ENSIGN Directional Services

# McGlothlin Farms 4X-334

MD
2":100'

**Company:** Petroleum Development Corp.
**Well Name:** McGlothlin Farms 4X-334
**API:** 05 123 44009 00
**County/Parish:** Weld
**State:** Colorado
**Country:** United States
**Job number:** 161-92
**Field:** Wattenburg
**Rig Id:** Ensign 161
**Survey Company:** Ensign Directional Services
**Operator:** Petroleum Development Corp.
**Company Man:** Brady Sharp / John Falton

**Daylight DD:** Zach Gentry
**Swing Shift DD:** Chris Saykally
**Night DD:** Tony Callow
**Daylight MWD:** Ryan Prue
**Night MWD:** Roy Montante

**Log measurements:** Gamma, ROP
**Depth measured from:**
**Maximum temperature:**

| | Depth | Date |
|---|---|---|
| **Start:** | 0 ft | 9/7/17 |
| **End:** | 14345 ft | 9/16/17 |

| Casing | Depth | Size |
|---|---|---|
| **Surface:** | | 9 5/8" |
| **Intermediate:** | | |

**Mud Type:** H2O
**Density:**
**Viscosity:**
**Rm:** **Rmf:** **Rmc:**

**Elevations**
**KB:** 4639 ft
**GL:** 4616 ft
**DF:** 4639 ft

| Run | Bit Size | Offsets Gamma | Offsets Survey | Depths Start | Depths End | Dates Start | Dates End |
|---|---|---|---|---|---|---|---|
| 1 | 12.25" | | 57.85 ft | 0 ft | 1680 ft | 9/7/17 | 9/7/17 |
| 2 | 8.5" | 62.16 ft | 57.16 ft | 1680 ft | 14345 ft | 9/8/17 | 9/16/17 |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |

Ensign Directional Services 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.

ROP
0
0.0 500.0
500.0 1000.0
MD
2400
Gamma
API
0.0 300.0
300.0 600.0
#24 MD(2352.00) Inc(11.6) Azm(103.0) TVD(2342.84) VS(-116.23) N/-S(-18.10) E/-W(116.62) DLS(1.1)

#118 MD(11378.00) Inc(90.4) Azm(269.8) TVD(6748.09)
VS(4345.89) N/-S(-151.58) E/-W(-4343.71)
DLS(0.9)

#119 MD(11474.00) Inc(90.0) Azm(269.3) TVD(6747.76)
VS(4441.88) N/-S(-152.33) E/-W(-4439.71)
DLS(0.7)

#120 MD(11569.00) Inc(89.9) Azm(269.6) TVD(6747.84)
VS(4536.88) N/-S(-153.25) E/-W(-4534.71)
DLS(0.3)

#121 MD(11665.00) Inc(89.9) Azm(268.9) TVD(6748.01)
VS(4632.88) N/-S(-154.50) E/-W(-4630.70)
DLS(0.7)

#122 MD(11761.00) Inc(90.5) Azm(269.8) TVD(6747.67)
VS(4728.87) N/-S(-155.59) E/-W(-4726.69)
DLS(1.1)

#123 MD(11857.00) Inc(90.7) Azm(271.1) TVD(6746.67)
VS(4824.82) N/-S(-154.84) E/-W(-4822.68)
DLS(1.4)

#124 MD(11952.00) Inc(91.1) Azm(270.2) TVD(6745.18)
VS(4919.76) N/-S(-153.76) E/-W(-4917.66)
DLS(1.0)

#125 MD(12048.00) Inc(91.4) Azm(269.3) TVD(6743.08)
VS(5015.73) N/-S(-154.18) E/-W(-5013.63)
DLS(1.0)

#126 MD(12143.00) Inc(89.8) Azm(270.2) TVD(6742.09)
VS(5110.71) N/-S(-154.59) E/-W(-5108.62)
DLS(1.9)

#127 MD(12239.00) Inc(89.8) Azm(269.1) TVD(6742.42)
VS(5206.70) N/-S(-155.18) E/-W(-5204.62)
DLS(1.1)

