



**Department of Energy**  
Oak Ridge Operations  
P.O. Box 2001  
Oak Ridge, Tennessee 37831-8723

September 17, 1991

Dr. David Bedan  
Radioactive Waste Cleanup Coordinator  
Missouri Department of Natural Resources  
P. O. Box 176  
Jefferson City, Missouri 65102

Dear Dr. Bedan:

**ENVIRONMENTAL MONITORING RESULTS**

Please find enclosed, the sampling results from raw and finished water at the Chain of Rocks Water Treatment Plant. These results are being provided to you per your request, on a quarterly basis. The sampling is conducted as part of the Department of Energy's (DOE) environmental monitoring program for the St. Louis Airport Site. Unfiltered samples were analyzed for radium-226, thorium-230, and total uranium, the results for which are shown as Location 3 and Location 4 on the first page of the enclosure. These data represent sampling results from April 1991 environmental monitoring activities. The second page of the enclosure is a drawing showing the sampling locations for the Chain of Rocks Water Treatment Plant.

Results

DOE's derived concentration guidelines (DCGs) for radium-226, thorium-230, and total uranium are 100 picocuries per liter (pCi/L), 300 pCi/L, and 600 pCi/L, respectively. The DCGs are calculated radionuclide concentrations that assure that an individual in the general public does not exceed the radiation protection standard of 100 millirem per year, assuming typical water consumption conditions. Analytical results for water collected from sampling Locations 3 and 4, near the Chain of Rocks Water Treatment Plant indicate radionuclide concentrations well below their respective DCGs.

If you have any questions regarding these data, please contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "David G. Adler", is written over the word "Sincerely".

David G. Adler, Site Manager  
Former Sites Restoration Division

Enclosure

Dr. Bedan

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September 17, 1991

cc: Mr. Kenneth Baldwin, St. Louis County Department of Health  
Mr. Terry Gloriod, St. Louis County Water  
Mr. Greg McCabe, U.S. Environmental Protection Agency, Region VII  
Dr. William Kincaid, St. Louis Department of Health and Hospitals  
Mr. Daryl Roberts, Missouri Department of Health  
Mr. Conn B. Roden, St. Louis County Department of Community Health and Medical Care  
Mr. David Visintainer, City of St. Louis, Water Division Chain of Rocks Water Treatment Plant  
Mr. Steven D. Liedle, Bechtel National, Inc.

CUSTOMER  
ATTENTION  
ADDRESS  
CITY  
W.O. NO.

Bechtel National, Inc. - SLAPSS-00004  
Mike McDougall  
P.O. Box 350  
Oak Ridge, TN 37831-0350  
153E3585

ALBUQUERQUE LABORATORY



RA226/TH230/TOTU IN WATER

#325

TYPE OF ANALYSIS

CUSTOMER ORDER NUMBER

SAMPLES RECEIVED 29-APR-91

| Customer Identification          | Date Collected | Type of Analysis | TOTAL VOL. | ACTIVITY | 2 SIGMA / ERROR | UNITS      |
|----------------------------------|----------------|------------------|------------|----------|-----------------|------------|
| 15301SW0291                      | 25-APR-91      | RA-226           | 3240       | <        | 0.06            | pCi/l      |
|                                  |                | TH-230           | 3240       | <        | 0.1             | pCi/l      |
|                                  |                | TOTU             | 3240       |          | 18              | ug/l       |
| 15302SW0291                      | 25-APR-91      | RA-226           | 3480       |          | 0.23            | 0.08 pCi/l |
|                                  |                | TH-230           | 3480       | <        | 0.1             | pCi/l      |
|                                  |                | TOTU             | 3480       | <        | 5               | ug/l       |
| 15302SW0291<br>DUPLICATE         | 25-APR-91      | RA-226           | 3480       |          | 0.08            | 0.07 pCi/l |
|                                  |                | TH-230           | 3480       | -        | -               | pCi/l      |
|                                  |                | TOTU             | 3480       | -        | -               | ug/l       |
| 15303SW0291<br>RAW<br>Location 3 | 25-APR-91      | RA-226           | 3580       |          | 1.0             | 0.09 pCi/l |
|                                  |                | TH-230           | 3580       |          | 2.50            | 0.36 pCi/l |
|                                  |                | TOTU             | 3580       |          | 7               | ug/l       |
| 15304SW0291<br>FIN<br>Location 4 | 25-APR-91      | RA-226           | 3610       |          | 0.21            | 0.09 pCi/l |
|                                  |                | TH-230           | 3610       | <        | 0.03            | pCi/l      |
|                                  |                | TOTU             | 3610       |          | 6               | ug/l       |
| 15305SW0291                      | 25-APR-91      | RA-226           | 3020       | <        | 0.07            | pCi/l      |
|                                  |                | TH-230           | 3020       | <        | 0.07            | pCi/l      |
|                                  |                | TOTU             | 3020       |          | 7               | ug/l       |
| 15306SW0291                      | 25-APR-91      | RA-226           | 3320       |          | 1.1             | 0.1 pCi/l  |
|                                  |                | TH-230           | 3320       |          | 0.66            | 0.24 pCi/l |
|                                  |                | TOTU             | 3320       |          | 7               | ug/l       |
| 15306SW0291<br>DUPLICATE         | 25-APR-91      | RA-226           | 3320       |          | -               | - pCi/l    |
|                                  |                | TH-230           | 3320       |          | 0.98            | 0.31 pCi/l |
|                                  |                | TOTU             | 3320       |          | -               | - ug/l     |
| 15307SW0291                      | 25-APR-91      | RA-226           | 2260       |          | 1.58            | 0.1 pCi/l  |
|                                  |                | TH-230           | 2260       |          | 2.75            | 0.39 pCi/l |
|                                  |                | TOTU             | 2260       |          | 7               | ug/l       |

