

START

9713534.1520

0046795

H0074-T/W 8

Thermo NUtech

2030 Wright Avenue

P.O. Box 4040

Richmond, CA 94804-0040

(510) 235-2633 • FAX (510) 235-0438

December 6, 1996



Ms. Doris Ayres
Bechtel Hanford Inc.
1022 Lee Boulevard
Richland, WA 99352

Reference: P.O. #TSH-SBV-207925
Thermo NUtech N6-11-019-7430, SDG H0074

Dear Ms. Ayres:

Enclosed is the data report for the single water sample designated as SAF No. B97-011/SDG H0074, received at Thermo NUtech on November 8, 1996. Results are given for strontium-89 & 90.

This "summary delivery" data package is paginated from 1 through 31.

Please call if you have any questions concerning this data.

Sincerely,

N. Joseph Verville
Program Manager

NJV/mac

Enclosure: Data Package

Thermo NUtech
W.O. No. N6-11-019-7430/SDG H0074

Bechtel Hanford Inc.
P.O. TSH-SBV-207925
December 6, 1996

Case Narrative

1.0 GENERAL

Thermo NUtech Sample Delivery Group H0074 is comprised of the single water sample designated as SAF B97-011 delivered under Project Designation 100-NR-2.

The sample was received as stated on the Chain-of-Custody document.

2.0 ANALYSIS NOTES

2.1 Strontium-89 Analyses

No problems were encountered with the analyses. The 2 sigma errors in the results for the sample, its duplicate, and the method blank were all greater than their respective results and MDA's indicating that the MDA may not be good estimate of the "real" MDA.

2.2 Strontium-90 Analyses

No problems were encountered with the analyses. All sample MDA's were less than the RDL.

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THERMO NUTECH

SAMPLE DELIVERY GROUP 7430

SAMPLE SUMMARY

SDG 7430
Contact N. Joseph Verville

Client Westinghouse Hanford
Contract TSH-SBV-207925
Case no H0074

| CLIENT SAMPLE ID | LOCATION | MATRIX | LEVEL | LAB SAMPLE ID | SAP NO | CHAIN OF CUSTODY | COLLECTED |
|------------------------|----------|--------|-------|---------------|---------|------------------|----------------|
| BOJ2N4 | 100N | LIQUID | | N611019-01 | B97-011 | EFL-1154 | 11/06/96 10:45 |
| Method Blank | | LIQUID | | N611019-03 | B97-011 | | |
| Lab Control Sample | | LIQUID | | N611019-02 | B97-011 | | |
| Duplicate (N611019-01) | 100N | LIQUID | | N611019-04 | B97-011 | | 11/06/96 10:45 |

SAMPLE SUMMARY

Page 1

SUMMARY DATA SECTION

Page 3

Lab id TMANC
Protocol WHC-HASM-1
Version Ver 1.0
Form DVD-CS
Version 3.06
Report date 12/05/96

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THERMO NUTECH
SAMPLE DELIVERY GROUP 7430

N611019-01

BOJ2N4

DATA SHEET

SDG 7430 Client/Case no Westinghouse Hanford H0074
 Contact N. Joseph Verville Case no TSH-SBV-207925
 Lab sample id N611019-01 Client sample id BOJ2N4
 Dept sample id 7430-001 Location/Matrix 100N LIQUID
 Received 11/08/96 Collected 11/06/96 10:45
 Custody/SAF No EFL-1154 B97-011

| ANALYTE | CAS NO | RESULT pCi/L | 2σ ERR (COUNT) | MDA pCi/L | RDL pCi/L | QUALI- FIERS | TEST |
|--------------|------------|-----------------|-------------------|--------------|--------------|-----------------|------|
| Strontium 89 | 14158-27-1 | 16 | <u>64</u> | 3.0 | 5.0 | | SR |
| Strontium 90 | 10098-97-2 | 380 | 57 | 1.0 | 2.0 | | Y |

Lab id TMANC
 Protocol WHC-HASM-1
 Version Ver 1.0
 Form DVD-DS
 Version 3.06
 Report date 12/05/96

| | | | | |
|--|---|--|------------------------------------|----------------------------|
| Collector <i>A. Rizzo / D 5411</i> | Company Contact J.V. Borghese | Telephone No. 509/375-4688 | Project Coordinator Koerner, CC | Data Turnaround 15 Days |
| Project Designation 100-NR-2 Monthly Performance Monitoring | Sampling Location 100N | SAF No. B97-011 | | |
| Ice Chest No. <i>ERC 96-070</i> | Field Logbook No. <i>ERL-1154</i> | Method of Shipment Federal Express | | |
| Shipped To TMA NORCAL | Offsite Property No. <i>W97-0001-7</i> | Bill of Lading/Air Bill No. <i>277 1635 063</i> | | |

