0058294

Battelle
Putting Technology To Work
Pacific Northwest National Laboratory
902 Battelle Boulevard
P.O. Box 999
Richland, Washington 99352

FACSIMILE TRANSMITTAL

DATE: 9-10-02

To: JOAN KESSNER
Company: BHI
City/State: RICHLAND WA
Facsimile #: 1-425-969-4823
Telephone #:

From: S. RIVENS
PNNL
Facsimile #: 372-1484
Telephone #: 376-3198

Transmittal Consists of [7] Page(s) including cover page.

COMMENTS :

(601 088)
pnl0049
emailed to dave/dcam

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SEP 2002

EA-1950-231 (4/96)

ID:NI-63 LS6500-2 10 SEP 2002 14:17

USER: 4 COMMENT:SN7069514

PRESET TIME : 2.00

DATA CALC :	SL DPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	:EDIT	BHI / 100 B-C
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	: OFF	9-10-02
TWO PHASE :	NO	ARC	: NO	CYCLE REPEATS :	1	DISK	: OFF	JMF
SCINTILLATOR:	LIQUID	LUMEX:	NO	LOW SAMPLE REJ:	0	RWM LIST	: OFF	Run # 3847
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none		

TSOTOPE 1: NI-63 %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 33
WIDE OPEN WINDOW %ERROR: 0.00 FACTOR: 1.000000 BKG. SUB: 67

BACKGROUND QUENCH CURVE: Off COLOR QUENCH CORRECTION: Off

Quench Limits Low:69.120 High:342.31

SAM NO	POS	TIME MIN	H#	NI-63 CPM	NI-63 %ERROR	WIDE CPM	WIDE %ERROR	NI-63 DPM	NI-63 EFF-1	LUMEX %	ELAPSED TIME	
1	24-1	2.00	62.9	0.00	1.E+06	0.00	1.E+06	0.00	75.26	6.02	2.44	BLANK
		WARNING: QUENCH VALUE IS OUTSIDE QUENCH LIMIT										
2	24-2	2.00	140.0	0.00	1.E+06	0.36	3215.5	0.00	64.38	1.00	4.98	J004C5
3	24-3	2.00	123.3	0.76	1077.0	6.36	189.98	1.13	67.03	6.71	7.53	J004C6
4	24-4	2.00	153.5	0.00	1.E+06	0.00	1.E+06	0.00	62.10	5.34	10.09	J004C7
5	24-5	2.00	158.3	0.00	1.E+06	0.00	1.E+06	0.00	61.25	9.99	12.65	J004C8
6	24-6	2.00	148.8	2.76	305.30	0.00	1.E+06	4.39	62.90	18.26	15.22	J004C9
7	24-7	2.00	196.3	0.00	1.E+06	0.00	1.E+06	0.00	53.94	1.40	17.77	J004D0
8	24-8	2.00	115.8	0.00	1.E+06	0.00	1.E+06	0.00	68.15	4.52	20.34	J004D1
9	24-9	2.00	160.6	0.00	1.E+06	0.00	1.E+06	0.00	60.84	2.45	22.91	J004D2
10	24-10	2.00	128.5	0.00	1.E+06	2.86	412.23	0.00	66.23	1.35	25.48	J004D3
11	24-11	2.00	132.5	3.76	227.23	10.36	119.78	5.73	65.59	4.53	28.06	J004D4
12	24-12	2.00	153.7	0.00	1.E+06	0.00	1.E+06	0.00	62.15	3.85	30.63	J004D5
13	42-1	2.00	113.9	0.00	1.E+06	0.00	1.E+06	0.00	68.43	1.81	33.28	J004D6
14	42-2	2.00	139.5	0.00	1.E+06	0.00	1.E+06	0.00	64.46	1.26	35.85	J004D7
15	42-3	2.00	112.3	0.00	1.E+06	0.00	1.E+06	0.00	68.66	1.13	38.40	J004D8

ID: DAILY SOURCE 10 SEP 2002 14:16

USER: 8 COMMENT: LSC#2 USE UNQ C14 DIVIDEBY10

PRESET TIME :	0.10						
DATA CALC :	CPM	H#	:YES	SAMPLE REPEATS:	1	PRINTER	:EDIT
COUNT BLANK :	NO	IC#	: NO	REPLICATES :	1	RS232	: OFF
TWO PHASE :	NO	AQC	:YES	CYCLE REPEATS :	1	DISK	: OFF
SCINTILLATOR:	LIQUID	LUMEX	: NO	LOW SAMPLE REJ:	0	RWM LIST	: OFF
LOW LEVEL :	NO	HALF LIFE CORRECTION DATE:				none	

