Yankee Atomic Electric Company LTP Submittal Overview

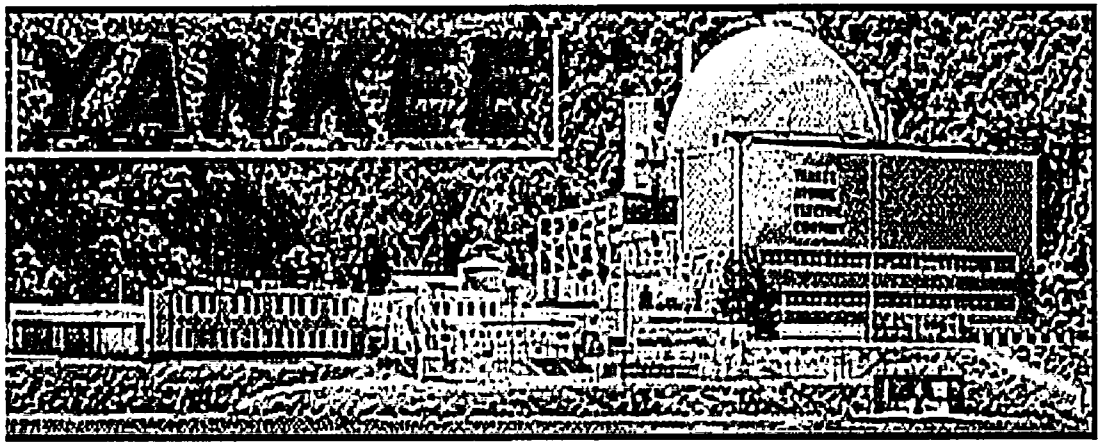
Meeting with USNRC

April 6, 2004

Discussion Topics

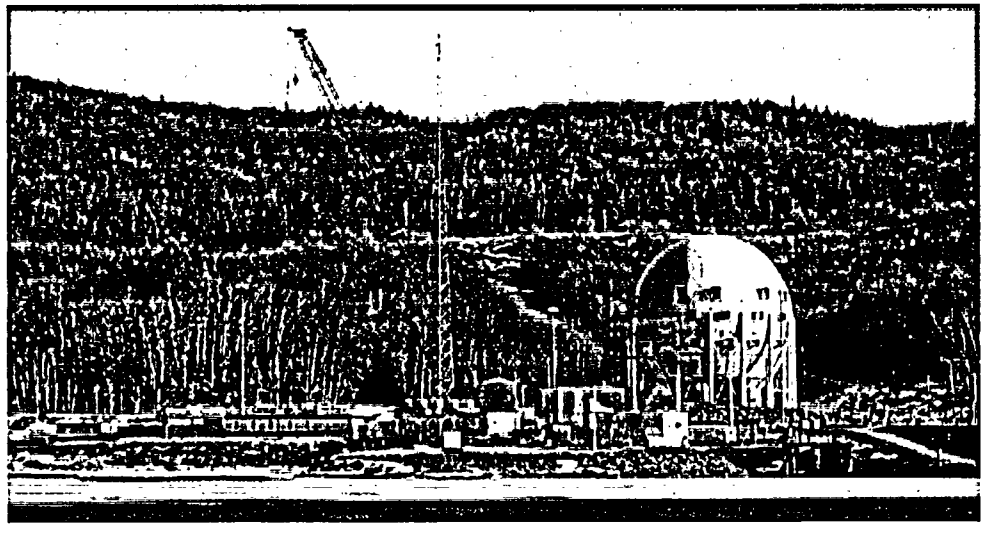
- Update of Decommissioning Progress
- LTP-Related Submittals
- Hydrogeologic Report
- Related Activities – 2004
- Future Communications with NRC

