FERNALD CLEANUP PROGRESS BRIEFING
MARCH 2000

6:30 p.m. Opening Remarks	Gary Stegner
6:35 p.m. Project Updates	
Waste Pits Remedial Action Project	Dave Lojek
On-Site Disposal Facility Projects	Jay Jalovec
Decontamination & Dismantlement	John Trygier
Silos Project	Art Murphy
Aquifer Restoration/Wastewater Project	Dennis Carr
Soil Characterization & Excavation Project	Rob Janke
Waste Management	Carlos Tellez

Question and Answer Session

8:30 p.m. Adjourn

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Graphics # 6257.0A 3/00

PROJECT NEWS
WASTE PITS REMEDIAL ACTION PROJECT

- Rail transportation
- Waste pit excavation
- Dryer operations

Graphics # 6257.1A 3/00

NORTH RAIL YARD

Photo taken February 2000

Graphics # 6257.1B 3/00 Photo # 6349-D1684

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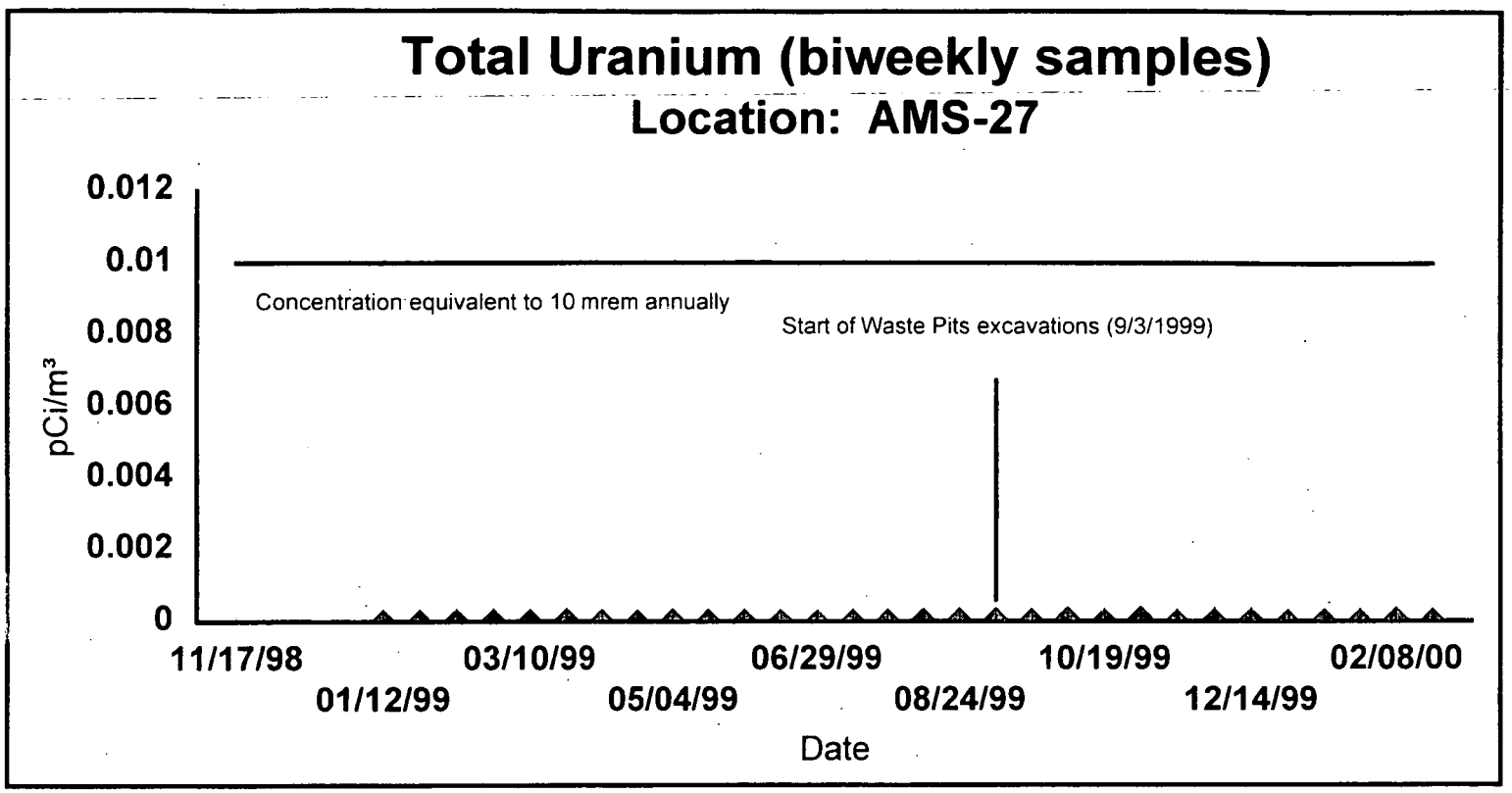
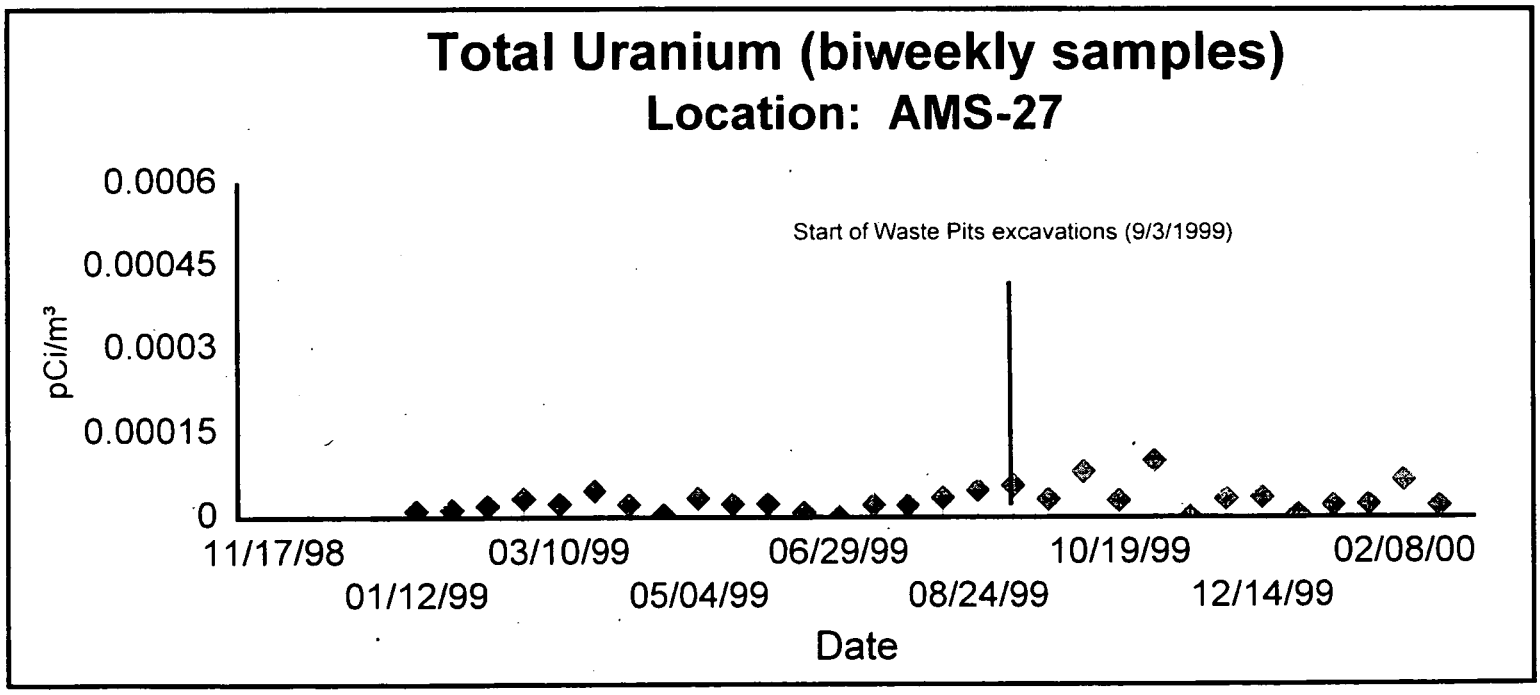
PIT 3 EXCAVATION

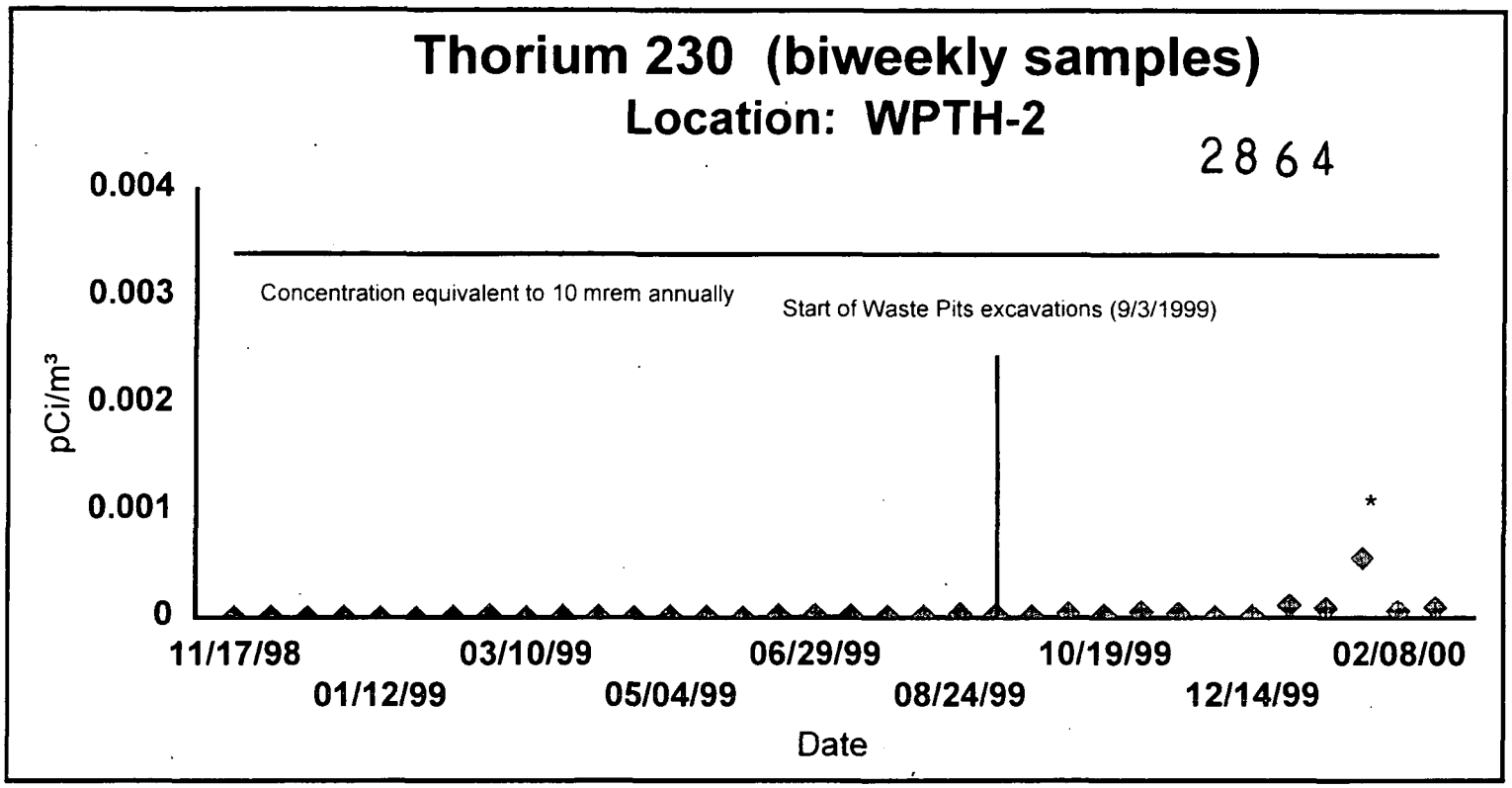
Photo taken February 2000

Graphics # 6257.1C 3/00 Photo # 7317-269



Note: 10 mrem annual limit is NESHAP effective dose equivalent standard for members of the public.





