0057930 PNL 041

Battelle
Putting Technology To Work

# FACSIMILE TRANSMITTAL

DATE: January 24, 2002

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

From: Steven Bivins
pnnl
Facsimile #: 372-1484
Telephone #: 376-3198

Transmittal Consists of 5 Page(s) including cover page:

*COMMENTS:*

boo 031
sdg pnl0041
emailed to mike 5/28

RECEIVED
AUG 19 2002
EDMC

RECEIVED
MAY 2002

May 28 02 10:26a p.1

ID:NI-63 LS6500-2 28 MAY 2002 08:43
USER: 4 COMMENT:SN7049514

BECHTEL 100mL
5-28-02
JM

Run # 3211

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PRESET TIME : | 2.00 | | | | | | | | |
| DATA CALC : | SL DPM | HW | :YES | SAMPLE REPEATS: | 1 | PRINTER | :EDIT |
| COUNT BLANK : | NO | IC# | : NO | REPLICATES : | 1 | RS232 | : OFF |
| TWO PHASE : | NO | ADC | : NO | CYCLE REPEATS : | 1 | DISK | : OFF |
| SCINTILLATOR: | LIQUID | LUMEX | : NO | LOW SAMPLE REJ: | 0 | RWM LIST | : OFF |
| LOW LEVEL : | NO | HALF LIFE CORRECTION DATE: | | | 10 MAR 1997 12:00 | | |

ISOTOPE 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:49.120 High:342.31

| SAM NO | POS | TIME MIN | HW | 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 | 56.3 | 0.00 | 1.E+06 | 0.00 | 1.E+06 | 0.00 | 76.07 | 3.52 | 2.44 | BLANK |
| | WARNING: QUENCH VALUE IS OUTSIDE QUENCH LIMIT | | | | | | | | | | | |
| 2 | 24-2 | 2.00 | 78.4 | 0.00 | 1.E+06 | 0.00 | 1.E+06 | 0.00 | 73.26 | 7.04 | 5.00 | B14PX7 |
| 3 | 24-3 | 2.00 | 88.6 | 40.76 | 29.75 | 42.86 | 34.53 | 56.65 | 71.95 | 1.53 | 7.54 | B14PX8 |
| 4 | 24-4 | 2.00 | 101.0 | 1.26 | 654.46 | 0.00 | 1.E+06 | 1.79 | 70.26 | 9.44 | 10.13 | B14PX9 |
| 5 | 24-5 | 2.00 | 98.0 | 0.00 | 1.E+06 | 0.86 | 1351.0 | 0.00 | 70.69 | 5.34 | 12.69 | B14PY0 |
| 6 | 24-6 | 2.00 | 79.4 | 3.26 | 260.28 | 9.86 | 125.45 | 4.46 | 73.16 | 2.64 | 15.26 | B14PY1 |
| 7 | 24-7 | 2.00 | 86.5 | 1.76 | 471.97 | 2.86 | 412.23 | 2.44 | 72.22 | 2.01 | 17.84 | B14PY2 |
| 8 | 24-8 | 2.00 | 83.4 | 0.00 | 1.E+06 | 4.36 | 273.31 | 0.00 | 72.64 | 3.78 | 20.41 | B14PY3 |
| 9 | 24-9 | 2.00 | 78.2 | 2.76 | 305.30 | 15.36 | 85.37 | 3.77 | 73.31 | 3.61 | 22.97 | B14PY4 |
| 10 | 24-10 | 2.00 | 95.6 | 3.26 | 260.28 | 2.86 | 412.23 | 4.59 | 71.02 | 1.14 | 25.53 | B14PY5 |
| 11 | 24-11 | 2.00 | 81.1 | 1.76 | 471.97 | 7.36 | 165.29 | 2.41 | 72.94 | 1.98 | 28.10 | B14PY6 |

ID: DAILY SOURCE 28 MAY 2002 08:42

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 | 8-1 | 0.10 | 0.3 | 94650.00 | 2.06 | 95270.00 | 2.05 | 0.00 | 0.55 |

| Bechtel Hanford Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | B00-031-017 | Page 1 of 2 |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Collector<br>MT Stankovich | Company Contact<br>Mike Stankovich<br>Telephone No.<br>509-531-7620 | Project Coordinator<br>TRENT, SJ | Price Code<br>Air Quality ☐ | Data Turnaround<br>7 Days |
| Project Designation<br>100 F Area - Other Solid (quick turn) | Sampling Location<br>100F Equipment | SAF No.<br>B00-031 | | |
| Ice Chest No. | Field Logbook No.<br>EI-1535-5<br>COA<br>RI1FX12000 | Method of Shipment<br>Hand Dellevered/Gov't Vehicle | | |
| Shipped To<br>PNNL Building 326 | Offsite Property No.<br>NA | Bill of Lading/Air Bill No.<br>NA | | |

