



Cathedral Energy Services
1949 North Pyrite Road
Casper, Wyoming 82604

145194

5":100' - TVD

7/7/2014 2:22:23 PM

CATHEDRAL

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

Country: U.S.A.

State / Province: Colorado

County / Parish: Weld

Started: 06/17/2014 12:30 PM

API/UWI: 05-123-3922200

Field: Wattenberg (Codell)

Well: Mumby State 4A-36H-P266

Rig: Helmerich & Payne 522

Ended: 06/24/2014 12:30 PM

Gamma Ray
Section Plane: 0.0
Magnetic North: 8.41
Gamma Attenuation Factor:
Gamma Averaging: 7%

Personnel

Day Hand: J. Nichols

Night Hand: A. Stewart

Comp. Emp:

Maximum Temperature: 225°F

Location

Latitude: 40.090827

Longitude: -104.719695

Elev. GL: 5019

Elev. DF:

Elev. KB: 5049

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

Hole Data

Size	From	To
12-1/4	0	1137
8-3/4	1137	8104
6-1/8	8104	12174

Casing Data

Size	From	To
9-5/8	0	1127
7	0	8094
4-1/2	0	12164

Bit Sizes

Size	From	To
12-1/4	0	1137
8-3/4	1137	8104
6-1/8	8104	12174

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
232	35.91	0	6/17/2014 7:00:20 PM	1137	6/20/2014 11:00:20 AM	8104
232	34.7	0	6/22/2014 1:00:52 AM	8104	6/24/2014 10:00:52 PM	12174

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) 500.00
150.00 2 300.00 FT

