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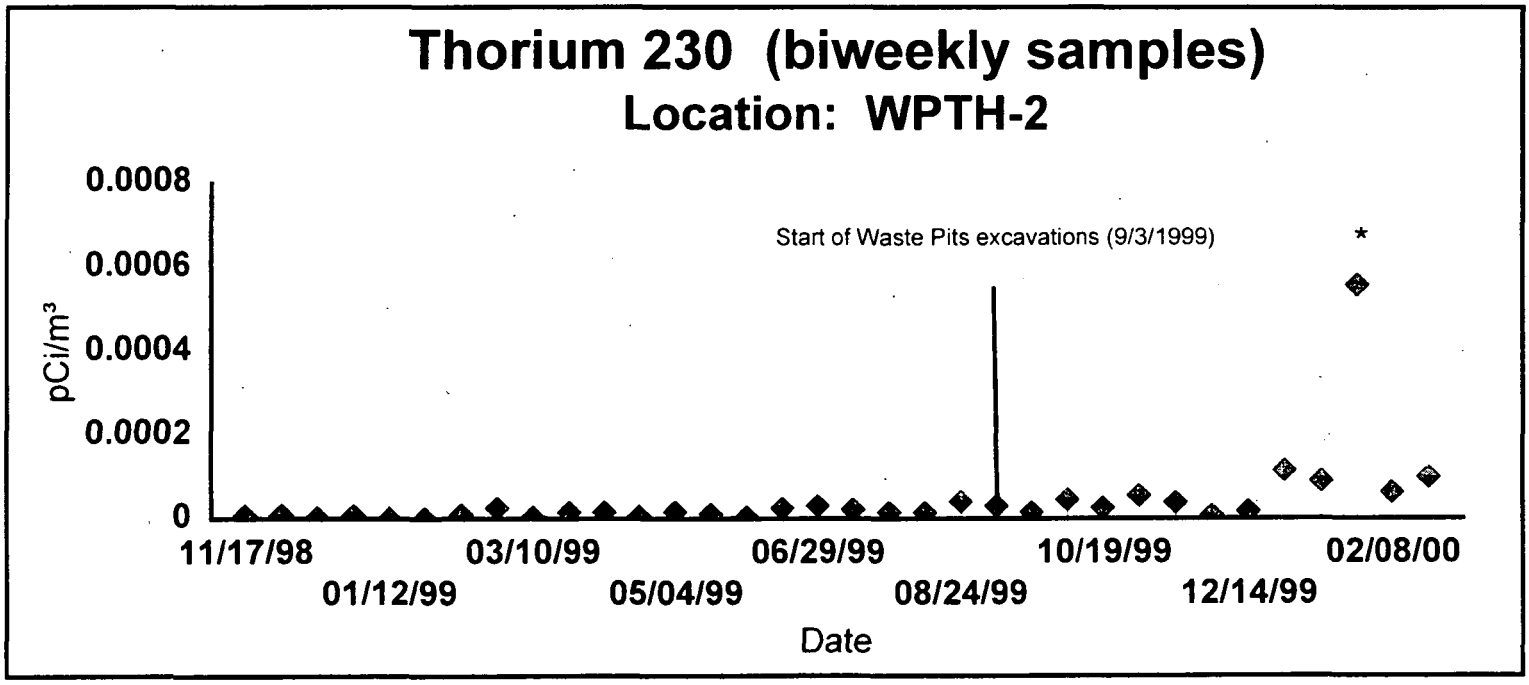
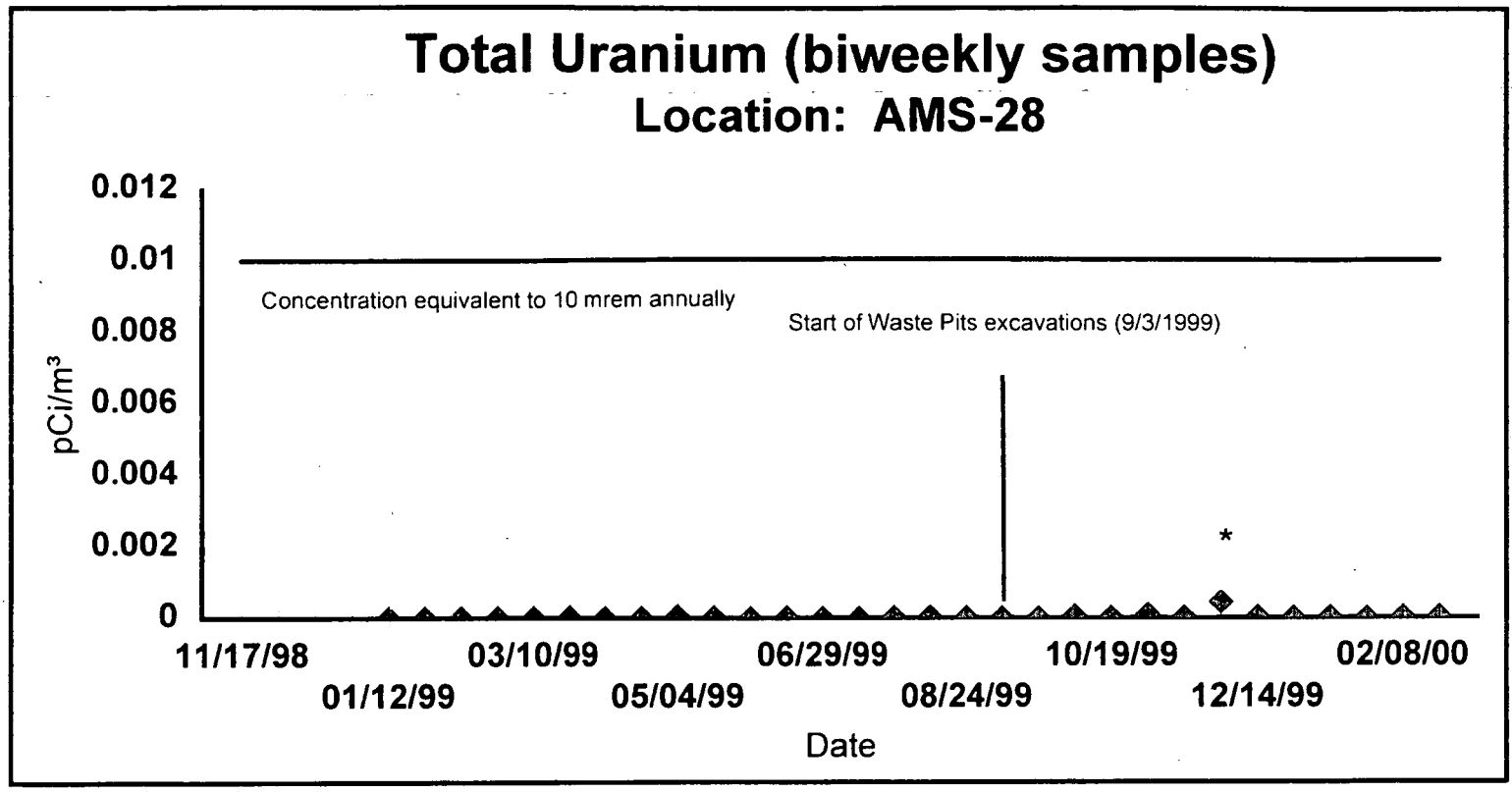
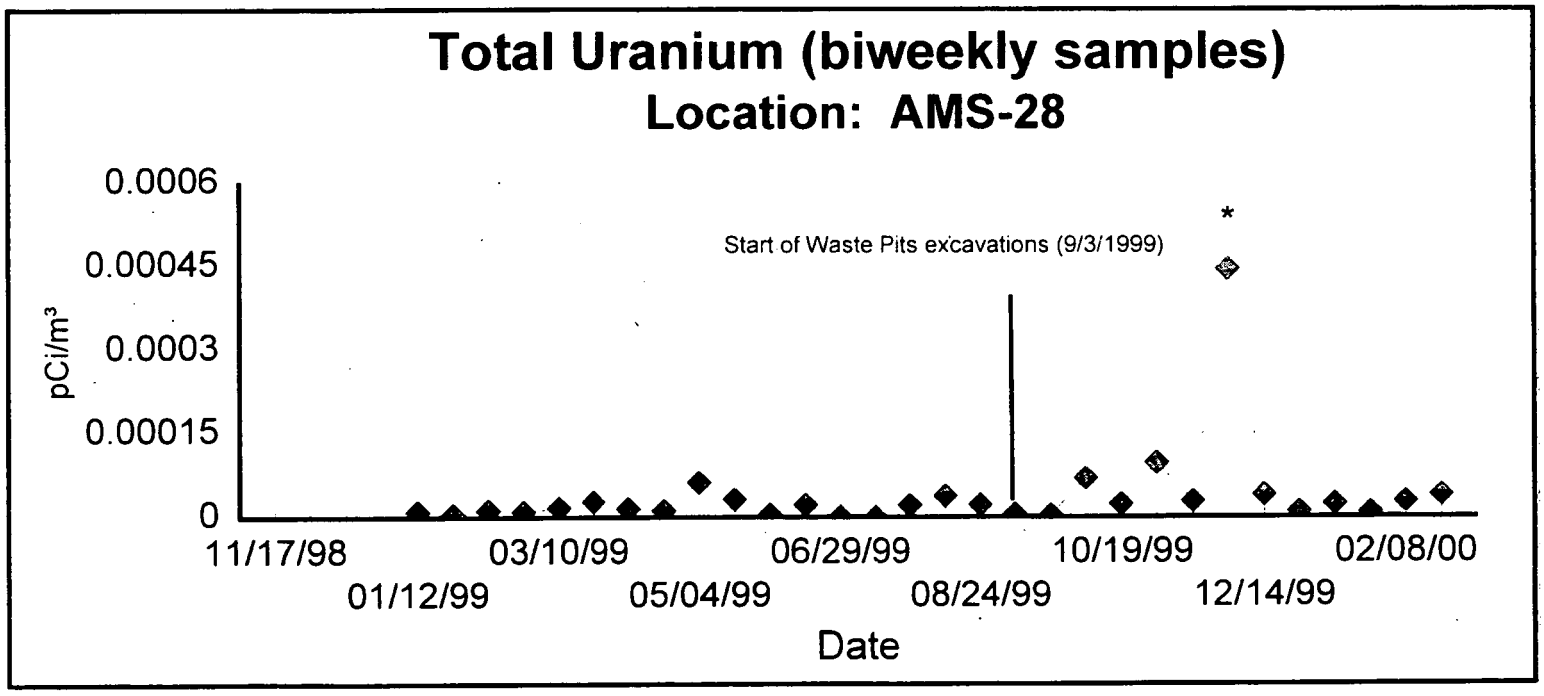


