Data Collection Method

Data collection is described in the Description of Spinner Logging (Section 2.1.2) and Test Procedures and Description (Section 2.2.1) sections of the report. In accordance with TP-9.0, a series of spinner logs were run prior to and during pumping. In accordance with TP-9.0 and TP-9.5, Westbay Mosdax pressure sensors were placed above the submersible pump in well NC-EWDP-7SC, and below the water table in the nearest offset well (NC-EWDP-7SC), to measure the pressure response to pumping and recovery. Barometric pressure during the test was also recorded. Pump rates were determined using a 50-gal. (189.3-L) drum and a stopwatch, and also with a turbine flow meter.

Data Location(s)

NC-EWDP-7SC is located on a paleospring deposit at the south end of Crater Flat, approximately 2 miles (about 3 km) north of Highway 95, or about 10 miles (about 16 km.) northwest of the Lathrop Wells Junction.

Data Collection Period(s)

Field activities were conducted in March 2001. A preliminary test interpretation was prepared in April 2001, and the final report was completed in March 2002.

The original test data were submitted by Nye County personnel to the NWRPO. See field scientific notebook #127 (RID 4540); RID 4018 (spinner log); and RID 4173 (pressure and temperature data).

References to RIDs containing supporting well information, well logs, and other original data collected from NC-EWDP-7SC can be found on the nyecounty.com web site under "EWDP" and "EWDP-7SC".

Data Censoring

The turbine flow meter readings were inaccurate because of the low pump rate, so the hand measurements with a stopwatch and drum were used for rate determination. The Westbay Mosdax pressure sensor in the observation well was outside its calibration date, and the sensor failed 12.5 hr. into the recovery. Data beyond that time were not utilized for the analysis. Water level sounder measurements were recorded as a check, and were found to be within 0.08 ft of the Westbay Mosdax readings. The analysis was prepared utilizing the Westbay information during the time the sensor was reading properly. The original test data may be viewed in their entirety at the NWRPO QA Records Center in Pahrump, NV.

Data Processing

Data processing of the spinner data is described in the Spinner Log Fundamentals section (Section 2.1.1) of the report. Data processing of the pressure data is described in the Pumping Well Recovery Analysis (Section 2.2.2) and Model Analysis (Section 2.2.3) sections of the report.

Data Limitations

The accuracy of the pressure data recorded during the test was limited by the failure of one of the pressure sensors. The accuracy of the rate data was limited by the low pump rate. The test interpretation is limited by the inherent differences between the actual aquifer system present, and the idealized aquifer model assumed in the analysis procedure. Analysis of the spinner data indicated most of the water production came from two screens, with very small water production from another screen and no measurable production from the fourth screen. The pump and recovery test was analyzed using a two-layer model, with the well located in the center of a circular region with reduced transmissibility. The presence of a damaged region around the well is
consistent with the observations that large amounts of polymer and bentonite gel mud were

lost while drilling and completing this well, and that two instances of "stair-step" changes in pressure occurred in NC-EWDP-7SC during the pumping period, although no corresponding changes were seen in the nearby observation well. Differences between the active well results and the observation well results are considered to reflect different aquifer properties at distances greater than about 10-20 ft. (about 3-6 m) from the active well.

Governing QA Docs.  
TP-9.0, TP-9.5, TP-9.7

Frequency of Transmittal  
One time only

Direct Questions About Data To-  
Nye County QA Records Center