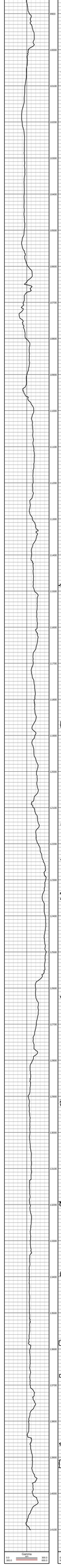

ENSIGN Directional

Wiedeman 28F-214

MD
2":100'

Company: Petroleum Development Corp.
Well Name: Wiedeman 28F-214
API: 05-123-40603
County/Parish: Weld
State: Colorado
Country: USA
Job number: 207-121-242
Field: DJ Basin
Rig Id: Ensign 121
Survey Company: Ensign Directional Services
Company Man 1 Dean Haight

Lead Directional Driller Brevin Williams
Rotating Directional Driller Dave Van Doran
Night Directional Driller Pete Moriarty

MWD Ensign Directional Services

Log measurements: gamma, ROP
Depth measured from: Rig Floor
Maximum temperature: -------

	Depth	Date
Start:	0 ft	9-13-2015
End:	14162 ft	9-20-2015

Casing	Depth	Size
Surface:	906	9 5/8
Intermediate:	7460	7

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

Elevations
KB: 4776
GL: 4763
DF: 4776

Run	Bit Size	Offsets Gamma	Offsets Survey	Depths Start	Depths End	Dates Start	Dates End
1	12.25		58.09	0	920	9-13-2015	9-13-2015
2	8.75	57.79	52.79	920	7480	9-14-2015	9-15-2015
3	6 1/8	60.86	55.85	7480	12951	9-17-2015	9-19-2015
4	6 1/8	60.62	55.62	12951	14162	9-19-2015	9-20-2015
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.

#9 MD(864.00) Inc(1.9) Azm(263.5) TVD(863.79)
VS(16.68) NS(-4.95) EW(-16.71) TEMP(0.0)

#10 MD(1003.00) Inc(1.8) Azm(278.1) TVD(1002.72)
VS(21.13) NS(-4.91) EW(-21.16) TEMP(0.0)

#11 MD(1096.00) Inc(1.5) Azm(280.2) TVD(1095.68)
VS(23.78) NS(-4.49) EW(-23.81) TEMP(0.0)

#12 MD(1190.00) Inc(1.5) Azm(277.4) TVD(1189.65)
VS(26.21) NS(-4.11) EW(-26.24) TEMP(0.0)

#13 MD(1283.00) Inc(1.5) Azm(275.8) TVD(1282.62)
VS(28.63) NS(-3.83) EW(-28.65) TEMP(0.0)

#14 MD(1377.00) Inc(1.5) Azm(275.7) TVD(1376.58)
VS(31.08) NS(-3.58) EW(-31.10) TEMP(0.0)

#15 MD(1470.00) Inc(1.7) Azm(273.2) TVD(1469.55)
VS(33.67) NS(-3.38) EW(-33.69) TEMP(0.0)

#16 MD(1563.00) Inc(1.9) Azm(268.8) TVD(1562.50)
VS(36.59) NS(-3.34) EW(-36.61) TEMP(0.0)

#17 MD(1656.00) Inc(1.8) Azm(269.3) TVD(1655.45)
VS(39.59) NS(-3.39) EW(-39.61) TEMP(0.0)

#18 MD(1749.00) Inc(1.4) Azm(260.0) TVD(1748.42)
VS(42.17) NS(-3.61) EW(-42.19) TEMP(0.0)

#19 MD(1843.00) Inc(1.4) Azm(267.9) TVD(1842.39)
VS(44.45) NS(-3.85) EW(-44.47) TEMP(0.0)

#20 MD(1937.00) Inc(1.2) Azm(265.6) TVD(1936.36)
VS(46.58) NS(-3.96) EW(-46.60) TEMP(0.0)