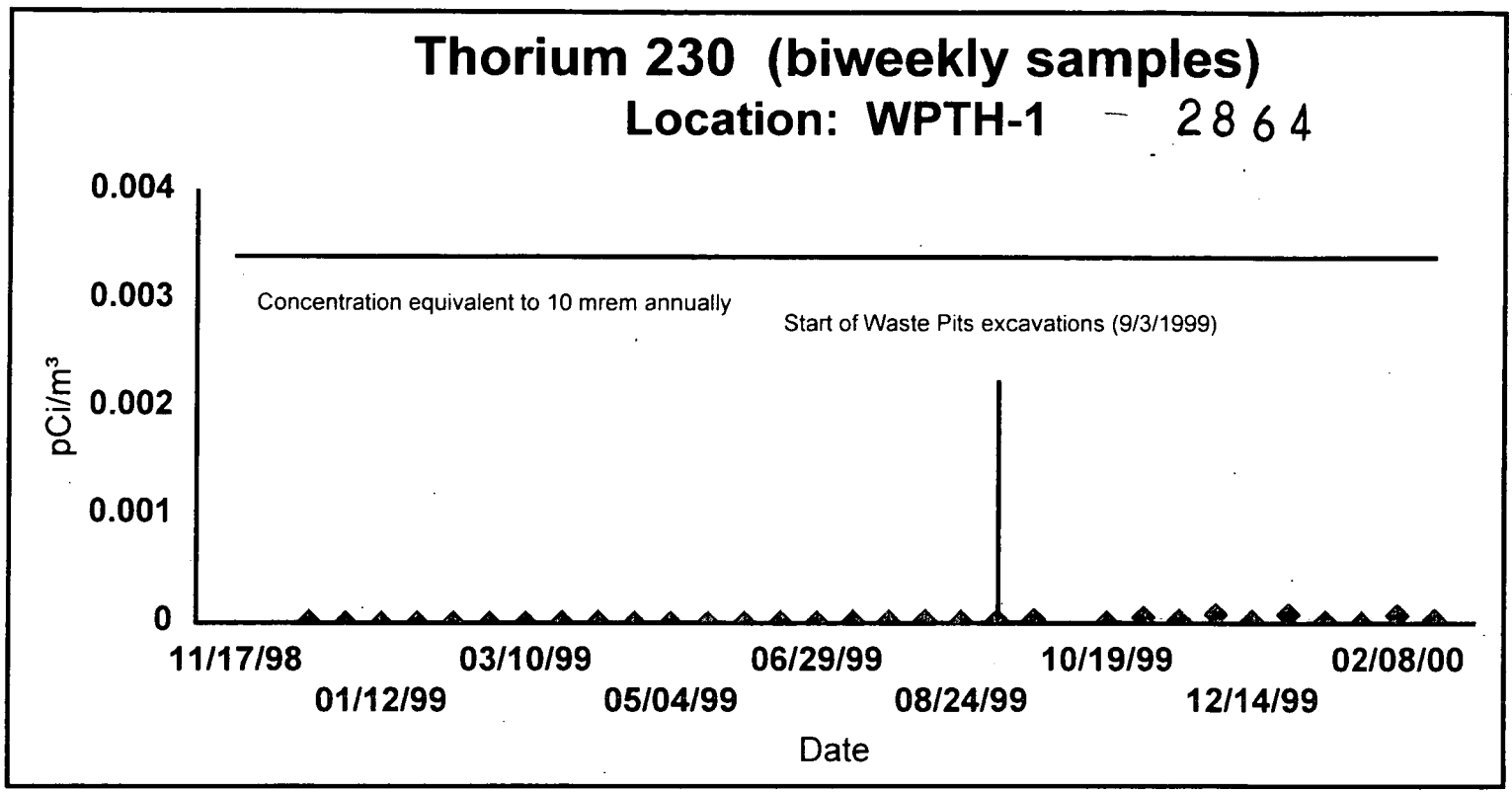
* WPTH-2 data point for 1/25/2000 = 0.00056 pCi/m³, inhalation of this concentration for the entire year would result in an effective dose equivalent of 1.6 millirem.



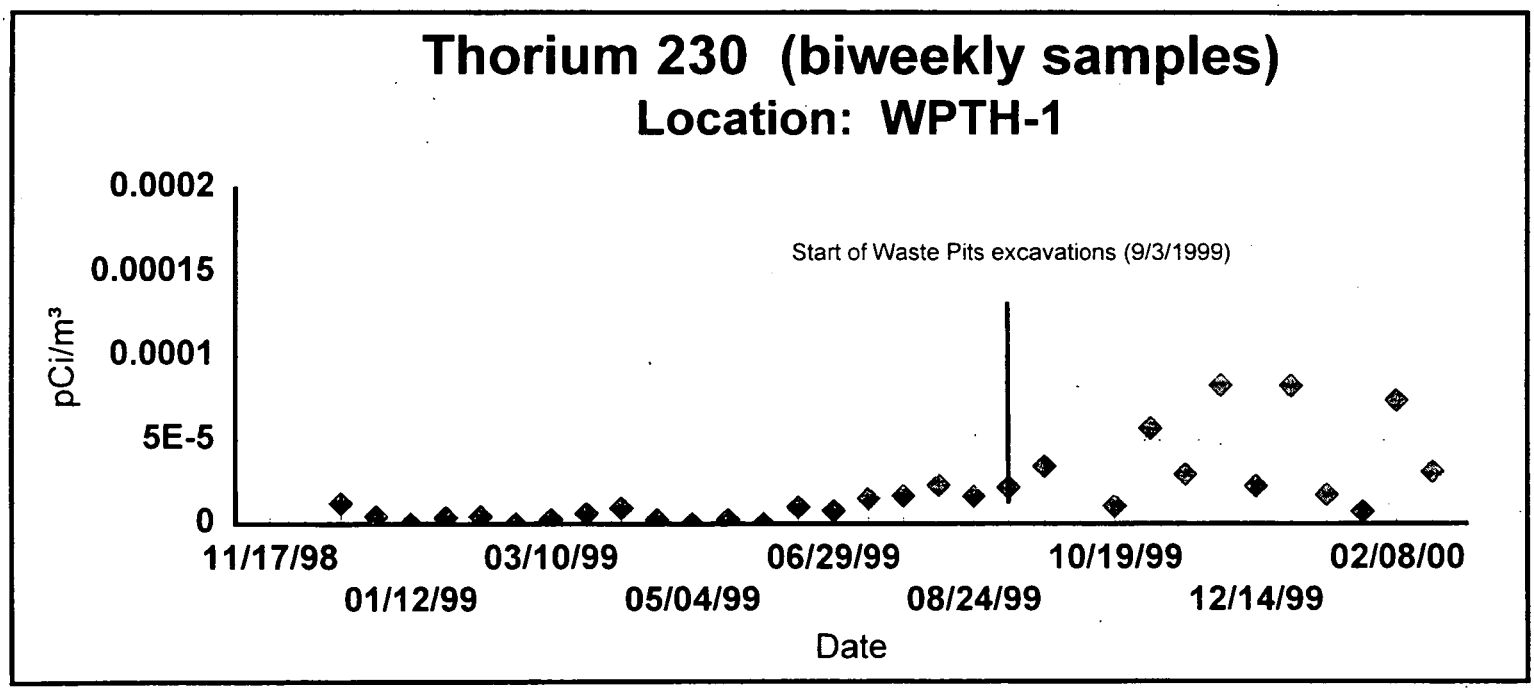
Note: 10 mrem annual limit is NESHAP effective dose equivalent standard for members of the public.

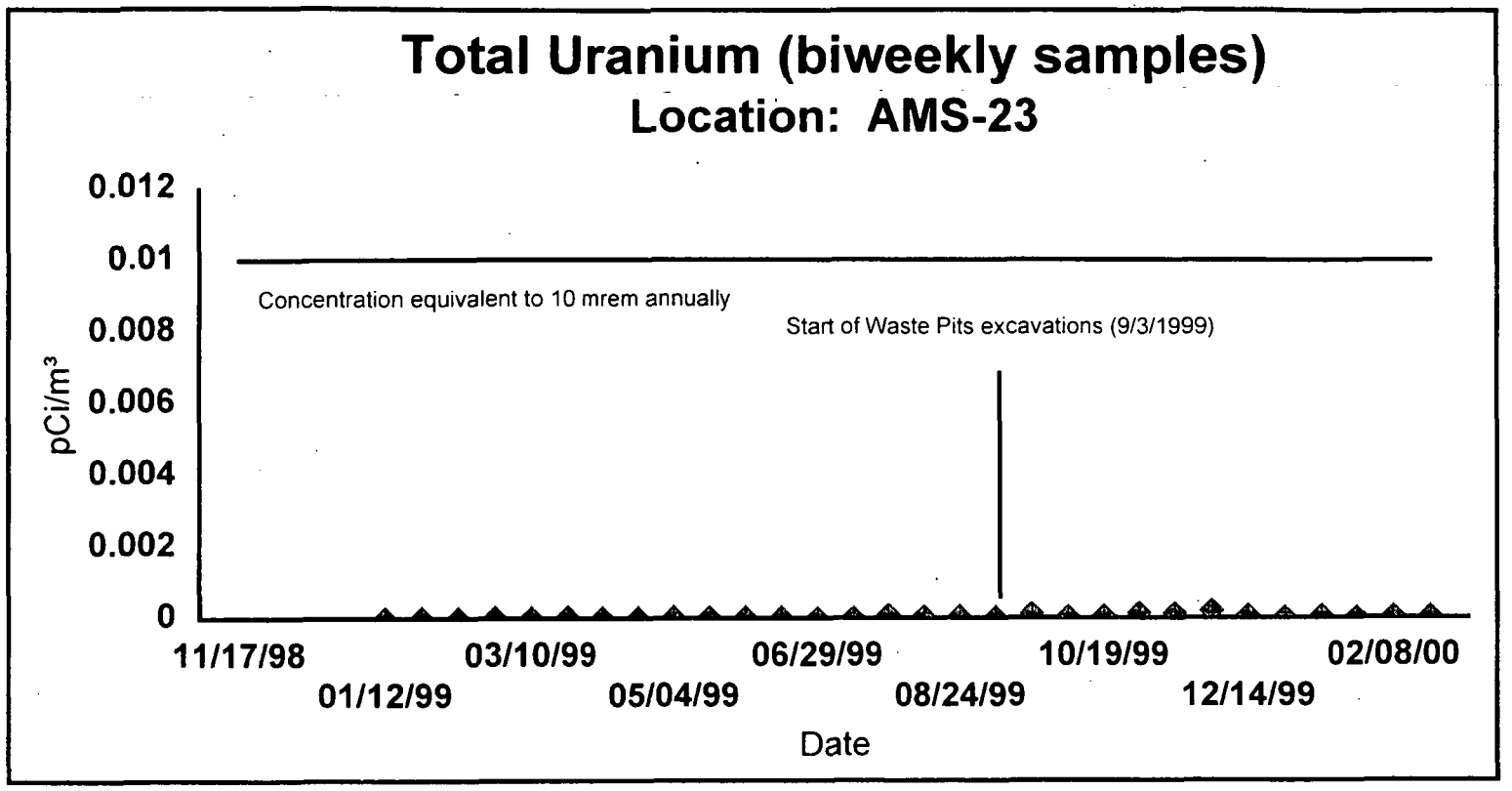


*AMS-28 data point for 11/30/1999 = 0.00045 pCi/m³, inhalation of this concentration for the entire year would result in an effective dose equivalent of 0.45 millirem.

