

# FIELD SCREENING FINAL DATA DELIVERABLE COVER SHEET

Date: Tuesday, December 6, 2005

Sample Authorization Form (SAF) Number: I05-051

SDG Number (assigned by Sample Management): FPO269 Pages

Attachments (check all that apply or N/A): 12/9/05

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

Total number of pages (including cover sheet):

159 <sup>m/c</sup>  
2/15/06

Comments:

**KR-4 - Hexavalent Chromium - Water**

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



Margi Adams  
Analyst Signature

[Signature]  
Reviewer's Signature

12/6/2005  
Date

12/14/05  
Date

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

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

**RECEIVED**  
MAR 21 2006  
**EDMC**

# On-Site Measurement of Cr +6

## 100-KR-4 Groundwater

SAF: 105-051

Procedure: GRP-EE-05-1.17

Logbook: HNF-N-296 5 Page 31

9/14/2005

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)
199-K-20	B1DP17	105-051	9/14/2005	9:46	FMH	Water	9/15/2005	8:15	MRA	0.053	341
199-K-18	B1DP14	105-051	9/14/2005	10:23	FMH	Water	9/15/2005	8:15	MRA	0.127	563
199-K-18	B1DP15	105-051	9/14/2005	10:23	FMH	Water	9/15/2005	8:15	MRA	0.128	563

Logbook: HNF-N-296 5 Page 34

9/15/2005

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)
199-K-131	B1DP10	105-051	9/15/2005	9:32	LDW	Water	9/16/2005	9:25	DJA	0.075	418
199-K-117A	B1DP08	105-051	9/15/2005	11:00	LDW	Water	9/16/2005	9:25	DJA	<0.005	191

Analysts: DJ Alexander and M.R. Adams

Date: 9/30/2005

\\ap014\afs\fields\cr\data\KR4 Data\cr6\_ksep.xls

KRY Cr<sup>VI</sup> Data

DJ Alexander /  
GS/Sjalexander

### Hexavalent Chromium Daily Activity Log

Project: KR-4 GW Monitoring / SAF I05-051  
Logbook HNF-N-296 5

Date: 09/14/05

15 min. analysis

*Sjalexander*  
9-15-05

0800	M.R. Adams arrives 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 950, low range hexavalent chromium.
0805	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.
0815	Analyzed samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (µs/cm)
0.10 mg/L std.	----	----	0.103	----	----	----	----
Blank	----	----	<0.005	----	----	----	----
B1DP17	199-K-20	I05-051	0.053	09-14-05	09:46	FMH	341
B1DP14	199-K-18	I05-051	0.127	09-14-05	10:23	FMH	563
B1DP15	199-K-18	I05-051	0.128	09-14-05	10:23	FMH	563
Blank	----	----	<0.005	----	----	----	----
0.10 mg/L std.	----	----	0.102	----	----	----	----

Data recorded real time using a laptop computer.

*SJA* SEP 15 2005

D.J. ALEXANDER

*Sjalexander*

SEP 15 2005

Reviewed *M.R. Adams*  
By: M.R. Adams

OCT 27 2005

KRY Cr+6 Data

DJ Alexander/09/  
alexander

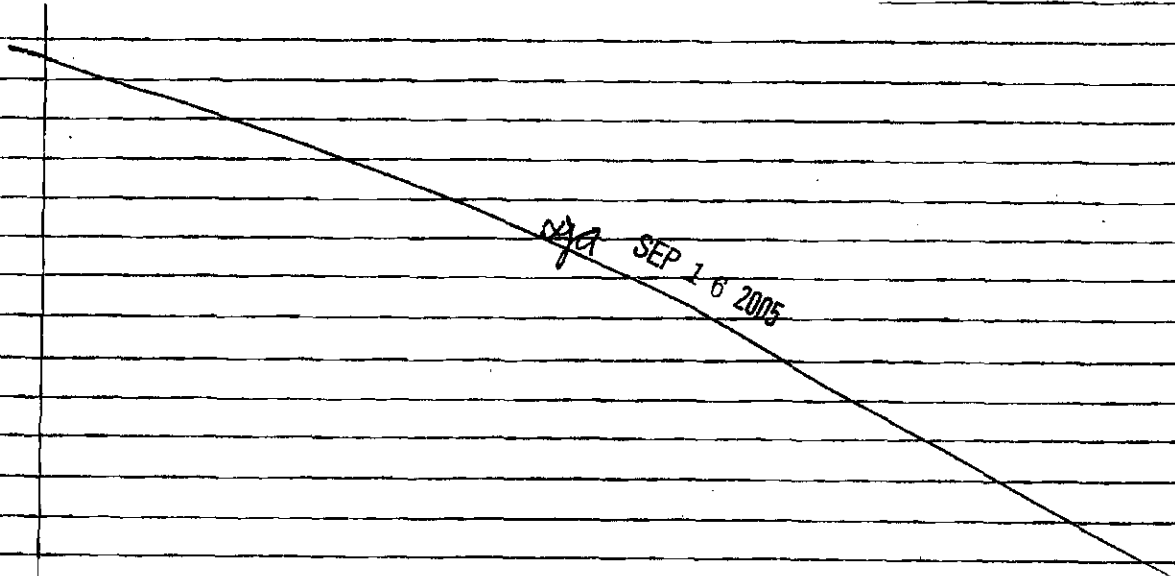
alexander  
9-16-05

**Hexavalent Chromium Daily Activity Log**  
**Project: KR-4 GW Monitoring / SAF I05-051**  
**Logbook HNF-N-296 5**  
**Date: 09/16/05**

