

KS0045-Field
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Environmental
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ERC Team

Interoffice Memorandum

044683

Job No. 22192
Written Response Required? NO
Closes CCN N/A
OU 200-ZP-1
TSD N/A
ERA N/A
Subject Code 8630

TO: M. A. Buckmaster, H4-80
J.A. Lerch, B1-35

DATE: March 28, 1997

COPIES: See Below

FROM: R. T. Coffman
Onsite Measurement Services
H9-11/372-9373

SUBJECT: 200-ZP-1 PHASE II PERFORMANCE MONITORING, GROUNDWATER
RESULTS, FEBRUARY 1997, REV 0

REFERENCES:

1. BHI, 1996, *On-Site Measurements Quality Assurance Plan*, BHI-00852, REV 0, Bechtel Hanford, Inc., Richland, Washington.
2. BHI, 1995, *Field Screening Procedures*, BHI-EE-05, Bechtel Hanford, Inc., Richland, Washington.
3. BHI, 1995, *200-ZP-1 Field Screening Support Logbook*, EL-1273, Bechtel Hanford, Inc., Richland, Washington.

This data package contains field screening results for groundwater samples analyzed to support 200-ZP-1 IRM Phase II performance monitoring. The Quality Assurance level for this work corresponds to QA-1 as specified in the reference 1 (BHI 1996). Samples collected and analyzed during February 1997 were managed under SAF C97-014, C97-015, and C97-018

Attachment 1 contains Volatile Organic Compound (VOC) results for groundwater samples collected to support the referenced project. The VOC analysis results on 3/3 and 3/4 were generated using the Hewlett - Packard 5890 gas chromatograph with a headspace autosampler, and VOC analysis results on 3/5 were generated using a Photovac 10S plus portable gas chromatograph. Both instruments were operated in accordance with Field Screening Procedure (FSP) 1.1, *Aqueous Headspace Analysis of Volatile Organic Compounds in Water* (BHI 1995). It was necessary to utilize the Photovac 10S plus portable gas chromatograph when on 3/4, the Hewlett Packard 5890 support computer hard drive failed. The computer was replaced and has been restored to normal operation. Samples analyzed using the Photovac were B0JYW7, B0JYW5, B0JY24, and B0JY25. Information concerning operation and calibration of the gas chromatographs is contained in instrument logbooks EL-1329 and EL-1332. Please contact me if you have any questions on this information.

R. T. Coffman, Engineer/Analyst

R.T. Coffman
RTC:rtc



M. A. Buckmaster, H4-80

Page 2

Attachments:

Attachment 1. 200-ZP-1 IRM Phase II Performance Monitoring, Groundwater Results,
February 1997

Attachment 2. Sample Chain of Custody Sheets

Copies:

J. R. Freeman-Pollard, H9-12, w/attachment 1 only

B. H. Ford, H0-02, w/attachment 1 only

M.J. Galgoul, H9-12, w/attachment 1 only

I. D. Jacques, H9-10, w/attachment 1 only

R. B. Kerkow, H9-10, w/attachment 1 only

A. M. Hopkins, H9-11, w/attachment 1 only

S. A. Strobe, T7-12, w/attachment 1 only

L. C. Swanson, H9-11, w/attachment 1 only

BHI Document Control, H4-79, w/original attachments

200-ZP-1 Phase II Performance Monitoring
Groundwater Results, February 1997
SAF C97-014, C97-015, and C97-018

Sample Location	HEIS Number	Sample Date	Analysis Date	Chloroform (µg/L)	Carbon Tetrachloride (µg/L)	Trichloroethylene (µg/L)
299-W14-9	BOJY16	2/27/97	3/4/97	41	290	7
Duplicate @ 299-W14-9	BOJY29	2/27/97	3/4/97	40	280	6.8
299-W15-1	BOJRD2	2/24/97	3/4/97	20	2700	12
Duplicate @ 299-W15-1	BOJRD3	2/24/97	3/4/97	46	3000	18
299-W15-4	BOJY17	2/20/97	3/3/97	10	550	<2.0
299-W15-7	BOJRD4	2/20/97	3/3/97	39	2300	17
299-W15-10	BOJRD5	2/26/97	3/4/97	30	3200	14
299-W15-11	BOJXX3	2/20/97	3/3/97	25	2500	6.9
299-W15-15	BOJY21	2/20/97	3/3/97	10	1500	<2.0
299-W15-19	BOJY22	2/20/97	3/3/97	5.6	110	<2.0
299-W15-25	BOJYW1	2/24/97	3/4/97	90	2800	6.8
* 299-W15-30	BOJYW5	2/24/97	3/5/97	49	6500	<2.0
* 299-W15-31A	BOJYW7	2/24/97	3/5/97	37	5700	3.9
299-W15-38	BOJYW2	2/25/97	3/4/97	31	2300	<2.0
299-W15-39	BOJY23	2/27/97	3/4/97	21	1000	<2.0
* 299-W18-1	BOJY24	2/26/97	3/5/97	16	1500	<2.0
* 299-W18-4	BOJY25	2/27/97	3/5/97	<4.0	11	<2.0
299-W18-21	BOJY28	2/20/97	3/3/97	9.8	1100	<2.0
299-W18-23	BOJRF6	2/21/97	3/3/97	3.4	470	<2.0
299-W18-26	BOJRF4	2/21/97	3/3/97	22	220	<2.0
Duplicate @ 299-W18-26	BOJRF5	2/21/97	3/3/97	23	380	<2.0
299-W18-27	BOJY27	2/19/97	3/3/97	2.3	370	<2.0
299-W18-28	BOJY28	2/19/97	3/3/97	13	22	<2.0
299-W18-30	BOJY15	2/3/97	2/12/97	16	1000	2.2
299-W18-32	BOJY30	2/19/97	3/3/97	<2.0	3.8	<2.0
699-39-79	BOJRF3	2/21/97	3/3/97	3.3	250	<2.0