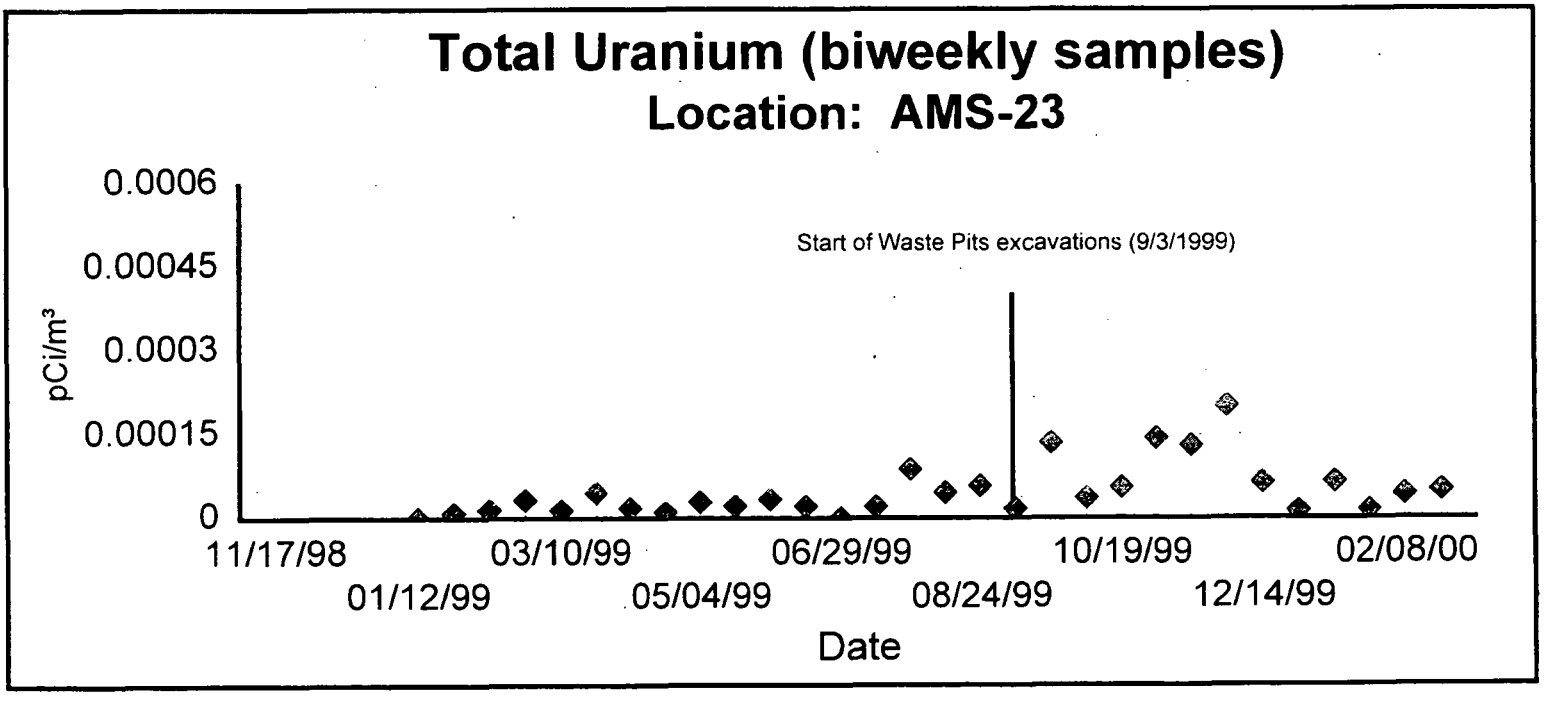


Note: 10 mrem annual limit is NESHAP effective dose equivalent standard for members of the public.

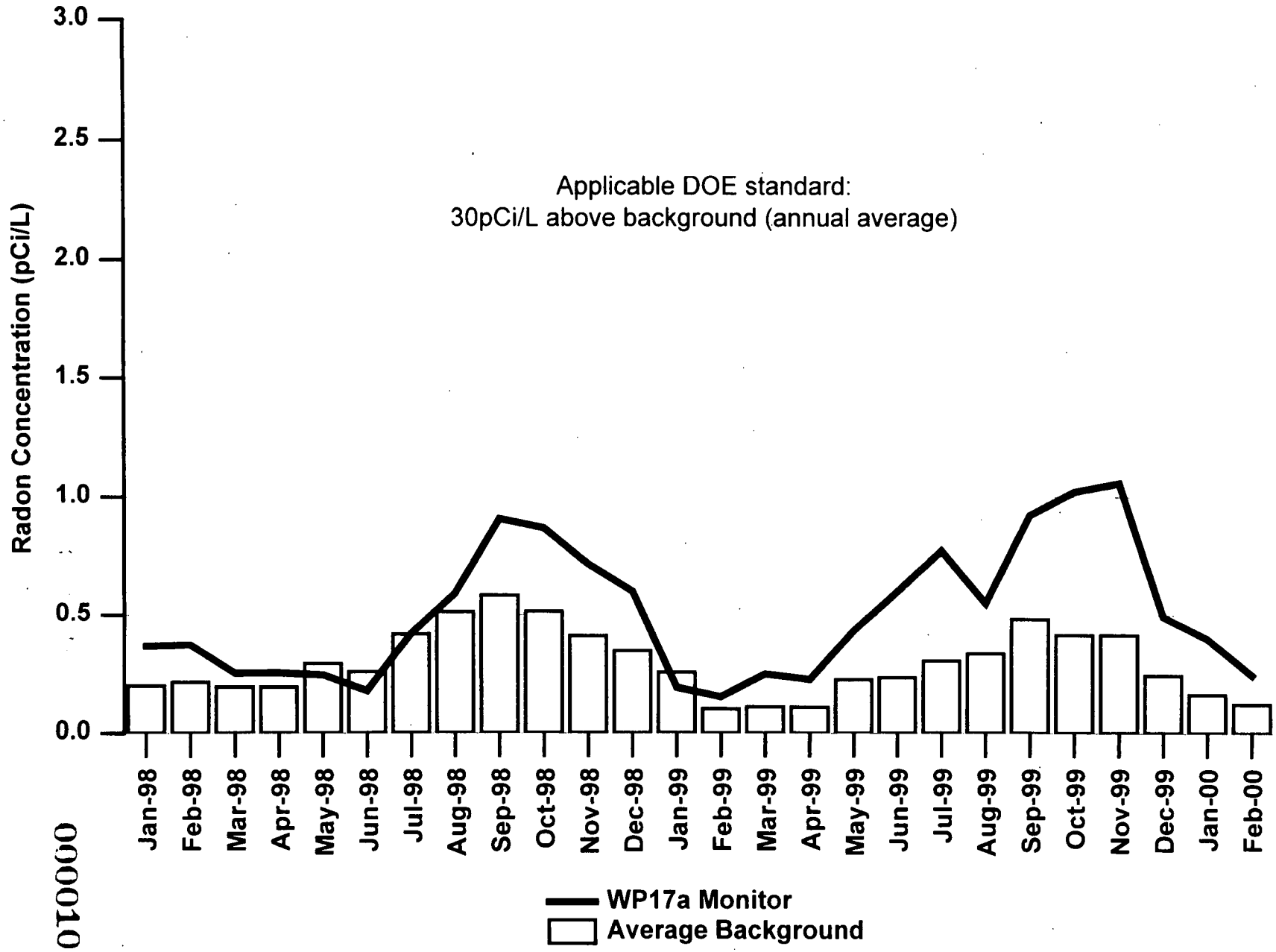




Nc 0 mrem annual limit is NESHAP effective dose equivalent standard for members of the public.



Waste Pit Monitor 17a Radon Concentrations



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PROJECT NEWS
ON-SITE DISPOSAL FACILITY PROJECT

- Resumed waste placement activities in March
- Ongoing Phase III design
  - Continued placement in Cells 2 & 3
  - Construction of Cell 4 liner system
- Initiated North Entrance Road study
- Finalizing Leachate Transmission System design
- Finalizing Borrow Area Strategy Report

