

**CATHEDRAL**

Cathedral Energy Services
1949 North Pyrite Road
Casper, Wyoming 82604

145036

5"-100' - TVD

5/13/2014 8:46:23 AM

Oper. Company: EnCana Oil & Gas (USA) Inc.**Country:** U.S.A.**State / Province:** Colorado**County / Parish:** Weld**Started:** 04/15/2014 11:00 PM**API/UWI:** 05-123-37779-00**Field:** Wattenberg (Codell)**Well:** Vogl-McCoy 2F-5H-E267**Rig:** Helmerich & Payne. Inc. 278**Ended:** 05/02/2014 11:45 AM

Gamma Ray
Section Plane: 180.00
Magnetic North: 8.55
Gamma Attenuation Factor: 2.182
Gamma Averaging: 7%

Personnel**Day Hand:** A. Bertagnole**Night Hand:** M. Liebergot**Comp. Emp:** Chris Hite

Maximum Temperature: 239°F

Location**Latitude:** 40.166330**Longitude:** 104.921110**Elev. GL:** 4860**Elev. DF:****Elev. KB:** 4890

Log and Survey Depths Relative to Kelly Bushing (KB) Depth

Hole Data

Size	From	To
12-1/4	0	865
8-3/4	865	7625
6-1/8	7625	15187

Casing Data

Size	From	To
9-5/8	0	850
7	0	7609
4-1/2	0	15170

Bit Sizes

Size	From	To
12-1/4	0	865
8-3/4	865	7625
6-1/8	7625	15187

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
260	39.62	0	4/15/2014 6:26:51 AM	865	4/21/2014 6:26:51 AM	7625
235	38.51	0	4/21/2014 6:31:17 AM	7625	4/28/2014 6:31:17 AM	13729
260	38.24	0	4/28/2014 6:32:42 AM	13729	4/30/2014 6:32:42 AM	14116
326	39.35	0	4/30/2014 6:36:21 AM	14116	5/3/2014 7:36:21 AM	15187

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 Gamma Ray (API) 150.00 TVD 0.00 ROP (FT/HR) 600.00
150.00 2 300.00 FT























