



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

**Timbro Ranch 2-3-9-59**  
**Scale 1":100' - TVD**  
**12/24/2014 6:10 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 an interpretation made by any of our officers, agents, or employees.*