Graphics # 6257.2A 3/00

BORROW AREA

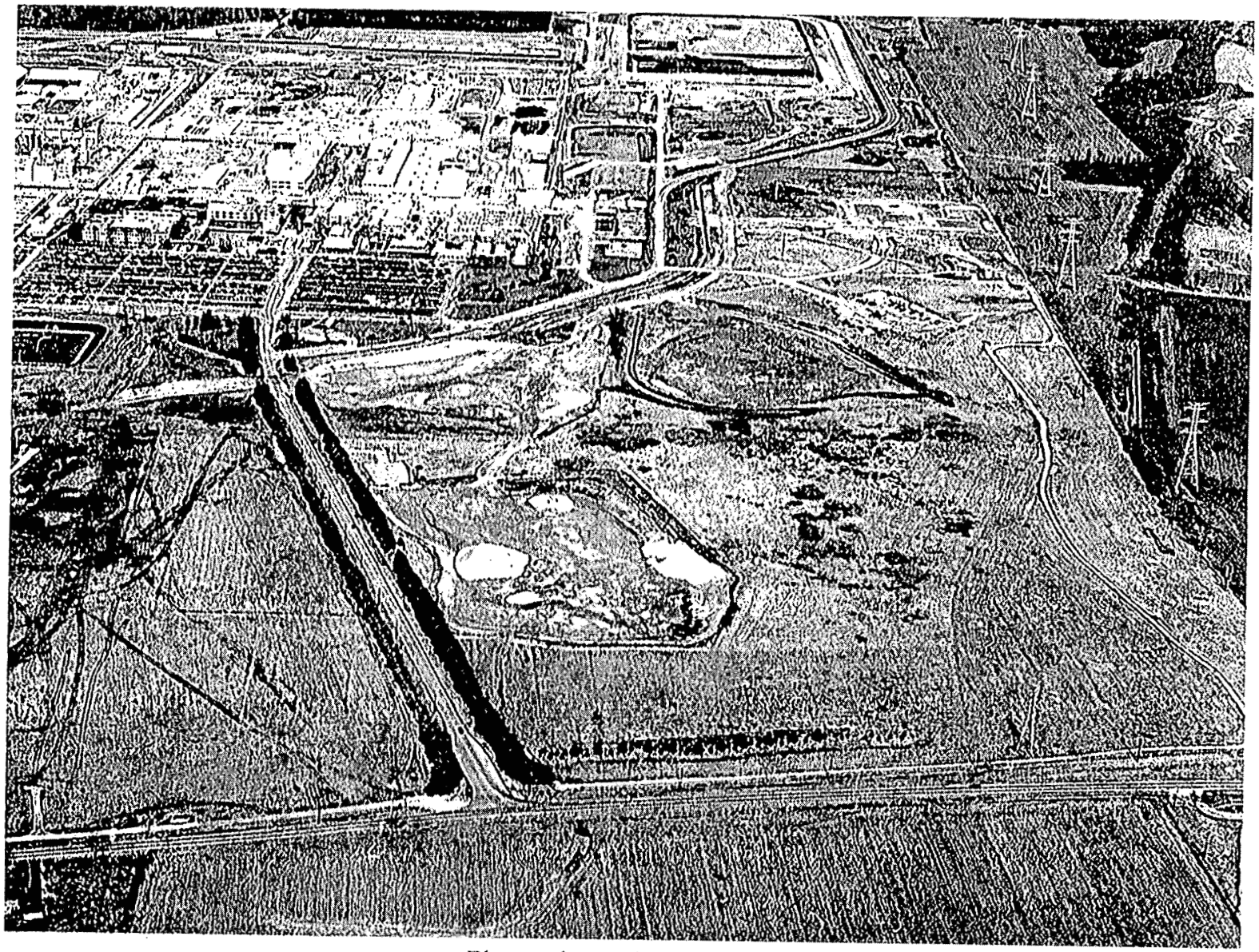

Photo taken February 2000

Graphics # 6161.2B 1/00 Photo # 7317-40

ON-SITE DISPOSAL FACILITY

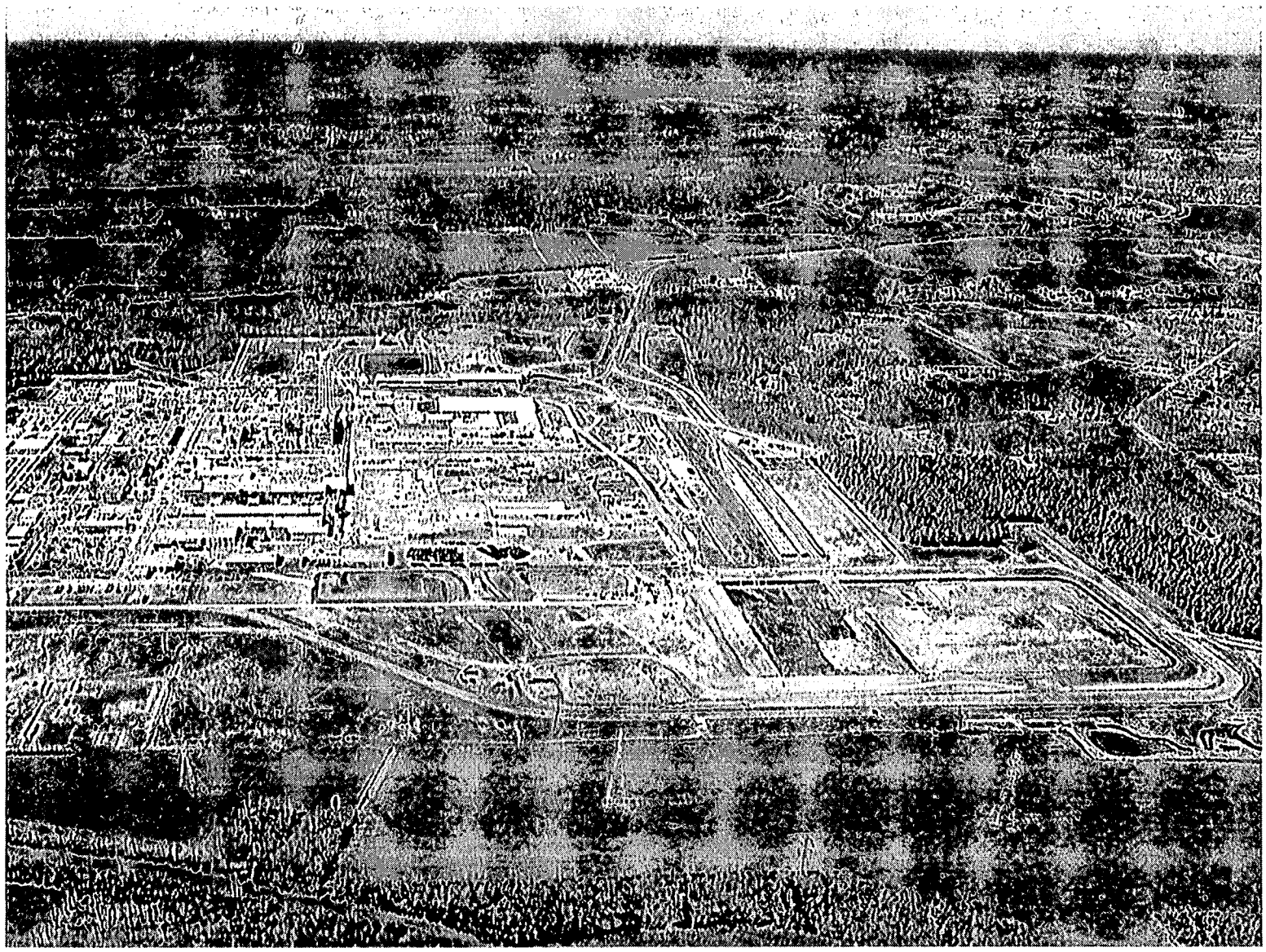

Photo taken February 2000

Graphics # 6161.2C 1/00 Photo # 7317-35

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PROJECT NEWS
DECONTAMINATION & DISMANTLEMENT

- Plant 5
  - Conducting interior transite removal in Building 5A
  - Dismantling structural steel and removing equipment and systems in Building 5D
  - Performing release cleaning in Building 55A
- Plant 6
  - Began utility installation
  - Setup wastewater collection system
- Maintenance/Tank Farm Complex
  - Completed dismantlement of Old Water Storage Tank

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Graphics # 6257.3A 3/00

PROJECT NEWS
SILOS PROJECT

Silos 1 & 2 Draft Revised Feasibility Study/ Proposed Plan Project Status

- Incorporated comments on revised feasibility study/proposed plan (FS/PP) from regulators and submitted draft final version
- Draft final FS/PP will be issued for a 45-day public comment period and associated public hearings locally and in Nevada upon receipt of USEPA approval

Graphics # 6257.4A 3/00

PROJECT NEWS
SILOS PROJECT

Silos 1& 2 Accelerated Waste Retrieval Project Status

- Responding to comments from USEPA on remedial design package; awaiting comments from OEPA
- Final design is 60 percent complete
- Seeking authorization to mobilize and begin site preparation activities in spring of 2000

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Graphics # 6257.4B 3/00

PROJECT NEWS
SILOS PROJECT

Silo 3
Project Status

- Received DOE approval of safety basis documentation for project
- Completed development of Site Preparation Package; submitted document to regulators on March 2, 2000
- Continuing development of remedial design package for remainder of facility
- Pursuing early authorization to mobilize and begin site preparation activities in advance of original September target date

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Graphics # 6257.4C 3/00

PROJECT NEWS
AQUIFER RESTORATION/ WASTEWATER PROJECT

- Groundwater Extraction Well Project:
  - Complete construction and startup of two additional wells
- AWWT Groundwater Reroute Project
  - Completed construction in February
- AWWT Backwash Reroute Project
  - Completed construction in February

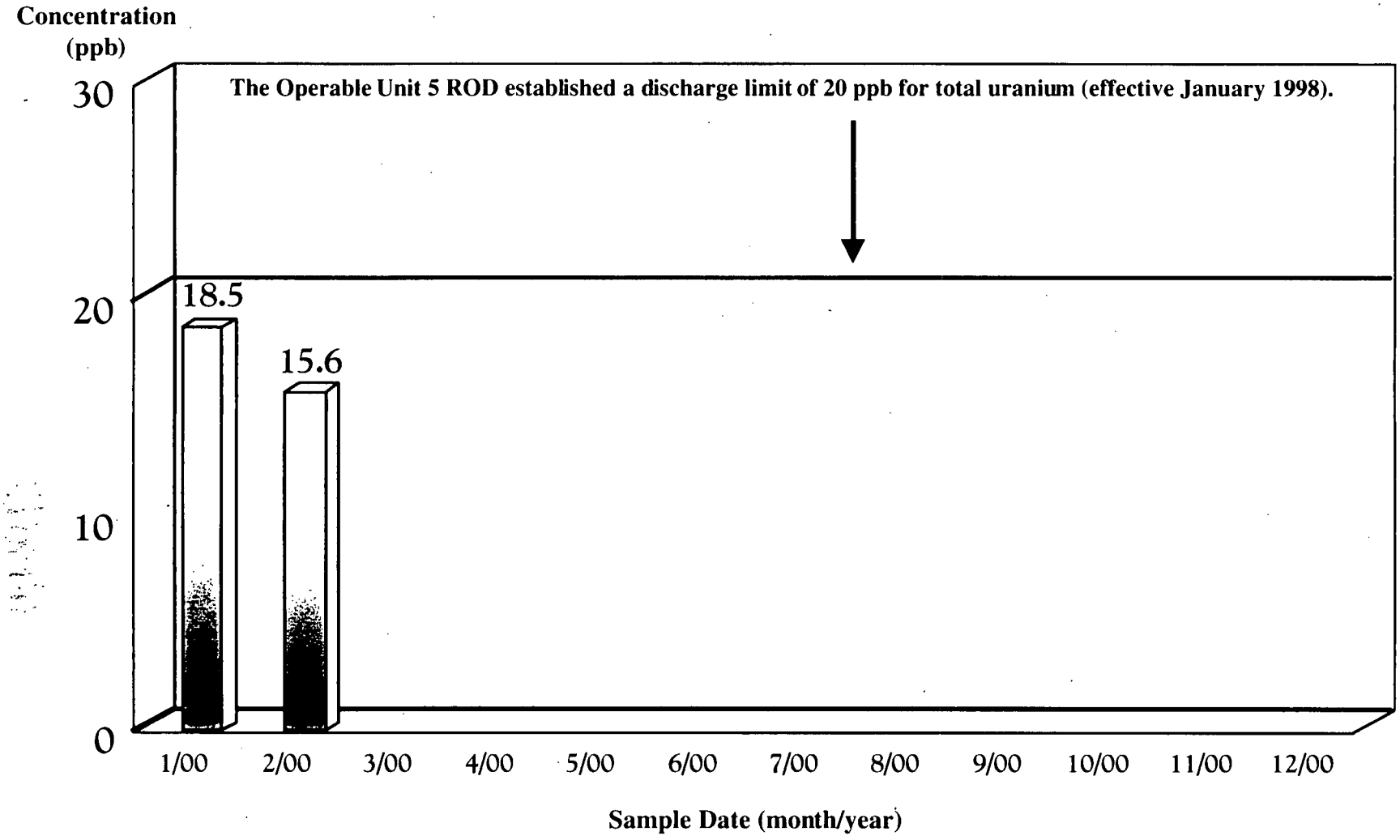
Graphics # 6257.5A 3/00

PROJECT NEWS
AQUIFER RESTORATION/ WASTEWATER PROJECT

- Contaminated groundwater extraction network continuing to perform ahead of schedule:
  - Processed 188 million gallons of groundwater/wastewater in January
  - Processed over 2 billion gallons of contaminated water in '99
  - Removed over 5.25 billion gallons of contaminated groundwater to date

Graphics # 6257.5B 3/00

AVERAGE MONTHLY TOTAL URANIUM CONCENTRATION DISCHARGED TO THE GREAT MIAMI RIVER IN 2000



Graphics # 6257.5C 3/00

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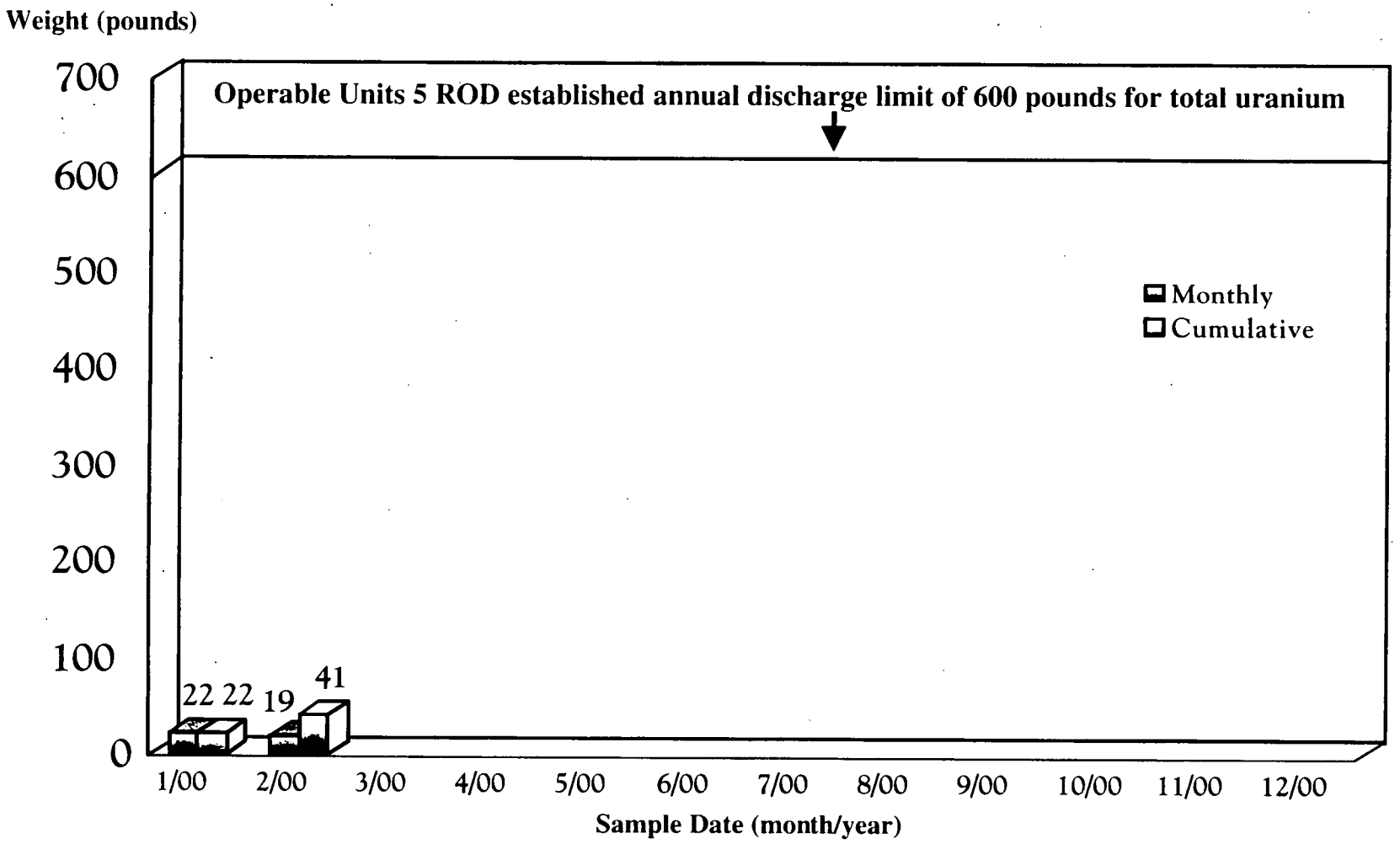
POUNDS OF URANIUM DISCHARGED TO THE GREAT MIAMI RIVER IN 2000



Note: Sum of monthly discharges may not always agree with cumulative total because of rounding differences.