Update of Decommissioning Progress



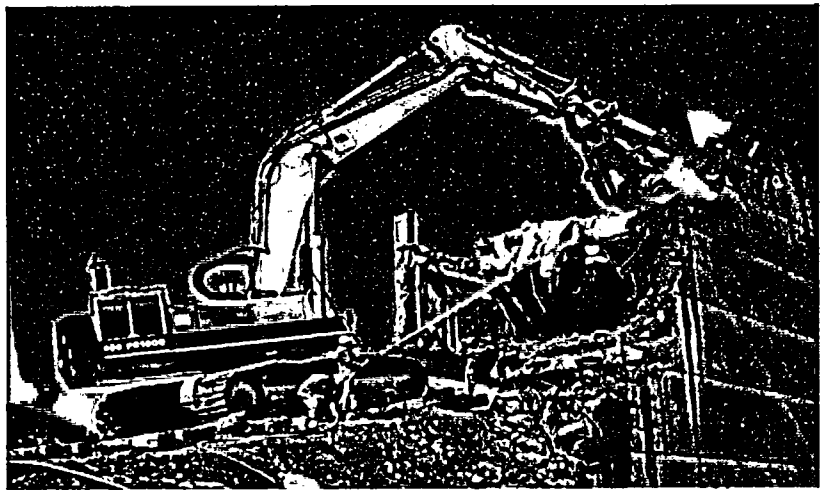
During Operations

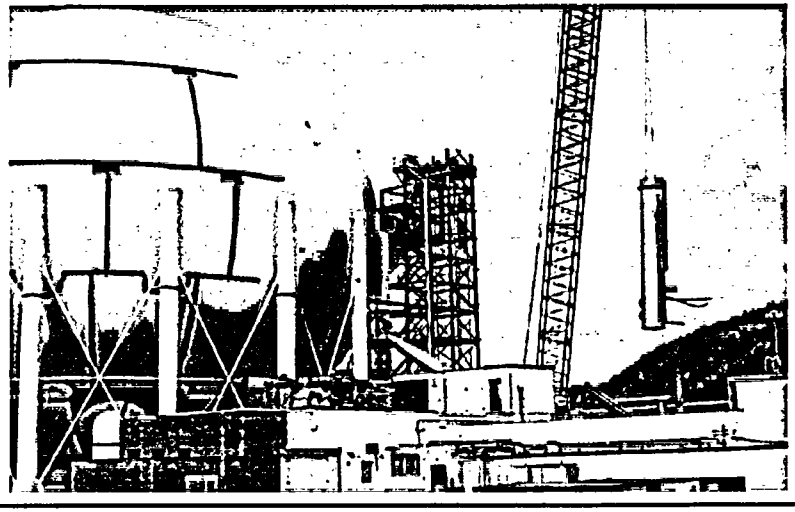
Currently

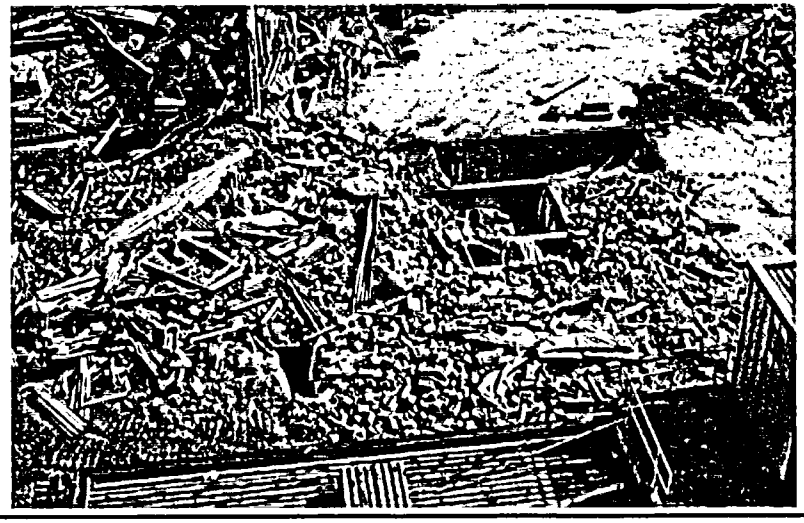


Update of Decommissioning Progress

- Building Demolition
  - Turbine Building Monolith
  - Waste Warehouse
  - Safe Shutdown Building
  - Fuel Transfer Enclosure
  - Plant Vent Stack