POSSIBLE SAMPLE HAZARDS/REMARKS

*Radioactive*

**Special Handling and/or Storage**

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

| Sample No. | Matrix * | Sample Date | Sample Time | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B14PX7 | OTHER SOLID | 5-22-02 | 0945 | ✓ | | | | | | | | | |
| B14PX8 | OTHER SOLID | 5-22-02 | 0945 | ✓ | | | | | | | | | |
| B14PX9 | OTHER SOLID | 5-22-02 | 0945 | ✓ | | | | | | | | | |
| B14PY0 | OTHER SOLID | 5-22-02 | 0945 | ✓ | | | | | | | | | |
| B14PY1 | OTHER SOLID | 5-22-02 | 0945 | ✓ | | | | | | | | | |

| CHAIN OF POSSESSION | Sign/Print Names | SPECIAL INSTRUCTIONS |
|---|---|---|
| Relinquished By/Removed From — Date/Time<br>Terry S. Elison / Terry S. Elison 5-23-02/1240 | Received By/Stored In — Date/Time<br>MS Stankovich 5-23-02/1240 | |
| Relinquished By/Removed From — Date/Time 1450<br>MS Stankovich 5-23-02 | Received By/Stored In — Date/Time<br>2A/3728 5-23-02 1450 | |
| Relinquished By/Removed From — Date/Time 0925<br>Ref 2A 3728 5-28-02 | Received By/Stored In — Date/Time 0925<br>R. Fuller / R. Fuller 5-28-02 | |
| Relinquished By/Removed From — Date/Time<br>R. Fuller / R. Fuller 5-28-02 0930 | Received By/Stored In — Date/Time 0930<br>J. Ferraro / J. Ferraro 5-28-02 | |
| Relinquished By/Removed From — Date/Time | Received By/Stored In — Date/Time | |
| Relinquished By/Removed From — Date/Time | Received By/Stored In — 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

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

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

RUN #3211

| Bechtel Hanford Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | B00-031-017 | Page 2 of 2 |
|---|---|---|---|
| Collector: MT Stankovich | Company Contact: Mike Stankovich; Telephone No.: 509-531-7620 | Project Coordinator: TRENT, SJ | Price Code: Air Quality — Data Turnaround: 7 Days |
| Project Designation: 100 F Area - Other Solid (quick turn) | Sampling Location: 100F Equipment | SAF No.: B00-031 | |
| Ice Chest No. | Field Logbook No.: EI-1535-5 | COA: R11FX12000 | Method of Shipment: Hand Delievered/Gov't Vehicle |
| Shipped To: PNNL Building 326 | Offsite Property No.: NA | | Bill of Lading/Air Bill No.: NA |

POSSIBLE SAMPLE HAZARDS/REMARKS

*Radioactive*

Special Handling and/or Storage

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

| Sample No. | Matrix * | Sample Date | Sample Time | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| B14PY2 | OTHER SOLID | 5-22-02 | 0945 | — | | | | | | | | | |
| B14PY3 | OTHER SOLID | 5-22-02 | 0945 | — | | | | | | | | | |
| B14PY4 | OTHER SOLID | 5-22-02 | 0945 | — | | | | | | | | | |
| B14PY5 | OTHER SOLID | 5-22-02 | 0945 | — | | | | | | | | | |
| B14PY6 | OTHER SOLID | 5-22-02 | 0945 | — | | | | | | | | | |

| CHAIN OF POSSESSION | Sign/Print Names | SPECIAL INSTRUCTIONS | Matrix * |
|---|---|---|---|
| Relinquished By/Removed From: Tony S. Eliason/Tony Eliason, Date/Time: 5-23-02/1240 | Received By/Stored In: Mike Stankovich, Date/Time: 5-23-02 1240 | | S=Soil, SE=Sediment, SC=Scale, 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/Removed From: MT Stankovich, Date/Time: 5-23-02 1450 | Received By/Stored In: 2B/3728, Date/Time: 5-23-02 1450 | | |
| Relinquished By/Removed From: R.F. 2B 3728, Date/Time: 5-28-02 0925 | Received By/Stored In: R. Fahlberg, Date/Time: 5-28-02 0925 | | |
| Relinquished By/Removed From: ERC, Date/Time: 5-28-02 0930 | Received By/Stored In: J. Forrest, Date/Time: 5-28-02 0930 | | |
| Relinquished By/Removed From: Date/Time | Received By/Stored In: Date/Time | | |
| Relinquished By/Removed From: Date/Time | Received By/Stored In: Date/Time | | |

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

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

RUN #524