0915	D.J. Alexander arrives on-site at 200W, MO-612 field laboratory. Set up to analyze samples for hexavalent chromium using a HACH DR 2010 spectrophotometer, S/N 98060009425, Method 950, low range hexavalent chromium.
0918	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.
0925	Analyzed samples.

Sample #	Well #	SAF #	Concentration (mg/L)	Date Sampled	Time Sampled	Sampler	Conductivity (µs/cm)
0.10 mg/L std.	----	----	0.106	----	----	----	----
Blank	----	----	<0.005	----	----	----	----
BIDP10	199-K-131	I05-051	0.075	09-15-05	09:32	LDW	418
BIDP08	199-K-117A	I05-051	<0.005	09-15-05	11:00	LDW	191
Blank	----	----	<0.005	----	----	----	----
0.10 mg/L std.	----	----	0.106	----	----	----	----

Data recorded real time using a laptop computer.



D.J. ALEXANDER  
 alexander  
 SEP 16 2005

Reviewed *M.R. Adams* OCT 27 2005  
 By: M.R. Adams  
 00000004

PNNL	<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>	C.O.C. #	<b>I05-051-2</b>
		Page <u>1</u> of <u>1</u>	

Collector <b>DURATEK L. D. WALL</b>	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
SAF No. I05-051	Sampling Origin <b>Hanford Site</b>	Purchase Order/Charge Code		
Project Title CERCLA 100KR41AM(1)	<b>DTS-SAWS-495</b>	Ice Chest No.	Temp.	
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment Govt Truck	Bill of Lading/Air Bill No.		
Protocol CERCLA	Priority: 45 Days	Offsite Property No.		

POSSIBLE SAMPLE HAZARDS/REMARKS ** **	SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1DP08 (F)		W	9-15-05	1100	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None

Relinquished By <b>DURATEK L. D. WALL</b>	Print <i>L.D. Wall</i>	Sign	Date/Time 0905 SEP 15 2005	Received By <i>D.J. Alexander</i>	Print <i>D.J. Alexander</i>	Sign	Date/Time 9-15-05/0905	Matrix *
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	S = Soil            DS = Dross Solid SF = Sediment    DF = Drum Fluid 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	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	
FINAL SAMPLE DISPOSITION	RETURNED TO OU			Disposed By <i>D.J. Alexander</i>			Date/Time SEP 16 2005 / 1000	

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PNNL **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** C.O.C.# **105-051-4**

Page 1 of 1

Collector <b>DURATEK L. D. WALL</b>	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN FAX
SAF No. 105-051	Sampling Origin <b>Hanford Site</b>	Purchase Order/Charge Code	
Project Title CERCLA 100KR4IAM(1)	<b>DTS-SAWS-H95</b>	Ice Chest No.	Temp.
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment Govt Truck	Bill of Lading/Air Bill No.	
Protocol CERCLA	Priority: 45 Days	Offsite Property No.	

POSSIBLE SAMPLE HAZARDS/REMARKS ** **	SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1DP10 (F)		W	9-15-05	0932	1x40-mL aGe*	COLOR_TK_FLD: Hexavalent Chromium (1)	None

Relinquished By <b>DURATEK Print L. D. WALL</b>	Sign <i>L. D. Wall</i>	Date/Time 9-16-05/0905	Received By <b>DJ Alexander / J Alexander</b>	Print <i>DJ Alexander / J Alexander</i>	Sign <i>J Alexander</i>	Date/Time 9-16-05/0905	Matrix *
Relinquished By		Date/Time	Received By			Date/Time	S = Soil                    DS = Drum Spill SF = Sediment         DI = Drum Liquid SO = Solid                T = Tissue SL = Sludge             W1 = 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	
FINAL SAMPLE DISPOSITION		<b>RETURNED TO CU</b>		Disposed By <b>D.J. ALEXANDER / J Alexander</b>		Date/Time <b>SEP 16 2005 / 1000</b>	

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<b>PNNL</b>	<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>	C.O.C. # <b>I05-051-7</b>
		Page <b>1</b> of <b>1</b>

Collector <b>DURKREK F.M. HALL</b>	Contact/Requester <b>Dot Stewart</b>	Telephone No. <b>509-376-5056</b>
SAF No. <b>I05-051</b>	Sampling Origin	MSIN FAX
Project Title <b>CERCLA 100KR41AM(1)</b>	<b>DTS - SALUS H</b>	Purchase Order/Charge Code
Shipped To (Lab) <b>Mobile Field Laboratory</b>	Method of Shipment <b>Govt Truck</b>	Ice Chest No. <b>SM L 124</b> Temp.
Protocol <b>CERCLA</b>	Priority: <b>45 Days</b>	Bill of Lading/Air Bill No.
POSSIBLE SAMPLE HAZARDS/REMARKS * *		Offsite Property No.

SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1DP14 (F)		W	9-14-05	1023	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None

Relinquished By <b>DURKREK F.M. HALL</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>SEP 15 2005 07:50</b>	Received By <b>PMGENT</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>SEP 15 2005 07:50</b>	<b>Matrix *</b> S = Soil            DS = Dross Solid SP = Sediment    DI = Drum L. Irral SO = Solid        T = Tissue SF = Sludge        WI = Wine W = Water        L = Liquid O = Oil            V = Vegetation A = Air             X = Other
Relinquished By <b>PMGENT</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>9/15/05 0800</b>	Received By <b>MR Adams</b>	Print <i>[Signature]</i>	Sign <i>[Signature]</i>	Date/Time <b>9/15/05 0800</b>	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	
<b>FINAL SAMPLE DISPOSITION</b>	<b>RETURNED TO OU</b>			Disposed By <b>MR Adams</b>			Date/Time <b>SEP 14 2005 /0915</b>	00000007

<b>PNNL</b>	<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>	C.O.C.# <b>105-051-8</b>
		Page 1 of 1

Collector <b>DURKEX F. M. HALL</b>	Contact/Requester Dot Stewart	Telephone No. MSIN FAX 509-376-5056
SAF No. 105-051	Sampling Origin	Purchase Order/Charge Code
Project Title CERCLA 100KR4IAM(1)	<b>OTF Sample H</b>	Ice Chest No. <b>SMC 124</b> Temp.
Shipped To (Lab) Mobile Field Laboratory	Method of Shipment Govt Truck	Bill of Lading/Air Bill No.
Protocol CERCLA	Priority: 45 Days	Offsite Property No.

POSSIBLE SAMPLE HAZARDS/REMARKS ** **	SPECIAL INSTRUCTIONS Hold Time Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1DP15 (F)		W	9-14-05	1023	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None

Relinquished By <b>DURKEX F. M. HALL</b>	Date/Time <b>SEP 14 2005</b>	Received By <b>PMGENT</b>	Date/Time <b>SEP 14 2005</b>	Matrix* S = Soil DS = Dism Solid SF = Sediment DM = Dism Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other
Relinquished By <b>PMGENT</b>	Date/Time <b>9/15/05 0800</b>	Received By <b>MR Adams</b>	Date/Time <b>9/15/05 0800</b>	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
<b>FINAL SAMPLE DISPOSITION</b>	Disposed Method (per Return to customer per lab procedure, used in process) <b>RETURNED TO OU</b>		Disposed By <b>MR Adams</b>	Date/Time <b>SEP 14 2005 / 0915</b>

00000008

**PNNL** **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** **C.O.C.# 105-051-11**  
 Page 1 of 1

<b>Collector</b> BURKEX F. M. HALL	<b>Contact/Requester</b> Dot Stewart	<b>Telephone No.</b> 509-376-5056	<b>MSIN</b>	<b>FAX</b>
<b>SAF No.</b> 105-051	<b>Sampling Origin</b>	<b>Purchase Order/Charge Code</b>		
<b>Project Title</b> CERCLA 100KR4(AM(1))	<b>Method of Shipment</b> Govt Truck	<b>Ice Chest No.</b> SMC 127	<b>Temp.</b>	
<b>Shipped To (Lab)</b> Mobile Field Laboratory	<b>Priority:</b> 45 Days	<b>Bill of Lading/Air Bill No.</b>		
<b>Protocol</b> CERCLA	<b>Offsite Property No.</b>			
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> ** **		<b>SPECIAL INSTRUCTIONS</b>		<b>Hold Time</b> <b>Total Activity Exemption:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1DP17 (F)		W	9-14-05	0946	1x40-mL aGs*	COLOR_TK_FLD: Hexavalent Chromium (1)	None

<b>Relinquished By</b> BURKEX F. M. HALL	<b>Print</b> <b>Sign</b> <i>[Signature]</i>	<b>Date/Time</b> SEP 14 2005 15 0730	<b>Received By</b> PMGENT <i>[Signature]</i>	<b>Print</b> <b>Sign</b> <i>[Signature]</i>	<b>Date/Time</b> SEP 14 2005 15 0730	<b>Matrix *</b> S = Soil      DS = Drum Solid SF = Sediment      DM = Drum Liquid SO = Solid      T = Tissue SL = Sludge      WI = Wine W = Water      L = Liquid O = Oil      V = Vegetation A = Air      X = Other
<b>Relinquished By</b> PMGENT <i>[Signature]</i>	<b>Date/Time</b> 9/15/05 0800	<b>Received By</b> MAGALO <i>[Signature]</i>	<b>Date/Time</b> 9/15/05 0800			
<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>			

**FINAL SAMPLE DISPOSITION** RETURNED TO OU (Personal Material (e.g. retained by customer) per lab procedure, used in process) **Disposed By** MR Adams / *[Signature]* **Date/Time** SEP 14 2005 / 0915

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