0088845

FIELD SCREENING
FINAL DATA DELIVERABLE COVER SHEET

Date: Tuesday, October 10, 2006

Sample Authorization Form (SAF) Number: I06-062

SDG Number (assigned by Sample Management): FP0350 Daynes 10/19/06

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

X	Test Results
N/A	Narrative Summary
X	Chain of Custody(s)
X	Logbook Pages
N/A	Anomaly Report

Total number of pages (including cover sheet): 8

Comments:
ISRM - Hexavalent Chromium – Sulfate - Water

THESE TESTS WERE CONDUCTED USING QC-1

OCT 2006
RECEIVED

Analyst Signature — Date: 10/10/06

Reviewer's Signature — Date: 10/23/06

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

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

RECEIVED
JUN 03 2010
EDMC
00000001

On-Site Measurement of Cr +6

ISRM Groundwater

SAF: I06-062
Procedure: GRP-EE-05-1.17
Logbook: HNF-N-296 7 Page 16

9/7/2006

Location	HEIS Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	Cr +6 (mg/L)	Conductivity (µs/cm)	Water Level (m TOC)
199-D5-39	B1KCR7*	I06-062	9/7/2006	9:06	RTS	Water	9/7/2006	14:50	LCP	1.506	475	N/A
199-D5-39	B1KCR9*	I06-062	9/7/2006	9:06	RTS	Water	9/7/2006	14:50	LCP	1.514	475	N/A
199-D4-15	B1KCR4*	I06-062	9/7/2006	9:34	RTS	Water	9/7/2006	14:50	LCP	1.438	692	26.111

* 2X Dilution

Note: Samples were analyzed with the blank of reagent-treated deionized water as the "zero vial".

Analyst(s): LC Petersen/ JD Mehrer Date: 9/7/2006

\\ap014\afsfieldsc\cr6data\ISRM\cr6_isept.xls.

On-Site Measurement of SO_4

ISRM Groundwater

SAF: I06-062
Procedure: GRP-EE-05-1.18
Logbook: HNF-N-296 7 Page 15

Date: 9/7/06

Location	Heis Number	SAF	Date Collected	Time Collected	Sampler (Initials)	Sample Media	Date Analyzed	Time Analyzed	Analyst (Initials)	SO_4 (mg/L)
199-D5-39	B1KCR8*	I06-062	9/7/2006	9:06	RTS	Water	9/7/2006	15:05	LCP	86
199-D5-39	B1KCT0*	I06-062	9/7/2006	9:06	RTS	Water	9/7/2006	15:05	LCP	84
199-D4-15	B1KCR5**	I06-062	9/7/2006	9:34	RTS	Water	9/7/2006	15:05	LCP	156

* Sample diluted 2X
**Sample diluted 4X

Analyst(s): LC Petersen Date: 9/7/2006

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ISRM Cr+6
HR3 Cr+6

TMJohansen/[illegible]

Hexavalent Chromium Daily Activity Log
Project: 100-ISRM / SAF No. I06-056
100-ISRM / SAF No. I06-062
100-HR3 / SAF No. I06-057
Logbook HNF-N-296 7
Date: 9/07/06

[illegible] Johansen 10/6/06

1230	L. C. Petersen arrived on-site at 200W, MO-612 field laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 951, low range hexavalent chromium.
1325	Prepared 0.10 mg/L standard by adding 240 µL of 12.5 mg/L HACH hexavalent chromium standard, lot # A5354, Exp. 12-2010, to 29.76 mL of deionized water.
1350	Analyzed samples.
1355	Diluted samples B1KCR7, B1KCR9, B1KCR4 2X by adding 10 mL deionized water to 10 mL sample.
1450	Analyzed samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (µs/cm)	Water Depth-m(TOC)
Blank	-----	-----	0.006	-----	-----	-----	-----	-----
0.10 mg/L std.	-----	-----	0.102 [1]	-----	-----	-----	-----	-----
B1K6N3	199-D4-86	I06-056	0.013	9/7/06	10:47	RTS	383	25.291
B1KCR7*	199-D5-39	I06-062	1.506	9/7/06	09:06	RTS	475	N/A
B1KCR9*	199-D5-39	I06-062	1.514	9/7/06	09:06	RTS	475	N/A
B1KCR4*	199-D4-15	I06-062	1.438	9/7/06	09:34	RTS	692	26.111
B1KBY0	FTB/ 199-D5-38	I06-057	0.002	9/7/06	07:30	RTS	N/A	N/A
B1KBY2	199-D5-38/ FTB	I06-057	0.080	9/7/06	08:49	RTS	428	26.298
B1KBX4	199-D8-88	I06-057	0.047	9/7/06	11:26	DRB/ LW	233	24.116
B1KBX2	199-D8-73	I06-057	0.153	9/7/06	12:01	DRB/ LW	340	24.826
B1KBX1	199-D8-73	I06-057	0.152	9/7/06	12:01	DRB/ LW	340	24.826
0.10 mg/L std.	-----	-----	0.100 [1]	-----	-----	-----	-----	-----
Blank	-----	-----	0.005	-----	-----	-----	-----	-----

[1] New lot of HACH ChromaVer® 3 Reagent, which is reading known concentrations of hexavalent chromium in deionized water higher than we normally see in this analysis. To subtract out this affect, we used the blank of reagent-treated deionized water as the "zero vial" for the analyses of the standard and all samples.

