



DDC

3222 North 6th Mile Road  
Casper, WY 82604**RM-13915**

1":100' - TVD

11/25/2013 8:52:14 AM

**Oper. Company:** Noble Energy Inc**Country:** USA**State / Province:** Colorado**County / Parish:** Weld**Started:** 11/20/2013 10:30 PM**API/UWI:** 05-123-37550**Field:** WildCat**Well:** Timbro State LD16-66HN**Rig:** H&P 326**Ended:** 11/25/2013 06:55 AM**Personnel****Day Hand:** Bob Kubistek**Night Hand:** Chris Abbott**Comp. Emp:** DDC**Location****Latitude:** 40°45'13.032 N**Longitude:** 103°51'38.880 W**Elev. GL:** 4756**Elev. DF:** 30**Elev. KB:** 4786**Hole Data**

| Size   | From | To   |
|--------|------|------|
| 13 3/4 | 0    | 1235 |
| 8 3/4  | 1235 | 6090 |
| 6 1/8  | 6090 | 9790 |

**Casing Data**

| Size  | From | To   |
|-------|------|------|
| 9 5/8 | 0    | 1225 |
| 7     | 0    | 6080 |
| 4 1/2 | 0    | 9790 |

**Bit Sizes**

| Size   | From | To   |
|--------|------|------|
| 13 3/4 | 0    | 1235 |
| 8 3/4  | 1235 | 6090 |
| 6 1/8  | 6090 | 9790 |

**Mud Data**

| Type | Weight | Density | Viscosity | Rm | Rmf | Rmc | From | To   |
|------|--------|---------|-----------|----|-----|-----|------|------|
| LSND | 10.3   |         | 38        |    |     |     | 1235 | 9790 |

**Tool Run Data**

| Serial Number | Gamma Offset | Resist. Offset | Start Time             | Start Depth | End Time               | End Depth |
|---------------|--------------|----------------|------------------------|-------------|------------------------|-----------|
| 817           | 36           | 0              | 11/20/2013 10:30:03 PM | 1235        | 11/21/2013 12:00:03 AM | 1267      |
| 1862          | 36           | 0              | 11/21/2013 3:30:09 AM  | 1267        | 11/21/2013 7:00:09 PM  | 5011      |
| 1862          | 44           | 0              | 11/22/2013 7:00:23 AM  | 5011        | 11/22/2013 5:30:23 PM  | 6090      |
| 1862          | 51           | 0              | 11/24/2013 2:30:34 AM  | 6090        | 11/25/2013 6:55:34 AM  | 9790      |

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost damages or expenses incurred or sustained by anyone resulting from an interpretation made by any of our officers, agents, or employees.