* - Value less than practical quantitation limit

VOA Instrument: Hewlett Packard 5890 GC, Serial # 3235A47885
 Method: Dual DB-VRX columns, ECD/FID, 1 mL headspace injection
 Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 132 to 134

* VOA Instrument: Photovac 10S Plus GC, Serial # BLDG203
 Method: 5 mL/min HP Air, 11.7 eV lamp, 250 uL headspace injection
 Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 132 to 134

Analyst: P.T. Cottman - 4-8-97
 P.T. Cottman

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-018-16	Page 1 of 1												
Collector RT SICKLE (RFS)			Company Contact JH Kessner		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field												
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997			Sampling Location 200W		SAF No. C97-018																
Ice Chest No. <i>N/A</i>			Field Logbook No. <i>FFL-1111-6 PAGE #2</i>		Method of Shipment <i>Gov. Vehicle</i>																
Shipped To Mobile Laboratory			Offsite Property No. <i>N/A</i>		Bill of Lading/Air Bill No. <i>N/A</i>																
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation		HCl to pH <2 Cooled to 4C																
			Type of Container		Gs*																
			No. of Container(s)		1																
Special Handling and/or Storage			Volume		40ml																
SAMPLE ANALYSIS					VOA BY FIELD GC - Chlorinated Hydrocarbon																
Sample No.		Matrix *	Sample Date		Sample Time																
BOJY30		Water	FEB 19 1997		1208		✓														
CHAIN OF POSSESSION		Sign/Print Names				SPECIAL INSTRUCTIONS ** Total Activity Exempt										Matrix *					
Relinquished By RT SICKLE (RFS)		Date/Time <i>2-24-97 1430</i>		Received By <i>R. B. Kerkow</i>		Date/Time <i>2-24-97 1430</i>												S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other			
Relinquished By <i>R. B. Kerkow</i>		Date/Time <i>2-24-97 0930</i>		Received By <i>R. B. Kerkow</i>		Date/Time <i>2-24-97</i>															
Relinquished By		Date/Time		Received By		Date/Time															
Relinquished By		Date/Time		Received By		Date/Time															
LABORATORY SECTION		Received By				Title				Date/Time											
FINAL SAMPLE DISPOSITION		Disposal Method				Disposed By				Date/Time											

Collector RT SICKLE (RFS)	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. N/A	Field Logbook No. EFL-1111-6 PAGE 82	Method of Shipment 6.0L 6x4 LIF		
Shipped To Mobile Laboratory	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C																
	Type of Container	Gs*																
	No. of Container(s)	1																
Special Handling and/or Storage	Volume	40ml																
SAMPLE ANALYSIS		VOA BY FIELD GC -- Chlorinated Hydrocarbon																

Sample No.	Matrix *	Sample Date	Sample Time															
B0JY28	Water	FEB 19 1997	1230	✓														

CHAIN OF POSSESSION	Sign/Print Names				SPECIAL INSTRUCTIONS ** Total Activity Exempt.	Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other
	Relinquished By RT SICKLE (RFS)	Date/Time 2-26-97 1430	Received By <i>R. J. Steffen</i>	Date/Time 2-26-97 1430		
	Relinquished By <i>R. J. Steffen</i>	Date/Time 2-24-97 0930	Received By <i>J. H. Kessner</i>	Date/Time 2-24-97 0930		
	Relinquished By	Date/Time	Received By	Date/Time		

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

COPY

Collector RT SICKLE (RFS)	Company Contact J.H. KESSNER	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997	Sampling Location 200-W	SAF No. C97-015		
Ice Chest No. SML-503	Field Logbook No. EFL-1111-6	Method of Shipment Hand Carried		
Shipped To Mobile Laboratory	Offsite Property No. NA	Bill of Lading/Air Bill No. NA		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C																		
	Type of Container	Gs*																		
	No. of Container(s)	1																		

Special Handling and/or Storage	Volume	40ml																		
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SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon																		
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Sample No.	Matrix *	Sample Date	Sample Time																	
B0JRF4	Water	2-21-97	0932	X																

CHAIN OF POSSESSION	Sign/Print Names				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT										Matrix *	
	Relinquished By <i>RT Sickle (RFS)</i>	Date/Time <i>2-24-97 0830</i>	Received By <i>RT Sickle</i>	Date/Time <i>2-24-97 0830</i>											S - Soil	
	Relinquished By <i>R.S. Sickle</i>	Date/Time <i>2-24-97 0930</i>	Received By <i>RB Karkow</i>	Date/Time <i>2-24-97 0930</i>											SE - Sediment	
	Relinquished By	Date/Time	Received By	Date/Time											SO - Solid	

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

Collector RT SICKLE (RFS)	Company Contact J.H. KESSNER	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997	Sampling Location 200-W	SAF No. C97-015		
Ice Chest No. SML-503	Field Logbook No. EFL-1111-6	Method of Shipment Hand Carried		
Shipped To Mobile Laboratory	Offsite Property No. NA	Bill of Lading/Air Bill No. NA		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C																		
	Type of Container	Gs*																		
	No. of Container(s)	1																		
Special Handling and/or Storage	Volume	40ml																		
SAMPLE ANALYSIS		VOA BY FIELD GC -- Chlorinated Hydrocarbon																		

