QUALITY ASSURANCE SURVEILLANCE REPORT
NYE COUNTY
NUCLEAR WASTE REPOSITORY PROJECT OFFICE

SURVEILLANCE NUMBER-01-07

DATE: May 15, 2007

TO: David Swanson, Interim Director
Quality Assurance Records Center

FROM: Levi Kryder, Acting Geoscience Manager

SCOPE AND REQUIREMENTS: This was a limited scope surveillance of natural-gradient tracer test (NGTT) sampling Site 22, manual measurement of water levels in Early Warning Drilling Program wells, scientific notebook entries, and compliance with applicable Health and Safety Plans.

This surveillance was performed on May 14, 2007 to assess compliance with the following:

- Pumping and collection of groundwater samples from NC-EWDP-22S and 22PC (deep) in accordance with TPN-9.5, Rev. 0 in support of the Nye County Nuclear Waste Repository Project Office (NWRPO) NGTT.
- Collection of manual water level data in accordance with TP-9.9, Rev. 3.
- Documentation of field work in scientific notebooks in accordance with QAP-3.2, Rev. 2.
- Site Specific Health and Safety Plan for Natural Gradient Cross-Hole Tracer Test at Site 22 (HASP).

This surveillance involved selecting applicable requirements from several NWRPO Test Plans, Technical Procedures, and Quality Administrative Procedures to determine whether these procedural and safety controls were being effectively implemented.

SUMMARY: With three exceptions, the controls and documentation associated with NGTT sample collection, manual water level measurements, and documentation of technical investigations were found to be in compliance and effectively implemented. All safety procedures were properly implemented. The exceptions of note were:

- The Westbay® MOSDAX® data logger (MDL) and Stand Alone Module (SAM) were not hung from the Bennett Pump, as described in Section 5.4 (3 and 5) of TPN-9.5, Rev. 0.
- An alternate method for decontaminating the first 150 feet of Bennett Pump tubing bundle was used (as opposed to the method described in Section 5.4 (6) of TPN-9.5, Rev. 0).
- In some cases, entries in the scientific notebook that were crossed out were dated in a MM/DD format, instead of the MM/DD/YY format.

DATE OF SURVEILLANCE: May 14, 2007

LEAD SURVEILLER: Levi Kryder

PERSONNEL CONTACTED: John Klenke, Geoscientist I; and Judd Sampson, Geoscience Technician.

SURVEILLANCE CONDUCT: Field activities associated with NGTT sampling, manual water level measurements, documentation of technical investigations in the scientific notebook, and applicable safety procedures were directly observed in the field. All activities, except those noted in the SUMMARY section of this report, were performed in accordance with the above-mentioned governing Quality Assurance (QA) procedures. One notebook (scientific notebook #166) was used during the surveilled field activities.

CONCLUSIONS AND RECOMMENDATIONS: The overall results of this surveillance indicate that, with the exception of three items, NGTT sampling, manual water level measurement, and documentation of technical investigations are being conducted in accordance with applicable QA procedures. Personnel also followed all applicable requirements of the HASP. The items that are potentially adverse to quality are listed under the SUMMARY section; the recommended solutions to these items are as follows:

- The MDLs and SAMs have not been used subsequent to the implementation of TPN-9.5, Rev. 0, due to the technical and safety implications of the deployment of this Westbay® equipment. The suggested remedy is to implement a field change notice negating the use of this equipment.
- An alternate method for the decontamination of the first 150 feet of the Bennett pump tubing is currently being used: a water-soaked disposable rag is used to "wipe" this interval of tubing. Field personnel have indicated that this cleans the tubing bundle more efficiently than the method described in TPN-9.5, Rev. 0. The proposed remedy is for field personnel to follow the decontamination procedure in TPN-9.5, Rev. 0, as it was agreed upon by all involved parties (NWRPO, DOE, BSC/Lead Lab) at the time the Test Plan was written.
- For revisions to entries made in the scientific notebook, the MM/DD/YY date format is more specific and technically defensible.

CONCURRENCE:

QA OFFICER	5-18-07 DATE
(Acting GSM) for ON-SITE GEOTECHNICAL REPRESENTATIVE	5/15/07 DATE
PROGRAM MANAGER	5-18-07 DATE

Cc: Bill Belke (QA Auditor)
Ken Hooks (QA Auditor)
Judd Sampson
John Klenke