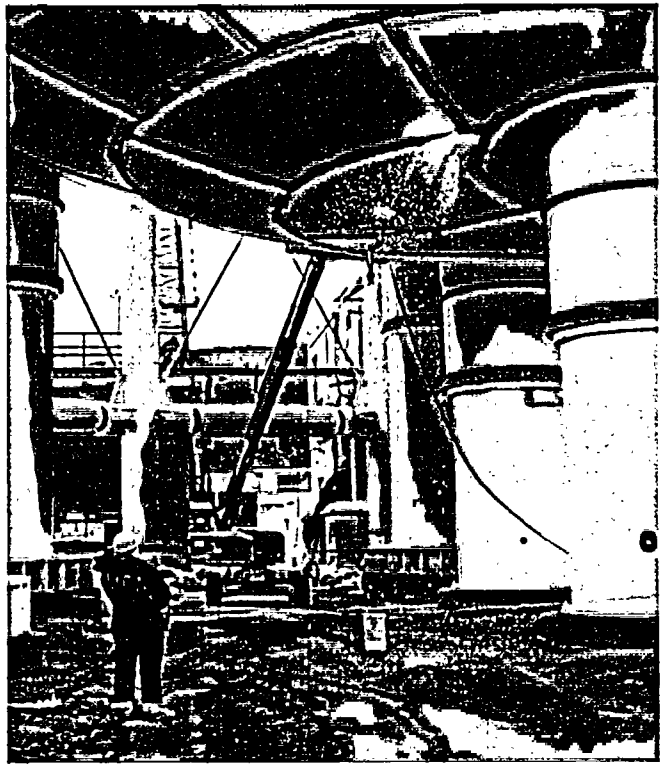


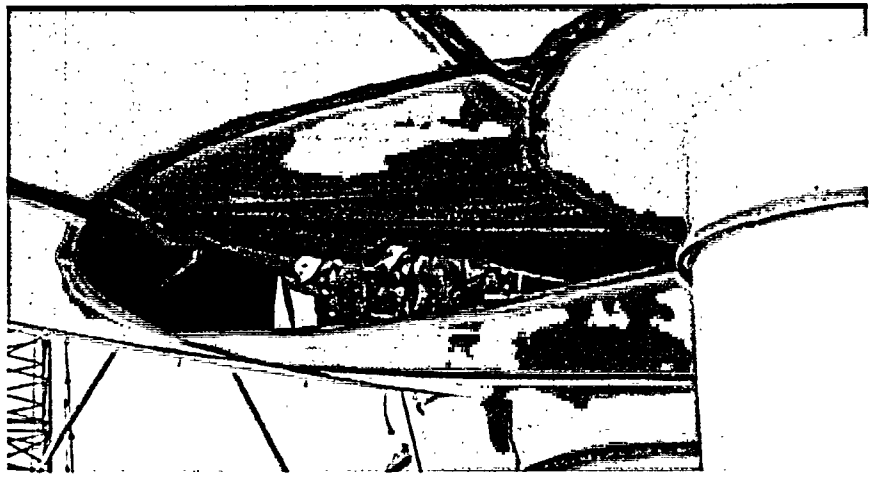


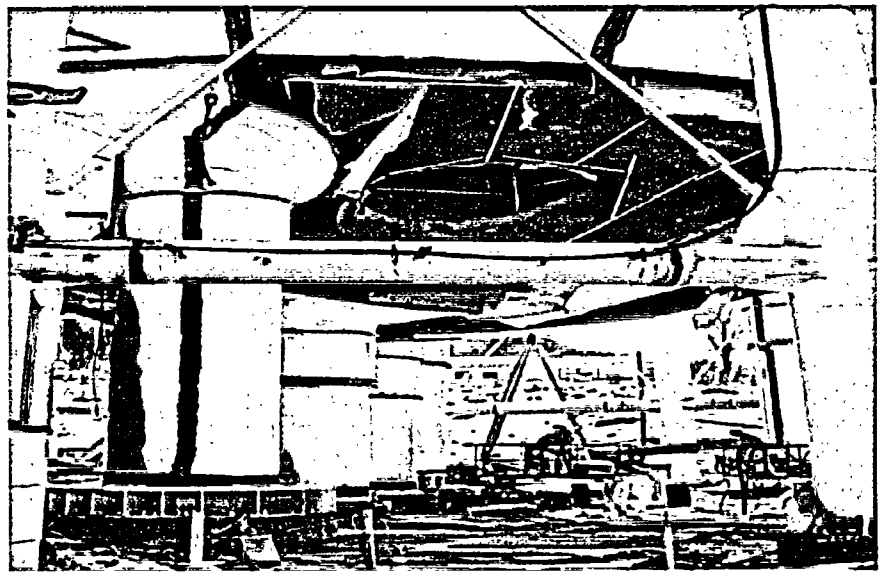


Update of Decommissioning Activities

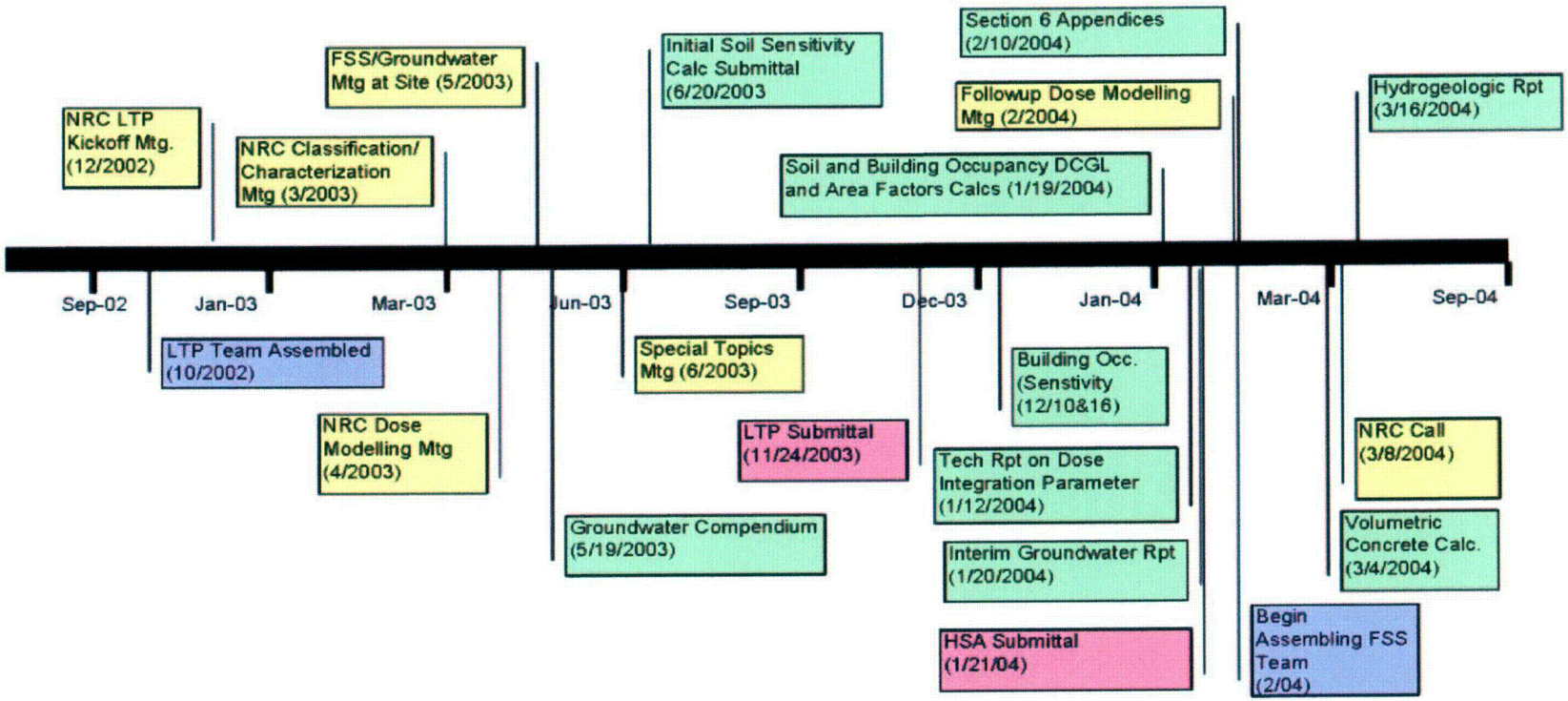
- Cutting of the Metal Vapor Container







Timeline of LTP Activities



C01

License Termination Plan

- General Information
- Summary of Historical Site Assessment
  - Identification of survey areas
  - Initial classification of survey areas
  - Radionuclides of interest
  - Known groundwater information
  - Areas of additional investigation
    - Subsurface areas
    - Groundwater
- Remaining Decommissioning Activities and Remediation Plans

License Termination Plan (Con't)

- Dose Modeling Methodology
  - Criteria, scenarios, and codes used
  - Calculations sent separately
  - Input/output details provided in appendices
- Final Status Survey Methodology
  - Follows MARSSIM
  - Groundwater and subsurface considerations
- Financial Information
- Supplement to the Environmental Report

Dose Modeling Calculations

- Calculations provided:
  - For soil and building surfaces:
    - Parameter sensitivity
    - Parameter values
    - DCGLs
    - Area Factors
  - For concrete:
    - Correlate residual radioactivity and dose
    - Establish DCGL corresponding to 0.5 mrem/yr
- LTP Section 6 Appendices Summarize Information from Calcs (Inputs and Results) for Soil and Building Surfaces

