



Titan Directional Drilling
20302 Park Row Suite 1200
Katy, Tx 77449

Timbro Ranch 2-3-9-59
Scale 5":100' - MD
12/24/2014 6:09 AM

Oper. Company: Carrizo Oil & Gas
Well: Timbro Ranch 2-3-9-59
Field: Niobrara
Rig: Xtreme 19
Well ID: 05-123-40454
Job Number: TL14003

State: Colorado
County: Weld County
Country: USA
Location: Weld County
Start Date: 12/20/2014 07:30:00
End Date: 12/24/2014 06:00:00

Latitude: 40.7862527777778
Longitude: -103.796547222222

Elev KB: 17
Elev DF: 5082
Elev GL: 5065

Operator 1: Skylar Thompson

Operator 2: Trevor Cecchettini

| Tool Run Data | Run #1 | Run #2 | Run #3 | Run #4 | Run #5 |
|--------------------|-------------|------------|-------------|------------|---------|
| Tool S/N | N/A | N/A | 6182 | 6182 | |
| Bit Size | 12 1/4 | 8 3/4 | 8 3/4 | 6 1/8 | |
| Cal Factor | N/A | N/A | 4.43 | 2.44 | |
| Gamma Offset | 0.00 | 0.00 | 41.00 | 43.00 | |
| Resistivity Offset | 0.00 | 0.00 | 0.00 | 0.00 | |
| Start Depth | 0.00 | 1840.00 | 5576.00 | 6442.00 | |
| StartDate | 12/16/2014 | 12/19/2014 | 12/20/2014 | 12/22/2014 | |
| StartTime | 11:30 PM | 1:30 AM | 7:30 AM | 11:00 AM | |
| EndDepth | 1840.00 | 5576.00 | 6442.00 | 10553.00 | |
| EndDate | 12/17/2014 | 12/20/2014 | 12/21/2014 | 12/24/2014 | |
| EndTime | 7:30 PM | 6:10 AM | 10:10 AM | 6:00 AM | |
| Mud Type | Fresh Water | WBM | WBM | WBM | |
| Temperature | 117 | 131 | 142 | 190 | |
| Hole Data | | | Casing Data | | |
| Size | From | To | Size | From | To |
| 12 1/4" | 0.00 | 1840.00 | 9 5/8" | 0.00 | 1817.00 |
| 8 3/4" | 1840.00 | 6442.00 | 7" | 1817.00 | 6421.00 |
| 6 1/8" | 6442.00 | 10553.00 | | | |

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 interpretation made by any of our officers, agents, or employees.















































