



Precision Directional Services, Inc.  
27610 Commerce Oaks Drive  
Oak Ridge North, TX 77385

**DL1956**

5":100' - MD  
11/11/2013 2:50:01 AM

**Oper. Company:** Carrizo Oil & Gas, Inc.  
**Country:** United States  
**State / Province:** Colorado  
**County / Parish:** Weld  
**Started:** 11/06/2013 06:00 PM

**API/UWI:** 05-123-38332-00  
**Field:** Niobrara 83'  
**Well:** Speaker 2-27-8-61  
**Rig:** Xtreme 17  
**Ended:** 11/11/2013 02:30 AM

### Personnel

**Day Hand:** Andrew Thomson  
**Night Hand:** Luis Suarez  
**Comp. Emp:** Curtiss Andersen

### Location

**Latitude:** 40.37'35.124N  
**Longitude:** 104.11'57.839W  
**Elev. GL:** 4932  
**Elev. DF:** 17  
**Elev. KB:** 4949

### Hole Data

Size	From	To
12 1/4	0	1469
8 3/4	1469	6660
6 1/8	6660	11182

### Casing Data

Size	From	To
9 5/8	0	1469
7	1469	6660
4 1/2	6660	11182

### Bit Sizes

Size	From	To
12 1/4	0	1469
8 3/4	1469	6660
6 1/8	6660	11182

### Mud Data

Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
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### Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
G2689	41	0	11/6/2013 12:00:25 AM	5889	11/7/2013 6:30:25 PM	6660
G2689	41	0	11/8/2013 12:00:15 PM	6660	11/11/2013 2:30:15 AM	11182

*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.*

























