* 2X Dilution

Reviewed 00000004
By: M.A. Baechler OCT 10 2006

TMJohansen/[illegible]Johansen, 10/6/06

M.A. Baechler

ISRM Cr+6 SO4 MJ 10-6-06
HR-3 Cr+6 SO4

TMJohansen/TMJohansen

Sulfate Daily Activity Log
Project: ISRM GW Monitoring / SAF I06-056
ISRM GW Monitoring / SAF I06-062
100 HR3 GW Monitoring / SAF I06-057
Logbook HNF-N-296 7
Date: 09/07/06

Tamara Johansen 10/6/06

1230	L. C. Petersen arrived on-site at 200W, MO-612 field laboratory. Set up to analyze samples for sulfate using a HACH DR 2010 spectrophotometer, S/N 980600009425, Method 952, sulfate.
1415	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.
1450	Analyzed samples.
1455	Diluted samples B1KCR8, B1KCT0 and B1KBY3 2X by adding 10 mL deionized water to 10 mL sample. Diluted sample B1KCR5 4X by adding 15 mL deionized water to 5 mL sample.
1505	Analyzed samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler
Blank	---	---	0	---	---	---
50 mg/L std.	---	---	50	---	---	---
B1K6N4	199-D4-86	I06-056	58	9/7/06	10:47	RTS
B1KCR8*	199-D5-39	I06-062	86	9/7/06	09:06	RTS
B1KCT0*	199-D5-39	I06-062	84	9/7/06	09:06	RTS
B1KCR5**	199-D4-15	I06-062	156	9/7/06	09:34	RTS
B1KBY1	FTB/ 199-D5-38	I06-057	0	9/7/06	07:30	RTS
B1KBY3*	199-D5-38/ FTB	I06-057	72	9/7/06	08:49	RTS
50 mg/L std.	---	---	49	---	---	---
Blank	---	---	0	---	---	---

* 2X Dilution
** 4X Dilution

TMJohansen/TMJohansen 10/6/06

Reviewed OCT 10 2006
By: M.A. Baechler
M.A. Baechler

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I06-062-4**

Page 1 of 1

Collector R.T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I06-062	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title ISRM, SEPTEMBER 2006	DTS- SAWS- H105	**Ice Chest No.** SAWS-119 **Temp.**
Shipped To (Lab) Mobile Field Laboratory	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**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 ☐
Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 06 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
B1KCR7 (F)		W	9-7-06	0906	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B1KCR8		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By (Print / Sign)	Date/Time	Received By (Print / Sign)	Date/Time
R.T. SICKLE	1230 SEP 07 2006	L.C. Petersen	1230 SEP 07 2006
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		DS = Drum Solid	
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	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process): RETURNED TO OU

Disposed By: LC Petersen Date/Time: 9/7/06 1530

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PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-062-5

Page 1 of 1

Collector R.T. SICKLE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. I06-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title ISRM, SEPTEMBER 2006	DTS-SAWS-H105	Ice Chest No. SAWS-119 Temp.
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	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 ☐
Batch all PNNL GW samples submitted under "W", "S", "T", "A" or "G" 06 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
B1KCR9 (F)		W	9-7-06	0906	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B1KCT0		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By	Date/Time	Received By	Date/Time
Print R.T. SICKLE Sign	SEP 07 2006 1230	Print L.C. Petersen Sign	SEP 07 2006 1230
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		DS = Drum Solid	
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	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) RETURNED TO OU Disposed By LCPetersen Date/Time 9/7/06 1530

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PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # I06-062-2

Page 1 of 1

Collector R.T. SICKLE	Contact/Requester Dot Stewart	Telephone No. 509-376-5056 MSIN FAX
SAF No. I06-062	Sampling Origin Hanford Site	Purchase Order/Charge Code
Project Title ISRM, SEPTEMBER 2006	DTB-SAWS H105	Ice Chest No. SAWS-119 Temp.
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.
Protocol CERCLA	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 ☐
Batch all PNNL GW samples submitted under "W", "S", "I", "A" or "G" 06 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
B1KCR4 (F)		W	9-7-06	0934	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None
B1KCR5		W	↓	↓	1x40-mL aGs*	COLOR_TK_FLD: Sulfate (1)	None

Relinquished By	Date/Time	Received By	Date/Time
Print R.T. SICKLE Sign	1230 SEP 07 2006	Print L.C. Petersen Sign	1230 SEP 07 2006
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		DS = Drum Solid	
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	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
	RETURNED TO OU	LC Petersen	9/7/06 1530

00000008