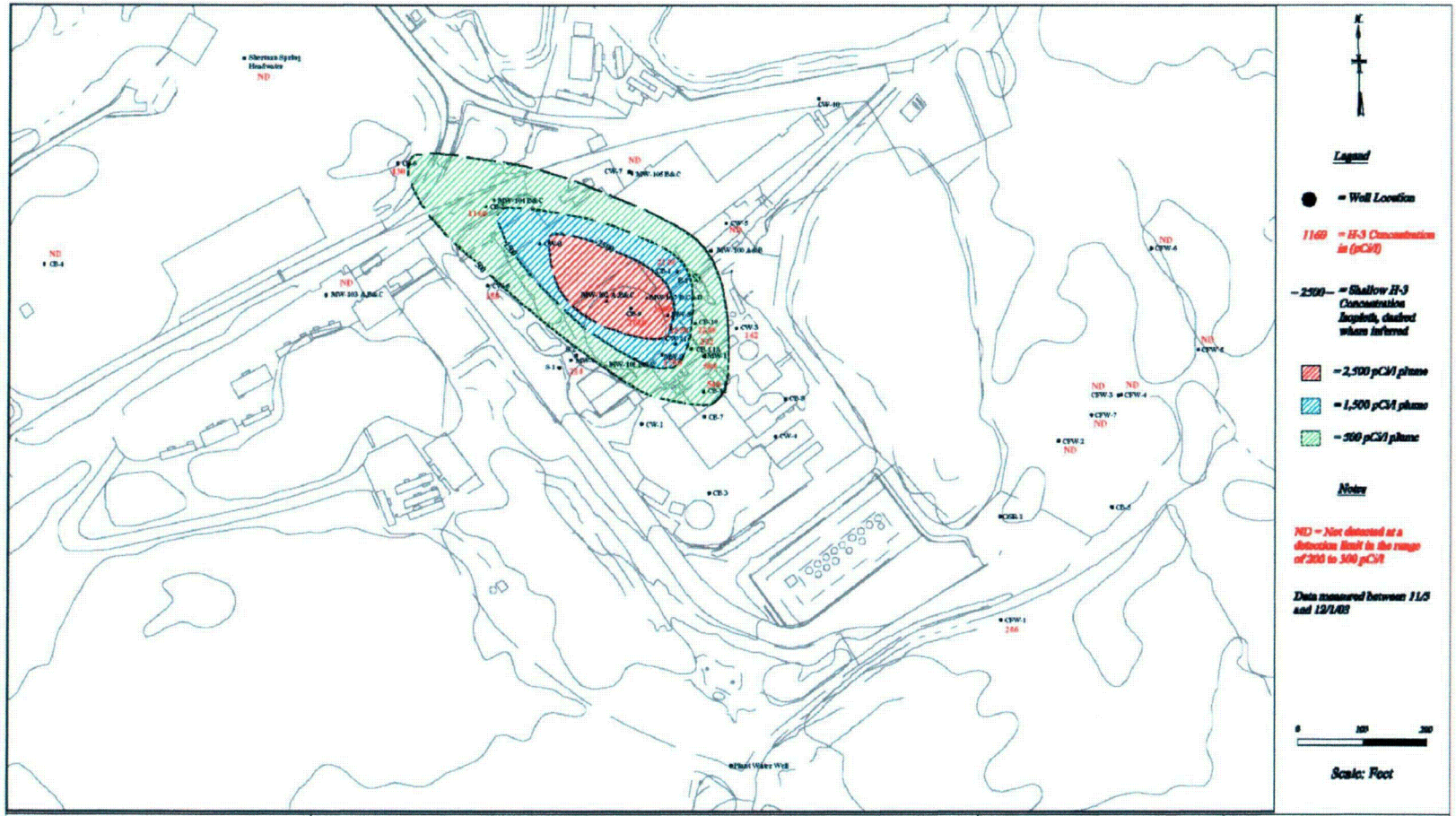
Historical Site Assessment

- Basis Document for Site Characterization and Survey Area Classification
- Describes:
  - Operational history and impacts
  - Events and spills
  - Potential for subsurface contamination
  - Past remediation efforts
  - Underground systems
- Summarizes:
  - Historical sample data
  - Statistics on open land area data (SOF, mean, median, std dev)
- Includes CD with Scanned References (Organized by Survey Area)

Hydrogeologic Report of 2003 Supplemental Investigation

- Supplements "3rd Quarter Interim Groundwater Report"
- Summarizes Well Drilling Methods and Construction
- Identifies Local Stratigraphy
- Discusses Hydraulic Gradient and Groundwater Flow
- Identifies Sample Analyses Performed
  - Gamma spec
  - Tritium and gross alpha/beta
  - Hard-to-detects (including transuranics)
- Discusses Sample Analyses Results
  - Tritium only plant-related radionuclides identified
- Provides Updated Tritium Plume Maps
- Describes Three-Dimensional Investigation