Sample No.	Matrix *	Sample Date	Sample Time																		
B0JRF5	Water	2-21-97	0932	X																	

CHAIN OF POSSESSION	Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT										Matrix * S - Sediment SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other		
	Relinquished By RT SICKLE (RFS)	Date/Time 2-24-97 0830	Received By R.S. Sickle	Date/Time 2-24-97 0830											
	Relinquished By R.S. Sickle	Date/Time 2-24-97 0930	Received By RAKerkow	Date/Time 2-24-97 0930											
	Relinquished By	Date/Time	Received By	Date/Time											

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

Pacific Northwest National Laboratory

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C97-018-8

Page 1 of 1

Collector: RZ STEFFLER (RFS) Company Contact: JH Kessner Telephone No.: (509) 372-9538 Project Coordinator: Stewart, DL Data Turnaround: Field

Project Designation: 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997 Sampling Location: 200W SAF No.: C97-018

Ice Chest No.: SML-503 Field Logbook No.: WHC-N-205 #63 Method of Shipment: Hand Carried

Shipped To: Mobile Laboratory Offsite Property No.: NA Bill of Lading/Air Bill No.: NA

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C											
	Type of Container	Gs*											
	No. of Container(s)	1											

Special Handling and/or Storage: Volume: 40ml

SAMPLE ANALYSIS: VOA BY FIELD GC - Chlorinated Hydrocarbon

Sample No.	Matrix *	Sample Date	Sample Time										
B0JY22	Water	2-20-97	1013	X									

CHAIN OF POSSESSION		Sign/Print Names	
Relinquished By: RZ STEFFLER (RFS)	Date/Time: 2-24-97 6430	Received By: RB Kerkow	Date/Time: 2-24-97 0930
Relinquished By: /	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

SPECIAL INSTRUCTIONS: ** Total Activity Exempt

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

LABORATORY SECTION: Received By: Title: Date/Time:

FINAL SAMPLE DISPOSITION: Disposal Method: Disposed By: Date/Time:

Collector RT SICKLE (RFS)	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. N/A	Field Logbook No. FL-1111-4 PAGE 52	Method of Shipment Cool. Isolate		
Shipped To Mobile Laboratory	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C											
	Type of Container	Gs*											
	No. of Container(s)	1											
Special Handling and/or Storage	Volume	40ml											
SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon											

Sample No.	Matrix *	Sample Date	Sample Time										
BOJY27	Water	FEB 19 1997	1304	✓									

CHAIN OF POSSESSION	Sign/Print Names		SPECIAL INSTRUCTIONS ** Total Activity Exempt	Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other		
	Relinquished By RT SICKLE (RFS)	Date/Time 2-24-97 1430			Received By R. J. Steffler	Date/Time 2-24-97 1430
	Relinquished By R. J. Steffler	Date/Time 2-24-97 0930			Received By R. S. Kerkov	Date/Time 2-24-97 0930
	Relinquished By	Date/Time			Received By	Date/Time

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

Collector RF THORNTON (RFS)	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. <i>SML 281</i>	Field Logbook No. <i>EP 1112 S</i>	Method of Shipment <i>COIT 1114</i>		
Shipped To Mobile Laboratory	Offsite Property No. <i>N/A</i>	Bill of Lading/Air Bill No. <i>1114</i>		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH < 2 Cooled to 4C											
	Type of Container	Gs*											
	No. of Container(s)	1											
Special Handling and/or Storage	Volume	40ml											
SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon											

Sample No.	Matrix *	Sample Date	Sample Time										
BOJY17	Water	2-20-97	1237	X									

CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS ** Total Activity Exempt.				Matrix *			
Sign/Print Names								S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WJ - Wipe L - Liquid V - Vegetation X - Other			
Relinquished By <i>RF Thornton</i>	Date/Time 1936 2-20-97	Received By <i>RZ Stebler</i>	Date/Time 2-20-97 1430								
Relinquished By <i>RZ Stebler</i>	Date/Time 2-24-97 0930	Received By <i>RB Kerkow</i>	Date/Time 2-24-97 0930								
Relinquished By	Date/Time	Received By	Date/Time								
Relinquished By	Date/Time	Received By	Date/Time								

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

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-8	Page 1 of 1
Collector RT SICKLE (RFS)			Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL	Data Turnaround Field	
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997			Sampling Location 200-W		SAF No. C97-015				
Ice Chest No. <i>SML-503</i>			Field Logbook No. <i>EFL-1111-6</i>		Method of Shipment <i>Hand Carried</i>				
Shipped To Mobile Laboratory			Offsite Property No. <i>NA</i>		Bill of Lading/Air Bill No. <i>NA</i>				
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation	HCl to pH <2 Cooled to 4C					
			Type of Container	Gs*					
			No. of Container(s)	1					
Special Handling and/or Storage			Volume	40ml					
SAMPLE ANALYSIS				VOA BY FIELD GC - Chlorinated Hydrocarbon					
Sample No.	Matrix *	Sample Date	Sample Time						
B0JRF3	Water	2-21-97	1007	X					
CHAIN OF POSSESSION		Sign/Print Names			SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT				Matrix * S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By RT SICKLE (RFS)	Date/Time <i>2-24-97 0830</i>	Received By <i>R.S. Sickle</i>	Date/Time <i>2-24-97 0830</i>						
Relinquished By <i>R.S. Sickle</i>	Date/Time <i>2-24-97 0930</i>	Received By <i>R.D. Kessler</i>	Date/Time <i>2-24-97 0930</i>						
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
LABORATORY SECTION	Received By		Title		Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method		Disposed By		Date/Time				