#128 MD(12335.00) Inc(89.2) Azm(270.2) TVD(6743.26)
VS(5302.68) N/-S(-155.77) E/-W(-5300.61)
DLS(1.3)

#129 MD(12431.00) Inc(89.2) Azm(270.9) TVD(6744.60)
VS(5398.63) N/-S(-154.84) E/-W(-5396.60)
DLS(0.7)

#130 MD(12526.00) Inc(90.0) Azm(270.5) TVD(6745.26)
VS(5493.57) N/-S(-153.68) E/-W(-5491.59)
DLS(0.9)

#131 MD(12622.00) Inc(90.5) Azm(270.4) TVD(6744.84)
VS(5589.54) N/-S(-152.93) E/-W(-5587.58)
DLS(0.5)

#132 MD(12718.00) Inc(91.2) Azm(269.8) TVD(6743.42)
VS(5685.50) N/-S(-152.76) E/-W(-5683.57)
DLS(1.0)

#133 MD(12814.00) Inc(90.5) Azm(270.2) TVD(6742.00)
VS(5781.47) N/-S(-152.76) E/-W(-5779.56)
DLS(0.8)

#134 MD(12910.00) Inc(89.5) Azm(270.5) TVD(6742.00)
VS(5877.43) N/-S(-152.18) E/-W(-5875.56)
DLS(1.1)

#135 MD(13005.00) Inc(89.3) Azm(269.5) TVD(6742.99)
VS(5972.41) N/-S(-152.18) E/-W(-5970.55)
DLS(1.1)

#136 MD(13101.00) Inc(90.0) Azm(271.2) TVD(6743.58)
VS(6068.37) N/-S(-151.59) E/-W(-6066.54)
DLS(1.9)

#137 MD(13197.00) Inc(90.1) Azm(270.2) TVD(6743.49)
VS(6164.32) N/-S(-150.42) E/-W(-6162.54)
DLS(1.0)

#138 MD(13293.00) Inc(90.5) Azm(269.5) TVD(6742.99)
VS(6260.30) N/-S(-150.67) E/-W(-6258.53)
DLS(0.8)

#139 MD(13389.00) Inc(89.8) Azm(269.5) TVD(6742.74)
VS(6356.29) N/-S(-151.51) E/-W(-6354.53)
DLS(0.7)

#140 MD(13485.00) Inc(89.1) Azm(268.6) TVD(6743.66)
VS(6452.29) N/-S(-153.10) E/-W(-6450.51)
DLS(1.2)

#141 MD(13581.00) Inc(88.5) Azm(268.6) TVD(6745.67)
VS(6548.26) N/-S(-155.44) E/-W(-6546.46)
DLS(0.6)

#142 MD(13677.00) Inc(88.5) Azm(269.8) TVD(6748.18)
VS(6644.23) N/-S(-156.78) E/-W(-6642.42)
DLS(1.2)

#143 MD(13772.00) Inc(89.6) Azm(270.5) TVD(6749.76)
VS(6739.19) N/-S(-156.53) E/-W(-6737.40)
DLS(1.4)

#144 MD(13868.00) Inc(89.9) Azm(269.8) TVD(6750.18)
VS(6835.16) N/-S(-156.28) E/-W(-6833.40)
DLS(0.8)

#145 MD(13963.00) Inc(90.9) Azm(271.4) TVD(6749.52)
VS(6930.11) N/-S(-155.29) E/-W(-6928.39)
DLS(2.0)

#146 MD(14059.00) Inc(91.3) Azm(270.5) TVD(6747.67)
VS(7026.03) N/-S(-153.70) E/-W(-7024.35)
DLS(1.0)

#147 MD(14155.00) Inc(91.6) Azm(269.5) TVD(6745.24)
VS(7121.97) N/-S(-153.70) E/-W(-7120.32)
DLS(1.1)

#148 MD(14251.00) Inc(92.3) Azm(268.8) TVD(6741.98)
VS(7217.92) N/-S(-155.12) E/-W(-7216.25)
DLS(1.0)

#149 MD(14285.00) Inc(92.1) Azm(268.6) TVD(6740.67)
VS(7251.89) N/-S(-155.89) E/-W(-7250.22)
DLS(0.8)