Graphics # 6257.5D 1/00

PROJECT NEWS
SOIL CHARACTERIZATION & EXCAVATION PROJECT

- Resumed excavation in South Field
- Upcoming excavation work:
  - Non-waste units in the SWUs area
  - Small area south of Stormwater Retention Basin
  - Soil stock piles
- Estimated volume totals for 2000 and out years
- Conducting remediation design for Former Production Area
  - Draft ***Integrated Remedial Design Package*** to EPA on March 31st
- Continuing certification of soils:
  - Old Sewage Treatment Plant area (82 acres)
  - Northwestern wooded area, south of Rt. 126 (107 acres)
  - Southern property corner, west of Paddys Run Creek (30 acres)

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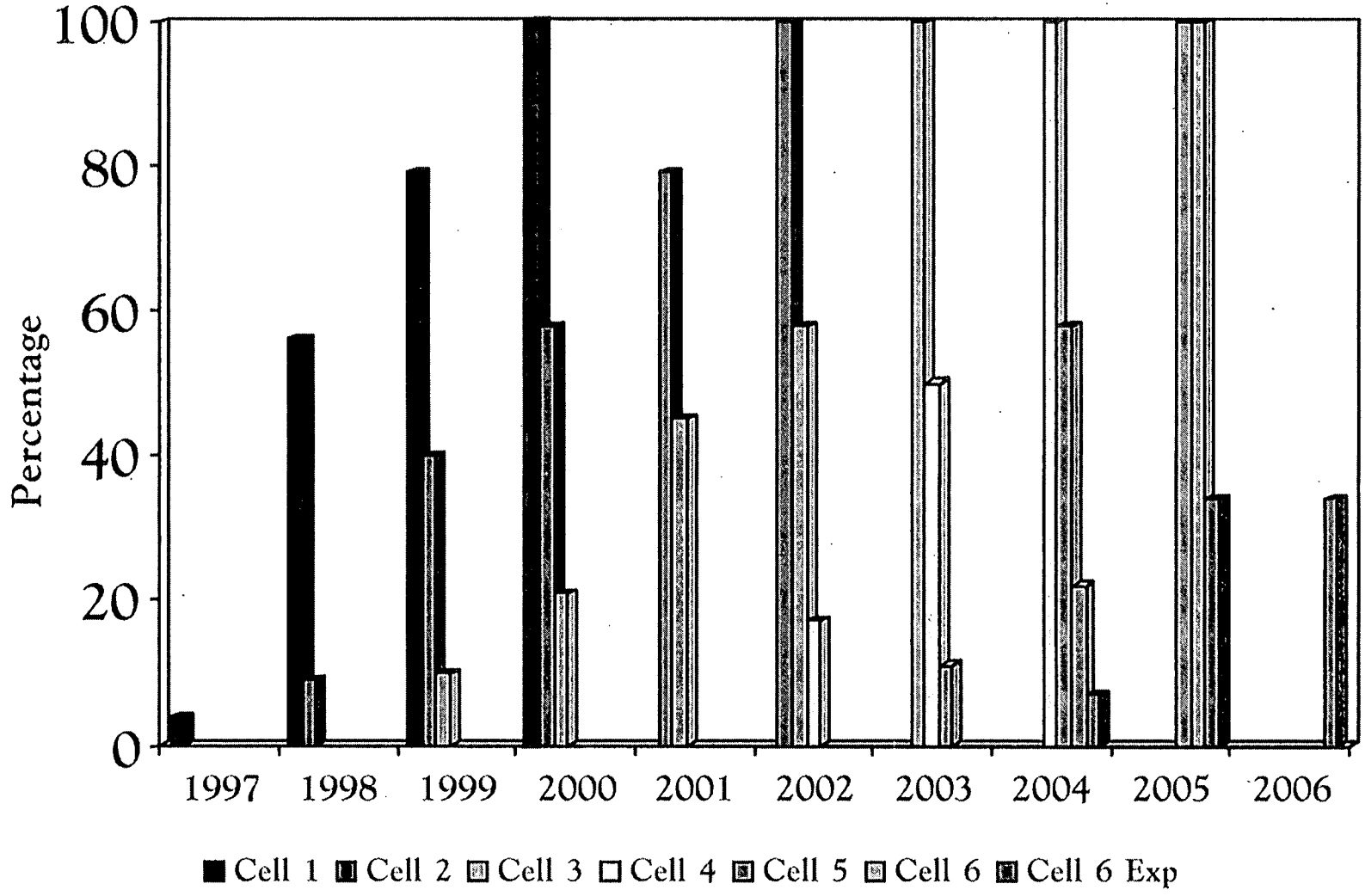
SOUTHERN WASTE UNITS

Photo taken February 2000

Graphics # 6257.6B 3/00 Photo # 7317-242

YEARLY QUANTITIES BY CELL MATERIALS PLACEMENT



Graphics # 6257.6C 3/00

PROJECT NEWS
WASTE MANAGEMENT

- Waste shipments to Nevada Test Site
- Nuclear material shipments to Portsmouth
- Uranium recycling initiative directed by DOE-HQ
- Liquid mixed waste shipments to TSCA Incinerator
- Plant 1 Pad consolidation