Pacific Northwest National Laboratory

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C97-015-11

Page 1 of 1

Collector PT SICKLE (RFS)		Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field		
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997		Sampling Location 200-W		Field Logbook No. EFL-1111-6		SAF No. C97-015		Method of Shipment Hand Carried		
Ice Chest No. SML-503		Offsite Property No. NA		Bill of Lading/Air Bill No. NA						
Shipped To Mobile Laboratory		Preservation		HCl to pH < 2 Cooked to 4C						
POSSIBLE SAMPLE HAZARDS/REMARKS		Type of Container		Gr.*						
Special Handling and/or Storage		No. of Container(s)		1						
		Volume		40ml						
		VOA BY FIELD GC - Calorinated Hydrocarbon								
		SAMPLE ANALYSIS								
Sample No.	Matrix *	Sample Date	Sample Time							
80JRF6	Water	2-21-97	0838							
				SPECIAL INSTRUCTIONS TOTAL ACTIVITY EXEMPT						
CHAIN OF POSSESSION		Sign/Print Names		Date/Time		Matrix *				
Relinquished By PT SICKLE (RFS)	<i>[Signature]</i>	2-24-97	<i>[Signature]</i>	2-24-97	0830	S	Soil			
Relinquished By <i>[Signature]</i>	<i>[Signature]</i>	2-24-97	<i>[Signature]</i>	2-24-97	0830	SE	Sediment			
Relinquished By <i>[Signature]</i>	<i>[Signature]</i>	2-24-97	<i>[Signature]</i>	2-24-97	0830	SL	Solid			
Relinquished By						W	Water			
Relinquished By						O	Oil			
Relinquished By						A	Air			
Relinquished By						DS	Drum Solids			
Relinquished By						DL	Drum Liquids			
Relinquished By						T	Tissue			
Relinquished By						WJ	Wipe			
Relinquished By						L	Liquid			
Relinquished By						V	Vegetation			
Relinquished By						X	Other			
LABORATORY SECTION	Received By	Title		Date/Time						
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time						

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-018-12	Page 1 of 1														
Collector RZ STEFFLER (RFS)			Company Contact JH Kessner		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field *														
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997			Sampling Location 200W			SAF No. C97-018																	
Ice Chest No. SML-503			Field Logbook No. WHC-N-205 #63			Method of Shipment Hand Carried																	
Shipped To Mobile Laboratory			Offsite Property No. NA			Bill of Lading/Air Bill No. NA																	
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation		HCl to pH <2 Cooled to 4C																		
			Type of Container		Gs*																		
			No. of Container(s)		1																		
			Special Handling and/or Storage		Volume		40ml																
SAMPLE ANALYSIS					VOA BY FIELD GC - Chlorinated Hydrocarbon																		
Sample No.		Matrix *		Sample Date		Sample Time																	
BOJY26		Water		2-20-97		0910		X															
CHAIN OF POSSESSION		Sign/Print Names										SPECIAL INSTRUCTIONS ** Total Activity Exempt.					Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other						
		Relinquished By RZ STEFFLER (RFS)		Date/Time 2-24-97 0930		Received By RB Kerkan		Date/Time 2-24-97 0930															
		Relinquished By		Date/Time		Received By		Date/Time															
		Relinquished By		Date/Time		Received By		Date/Time															
		Relinquished By		Date/Time		Received By		Date/Time															
LABORATORY SECTION		Received By			Title						Date/Time												
FINAL SAMPLE DISPOSITION		Disposal Method			Disposed By			Date/Time															

Collector RF THORNTON (RFS)	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Date Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. SML 291	Field Logbook No. EPL-1112-5	Method of Shipment GAST 6514		
Shipped To Mobile Laboratory	Offsite Property No. NA	Bill of Lading/Air Bill No. NA		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C																
	Type of Container	Gs*																
	No. of Container(s)	1																
Special Handling and/or Storage	Volume	40ml																
SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon																

Sample No.	Matrix *	Sample Date	Sample Time															
B0JY21	Water	2 20 97	1315	X														

CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS				Matrix *			
Sign/Print Names				** Total Activity Exempt.				S - Soil			
Relinquished By	Date/Time	Received By	Date/Time					SE - Sediment			
RF THORNTON (RFS)	2-20-97	RZ Staff...	2-20-97 1430					SO - Solid			
R.F. Staff	2-24-97 0930	RB Karkh	2-24-97 0930					SL - Sludge			
								W - Water			
Relinquished By	Date/Time	Received By	Date/Time					O - Oil			
								A - Air			
								DS - Drum Solids			
								DL - Drum Liquids			
								T - Tissue			
								WI - Wipe			
								L - Liquid			
								V - Vegetation			
								X - Other			

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

Collector RZ STEFFLER (RFS)	Company Contact J.H. KESSNER	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997	Sampling Location 200-W		SAF No. C97-014	
Ice Chest No. <i>SM/L-503</i>	Field Logbook No. <i>WHL-N-205 #63</i>		Method of Shipment <i>Hand Carried</i>	
Shipped To Mobile Laboratory	Offsite Property No. <i>NA</i>		Bill of Lading/Air Bill No. <i>NA</i>	

