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JUN 10 2002

DOE-0526-02

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

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

Ms. Val Orr
Division of Drinking and Ground Waters – UIC Unit
Ohio Environmental Protection Agency
P.O. Box 1049
Columbus, OH 43216-1049

Dear Mr. Saric, Mr. Schneider, Ms. Orr:

MARCH 2002 MONTHLY RE-INJECTION OPERATING REPORT

This letter transmits the subject report for your review and approval.

This report is being submitted to the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) Office of Federal Facilities Oversight in accordance with the Re-Injection Demonstration Test Plan. The report is also being submitted to the OEPA Division of Drinking and Ground Waters unit of Underground Injection Control (UIC) in accordance with their guidelines.

The March 2002 report is being provided in a monthly, streamlined format, as was February's. Based on discussion with the OPEA on March 19, 2002 (during the site weekly teleconference), it is our intention that the reports summarizing data starting with April-June 2002 will be provided in quarterly summaries.

Recycled and Recyclable

If you have questions or concerns regarding this report, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny Reising

FEMP:R.J. Janke

Johnny W. Reising
Fernald Remedial Action
Project Manager

Enclosure: As Stated

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MONTHLY RE-INJECTION OPERATING REPORT MARCH 2002

Re-injection at Fernald is exempted under 40 CFR 300.400(e)(1) from requiring a permit, as it is a CERCLA action. In accordance with Ohio EPA Guidelines (OEPA 1997), DOE is preparing monthly operating reports that include:

I. An analysis of the injectate

- Composite daily total uranium results from the injectate source (AWWT Expansion Facility effluent) for days when re-injection occurred are shown in Figure 1.
- Monthly grab sample results are provided in Table 1.

II. The volume and rate of re-injection

- Table 2 summarizes March's operational data.

III. A description of any well maintenance and rehabilitation procedures conducted.

- No well maintenance or rehabilitation occurred in March 2002.

Routine monitoring of the aquifer in the re-injection area is conducted as part of the groundwater remedy performance monitoring program specified in Fernald's Integrated Environmental Monitoring Plan (IEMP). Results of the IEMP are reported quarterly and are available for viewing on the Fernald website, www.fernald.gov.

ANALYSIS OF THE INJECTATE

No constituents exceeded their FRLs. The total uranium concentration measured in the monthly grab sample was 4.13 micrograms per liter (µg/L). The total uranium concentration of the daily composite sample also collected on March 5, 2002 was 6.0 µg/L.

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TABLE 1

ANALYSIS OF INJECTATE
Sample Collected March 5, 2002

Constituents[a]	Result[b]	Groundwater FRL[c]	Detection Limit	Constituent Type[e]	Basis for FRL[f]
General Chemistry		mg/L			
Nitrate	0.49	11.0		MP	B
Inorganics		mg/L			
Antimony	U	0.006	0.00048	N	A
Arsenic	U	0.05	0.00075	N	A
Barium	0.0551 B	2.0		N	A
Beryllium	0.00007 B	0.004		N	A
Cadmium	U	0.014	0.00008	N	B
Chromium, total	0.00038 B	0.022[d]		MP	R
Cobalt	U	0.17	0.00015	N	R
Lead	0.00098 B	0.015		N	A
Manganese	0.00011 B	0.9		N	B
Mercury	U	0.002	0.00010	MP	A
Nickel	0.0019 B	0.1		N	A
Selenium	U	0.05	0.00090	N	A
Silver	U	0.05	0.00018	N	R
Vanadium	U	0.035	0.00018	N	R
Zinc	U	0.021	0.00010	N	B
Radionuclides		pCi/L			
Neptunium-237	U	1.0	-3.86E-10	MP	R*
Radium-226	U	20.0	0.348	N	A
Strontium-90	0.102	8.0		MP	A
Thorium-228	U	4.0	0.0054	N	R*
Thorium-232	0.00801	1.2		N	R*
		µg/L			
Uranium, total	4.13	30.0		MP	A
Organics		µg/L			
Bis(2-ethylhexyl)phthalate	U	6.0	5.0	N	A
Carbon disulfide	U	5.5	1.0	N	A
1, 1-Dichloroethene	U	7.0	1.0	N	A
1, 2-Dichloroethane	U	5.0	1.0	MP	A
Trichloroethene	U	5.0	1.0	N	A

Lab Data Qualifiers:
U = Nondetected result.
B = Reported result is greater than the instrument detection level but less than the contract required detection limit.
J = Reported result is positively detected but is estimated; the result is still usable for making decisions.
[a]Constituents taken from Table 2-1 of Re-Injection Demonstration Test Plan. Constituents are those previously detected in aquifer zones 2 and 4 at concentrations above their FRL.
[b]If a duplicate sample was analyzed, then the highest concentration between the regular sample and duplicate sample is reported.
[c]From Table 9-4 in the Operable Unit 5 Record of Decision Report.
[d]FRL is for hexavalent chromium.
[e]Constituent types from Appendix A of IEMP. MP indicates that the constituent has been identified as being able to migrate to the aquifer. N indicates that the constituent has been identified as not being able to migrate to the aquifer.
[f]A - Applicable or relevant and appropriate requirement based (MCL, PMCL, etc.).
B - Based on 95th percentile background concentrations.
R - Risk-based
R* - Risk-based radionuclide cleanup levels include constituent specific 95th percentile background concentration.