| | | | | | | | | | | |
|--|---------------------|------|-----------------|--|--|--|--|--|--|--|
| POSSIBLE SAMPLE HAZARDS/REMARKS None | Preservation | None | HNO3 to pH 2 | | | | | | | |
| | Type of Container | P | P | | | | | | | |
| | No. of Container(s) | 1 | 4 | | | | | | | |
| Special Handling and/or Storage Maintain samples between 2 degrees C and 6 degrees C. | Volume | 20ml | 1000ml | | | | | | | |

| | | | | | | | | | | |
|-----------------|---------------|----------------------------|--|--|--|--|--|--|--|--|
| SAMPLE ANALYSIS | Activity Scan | Strontium-89,90 - Total Sr | | | | | | | | |
|-----------------|---------------|----------------------------|--|--|--|--|--|--|--|--|

| Sample No. | Matrix * | Sample Date | Sample Time | | | | | | | |
|------------|----------|-------------|-------------|---|---|--|--|--|--|--|
| B0J2N4 | Water | 11-6-96 | 1045 | X | X | | | | | |
| | | | | | | | | | | |
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| | | |
|--|-----------------------------|------------------------------------|
| CHAIN OF POSSESSION | Sign/Print Names | SPECIAL INSTRUCTIONS |
| Relinquished By <i>A. Rizzo</i> | Date/Time <i>11/6/96</i> | Received By <i>Eric Koerner</i> |
| Relinquished By <i>Eric Koerner</i> | Date/Time <i>11-7-96</i> | Received By <i>John TNU</i> |
| Relinquished By | Date/Time | Received By |
| Relinquished By | Date/Time | Received By |

- 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 |
| | | |
| FINAL SAMPLE DISPOSITION | Disposal Method | Disposed By |
| | | |

9715534-1524

WHC/BHI SAMPLE CHECK-IN LIST

Date/Time Received: 11-08-96/10:30 A.M. SDG #: H0074
 Work Order Number: M-11-018 & NG-11-019-7430 SAF#: B97-011
 Shipping Container ID: ERC 96-070 Chain-of-Custody #: B97-011-16

1. Custody Seals on shipping container intact? Yes [] No []
2. Custody Seals dated and signed? Yes [] No []
3. Chain-of-Custody record present? Yes [] No []
4. Cooler Temperature 2°C
5. Vermiculite/packing materials is Wet [] Dry []
6. Number of samples in shipping container: _____
7. Sample holding times exceeded? Yes [] No []
8. Samples have: tape _____ hazard labels
 custody seals appropriate sample labels
9. Samples are: in good condition _____ leaking
 _____ broken _____ have air bubbles
10. Were any anomalies identified in sample receipt? Yes [] No []
11. Description of anomalies (include sample numbers): _____

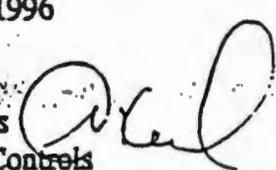
Sample Custodian *[Signature]* on 11-08-96/10:30 A.M.

Telephoned To: _____ on _____ By _____

Environmental
Restoration
Contractor **ERC Team**
Interoffice Memorandum

Job No. 22192
Written Response Required: NO
CCN: N/A
OIR: N/A
TSD: N/A
ERAs: N/A
Subject Code: 300

TO: W. S. Thompson NI-28 DATE: February 29, 1996
G. C. Henckel H4-80

COPIES: K. A. Smith X0-23 FROM: S. K. De Mers 
T. L. Lafreniere X0-23 Radiological Controls
D. E. Gergely X0-23 T7-05/373-1913

SUBJECT: Total Activities for Off-Site Shipments of Groundwater Samples to NRC Licensed Laboratories

There is no need to perform total activities prior to offsite shipment to NRC licensed labs of samples taken from ground water wells located on the Hanford Site.

All wells reviewed to date for radiological content have shown no well with a total activity in excess of 2,000,000 pCi/l (2,000 pCi/gm), the Department Of Transportation limit for radioactive material. The highest activity in any known well is 1.56×10^6 pCi/l H³.

While this does not constitute any release from radiological controls for worker protection, it does allow samples to be shipped based on historical laboratory data and save the expense of doing radiochemical analysis.

A copy of the most recent analytical data should be provided to the NRC licensed laboratory with the samples being shipped or if no data is available for new wells, the most recent data from adjacent wells.

SHIP DATE: 07NOV96
ACC# 098101276

ACTUAL WGT: 28 LBS MAN-WT
DIM WEIGHT CHECKED

CA 94804-9949

FedEx BILL THIRD PARTY

PART # 147923 FORMAT # 077 RIT 0796



Hanford Operations and Engineering Contract for the US Department of Energy

P.O. Box 1970, Richland, WA 98352

28 LBS

ATTN: D. Sanchez
Thermo Nil Tech
2030 Wright Ave.

FIRST CLASS

Richmond, CA 94804-9949

REF: R10NR22000 Y97-000197

PRIORITY OVERNIGHT FRI

CAD# 0053292 07NOV96
TRK# 277 1635 063

Deliver by:
08NOV96

94804-CA-US

OAK
WA JEM



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64-7800-083 (8/87)

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