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C																		
	Type of Container	Gs*																		
	No. of Container(s)	1																		

Special Handling and/or Storage	Volume	40ml																	
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SAMPLE ANALYSIS	VOA BY FIELD GC -- Chlorinated Hydrocarbon																		
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Sample No.	Matrix *	Sample Date	Sample Time																	
BOJRD4	Water	2-20-97	1220	X																

CHAIN OF POSSESSION	Sign/Print Names				SPECIAL INSTRUCTIONS										Matrix *	
Relinquished By <i>RZ STEFFLER (RFS)</i>	Date/Time <i>2-24-97 0430</i>	Received By <i>RB Kerkow</i>	Date/Time <i>2-24-97</i>	<i>0930</i>											S	Soil
Relinquished By	Date/Time	Received By	Date/Time												SF	Sediment
Relinquished By	Date/Time	Received By	Date/Time												SO	Solid
Relinquished By	Date/Time	Received By	Date/Time												SI	Sludge
Relinquished By	Date/Time	Received By	Date/Time		W	Water										
Relinquished By	Date/Time	Received By	Date/Time		O	Oil										
Relinquished By	Date/Time	Received By	Date/Time		A	Air										
Relinquished By	Date/Time	Received By	Date/Time		DS	Drum Solids										
Relinquished By	Date/Time	Received By	Date/Time		DI	Drum Liquids										
Relinquished By	Date/Time	Received By	Date/Time		T	Tissue										
Relinquished By	Date/Time	Received By	Date/Time		W	Wipe										
Relinquished By	Date/Time	Received By	Date/Time		L	Liquid										
Relinquished By	Date/Time	Received By	Date/Time		V	Vegetation										
Relinquished By	Date/Time	Received By	Date/Time		X	Other										

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

Collector: **RF THORNTON (RFS)** Company Contact: **J.H. KESSNER** Telephone No.: **(509) 372-9538** Project Coordinator: **Stewart, DL.** Data Turnaround: **Field**

Project Designation: **200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997** Sampling Location: **200-W** SAF No.: **C97-014**

Ice Chest No.: **S102 - 251** Field Logbook No.: **RFL-1112-5** Method of Shipment: **GOVT. VEH.**

Shipped To: **Mobile Laboratory** Offsite Property No.: **NA** Bill of Lading/Air Bill No.: **NA**

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH ~2 Cooled to 4C											
	Type of Container	GS*											
	No. of Container(s)	1											

Special Handling and/or Storage: **Volume** 40ml

SAMPLE ANALYSIS		VOA BY FIELD GC -- Chlorinated Hydrocarbon											

Sample No.	Matrix *	Sample Date	Sample Time										
B0JXX3	Water	2-20-97	1052	X									

CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS								Matrix *			
Relinquished By		Date Time		Sign/Print Names		Received By		Date Time						S	Sediment
RF THORNTON (RFS)		2-20-97 1430		<i>[Signature]</i>		RB Kerkov		2-20-97 1430						SE	Solid
<i>[Signature]</i>		2-24-97 0930		<i>[Signature]</i>		RB Kerkov		2-24-97 0930						SO	Solid
														SI	Sludge
														W	Water
														O	Oil
														A	Air
														DS	Drum Solids
														DL	Drum Liquids
														T	Tissue
														WI	Wipe
														L	Liquid
														V	Vegetation
														X	Other

LABORATORY SECTION: Received By: _____ Title: _____ Date Time: _____

FINAL SAMPLE DISPOSITION: Disposal Method: _____ Disposed By: _____ Date Time: _____

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector <i>A. Rizzo</i>	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. <i>SML 431</i>	Field Logbook No. <i>LHC - N-205 # 63</i>	Method of Shipment <i>Hand Delivered</i>		
Shipped To Mobile Laboratory	Offsite Property No.	Bill of Lading/Air Bill No.		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH ~2 Cooled to 4C																		
	Type of Container	Gs*																		
	No. of Container(s)	1																		

Special Handling and/or Storage	Volume	40ml																		
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SAMPLE ANALYSIS		VOA BY FIELD GC -- Chlorinated Hydrocarbon																		
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Sample No.	Matrix *	Sample Date	Sample Time																		
B0JY15	Water	2-3-97	0955	X																	

CHAIN OF POSSESSION	Sign/Print Names		SPECIAL INSTRUCTIONS ** Total Activity Exempt												Matrix *			
	Relinquished By <i>A. Rizzo (RPS)</i>	Date Time 2-4-97 1108	Received By <i>R. Stiller</i>	Date Time 2-4-97 1108													S	Soil
	Relinquished By <i>R. Stiller</i>	Date Time 2-5-97 0750	Received By <i>RT. LUTEMAN</i>	Date Time 2/5/97													SE	Sediment
	Relinquished By	Date Time	Received By	Date Time													SO	Solid