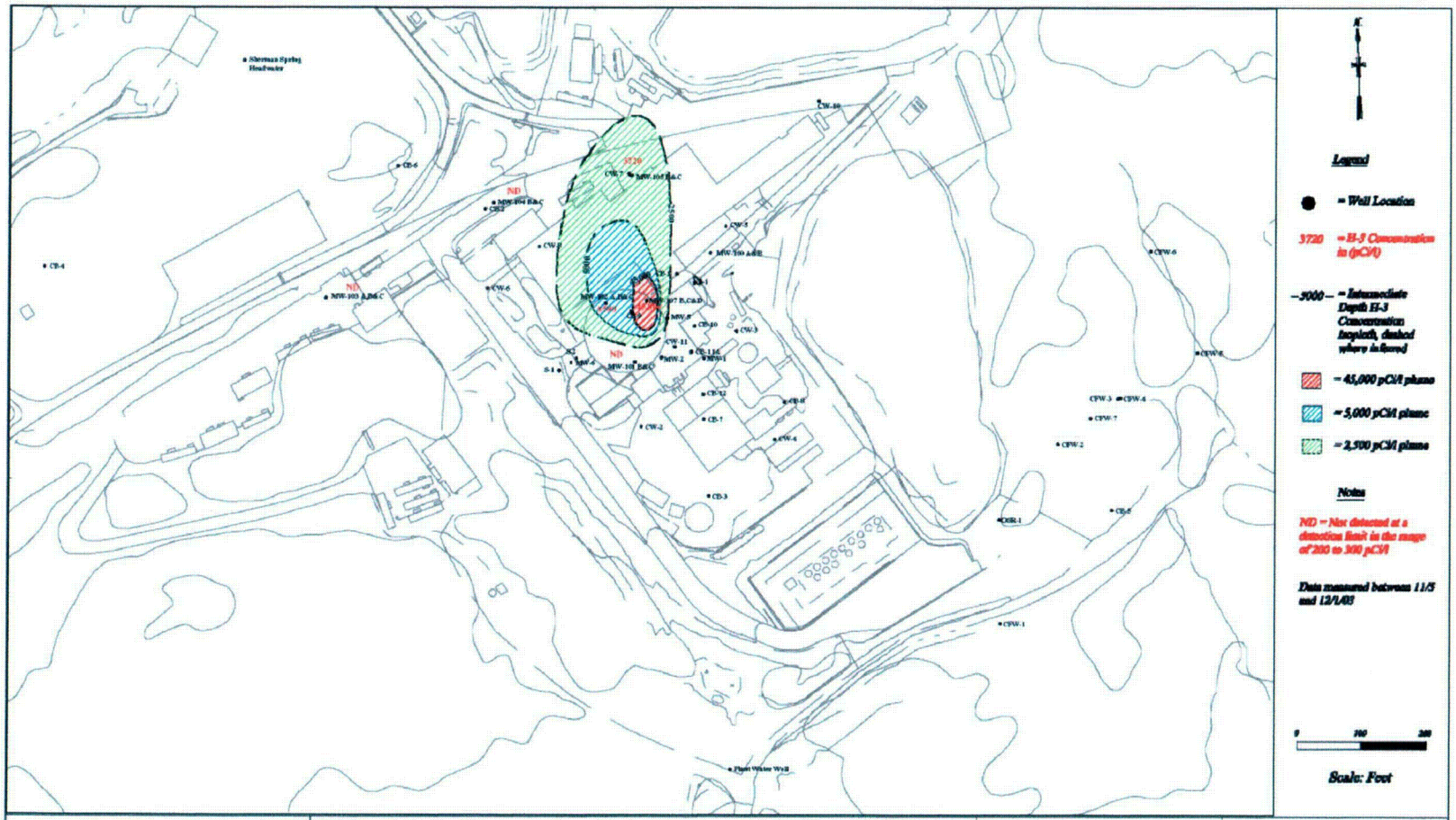
Shallow Tritium Plume (Nov. 2003)



	Yankee Nuclear Power Station Shallow Tritium Plume Map for November 2003	YANKEE	Date: February 2004 Revision: 0	Figure: 16

