



Precision Directional Services Inc.

PDSI
27610 Commerce Oaks Drive
Oak Ridge North, TX 77385

DL1622

2"-100' - MD

3/29/2013 10:09:21 PM

Oper. Company: Carrizo Oil & Gas, Inc

Country: USA

State / Province: Colorado

County / Parish: Weld

Started: 03/23/2013 09:45 AM

API/UWI: 05-123-36864

Field: Niobrara CONZ'83

Well: Nelson 5-17-9-60

Rig: Extreme 19

Ended: 03/29/2013 09:00 PM

Personnel

Day Hand: Paul Brown

Night Hand: Kody Armajo

Comp. Emp: Gabe Vela

Location

Latitude: 40 44'34.673N

Longitude: 104 07'16.417W

Elev. GL: 4991

Elev. DF: 5008

Elev. KB: 17

Hole Data

Size	From	To
12 1/4	0	1444
8 3/4	1444	6663
6 1/8	6663	10835

Casing Data

Size	From	To
9 5/8	0	1444
7	1444	6663
4.5	6663	10835

Bit Sizes

Size	From	To
12 1/4	0	1444
8 3/4	1444	6663
6 1/8	6663	10835

Mud Data

Type	Weight	Density	Viscosity	Rm	Rmf	Rmc	From	To
WBM	8.4						0	1444
WBM	8.4-9.5						1444	6663
WBM	9.5-9.8						6663	10835

Tool Run Data

Serial Number	Gamma Offset	Resist. Offset	Start Time	Start Depth	End Time	End Depth
G2828	40	0	3/23/2013 9:45:27 AM	5860	3/24/2013 2:28:27 PM	6663
G1406	42	0	3/25/2013 1:30:42 PM	6663	3/29/2013 3:00:42 PM	10835

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.

0.00 GR(API) 150.00 MD 0.00 ROP(FT/HR) 150.00 Surveys (TVD/INC/AZ)
150.00 2 300.00 FT 150.00 2 300.00



















