**C&J ENERGY SERVICES**

# GAMMA RAY C.C.L.
# CEMENT BOND V.D.L.

| | |
|---|---|
| Company | PDC Energy |
| Well | Harold 6Y-304 |
| Field | Wattenberg |
| County | Weld |
| State | CO |

Company PDC Energy

Well Harold 6Y-304

Field Wattenberg

County Weld State CO

Location: API #: 05-123-45748

487' FSL & 436' FEL
SE / SE

SEC 6 TWP 4N RGE 64W

Other Services

Permanent Datum Elevation 4804'

Log Measured From

Drilling Measured From

Elevation
K.B.
D.F.
G.L. 4804'

| | |
|---|---|
| Date | February 25, 2019 |
| Run Number | 1 |
| Depth Driller | 11,857' |
| Depth Logger | 7000' |
| Bottom Logged Interval | 7000'-0' |
| Top Log Interval | |
| Casing Size | |
| Type Fluid | Water |
| Max. Recorded Temp. | 240° |
| Estimated Cement Top | |
| Time Well Ready | |
| Time Logger On Bottom | |
| Unit Number | |
| Tool Size / ID Number | Probe 2-3/4" Radii |
| Location | WCRs48-49,E9/10,N |
| Recorded By | Meisner |
| Witnessed By | Gardella |

| Borehole Record | | | Tubing Record | | | |
|---|---|---|---|---|---|---|
| Run Number | Bit | From | To | Size | Weight | From | To |

| Casing Record | Size | Wgt/Ft | Top | Bottom |
|---|---|---|---|---|
| Surface String | | | | |
| Prot. String | | | | |
| Production String | 5.5" | | | |
| Liner | | | | |

<<< Fold Here >>>

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, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

**Harold 11 Well Pad**

<NORTH> O O O O O O O O O O X <SOUTH>

X = Harold 6Y-304

| | |
|---|---|
| Database File: | pdch6y304.db |
| Dataset Pathname: | pass2 |
| Presentation Format: | sector2 |
| Dataset Creation: | Mon Feb 25 08:05:03 2019 by Log 7.0 B1 |
| Charted by: | Depth in Feet scaled 1:240 |

3800
3850
3900
3950
4000
4050
4100
4150
4200
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6700
6750
6800
6850
6900
6950
7000
0 GR (GAPI) 110
400 TT3FT (usec) 200
-50 CCL 5
5 CCL 5.5
0 AMPMAX 100
0 AMPAVG 100
0 AMPMIN 100
0 AMP3FT (mV) 100
200 WVF5FT 1200
1 Sector Map 8