ISOTOPE 1:	14C	%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0
WIDE OPEN WINDOW		%ERROR: 0.00	FACTOR:	1.000000	BKG. SUB:	0

ALPHA-BETA DISCRIMINATION: NO

SAM NO	POS	TIME MIN	H#	14C CPM	14C %ERROR	WIDE CPM	WIDE %ERROR	LUMEX %	ELAPSED TIME
1	5-1	0.10	8.2	93700.00	2.07	94300.00	2.06	0.00	0.52

Source ✓ OK
9-10-02

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B01-055-031	Page 2 of 3
Collector: D.Shea	Company Contact: D.Shea; Telephone No.: 373-6425	Project Coordinator: KESSNER, JH	Price Code: Air Quality; Data Turnaround: 48 Hours
Project Designation: 100 B/C Area Effluent Pipeline & Proximity Site Remediatio	Sampling Location: 100 B/C, vehicle routines	SAF No.: B01-055	
Ice Chest No.: ERC 99051	Field Logbook No.: E-1548-2; COA: R100BC2600	Method of Shipment: Gov. vehicle	
Shipped To: PNNL Building 326	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

Possibly radiologically contaminated

Special Handling and/or Storage

Preservation	None										
Type of Container	G										
No. of Container(s)	1										
Volume	30mL										
SAMPLE ANALYSIS	Low Energy Beta - Screen (Nickel-63)										

Sample No.	Matrix *	Sample Date	Sample Time										
J004D0	OTHER SOLID	9/6/02	NA	✓									
J004D1	OTHER SOLID	↓	↓	✓									
J004D2	OTHER SOLID	↓	↓	✓									
J004D3	OTHER SOLID	↓	↓	✓									
J004D4	OTHER SOLID	↓	↓	✓									

CHAIN OF POSSESSION	Sign/Print Names	Date/Time	Received By/Stored In	Date/Time
Relinquished By/Removed From	Deb Ah	9-9-02/0730	DWShea DWShea	9/9/02 0730
Relinquished By/Removed From	DWShea DWShea	9/9/02 1642	Fridge 1A	9/9/02 1642
Relinquished By/Removed From	REF. 1A	91002 1320	SJGALE	91002 1320
Relinquished By/Removed From ERC	SJGALE	91002 1335	Received By/Stored In PNNL J. Ferrier	9-10-02 1340
Relinquished By/Removed From			Received By/Stored In	
Relinquished By/Removed From			Received By/Stored In	

SPECIAL INSTRUCTIONS
Lab WO# P20009

Personnel not available to relinquish samples from the 3726 Ref # 1A on 9/10/02

Matrix *
S=Soil
SE=Sediment
SC=Solid
Sl=Sludge
W=Water
O=Oil
A=Air
DS=Drum Solids
DL=Drum Liquids
T=Tissue
Sw=Wipe
L=Liquid
V=Vegetation
X=Other

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

B-H-EE-311 (03/01/2002)

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST	B01-055-031	Page 3 of 3
Collector: D.Shea	Company Contact: D.Shea; Telephone No.: 373-6425	Project Coordinator: KESSNER, JH	Price Code: Air Quality; Data Turnaround: 48 Hours
Project Designation: 100 B/C Area Effluent Pipeline & Proximity Site Remediatio	Sampling Location: 100 B/C, vehicle routines	SAF No.: B01-055	
Ice Chest No.: FRC 99 051	Field Logbook No.: EI-1548-2; COA: R100BC2600	Method of Shipment: Gov. vehicle	
Shipped To: PNNL Building 325	Offsite Property No.: N/A	Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

Possibly radiologically contaminated

Special Handling and/or Storage

Preservation	None										
Type of Container	G										
No. of Container(s)	1										
Volume	30mL										
SAMPLE ANALYSIS	Low Energy Beta - Strontium (Nickel-63)										
Sample No.	Matrix *	Sample Date	Sample Time								
J004D5	OTHER SOLID	9/6/02	NA	✓							
J004D6	OTHER SOLID	↓	↓	✓							
J004D7	OTHER SOLID	↓	↓	✓							
J004D8	OTHER SOLID	↓	↓	✓							