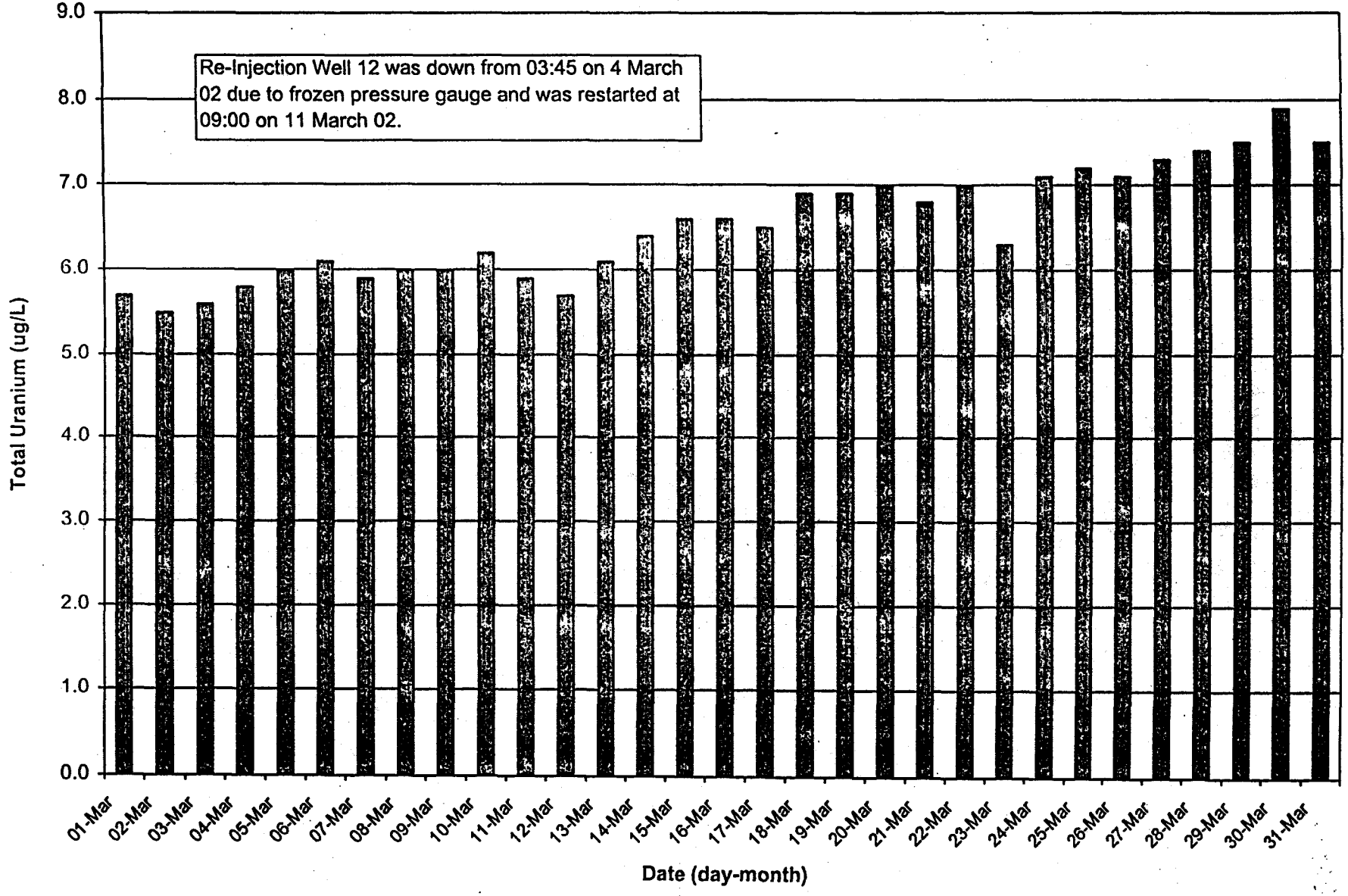
TABLE 2

RE-INJECTION WELL OPERATIONAL SUMMARY SHEET
MARCH 2002

Well Number	Reporting Period (hours)[a]	Hours Not Injecting[b]	Hours Injecting[c]	Operational Percent[d]	Million Gallons Injected[e]	Target[f] /Average[g] Operating Injection Rate (gpm)
22107 (IW-8)	744.00	744.00	0.00	0.0	0.00	200/0
22108 (IW-9)	744.00	744.00	0.00	0.0	0.00	150/0
22109 (IW-10)	744.00	0.00	744.00	100.0	8.74	200/196
22240 (IW-11)	744.00	0.00	744.00	100.0	8.78	200/197
22111 (IW-12)	744.00	168.00	576.00	77.4	6.73	200/195

