



Cathedral Energy Services
1949 North Pyrite Road
Casper, Wyoming 82604

145250

5":100' - TVD

9/19/2014 1:02:23 PM

CATHEDRAL

Oper. Company: Encana Oil & Gas (USA) Inc.

Country: U.S.A.

State / Province: Colorado

County / Parish: Weld

Started: 03/24/2014 05:00 PM

API/UWI: 05-123-38348-00

Field: Wattenberg

Well: Edith Ann-Duckworth21H 4B-O268

Rig: Patterson UTI Drilling

Ended: 08/08/2014 01:00 AM

Gamma Ray
Section Plane: 0.00
Magnetic North: 8.59
Gamma Attenuation Factor: 2.40
Gamma Averaging: 7%

Personnel

Day Hand: A. Clark

Night Hand: E. King

Comp. Emp: Andrew Baltes

Location

Latitude: 40.117670

Longitude: -105.003680

Elev. GL: 4926

Elev. DF:

Elev. KB: 4954.5

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

Hole Data

Size	From	To
12-1/4	0	907
8-3/4	966	7946
6-1/8	7876	17238

Casing Data

Size	From	To
9-5/8	0	897
7	0	7932
4-1/2	0	17223

Bit Sizes

Size	From	To
12-1/4	0	907
8-3/4	966	7946
6-1/8	7876	17238

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
1580	36.4	0	3/25/2014 9:00:25 PM	5000	3/28/2014 7:30:25 AM	6008
1580	39.67	0	3/28/2014 9:00:33 AM	6008	3/30/2014 4:00:33 PM	7946
1634	40.37	0	7/31/2014 5:00:50 PM	7946	8/8/2014 1:00:50 AM	17238

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

