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Graphics # 6257.7A 3/00

NUCLEAR MATERIAL SHIPMENTS

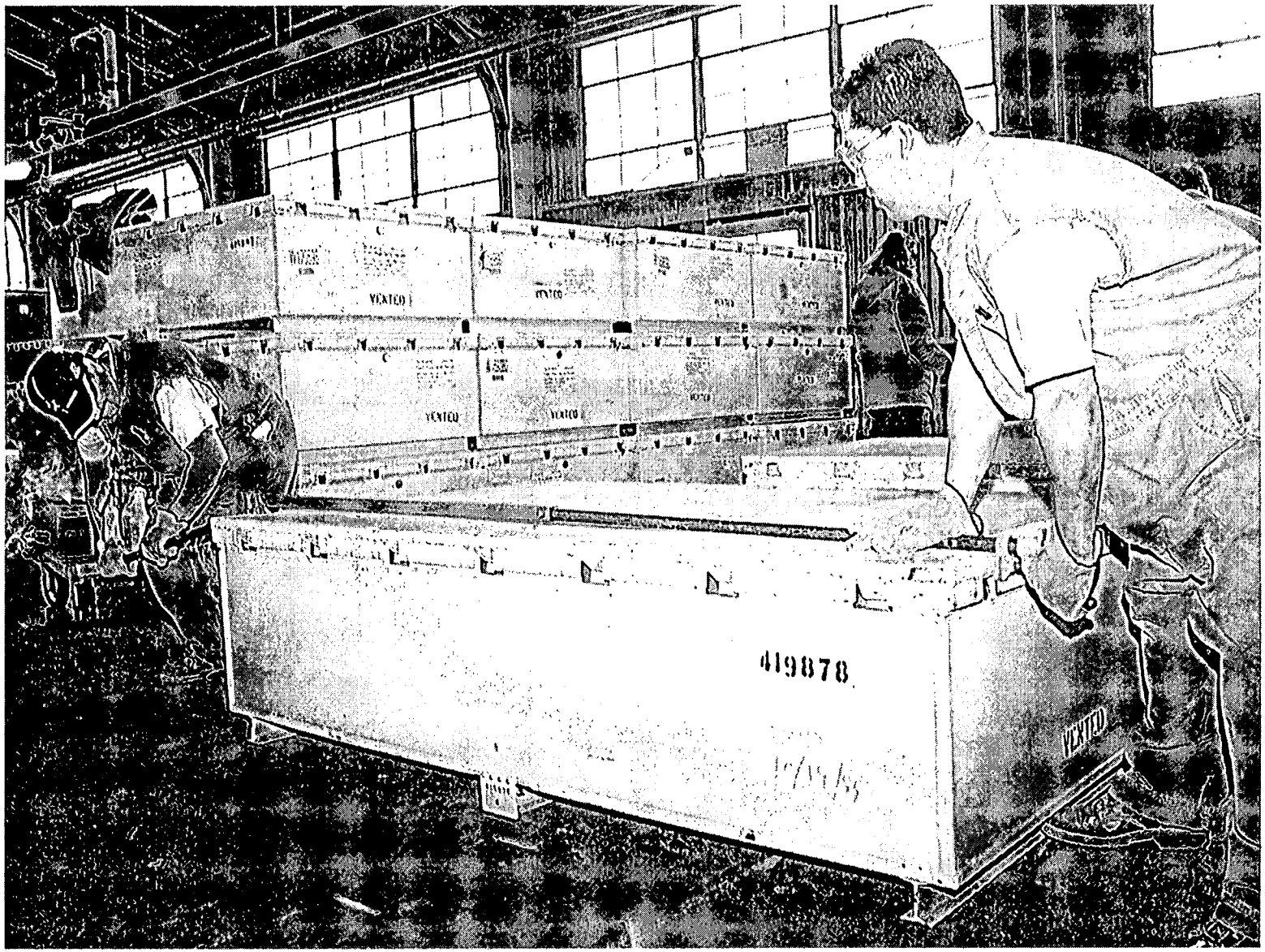

Photo taken January 2000

Graphics # 6257.7B 3/00 Photo # 7302-D43

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PLANT 1 PAD CONSOLIDATION

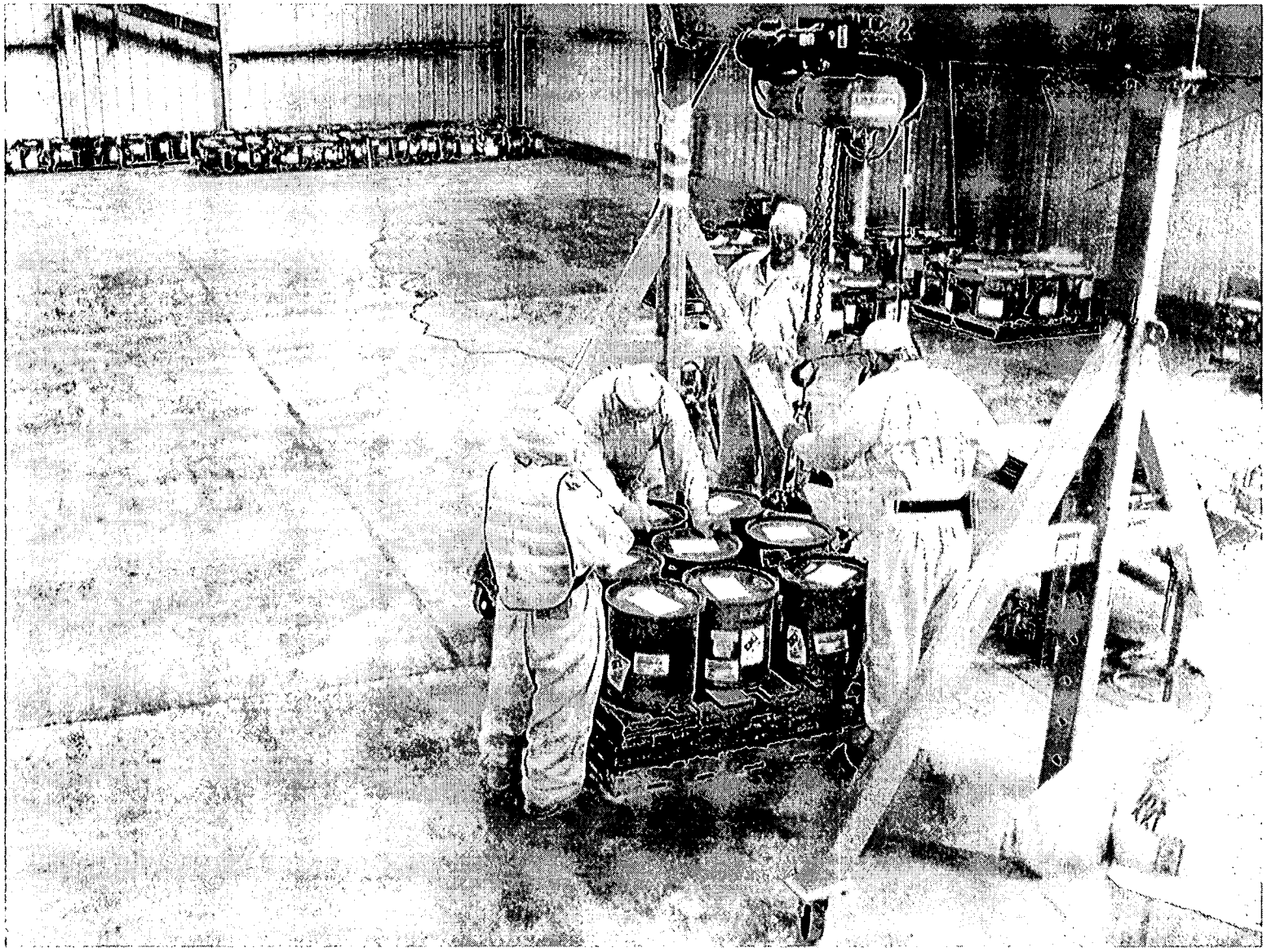

Photo taken February 2000

Graphics # 6257.7C 3/00 Photo # 6731-D144

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PLANT 1 PAD CONSOLIDATION

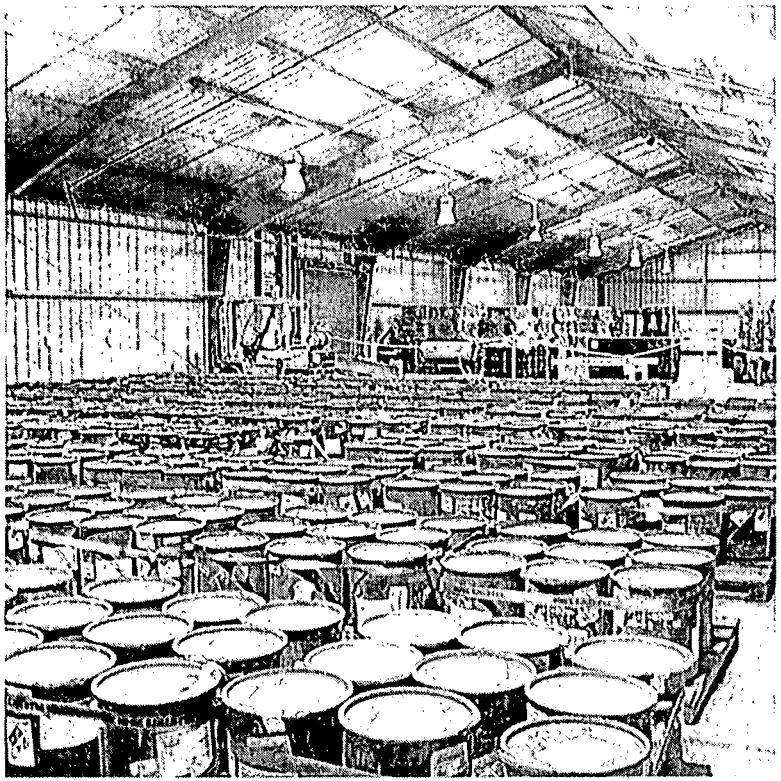

Photo taken October 1999

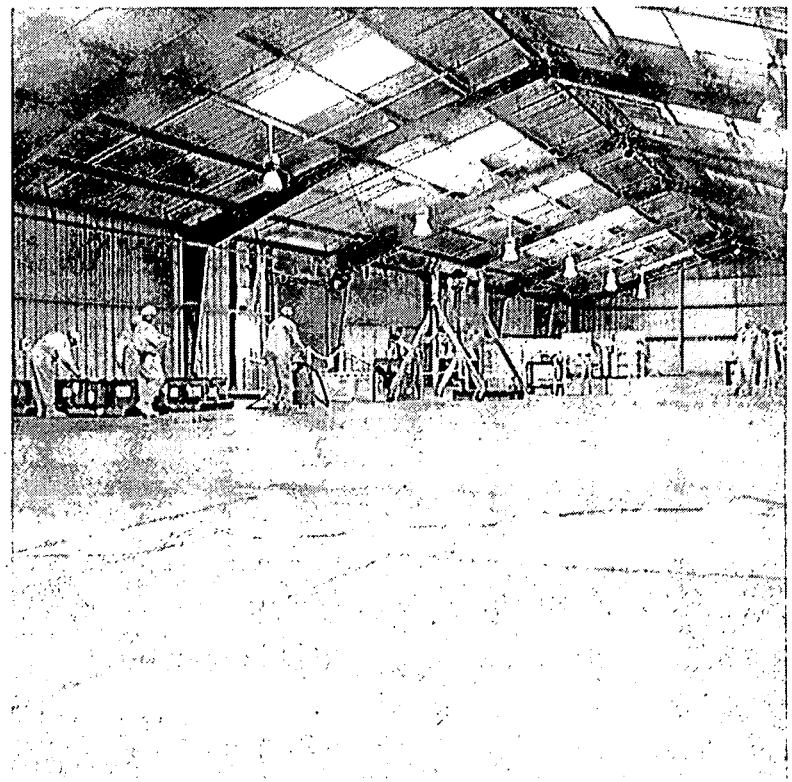

Photo taken February 2000

Graphics # 6257.7D 3/00 Photo # 7228-D11 & 6731-D143

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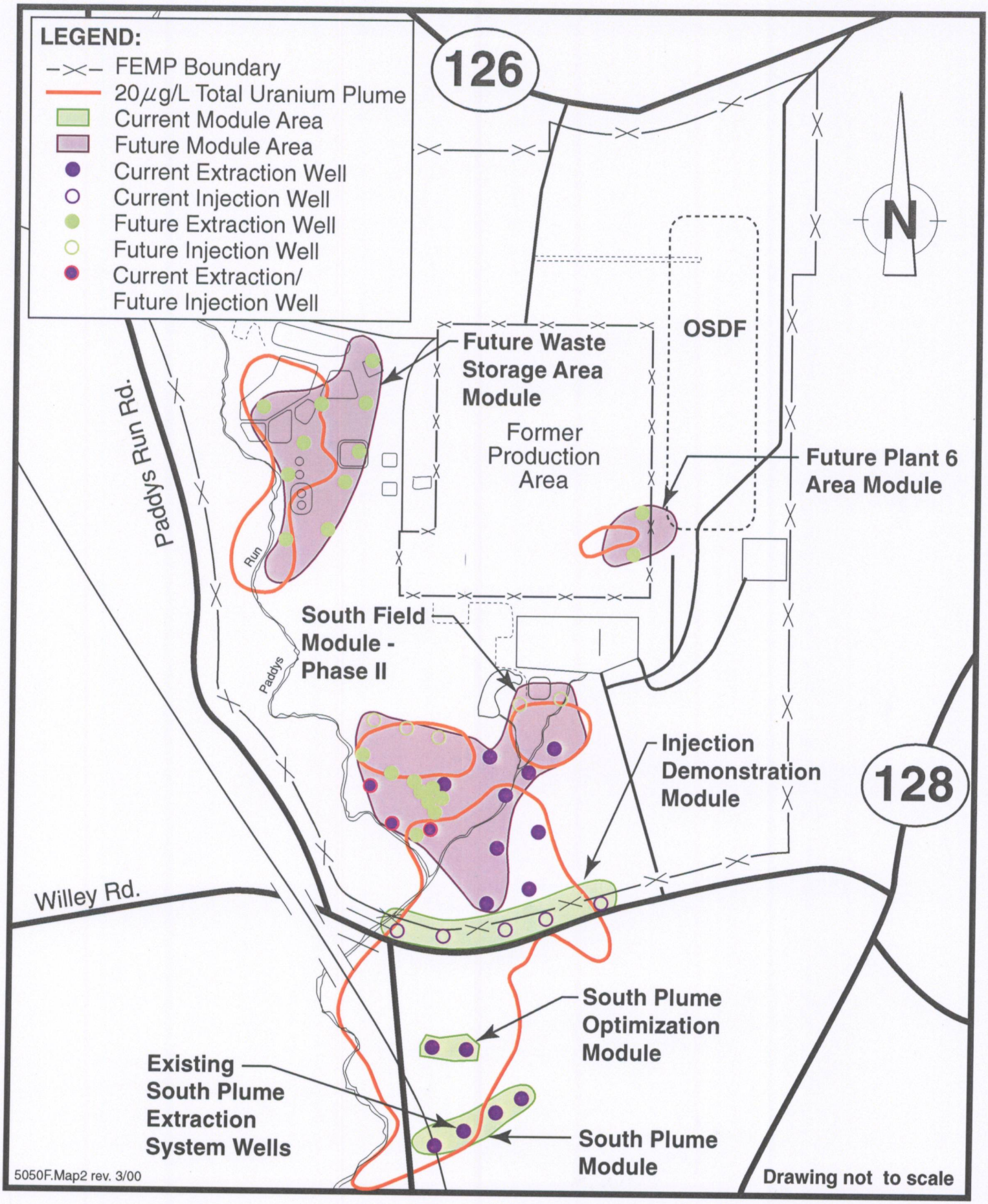
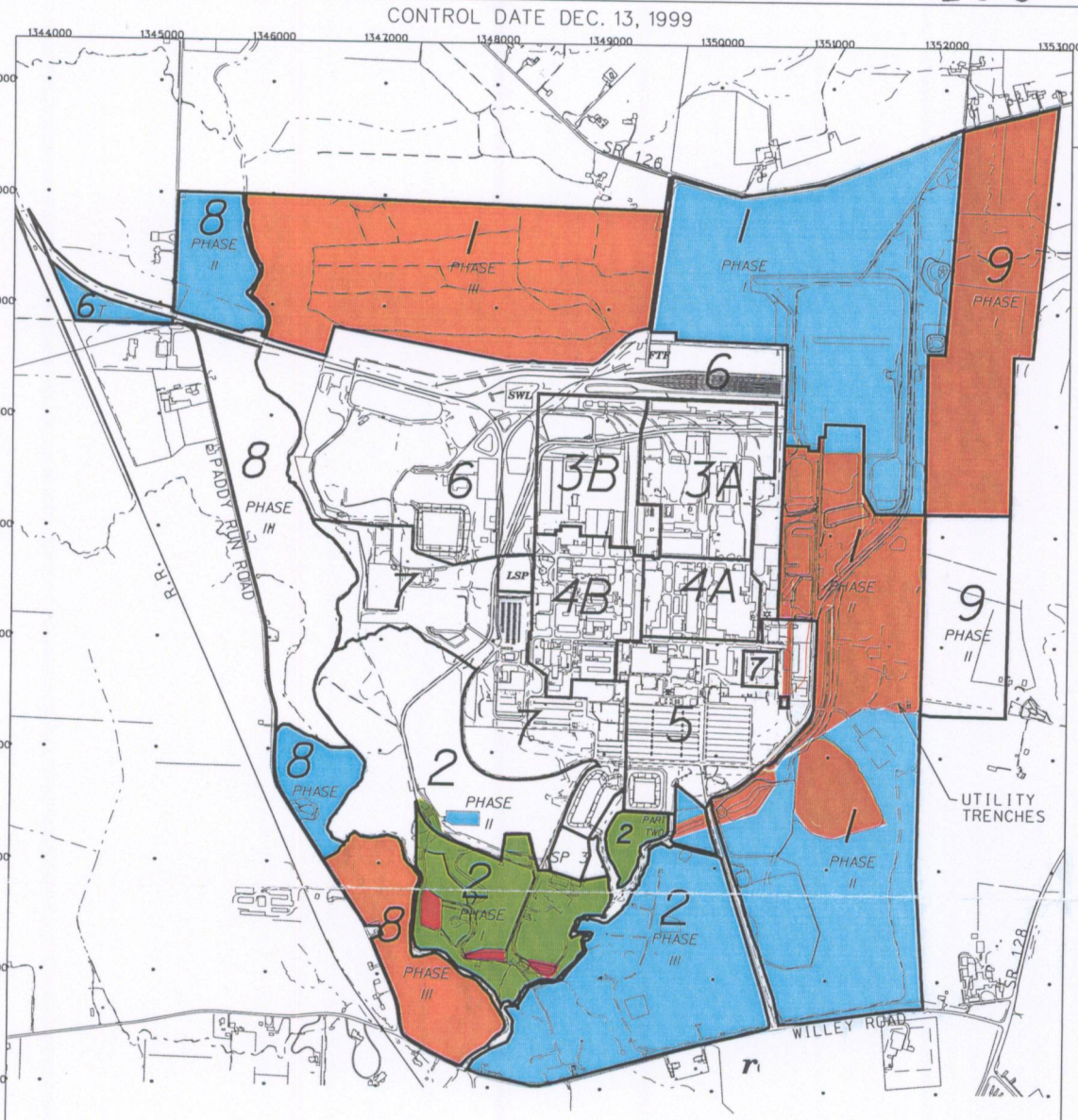