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

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-018-9		Page 1 of 1						
Collector RT SICKLE (RFS)			Company Contact JH Kessner		Telephone No. (509) 372-9338		Project Coordinator Stewart, DL		Data Turnaround Field							
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997			Sampling Location 200W			SAF No. C97-018										
Ice Chest No. <i>N/A</i>			Field Logbook No. <i>ERL-1111-6</i>			Method of Shipment <i>Gen Van</i>										
Shipped To Mobile Laboratory			Offsite Property No. <i>NW</i>			Bill of Lading/Air Bill No. <i>N/A</i>										
POSSIBLE SAMPLE HAZARDS/REMARKS <i>NA</i>			Preservation		HCl to pH <2 Cooled to 4C											
			Type of Container		Gs*											
			No. of Container(s)		1											
Special Handling and/or Storage <i>maintain @ 4C</i>			Volume		40ml											
SAMPLE ANALYSIS					VOA BY FIELD GC - Chlorinated Hydrocarbon											
Sample No.	Matrix *	Sample Date		Sample Time												
BOJY23	Water	2-27-97		0946		X										
CHAIN OF POSSESSION			Sign/Print Names									SPECIAL INSTRUCTIONS ** Total Activity Exempt				
			Relinquished By: <i>[Signature]</i>		Date/Time		Received By: <i>RB Kert</i>		Date/Time							
			RT SICKLE (RFS)		2-27-97 1430		RB Kerton		2-27-97							
			Relinquished By		Date/Time		Received By		Date/Time							
			Relinquished By		Date/Time		Received By		Date/Time							
Relinquished By		Date/Time		Received By		Date/Time										
LABORATORY SECTION	Received By			Title			Date/Time									
FINAL SAMPLE DISPOSITION	Disposal Method			Disposed By			Date/Time									

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

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C97-018-15

Page 1 of 1

Collector: RT SICKLE (RFS) Company Contact: JH Kessner Telephone No.: (509) 372-9538 Project Coordinator: Stewart, DL Data Turnaround: Field

Project Designation: 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997 Sampling Location: 200W SAF No.: C97-018

Ice Chest No.: N/A Field Logbook No.: EFZ-1111-G Method of Shipment: Gen. U.S.M.

Shipped To: Mobile Laboratory Offsite Property No.: N/A Bill of Lading/Air Bill No.: N/A

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C											
	N/A	Type of Container	Gs*										
		No. of Container(s)	1										

Special Handling and/or Storage: maintain @ 4°C Volume: 40ml

SAMPLE ANALYSIS: VOA BY FIELD GC - Chlorinated Hydrocarbon

Sample No.	Matrix *	Sample Date	Sample Time										
80JY29	Water	2-27-97	1246	γ									

CHAIN OF POSSESSION	Sign/Print Names				SPECIAL INSTRUCTIONS ** Total Activity Exempt	Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WT - Wipe L - Liquid V - Vegetation X - Other
	Relinquished By: RT SICKLE (RFS)	Date/Time: 2-27-97 1430	Received By: RB Kent	Date/Time: 2-27-97		
	Relinquished By:	Date/Time:	Received By:	Date/Time:		
	Relinquished By:	Date/Time:	Received By:	Date/Time:		

LABORATORY SECTION: Received By: _____ Title: _____ Date/Time: _____

FINAL SAMPLE DISPOSITION: Disposal Method: _____ Disposed By: _____ Date/Time: _____

Collector RT SICKLE (RFS)	Company Contact J.H. KESSNER	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
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Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997	Sampling Location 200-W	SAF No. C97-014
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Ice Chest No. N/A	Field Logbook No. ERL-1111-4 Page 86	Method of Shipment Gov. Vehicle
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Shipped To Mobile Laboratory	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A
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POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH ~2 Cooled to 4C							
	Type of Container	Gs*							
	No. of Container(s)	1							

Special Handling and/or Storage	Volume	40ml							
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SAMPLE ANALYSIS		VOA BY FIELD GC -- Chlorinated Hydrocarbon							
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Sample No.	Matrix *	Sample Date	Sample Time						
B0JRD2	Water	FEB 24 1997	1053						

CHAIN OF POSSESSION	Sign/Print Names	SPECIAL INSTRUCTIONS	
Relinquished By RT SICKLE (RFS)	Date/Time 2-24-97 1340	Received By RB Kerlan	Date/Time 2-24-97 1340
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
 - Sl Sediment
 - SO Solid
 - Sl Sludge
 - W Water
 - O Oil
 - A Air
 - DS Drum Solids
 - DI Drum Liquids
 - T Tissue
 - WI Wipe
 - L Liquid
 - V Vegetation
 - X Other

LABORATORY SECTION	Received By	Title	Date/Time
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FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time
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Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-10		Page 1 of 1			
Collector RT SICKLE (RFS)			Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field				
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997			Sampling Location 200-W			SAF No. C97-014							
Ice Chest No. N/A			Field Logbook No. EFL-1111-6 PAGE 80			Method of Shipment GRV. VEHICLE							
Shipped To Mobile Laboratory			Offsite Property No. N/A			Bill of Lading/Air Bill No. N/A							
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation		HCl to pH - 2 Cooled to 4C								
			Type of Container		Gs*								
			No. of Container(s)		1								
Special Handling and/or Storage			Volume		40ml								
SAMPLE ANALYSIS					VOA BY FIELD GC -- Chlorinated Hydrocarbon								
Sample No.		Matrix *	Sample Date		Sample Time								
B0JRD3		Water	FEB 24 1997		1053								
CHAIN OF POSSESSION		Sign/Print Names				SPECIAL INSTRUCTIONS					Matrix *		
Relinquished By RT SICKLE (RFS)		Date Time 2-24-97 1340		Received By RB Kerker		Date Time 2-24-97							S Soil
Relinquished By		Date Time		Received By		Date Time							SI Sediment
Relinquished By		Date Time		Received By		Date Time							SO Solid
Relinquished By		Date Time		Received By		Date Time							SI Sludge
Relinquished By		Date Time		Received By		Date Time							W Water
Relinquished By		Date Time		Received By		Date Time							O Oil
Relinquished By		Date Time		Received By		Date Time							A Air
Relinquished By		Date Time		Received By		Date Time							DS Drum Solids
Relinquished By		Date Time		Received By		Date Time							DI Drum Liquids
Relinquished By		Date Time		Received By		Date Time							T Tissue
Relinquished By		Date Time		Received By		Date Time							WI Wipe
Relinquished By		Date Time		Received By		Date Time							L Liquid
Relinquished By		Date Time		Received By		Date Time							V Vegetation
Relinquished By		Date Time		Received By		Date Time							X Other
LABORATORY SECTION		Received By				Title				Date Time			
FINAL SAMPLE DISPOSITION		Disposal Method				Disposed By				Date Time			

