# Robert L. Millford

PETROLEUM GEOLOGIST
OIL & GAS PROPERTIES
EXPLORATION & DEVELOPMENT

Merritt Drilling Company, Inc.
Operator

Chenoweth #1
C-NE-NE-NE
Sec. 27 T. 16S R. 21W
Ellis County, Kansas

Elevation: 2,187 KB
Total Depth: 3,385
Commenced: 10-01-04
Completed: 10-08-04

Surface Casing: 8 5/8" @ 224' w/ 150 sxs cement
Production Casing: 5½" @ 3,385' w/ 125 sxs cement
Perforations: None
Contractor: Murfin Drilling Co., Inc. Rig #17
Drilling Time: 7:00 AM 10-01-04 to 7:00 AM 10-08-04
Drilling Mud: Chemical Mud Co. Mr. Jim Stewart
Electric Log: Log-Tech Mr. Brad Rogers
Drill Stem Tests: Trilobite Testing, Inc. Mr. Kevin Kessler
Samples: 30' to RTD
Geologist: Robert L. Millford

| Formation | Log Depth | Sub-Sea Datum |
|---|---|---|
| Anhydrite | 1,767 | +420 |
| Base Anhydrite | 1,802 | +385 |
| Topeka | 3,023 | -836 |
| Heebner | 3,267 | -1,080 |
| Toronto | 3,286 | -1,099 |
| Lansing-Kansas City | 3,296 | -1,109 |
| Stark Shale | 3,736 | -1,549 |
| Marmaton | 3,753 | -1,566 |
| Pawnee | 3,830 | -1,643 |
| Fort Scott | 3,882 | -1,695 |
| Cherokee Shale | 3,900 | -1,713 |
| Mississippian | 3,964 | -1,777 |
| Kinderhook Shale | 3,972 | -1,785 |
| Viola | 3,980 | -1,793 |
| Simpson Shale | 3,1 | -1,8 |
| Simpson Sand | 3,1 | -1,8 |
| Arbuckle | 3,1 | -1,8 |
| RTD | 3,385 | -1,198 |
| LTD | 3,385 | -1,198 |

| DATE | 7:00 AM DEPTH | REMARKS |
|---|---|---|
| 6-11-14 | 0 | Spud @ 1:45 pm. Plug down @ 7:00 am. Drilled out plug @ 3:00 am on 6-12-14 w/ PDC bit |
| 6-12-14 | 500' | Cut 500' in last 24 hrs. 8½ hrs drlg. 8½ trips @ 1,800'. 1½ clean out bit |
| 6-13-14 | 2,035' | Cut 1,535' in last 24 hrs. 19.25 hrs drlg. 3/4 trip @ 3,033'. (rran bottom bit) |
| 6-14-14 | 3,360' | Cut 1,325' in last 24 hrs. 19.75 hrs drlg. |
| 6-15-14 | 4,915' | Cut 1555' in last 24 hrs. 23.75 hrs drlg. Sch'l 40 @ 4225' |
| 6-16-14 | 5,485' | Cut 570' in last 24 hrs. 23.75 hrs drlg. Sch'l 40 @ 4944' |
| 6-17-14 | 6,362' | Cut 848' in last 24 hrs. 23 hrs drlg. |
| 6-18-14 | 6,540' | Cut 177' in last 24 hrs. 10.25 hrs drlg. Sch'l 40 @ 6540' |
| 6-19-14 | 6,692' | Cut 152' in last 24 hrs. 6 hrs drlg. 4½ trips. Sch'l 40 @ 6692' |
| 6-20-14 | 4,730' | Cut 90' in last 24 hrs. 4 hrs drlg. Run production casing |

## Remarks

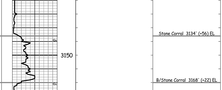
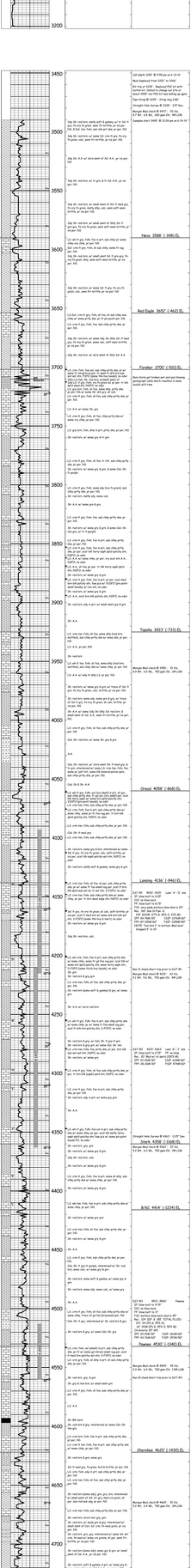
The electric log measurements correlate about 2' higher to the drilling measurements.

Formation tops and lithology on this report have been corrected to the electric log.

The drilling samples were deposited at the Kansas Geological Survey office in Wichita.

Respectfully submitted,

Robert L. Millford

## Drill Stem Test Charts

Drill Stem Test by Trilobite Testing, Inc.