LEGEND:
FEMP Boundary
20µg/L Total Uranium Plume
Current Module Area
Future Module Area
Current Extraction Well
Current Injection Well
Future Extraction Well
Future Injection Well
Current Extraction/
Future Injection Well
126
128
N
OSDF
Future Waste
Storage Area
Module
Former
Production
Area
Future Plant 6
Area Module
Paddys Run Rd.
Paddys
Run
South Field
Module -
Phase II
Injection
Demonstration
Module
Willey Rd.
South Plume
Optimization
Module
Existing
South Plume
Extraction
System Wells
South Plume
Module
5050F.Map2 rev. 3/00
Drawing not to scale



LEGEND:

APPROVED CERTIFIED AREAS (308.1 ACRES TOTAL)

- A1PI APPROVED CERTIFIED AREAS - 120.5 ACRES
- A1PI SEDIMENT TRAPS 2 AND 3 APPROVED CERTIFIED AREAS 1.4 ACRES
- A1PII APPROVED CERTIFIED AREAS - 80.1 ACRES
- A1PII-S2B APPROVED CERTIFIED AREAS 1.5 ACRES
- A8PII/A6TA APPROVED CERTIFIED AREA - 22.1 ACRES
- A8PI APPROVED CERTIFIED AREAS - 12.5 ACRES
- A2PIII APPROVED CERTIFIED AREA - 70 ACRES

CERTIFICATION IN PROGRESS

REMEDIATION IN PROGRESS

CHARACTERIZATION FOR REUSE AREAS - 2.5 ACRES

NON CERTIFIED AREAS

DRAFT

SCALE

1000 500 0 1000 FEET

FIGURE 1-2. FEMP CONTROLLED CERTIFICATION MAP

CURRENT AQUIFER RESTORATION MODULES & WELL LOCATIONS

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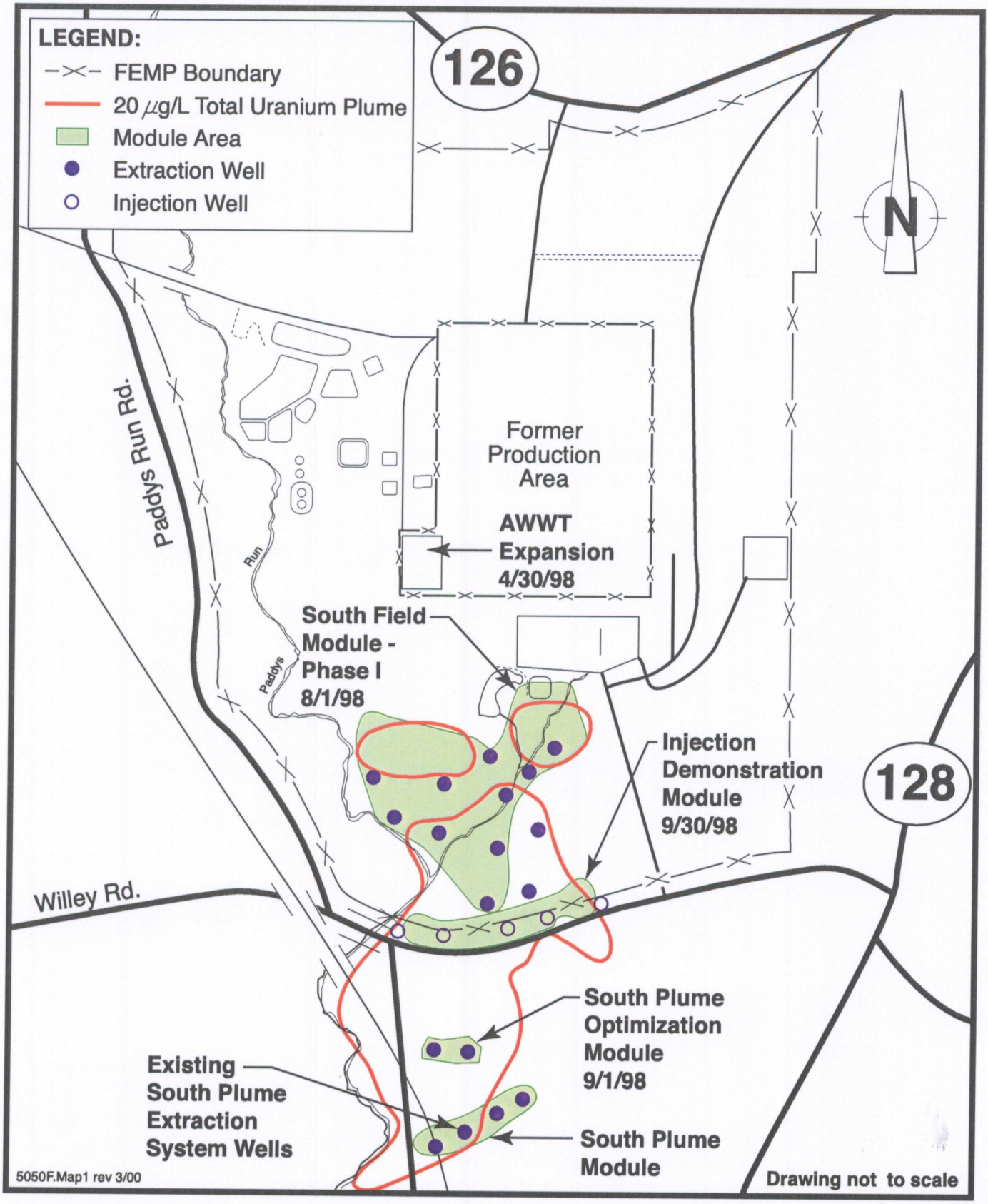

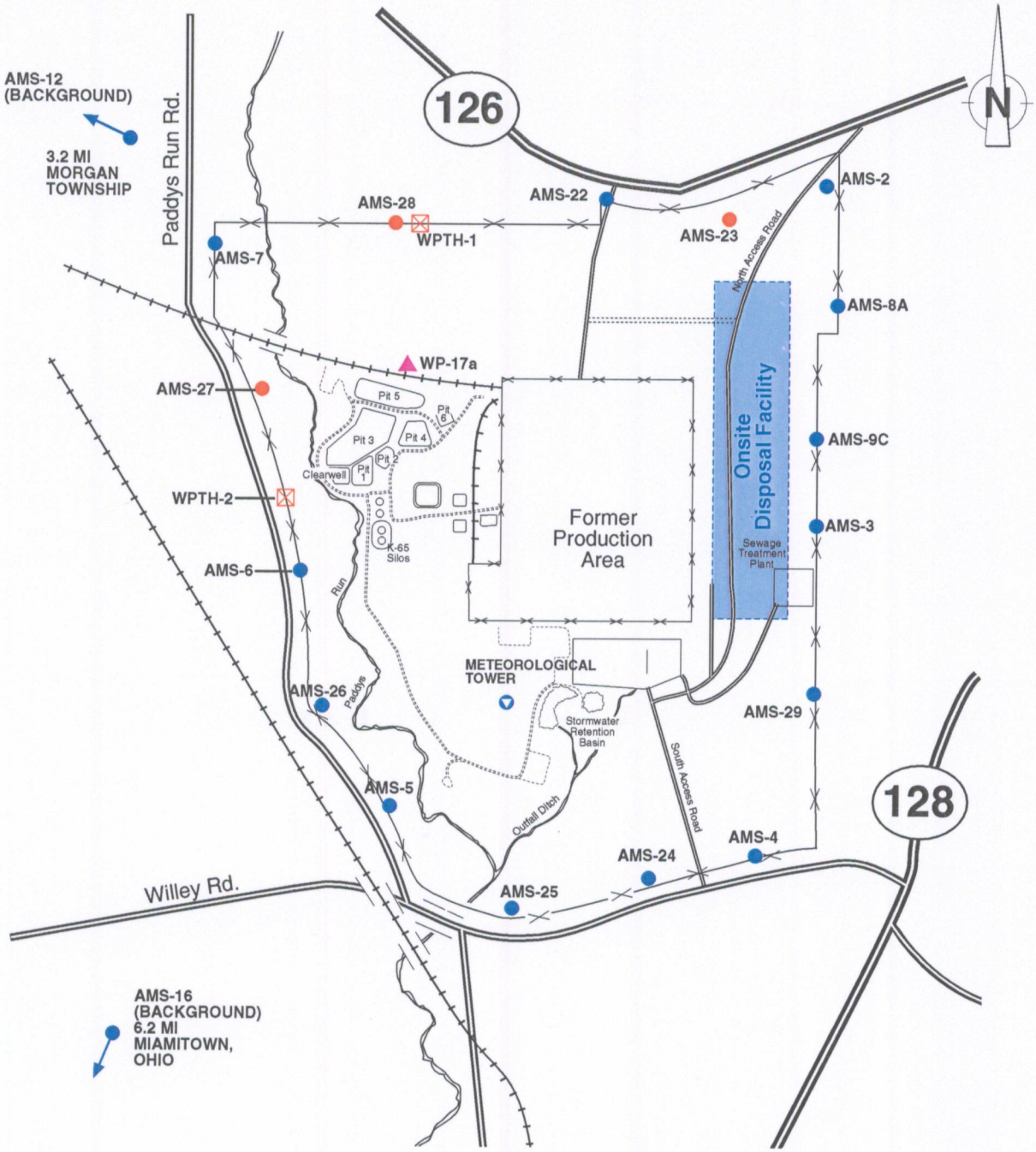

LEGEND

- AMS Locations
- Distance from center of former production area to AMS location off map
- Plant Perimeter
- Former Production Area Perimeter
- Thorium Monitor Locations
- Radon Monitor Location