☐ REPORTED VIA TELEPHONE

☒ FAX (partial) 07/11/91

(final) 08/09/91

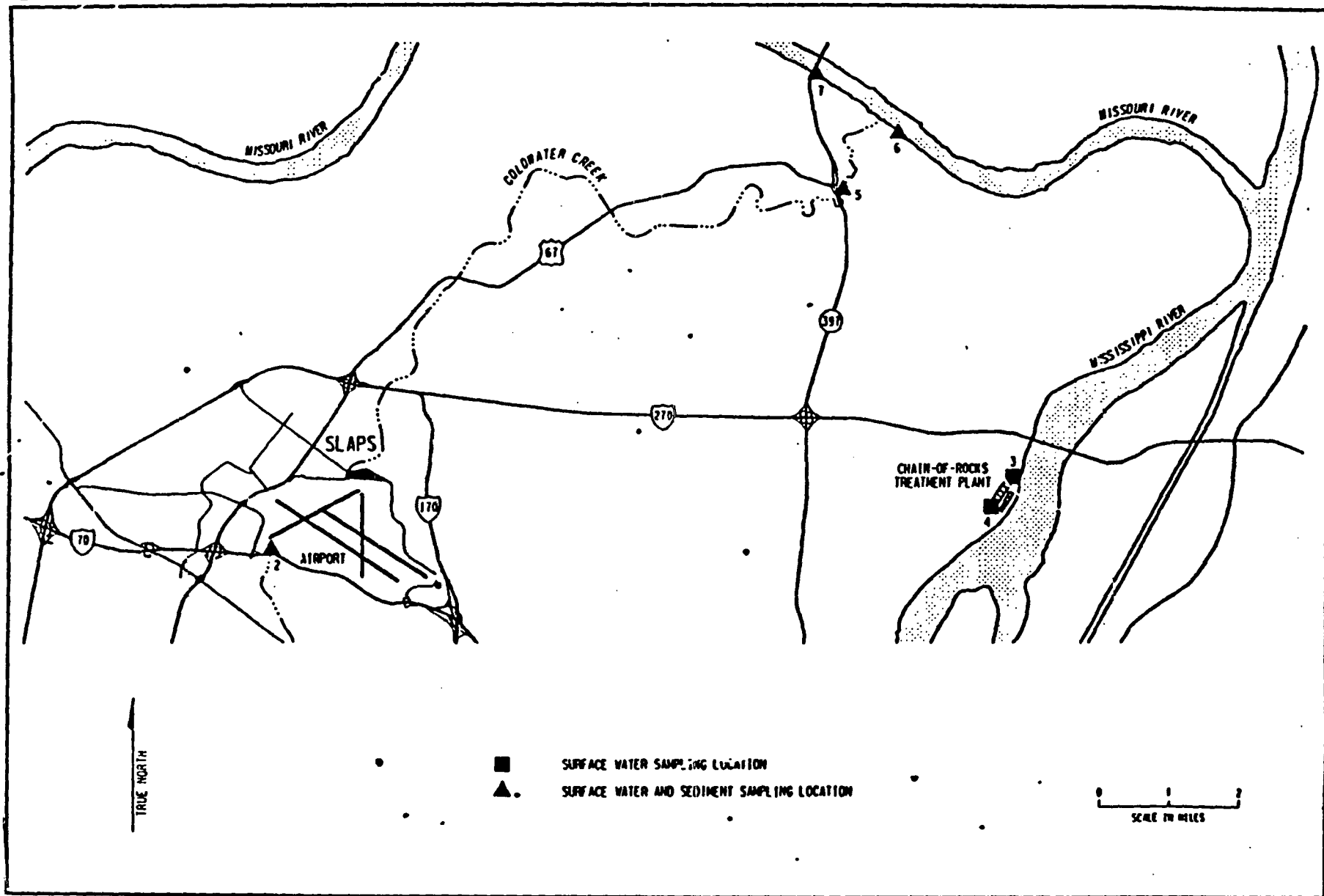
PAGE 1 OF 1

08-20-1991

**A Eberline**  
Thermo Analytical Inc.

7021 PAN AMERICAN FREEWAY, N.E.  
ALBUQUERQUE NEW MEXICO 87109

APPROVED BY



134F165.DGN

**Figure 4-3**  
**Offsite Surface Water and Sediment Sampling Locations in the SLAPS Area**

081172

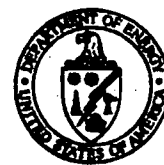
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Formerly Utilized Sites Remedial Action Program (FUSRAP)

# ADMINISTRATIVE RECORD

for the St. Louis Site, Missouri



U.S. Department of Energy

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