015 32

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-15	Page 1 of 1
Collector HT SICKLE (RFS)		Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field	
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling--FY1997		Sampling Location 200-W		SAF No. C97-014					
Ice Chest No. <i>N/A</i>		Field Logbook No. <i>EPA 111-4 PAGE 88</i>		Method of Shipment <i>COOL. DELIVERY</i>					
Shipped To Mobile Laboratory		Offsite Property No. <i>N/A</i>		Bill of Lading/Air Bill No. <i>N/A</i>					
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C						
		Type of Container	G5*						
		No. of Container(s)	1						
Special Handling and/or Storage		Volume	40ml						
SAMPLE ANALYSIS			VOA BY FIELD GC -- Chlorinated Hydrocarbon						
Sample No.	Matrix *	Sample Date	Sample Time						
B0JYW2	Water	FEB 25 1997	<i>0911</i>						
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By HT SICKLE (RFS)	Date Time <i>2-25-97 1430</i>	Received By <i>RB Kessner</i>	Date Time <i>2-27-97</i>					S	Soil
Relinquished By	Date Time	Received By	Date Time					SE	Sediment
Relinquished By	Date Time	Received By	Date Time					SO	Solid
Relinquished By	Date Time	Received By	Date Time					SI	Sludge
Relinquished By	Date Time	Received By	Date Time	W	Water				
Relinquished By	Date Time	Received By	Date Time	O	Oil				
Relinquished By	Date Time	Received By	Date Time	A	Air				
Relinquished By	Date Time	Received By	Date Time	DS	Drum Solids				
Relinquished By	Date Time	Received By	Date Time	DI	Drum Liquids				
Relinquished By	Date Time	Received By	Date Time	T	Tissue				
Relinquished By	Date Time	Received By	Date Time	WI	Wipe				
Relinquished By	Date Time	Received By	Date Time	L	Liquid				
Relinquished By	Date Time	Received By	Date Time	V	Vegetation				
Relinquished By	Date Time	Received By	Date Time	X	Other				
LABORATORY SECTION	Received By	Title		Date Time					
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date Time					

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-014-12		Page 1 of 1			
Collector PT SICKLE (RFS)			Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field				
Project Designation 200-ZP-1 IRM (Group 1) Groundwater Sampling-FY1997			Sampling Location 200-W			SAF No. C97-014							
Ice Chest No. N/A			Field Logbook No. EFL-1111-6 PAGE 89			Method of Shipment Coll. Vehicle							
Shipped To Mobile Laboratory			Offsite Property No. N/A			Bill of Lading/Air Bill No. N/A							
POSSIBLE SAMPLE HAZARDS/REMARKS			Preservation		HCl to pH <2 Cooled to 4C								
			Type of Container		Gas*								
			No. of Container(s)		1								
			Special Handling and/or Storage		Volume	40ml							
SAMPLE ANALYSIS					VOA BY FIELD GC - Chlorinated Hydrocarbon								
Sample No.	Matrix *	Sample Date	Sample Time										
BOJRD5 /	Water	FEB 26 1997	1036	✓									
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS				Matrix *	
Relinquished By PT SICKLE (RFS)		Date/Time 2-26-97 1220		Received By <i>RB Reuk</i>		Date/Time 2-26-97						S	- Soil
Relinquished By		Date/Time		Received By		Date/Time						SE	- Sediment
Relinquished By		Date/Time		Received By		Date/Time						SO	- Solid
Relinquished By		Date/Time		Received By		Date/Time						SL	- Sludge
Relinquished By		Date/Time		Received By		Date/Time		W	- Water				
Relinquished By		Date/Time		Received By		Date/Time		O	- Oil				
Relinquished By		Date/Time		Received By		Date/Time		A	- Air				
Relinquished By		Date/Time		Received By		Date/Time		DS	- Drum Solids				
Relinquished By		Date/Time		Received By		Date/Time		DL	- Drum Liquids				
Relinquished By		Date/Time		Received By		Date/Time		T	- Tissue				
Relinquished By		Date/Time		Received By		Date/Time		WI	- Wipe				
Relinquished By		Date/Time		Received By		Date/Time		L	- Liquid				
Relinquished By		Date/Time		Received By		Date/Time		V	- Vegetation				
Relinquished By		Date/Time		Received By		Date/Time		X	- Other				
LABORATORY SECTION	Received By			Title				Date/Time					
FINAL SAMPLE DISPOSITION	Disposal Method			Disposed By				Date/Time					

