NYE County NWRPO -Technical Data Report

RID No.	Transmitter	Org.	Receiver	Org.	Key word1	Title/Description
4527	Hammermeister	Nye	QARC	Nye	ISIP	Nye County Independent Scientific Investigations Program Final Report, Fiscal Years 1996-2001, August 2001, for U.S. Dept. of Energy (NWRPO-2001-04)

1

Doc. Date 8/30/2001 **General Doc. Type** QA Program Doc **Keyword2** EWDP

Entry Date 9/26/2001 **Detailed Doc. Type** Report **Keyword3** 5-yr summary

Data Originator Preparer Nye County Nwrpo

Title of Data Nye County Independent Scientific Investigations Program Final Report, Fiscal Years 1996-2001, August 2001, for U.S. Dept. of Energy (NWRPO-2001-04)

Description of Data This record contains a hard copy and an electronic file of the subject report. This report summarizes major activities and findings of Nye County's Independent Scientific Investigations Program for the period beginning in 1996 and ending in 2001. Activities were funded by the 5-year Exploratory Studies Facility (ESF) and the 3-year Early Warning Drilling Program (EWDP) grants from the Department of Energy. Major sections of the report are devoted to: regional geology studies, unsaturated zone studies in vicinity of the Yucca Mountain, saturated zone studies between Yucca Mountain and Highway 95, and several miscellaneous studies including Inyo County's studies in the Death Valley region.

Data Collection Method Data were collected following Nye County QA procedures and plans. Specific QA procedures and plans in effect for the period of interest in this report at available from the Nye County Quality Assurance Record Center located in Pahrump, NV. QA plans and procedures used in unsaturated zone studies near Yucca Mountain are referenced in 4 annual summary technical reports for the period May 1966 through April 2000 found in RID#s 499, 728, 1222, and 3730. Plans and procedures used in EWDP borehole/well studies are documented and/or referenced in Nye County QA Work Plans WP-4, WP-5, WP-6, and WP-8.

Data Location(s) Unsaturated zone data were collected from well UE-25 ONC#1, the ESF, and the Enhanced Characterization of the Repository Block (ECRB) tunnel. Regional geologic data were collected throughout the Death Valley flow system. EWDP data were collected from numerous wells constructed and monitored primarily in the region between Yucca Mountain and Highway 95 (northern boundary of Amargosa Valley).

Data Collection Period(s) 1996 - 2001

Data Source(s) Air pressure, temperature, humidity, and velocity sensors/data loggers were monitored in the UE-25 ONC#1, ESF, and ECRB. Drilling, sampling, logging, well completion, water level and water chemistry monitoring, and aquifer testing data collection were conducted in numerous EWDP boreholes/wells. Ventilation effects on air and rock temperature and moisture in a simplified repository design were simulated using the computer code A-TOUGH. See data and analyses from 4 previous summary annual technical reports for the period May 1996 through April 2000 found in RID#s 403, 499, 728, and 1222, respectively.

Data Censoring None

Data Processing Procedures for processing original air temperature and pressure data collected from the unsaturated zone are described in NWRPO QA plans and procedures listed below under "Governing QA Procedure or Plan".

Data Limitations The method used to isolate Westbay Mosdax pressure/temperature probes in UE-25 ONC#1 as described in RIDs 163, 164, and 242 may affect the representativeness of air pressure data obtained from these probes. Each Westbay Mosdax pressure/temperature probe installed above the water table is in pneumatic communication with a relatively long (approximately 30- to 200-foot long) depth interval of formation rock. More specifically, probes are in

NYE County NWRPO -Technical Data Report

RID No.	Transmitter	Org.	Receiver	Org.	Key word1	Title/Description

communication with the air-filled annular space between the Westbay casing and the formation. Relatively short 1-meter long packers divide the air filled annular space into approximately 30 to 200 foot long intervals. In most cases, pressure/temperature probes are located in adjacent intervals of air-filled annular space separated by a single 1-meter long packer. However, in several cases probes are separated by two or three intervals of annular space separated by two or three packers. Because each pressure/temperature probe is in direct pneumatic communication with a rather lengthy interval of air-filled annular space and associated formation rock, the pressure data obtained from these probes may not be representative of pressures in the formation adjacent to the probes or at formation locations further away from the borehole in the lateral direction.

Governing QA Docs. WP-2, WP-3, WP-4, WP-5, WP-6, WP-7, TP-7.0, TP-8.0, TP-8.1, TP-9.2, and TP-9.9.

Frequency of Transmittal One time only

Direct Questions About Data To-