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**SUBMITTAL OF THE ANALYTICAL RESULTS FROM AUGUST 1,
1995, FOR THE KC-2 WAREHOUSE/WELL NO. 67**

02/15/96

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DOE-FN EPAS
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REPORT**



Department of Energy
Fernald Environmental Management Project
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Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V - SRF-5J
77 W. Jackson Blvd.
Chicago, IL 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, OH 45402-2911

Dear Mr. Saric and Mr. Schneider:

SUBMITTAL OF THE ANALYTICAL RESULTS FROM AUGUST 1, 1995, FOR THE KC-2 WAREHOUSE/WELL NO. 67

This letter provides the results of the August 1, 1995, sampling of the KC-2 Warehouse/Well No. 67. Semiannual sampling of Well No. 67 for uranium and select Hazardous Substance List (HSL) metals began on January 31, 1994. Plugging and abandonment of Well No. 67 will occur concurrently with final decommissioning of the KC-2 Warehouse as agreed upon through approval of the KC-2 Warehouse/Well No. 67 Removal Action Fact Sheet.

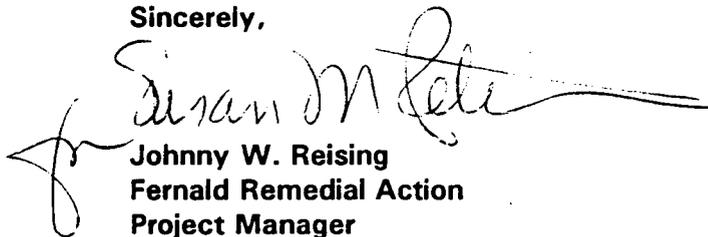
Analysis of the August 1, 1995, samples (see Table 1) show that the concentration of HSL metals are consistent with previously reported analytical results. All HSL metal concentrations are below the U.S. Environmental Protection Agency (U.S. EPA) maximum contaminant levels (MCL). Uranium concentrations continue to remain below the proposed 20 $\mu\text{g/L}$ (MCL).

Elevated metal concentrations were noted during the January 1995 sampling event. The elevated concentrations are attributed to higher than usual turbidity in the samples resulting from the use of a bailer during the January 1995 sampling round. Typically, a submersible pump is used during sampling. The increased turbidity resulted in elevated metals' concentrations in unfiltered samples. As noted in the KC-2 Warehouse/Well No. 67 Removal Action Fact Sheet, which was submitted to the U.S. EPA on September 27, 1993, the sediment in the well contains high concentrations of metals that do not readily leach to the groundwater. A submersible pump was used during the August 1, 1995, sampling and, as expected, the metals' concentrations returned to their previous levels.

Based on the observed consistency in contaminant concentrations in Well No. 67, the Department of Energy, Fernald Area Office (DOE-FN) requests reduction of the sampling frequency to an annual basis until such time as Well No. 67 is decommissioned. The FEMP sampled Well No. 67 in January 1996 as previously scheduled. After the sample results are obtained, and if found to be consistent with the results from the August 1995 sampling event, annual samples will be collected during August of subsequent years. The revised OU3 Prioritization and Sequencing Report (PSR) Schedule dated October 18, 1995, proposes a schedule for decommissioning the KC-2 Warehouse in FY 1997, provided that funding is available. If funding is not available, DOE-FN will adhere to the original milestone of FY 2004 as specified in the PSR issued June 1995.

If you or your staff have any questions, please contact Kathleen Nickel at (513) 648-3166, or Robert Janke at (513) 648-3124.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FN:Nickel

Enclosure: As Stated

cc w/enc:

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TABLE 1
SUMMARY OF GROUNDWATER SAMPLES FROM
KC-2 WAREHOUSE/WELL 67

Analyte	Sampling Events (µg/L)				Maximum Containment Level (µg/L)	
	8/15/93 Unfiltered/ Filtered	1/31/94* Unfiltered/ Filtered	8/17/94 Unfiltered/ Filtered	1/31/95 Unfiltered/ Filtered		8/1/95 Unfiltered/ Filtered
Aluminum	29700/22	214/ <33.4	1050/ <34.5	43,300/ <24	168/ <27	50 - 200
Antimony	112/45	<34.4/ <34.4	<30.5/ <30.5	220/ <33	<24/ <24	6.0
Arsenic	71.1/1.1	<1.6/ <1.6	<2.2/ <2.0	87/ <1	<4/ <4	50.0
Barium	757/333	103/105	214/198	867/160	209/195	2000
Beryllium	2.3/1	.41/ <.41	<0.33/ <0.67	<8/ND	ND/ND	4.0
Cadmium	44.6/3	4.0/ <2.9	<2.2/ <2.2	67/ <4	<2/ <2	5.0
Calcium	912000/1119000	60600/61200	97200/84000	1310000/47500	72700/69200	
Chromium	1560/4.4	9.2/ <4.0	122/ <3.0	2350/ <3	4/ <4	100
Cobalt	69.4/6.2	<7.0/ <7.0	<5.2/ <3.2	102/ <4	<5/ <5	NA
Copper	273/4.1	<6.7/ <6.7	<25.5/ <4.5	373/46	<3/ <3	**1300
Iron	375000/3240	9120/5250	30500/ <125	620000/271	3480/1370	300
Lead	1880/1.1	3.5/ <.33	53.9/ <0.7	2880/ <1	2/ <1	**15.0
Magnesium	228000/39100	37800/37900	43700/43700	322000/35000	39000/38800/	
Manganese	5250/113	141/130	426/164	8520/29	93/73	50
Mercury	0.24/0.2	<.10/ <.10	<.011/ <.01	2/1	ND/ND	2.0
Nickel	898/19	<15.1/ <15.1	67.3/ <11.4	1210/ <15	<10/ <10	100
Potassium	6500/1280	1450/1380	<2718/ <2710	14600/ <2670	922/ <778	
Selenium	11.1/1.1	<.78/ <.78	<1.6/ <2.6	10/ <1	<2/ <2	50.0
Silver	12.8/3	<6.9/ <6.9	<4.2/ <4.2	31/ <4	<4/ <4	100

TABLE 1
(Continued)

Analyte	Sampling Events (µg/L)				Maximum Containment Level (µg/L)
	8/15/93 Unfiltered/ Filtered	1/31/94 ^a Unfiltered/ Filtered	8/17/94 Unfiltered/ Filtered	1/31/95 Unfiltered/ Filtered	
Sodium	20900/19300 1.4/1.1	17500/17700 <.89/<.89	19800/19400 <9.1/<6.1	21800/19100 34/<5	19200/19200 <3/<3
Thallium	78.1/4	6.9/8.1	16.7/24.1	89/<9	<3/<3
Vanadium	1260/9	54.2/<3.4	83.4/<3.8	1790/21	<19/<15
Zinc	0.8	<.1	1.3	0.7	0.7
Total uranium-filtered	20	.3	2.8	0.2	0.9
Total uranium-unfiltered					20

^a Duplicate samples were collected for the January 31, 1994 sampling event and Table 1 reflects the highest of the two samples based on unfiltered results.

< = Less than detection limit

ND = Not detected

** = Under review

50 = Secondary maximum contaminant levels