C02

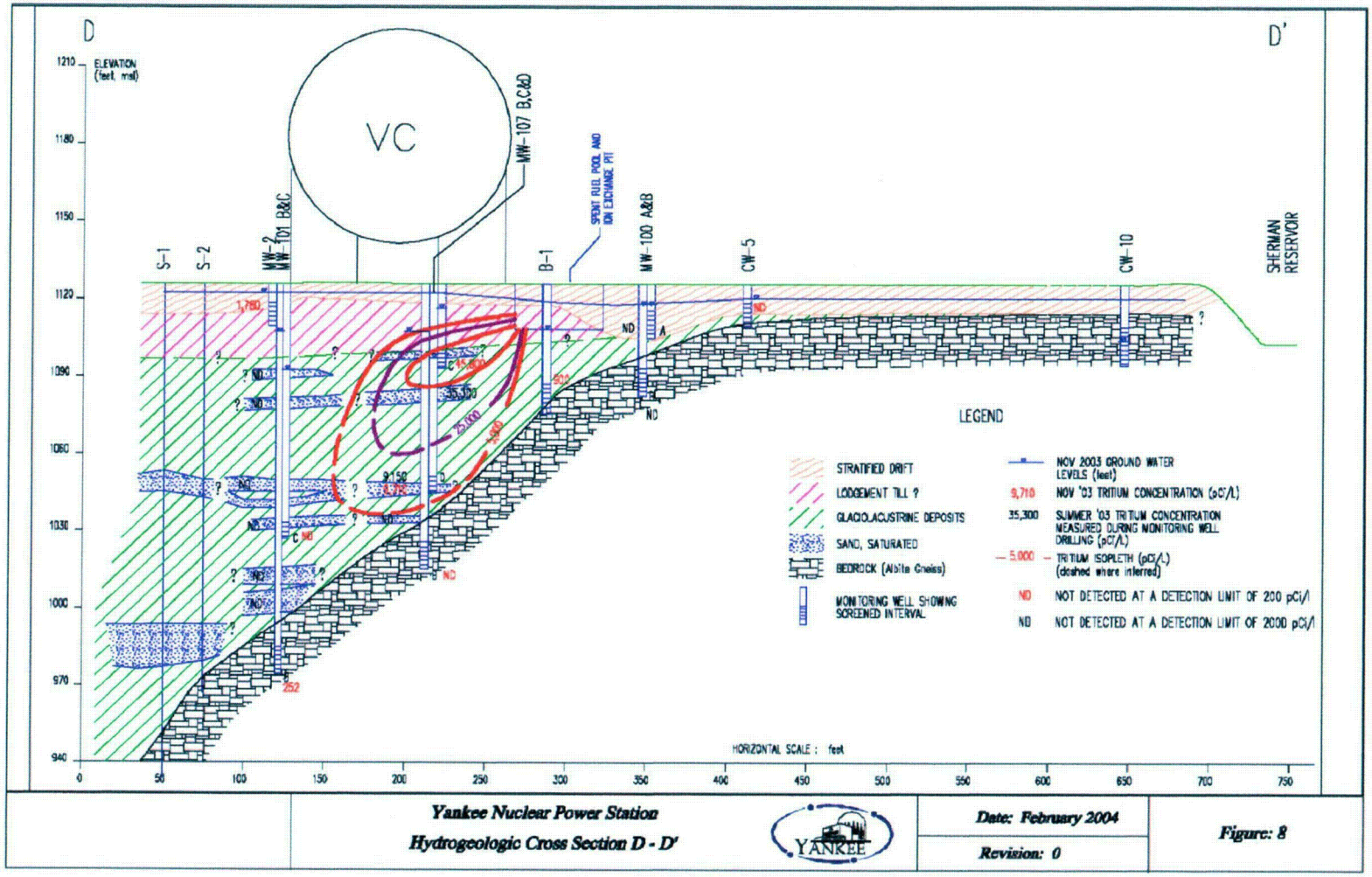
Intermediate Tritium Plume (Nov. 2003)



	Yankee Nuclear Power Station Intermediate Depth Tritium Plume Map for November 2003	YANKEE	Date: February 2004 Revision: 0	Figure: 19

C03

Three-Dimensional Investigation



C04

Related Activities - 2004

- FSS Activities
  - Assembling FSS staff
  - Developing FSS plans and procedures
  - Considering methodology to survey excavations
- Site Closure Project Plan
- PCB Remediation of Sherman Reservoir
- Continued Stakeholder and Community Outreach

Future Communications with NRC

- Regular Meetings
- Periodic Calls
- Early Identification of Concerns
- Path to Close Issues Before RAI Issuance