



Cathedral Energy Services
1949 North Pyrite Road
Casper, Wyoming 82604

145277

5":100' - TVD

9/22/2014 2:02:18 PM

CATHEDRAL

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

Country: U.S.A.

State / Province: Colorado

County / Parish: Weld

Started: 08/24/2014 03:30 AM

API/UWI: 233921500

Field: Wattenburg (Niobrara)

Well: Mumby State 4H-36H-P266

Rig: Helmerich & Payne 522

Ended: 08/29/2014 02:15 AM

Gamma Ray
Section Plane: 0.00
Magnetic North: 8.38
Gamma Attenuation Factor: 2.73
Gamma Averaging: 7%

Personnel

Day Hand: T. Kapsch

Night Hand: A. Stewart

Comp. Emp: Kevin Bergeron

Maximum Temperature: 233°F

Location

Latitude: 40.090825

Longitude: -104.719445

Elev. GL: 5018

Elev. DF:

Elev. KB: 5048

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

Hole Data

Size	From	To
12-1/4	0	1023
7-7/8	1023	7723
6-1/8	7723	11758

Casing Data

Size	From	To
9-5/8	0	1013
7	0	7713
4-1/2	0	11748

Bit Sizes

Size	From	To
12-1/4	0	1023
7-7/8	1023	7723
6-1/8	7723	11758

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
331	36.53	0	8/24/2014 9:38:35 AM	5000	8/28/2014 10:00:35 AM	7723
331	38.12	0	8/28/2014 9:49:14 AM	7723	8/29/2014 2:15:14 AM	11759

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