Pacific Northwest National Laboratory		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST						C97-015-13	Page 1 of 1
Collector RT SICKLE (RFS)		Company Contact J.H. KESSNER		Telephone No. (509) 372-9538		Project Coordinator Stewart, DL		Data Turnaround Field	
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997		Sampling Location 200-W		SAF No. C97-015					
Ice Chest No. N/A		Field Logbook No. EFL-1111-6 PAGE EC		Method of Shipment Gov. Vehicle					
Shipped To Mobile Laboratory		Offsite Property No. N/A		Bill of Lading/Air Bill No. N/A					
POSSIBLE SAMPLE HAZARDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C						
		Type of Container	Gs*						
		No. of Container(s)	1						
Special Handling and/or Storage		Volume	40ml						
SAMPLE ANALYSIS			VOA BY FIELD GC - Chlorinated Hydrocarbon						
Sample No.	Matrix *	Sample Date	Sample Time						
BOJYW7 L	Water	FEB 24 1997	1156						
CHAIN OF POSSESSION		Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY RESULTS NEEDED EXEMPT cf 2-20-97				Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other	
Relinquished By RT SICKLE (RFS)	Date/Time 2-24-97 1340	Received By RB Kenkin	Date/Time 2-24-97 1340						
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
Relinquished By	Date/Time	Received By	Date/Time						
LABORATORY SECTION	Received By	Title		Date/Time					
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By		Date/Time					

Collector RT SICKLE (RFS)	Company Contact J.H. KESSNER	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling--FY1997	Sampling Location 200-W	SAF No. C97-015		
Ice Chest No. N/A	Field Logbook No. EFL-1111-6 PAGE 60	Method of Shipment COU VEHICLE		
Shipped To Mobile Laboratory	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <3 Cooled to 4C																		
	Type of Container	Gs*																		
	No. of Container(s)	1																		
Special Handling and/or Storage	Volume	40ml																		
SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon																		

Sample No.	Matrix *	Sample Date	Sample Time																		
B0JYW5	Water	FEB 24 1997	1304	✓																	

CHAIN OF POSSESSION	Sign/Print Names		SPECIAL INSTRUCTIONS TOTAL ACTIVITY RESULTS NEEDED EXEMPT <i>2-20-97</i>												Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue WI - Wipe L - Liquid V - Vegetation X - Other		
	Relinquished By RT SICKLE (RFS)	Date/Time 1340 2-24-97	Received By <i>RB Kerken</i> RB Kerken	Date/Time 1340 2-24-97													
	Relinquished By	Date/Time	Received By	Date/Time													
	Relinquished By	Date/Time	Received By	Date/Time													
	Relinquished By	Date/Time	Received By	Date/Time													

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

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector RT SICKLE (RFS)	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. N/A	Field Logbook No. EFL-1111-G PAGE 89	Method of Shipment Gov. Vehicle		
Shipped To Mobile Laboratory	Offsite Property No. N/A	Bill of Lading/Air Bill No. N/A		

POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C																		
	Type of Container	Gs*																		
	No. of Container(s)	1																		

Special Handling and/or Storage	Volume	40ml																		
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SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon																		
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Sample No.	Matrix *	Sample Date	Sample Time																		
B0JY24 ✓	Water	FEB 26 1997	1141	✓																	

CHAIN OF POSSESSION	Sign/Print Names			
Relinquished By RT SICKLE (RFS)	Date/Time 2-26-97	Received By RB Kerkow	Date/Time 2-26-97	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	
Relinquished By	Date/Time	Received By	Date/Time	

SPECIAL INSTRUCTIONS ** Total Activity Exempt.	Matrix *
	S - Soil
	SE - Sediment
	SO - Solid
	SL - Sludge
	W - Water
	O - Oil
	A - Air
	DS - Drum Solids
	DL - Drum Liquids
	T - Tissue
	WI - Waste
	L - Liquid
	V - Vegetation
	X - Other

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

C O C C

Collector RT SICKLE (RFS)	Company Contact JH Kessner	Telephone No. (509) 372-9538	Project Coordinator Stewart, DL	Data Turnaround Field
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997	Sampling Location 200W	SAF No. C97-018		
Ice Chest No. NA	Field Logbook No. EFL-1111-6	Method of Shipment Go to Vech		
Shipped To Mobile Laboratory	Offsite Property No. NA	Bill of Lading/Air Bill No. NA		

POSSIBLE SAMPLE HAZARDS/REMARKS NA	Preservation	HCl to pH < 2 Cooled to 4C																
	Type of Container	Gs*																
	No. of Container(s)	1																
	Special Handling and/or Storage Mandarin @ 4C	Volume	40ml															
SAMPLE ANALYSIS		VOA BY FIELD GC - Chlorinated Hydrocarbon																

Sample No.	Matrix *	Sample Date	Sample Time															
BOJY25 ✓	Water	2-27-97	1043	X														

CHAIN OF POSSESSION	Sign/Print Names		SPECIAL INSTRUCTIONS ** Total Activity Exempt										Matrix * S - Soil SE - Sediment SO - Solid SL - Sludge W - Water O - Oil A - Air DS - Drum Solids DL - Drum Liquids T - Tissue W1 - Wipe L - Liquid V - Vegetation X - Other		
	Relinquished By RT SICKLE (RFS)	Date/Time 2-27-97 1430	Received By RB Kerkow	Date/Time 1430 2-27-97											
	Relinquished By	Date/Time	Received By	Date/Time											
	Relinquished By	Date/Time	Received By	Date/Time											
	Relinquished By	Date/Time	Received By	Date/Time											

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

1440003