NYE County NWRPO -Technical Data Report

| Title/Description | Key word1 | Org. | Receiver | Org. | O. Transmitter | | RID No | |
|--|------------------|-------------------------|------------------|-------------------|--------------------|----------------|---|--|
| NC-EWDP-2DB Well Completion Diagram | 2DB | Nye | QARC | NWRPO | | 0 Walker | 7559.0 | |
| | VCD | Keyword2 | Doc | QA Program D | General Doc. Type | 10/1/2008 | Doc. Date | |
| | completion | Keyword3 | ion Diagram | Well Completion | Detailed Doc. Type | 10/6/2008 | Entry Date | |
| | | | | | r | Jamie Walke | Data Originator Preparer | |
| | | | | on Diagram | DB Well Completion | NC-EWDP-2 | Fitle of Data | |
| | | | | | | | | |
| onic data in .DWG, .PDF, and .DOC formats. | copy and electro | includes har | -2DB. Record | ell NC-EWDP- | tion Diagram for w | Well Comple | Description of Data | |
| | | WDP-2DB. | es at site NC-E | pletion activitie | ed during well com | Data collecte | ata Collection Method | |
| | | | | | DB | NC-EWDP-2 | | |
| | | | | | 5/08 | 1/13/00 to 7/5 | | |
| | 48. | Notebook # | Field Scientific | RID 7553) and l | Casing Records (R | Tubing and 0 | Data Source(s) | |
| | | | | | | None | ata Censoring | |
| | | | | | | None | ata Processing | |
| | 48. | Notebook # ⁷ | Field Scientific | RID 7553) and I | | Tubing and C | Period(s) Data Source(s) Pata Censoring | |

Borehole casing and tubing depths are determined through direct measurement of drill pipe, well casing and tubing strings and are recorded on Tubing and Casing Records. All depths below ground level were made in reference to a ground level datum that was determined by "tagging" the depth of the emplaced material with a wireline tagging tool or tremmie line. Depths are not corrected for borehole deviation.

An inconsistency in the ground level datum was recognized after the drilling and casing operations from July 13, 2000 to October 10, 2000 (see RID 4725). With respect to the well completion diagram, the depths of the 14 3/4 inch and 9 7/8 inch boreholes and the 8 5/8 inch intermediate casing drilled or installed during this time frame were corrected by subtracting 1.35 feet from the depths. All subsequent operations used the correct ground level datum.

The completion materials were emplaced using tremmie line methods to the depths required. The tremmie line was used to pump completion materials into the annular space between the borehole and well casing except for the 5 1/2 inch completion casing that was cemented "bottom up" by pumping cement grout down the casing and upward from the casing bottom into the annular space. During drilling, the open borehole from the bottom of the 5 1/2 inch casing (2962.6 ft) to 3108.3 ft was grouted with neat cement and redrilled in order to stabilize swelling clays in this interval.

The NC-EWDP-2DB well completion is an open-hole well completion with open borehole below the 5 1/2 inch production casing. The borehole is open below 2962.6 ft to the total depth of 3175.0 ft; however, the formation in the interval between 2962.6 ft and 3108.3 ft is grouted. The production interval in open borehole is from 3108.3 ft to the borehole total depth of 3175.0 ft, an interval of 66.7 feet of 4 3/4 inch open borehole.

Following the deepening of the borehole and airlift well development in June and July 2008, a geophysical logging run was attempted in the open hole section below the 5 1/2 inch production casing from 2962.6 ft and 3175.0 ft. An obstruction (bridge) was encountered at 2998 ft, precluding the logging of the production interval below the grouted section of the open borehole. Water levels (~295 ft below ground level) and water production (maximum 20 gpm) observed during well development indicate that the target Paleozoic rocks may be hydraulically isolated from the production casing by the bridge encountered at 2998 ft.

Data Limitations

NYE County NWRPO -Technical Data Report

Org.

Governing QA Docs.

Frequency of Transmittal

Direct Questions About Data

NWRPO QA Records Center

Org.

Key word1

Title/Description

Receiver

To-