

**Precision Drilling**27610 Commerce Oaks Drive
Oak Ridge North, TX 773857
713-435-6250**Castor 5-36-9-59****Scale 5":100' - TVD****12/5/2013 8:47 AM****Oper. Company:** Carrizo Oil & Gas Inc.**Well:** Castor 5-36-9-59**Field:** Niobrara CONZ'83**Rig:** Extreme 19**Well ID:** 051-123-38369-00**Job Number:** DL1983**Notes:****State:** Colorado**County:** Weld**Country:** USA**Start Date:** 11/30/2013 23:30:00**End Date:** 12/05/2013 08:00:00**Latitude:** 40.71351N**Longitude:** -103.91896W**Notes:****Elev KB:** 4907**Elev DF:** 17**Elev GL:** 4890**Operator 1:** Neil LaRubbio**Notes:****Operator 2:** Kody Armajo

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool S/N	G2629	G2629			
Bit Size	8 3/4	6 1/8			
Cal Factor	2.58	1.55			
Gamma Offset	44.00	44.00			
Resistivity Offset	0.00	0.00			
Start Depth	5380.00	6093.00			
StartDate	11/30/2013	12/2/2013			
StartTime	11:30 PM	2:00 PM			
EndDepth	6093.00	13390.00			
EndDate	12/1/2013	12/5/2013			
EndTime	8:00 PM	8:00 AM			
Mud Type	WBM	WBM			
Mud Weight	9.6	9.6			
Funnel Viscosity	45	43			
Plastic Viscosity	11	13			
Yield Point	7	10			
Gel Strength	2, 6, 9	3, 9, 14			
Solids Content	1.9	3			
Sand Content	0.125	0.25			
Mud Alkalinity	0.8	1			
Filtrate Alkalinity	1.0	1.2			
Chlorides	800	1100			
Mud RM	N/A	N/A			
Mud RMF	N/A	N/A			
Mud RMC	N/A	N/A			
Mud RM at BHT	N/A	N/A			
Hole Data			Casing Data		
Size	From	To	Size	From	To
12 1/4	0.00	1403.00	9 5/8	0.00	1403.00
8 3/4	1403.00	6808.00	7	1403.00	6808.00
6 1/8	6808.00	13390.00	4.5	6808.00	13390.00

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.







