



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

Timbro Ranch 2-3-9-59
Scale 1":100' - MD
12/24/2014 6:08 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.