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Deb [illegible]	9-9-02/0730	DWShea DWShea	9/9/02 0930
DWShea DWShea	9/9/02 1642	Fridge 1A	9/9/02 1642
Ref 1A,	9/10/02 1320	SJ GALE [illegible]	9/10/02 1320
Ref 1A SJ GALE [illegible]	9/10/02 1335	PNNL J. Ferrin/[illegible]	9-10-02 1340

SPECIAL INSTRUCTIONS

Lab WO# P2C009

Personnel not available to relinquish samples from the 3729 Ref 1A on 9/10/02

Matrix *

S=Soil; SE=Sediment; SD=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

BHI-EE-011 (03/01/2002)

Bechtel Hanford Inc.	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		B01-055-031	Page 1 of 1
Collector: D.Shea	Company Contact: D.Shea	Telephone No.: 373-6425	Project Coordinator: KESSNER, JH	Price Code: Air Quality — Data Turnaround: 48 Hours
Project Designation: 100 B/C Area Effluent Pipeline & Proximity Site Remediatio	Sampling Location: 100 B/C, vehicle routines		SAF No.: BC1-055	
Ice Chest No.: ERC 99 051	Field Logbook No.: EI-1548-2	COA: R100BC2500	Method of Shipment: Gov. vehicle	
Shipped To: PNNL Building 325	Offsite Property No.: N/A		Bill of Lading/Air Bill No.: N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

Possibly radiologically contaminated

Special Handling and/or Storage

Preservation	None										
Type of Container	G										
No. of Container(s)	1										
Volume	30mL										
SAMPLE ANALYSIS	Low Energy Beta - Screen (Nickel-63)										

Sample No.	Matrix *	Sample Date	Sample Time										
J004C5	OTHER SOLID	9/6/02	NA	✓									
J004C6	OTHER SOLID	↓	↓	✓									
J004C7	OTHER SOLID			✓									
J004C8	OTHER SOLID			✓									
J004C9	OTHER SOLID			✓									

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
Deb [illegible]	9-9-02/0730	DWSher DWSher	9/9/02 0730
DWSher DWSher	9/9/02 1642	Fridge 1A	9/9/02 1642
REF 1A	91002 1320	SJGALE [illegible]	91002 1320
SJGALE [illegible] (ERC)	91002 1335	J.Ferrito/[illegible] (PNNL)	91002 1340

SPECIAL INSTRUCTIONS

Lab WO# P20009

Personnel not available to relinquish samples from the 3728 Ref# 1A on 9/10/02

Matrix *

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

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

BHI-EE-011 (03/01/2002)

COPY

ERC RADIOLOGICAL SURVEY RECORD (continuation)

Smear Counting Results

Survey #RSR-100BC-02-0866

Counter Location:		Background (cpm)	DL (cpm)	$DL_{activity}$ (dpm)	Counter Eff.
100BC MD-474	α	0.23	2.0	5.8	.342
	βγ	56.8	30	73	.422

Sample		Counting Results				Final Analysis
No	Description of Smear Location	Con. Type	Sample Count Duration (min)	Gross CPM	Net CPM	Removable (dpm/100 cm²)
1	CAT R201	α	1	2	<DL	<20
		βγ	1	63	<DL	<1000
2	ERDF CONT. 0154	α		0		
		βγ		62		
3	TRUCK LIC.# 641 64204	α		0		
		βγ		45		
4	5 GAL. BUCKET (QUEUE)	α		0		
		βγ		55		
5	ERDF CONT. 0524	α		0		
		βγ		65		
6	EX 400 TRACK R134	α		0		
		βγ		61		
7	ERDF CONT. 0608	α		2		
		βγ		55		
8	ERDF CONT 0751	α		0		
		βγ		56		
9	FUEL TRUCK	α		0		
		βγ		66		
10	SAFETY VAN	α		0		
		βγ		55		
11	HAUL TRUCK 844	α		0		
		βγ		41		
12	DESK IN TENT (RBA)	α		0		
		βγ		56		
13	RCT GR FORD 663 28287	α		2		
		βγ		63		
14	WATER LINE	α		0		
		βγ		57		

BHI-TM-R006k (07/31/2000)