#21 MD(2035.00) Inc(0.9) Azm(256.7) TVD(2034.35)
VS(48.35) NS(-4.22) EW(-48.37) TEMP(0.0)

#22 MD(2130.00) Inc(1.3) Azm(38.2) TVD(2129.34)
VS(48.41) NS(-3.54) EW(-48.43) TEMP(0.0)

#23 MD(2226.00) Inc(2.1) Azm(342.8) TVD(2225.30)
VS(48.27) NS(-1.01) EW(-48.28) TEMP(0.0)

#24 MD(2322.00) Inc(3.3) Azm(325.8) TVD(2321.20)
VS(50.37) NS(2.96) EW(-50.35) TEMP(0.0)

#25 MD(2417.00) Inc(2.9) Azm(326.5) TVD(2416.06)
VS(53.25) NS(7.22) EW(-53.21) TEMP(0.0)

#26 MD(2513.00) Inc(3.9) Azm(317.1) TVD(2511.89)
VS(56.84) NS(11.64) EW(-56.78) TEMP(0.0)

#27 MD(2608.00) Inc(5.0) Azm(312.9) TVD(2606.60)
VS(62.10) NS(16.82) EW(-62.01) TEMP(0.0)

#28 MD(2704.00) Inc(6.3) Azm(303.1) TVD(2702.13)
VS(69.61) NS(22.55) EW(-69.49) TEMP(0.0)

#29 MD(2800.00) Inc(7.5) Azm(292.0) TVD(2797.44)
VS(79.86) NS(27.77) EW(-79.71) TEMP(0.0)

#30 MD(2895.00) Inc(6.3) Azm(275.7) TVD(2891.76)
VS(90.81) NS(30.61) EW(-90.64) TEMP(0.0)

#31 MD(2991.00) Inc(7.9) Azm(273.0) TVD(2987.02)
VS(102.64) NS(31.48) EW(-102.48) TEMP(0.0)

#32 MD(3086.00) Inc(7.7) Azm(267.4) TVD(3081.14)
VS(115.52) NS(31.54) EW(-115.35) TEMP(0.0)

#33 MD(3182.00) Inc(7.3) Azm(263.9) TVD(3176.32)
VS(128.01) NS(30.60) EW(-127.84) TEMP(0.0)

#34 MD(3277.00) Inc(6.6) Azm(263.5) TVD(3270.62)
VS(139.42) NS(29.34) EW(-139.27) TEMP(0.0)

#35 MD(3372.00) Inc(6.2) Azm(259.7) TVD(3365.03)
VS(149.89) NS(27.80) EW(-149.74) TEMP(0.0)

#36 MD(3468.00) Inc(6.8) Azm(273.9) TVD(3460.42)
VS(160.66) NS(27.26) EW(-160.51) TEMP(0.0)

#37 MD(3563.00) Inc(6.1) Azm(286.6) TVD(3554.82)
VS(171.12) NS(29.08) EW(-170.96) TEMP(0.0)

#38 MD(3659.00) Inc(7.5) Azm(283.9) TVD(3650.15)
VS(182.10) NS(32.05) EW(-181.93) TEMP(0.0)

#39 MD(3754.00) Inc(6.9) Azm(283.0) TVD(3744.40)
VS(193.70) NS(34.82) EW(-193.51) TEMP(0.0)

#40 MD(3849.00) Inc(7.0) Azm(279.4) TVD(3838.70)
VS(204.98) NS(37.05) EW(-204.78) TEMP(0.0)

#41 MD(3945.00) Inc(6.9) Azm(280.4) TVD(3933.99)
VS(216.43) NS(39.05) EW(-216.22) TEMP(0.0)

#42 MD(4040.00) Inc(6.6) Azm(275.8) TVD(4028.34)
VS(227.48) NS(40.63) EW(-227.27) TEMP(0.0)

#43 MD(4136.00) Inc(6.2) Azm(273.9) TVD(4123.74)
VS(238.15) NS(41.54) EW(-237.93) TEMP(0.0)