[a]First operational shift reading on March 1, 2002 to first operational shift reading on April 1, 2002.
[b]Downtime as noted on Figure 1. IW-12 was down for approximately 13 days due to a frozen pressure gauge.
[c]Hours in reporting period - Hours not injecting
[d](Hours injecting/Hours in reporting period) x 100
[e]Summation of daily totalizer differences
[f]For IW-9, in February 2002, due to residual plugging, the target re-injection rate was set at 150 gallons per minute (gpm) in an effort to extend the life of the well. The design re-injection set point for each of the re-injection wells is 200 gpm. The combined design re-injection rate for all five wells is 1000 gpm.
[g]Gallons Injected/(Hours Injecting x 60)

Figure 1
Composite Daily Total Uranium Results from the AWWT Expansion Facility for Days when Re-Injection Occurred



mar02 awwt expansion effluent.xls Chart1 05/14/2002 8:52 AM

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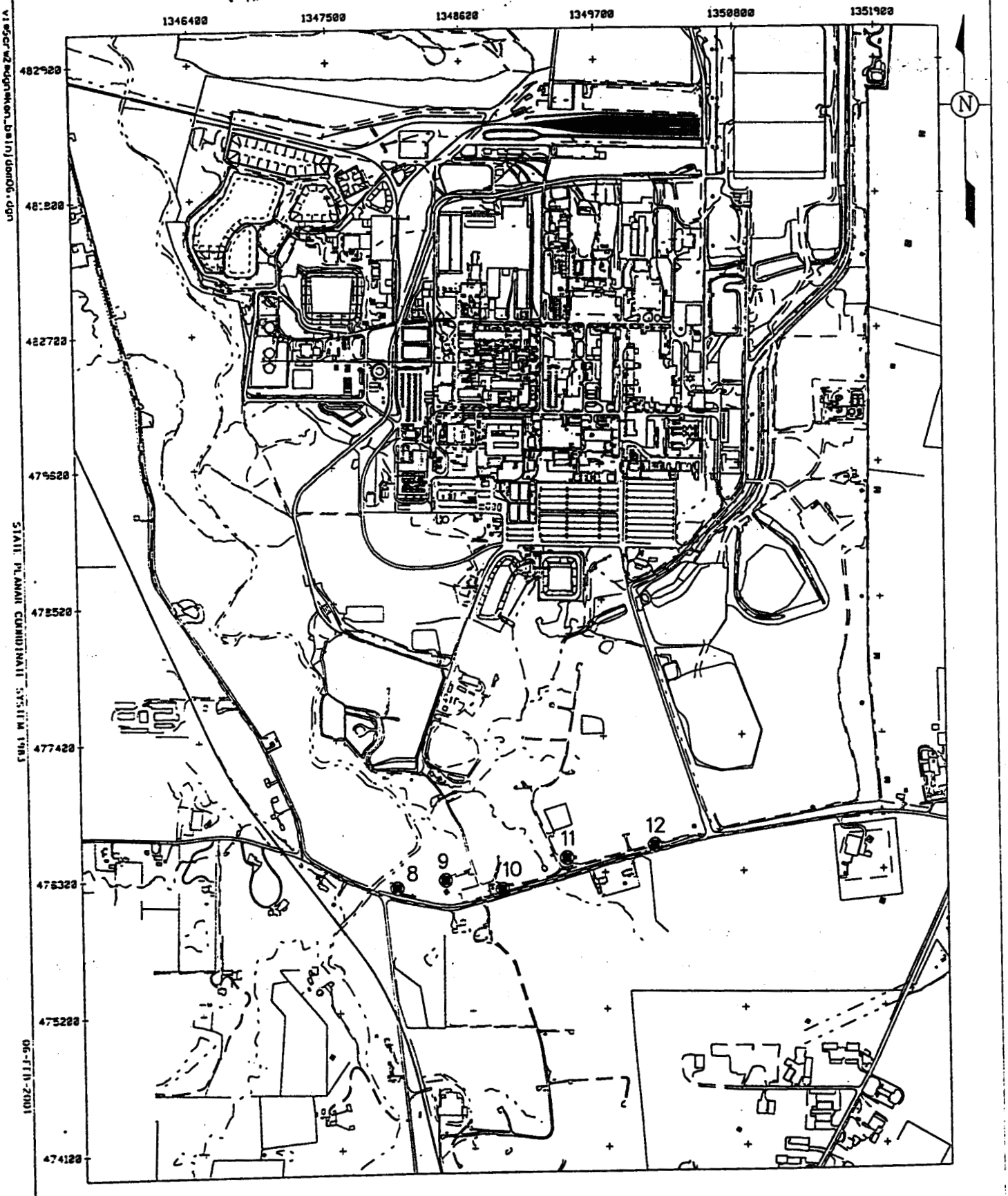

FIGURE 2. LOCATION OF RE-INJECTION WELLS