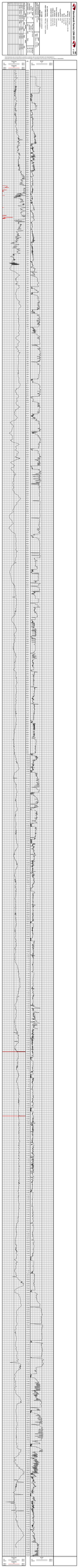

# Bernhardt Farms 13W-203

MD
2":100'

**Company:** PDC Energy
**Well Name:** Bernhardt Farms 13S-203
**API:** 05-123-38832
**Rig Id:** Ensign 135
**State:** Colorado
**County/Parish:** Weld
**Country:** USA
**Survey Company:** Total Directional
**Job number:** 2015-022-135
**COMPANY MAN** SHANE PARIS
**COMPANY MAN** JOHN FALTON

**DAY DIRECTIONAL** TANNER SCHWARTZ
**NIGHT DIRECTIONAL** FRED SELL / SCOTT INGRIM

**DAY MWD** JOSH ST GERMAIN
**NIGHT MWD** TROY CHANNEY

**Log measurements:** GAMMA
**Depth measured from:** RIG FLOOR
**Maximum temperature:** 239

| | Depth | Date |
|---|---|---|
| **Start:** | 0 ft | 5-2-2015 |
| **End:** | 14324 ft | 5-11-2015 |

| Casing | Depth | Size |
|---|---|---|
| **Surface:** | 922 | 10 |
| **Intermediate:** | 7390 | 7 |
| **Intermediate2:** | 14324 | 5.0 |

**Mud Type:** water based
**Density:** 9.2
**Viscosity:** 36
**Rm:** **Rmf:** **Rmc:**

**Elevations**
**KB:** 4750
**GL:** 4737
**DF:** 4750

| Run | Bit Size | Offsets | | Depths | | Dates | |
|---|---|---|---|---|---|---|---|
| | | Gamma | Survey | Start | End | Start | End |
| 1 | 12.75 | | 50.00 | 0 | 929 | 5-2-2015 | 5-3-2015 |
| 2 | 8.75 | 37.47 | 42.21 | 922 | 7397 | 5-4-2015 | 5-6-2015 |
| 3 | 6.125 | 47.40 | 52.14 | 7390 | 14324 | 5-7-2015 | 5-11-2015 |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

Total Directional uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.