#44 MD(4231.00) Inc(6.2) Azm(270.2) TVD(4218.18)
VS(248.40) NS(41.90) EW(-248.18) TEMP(0.0)

#45 MD(4327.00) Inc(6.3) Azm(272.0) TVD(4313.61)
VS(258.85) NS(42.11) EW(-258.63) TEMP(0.0)

#46 MD(4422.00) Inc(6.1) Azm(274.8) TVD(4408.06)
VS(269.09) NS(42.71) EW(-268.86) TEMP(0.0)

#47 MD(4518.00) Inc(4.6) Azm(265.3) TVD(4503.64)
VS(278.01) NS(42.82) EW(-277.78) TEMP(0.0)

#48 MD(4613.00) Inc(2.6) Azm(265.6) TVD(4598.44)
VS(283.95) NS(42.34) EW(-283.73) TEMP(0.0)

#49 MD(4708.00) Inc(1.0) Azm(251.9) TVD(4693.40)
VS(286.89) NS(41.92) EW(-286.67) TEMP(0.0)

#50 MD(4804.00) Inc(1.5) Azm(267.9) TVD(4789.37)
VS(288.94) NS(41.62) EW(-288.72) TEMP(0.0)

#51 MD(4899.00) Inc(1.4) Azm(260.7) TVD(4884.34)
VS(291.33) NS(41.38) EW(-291.11) TEMP(0.0)

#52 MD(4995.00) Inc(1.1) Azm(257.4) TVD(4980.32)
VS(293.38) NS(40.99) EW(-293.16) TEMP(0.0)

#53 MD(5090.00) Inc(1.1) Azm(243.1) TVD(5075.30)
VS(295.08) NS(40.38) EW(-294.87) TEMP(0.0)

#54 MD(5185.00) Inc(1.2) Azm(228.7) TVD(5170.28)
VS(296.63) NS(39.31) EW(-296.43) TEMP(0.0)

#55 MD(5281.00) Inc(1.7) Azm(217.3) TVD(5266.25)
VS(298.24) NS(37.52) EW(-298.04) TEMP(0.0)

#56 MD(5376.00) Inc(0.6) Azm(109.2) TVD(5361.24)
VS(298.62) NS(36.23) EW(-298.43) TEMP(149.3)

#57 MD(5472.00) Inc(0.7) Azm(93.7) TVD(5457.23)
VS(297.56) NS(36.03) EW(-297.37) TEMP(149.3)

#58 MD(5567.00) Inc(0.7) Azm(82.0) TVD(5552.22)
VS(296.41) NS(36.07) EW(-296.22) TEMP(149.3)

#59 MD(5663.00) Inc(0.9) Azm(55.6) TVD(5648.22)
VS(295.21) NS(36.58) EW(-295.01) TEMP(149.3)

#60 MD(5758.00) Inc(1.0) Azm(62.4) TVD(5743.20)
VS(293.86) NS(37.38) EW(-293.66) TEMP(149.3)

#61 MD(5853.00) Inc(1.0) Azm(44.5) TVD(5838.19)
VS(292.55) NS(38.36) EW(-292.35) TEMP(149.3)

#62 MD(5949.00) Inc(1.1) Azm(18.8) TVD(5934.17)
VS(291.67) NS(39.83) EW(-291.46) TEMP(149.3)

#63 MD(6044.00) Inc(1.0) Azm(5.8) TVD(6029.16)
VS(291.31) NS(41.52) EW(-291.08) TEMP(149.3)

#64 MD(6140.00) Inc(0.9) Azm(7.4) TVD(6125.14)
VS(291.13) NS(43.10) EW(-290.90) TEMP(149.3)

#65 MD(6235.00) Inc(0.6) Azm(262.0) TVD(6220.14)
VS(291.53) NS(43.77) EW(-291.30) TEMP(149.3)

#66 MD(6331.00) Inc(6.1) Azm(258.3) TVD(6315.94)
VS(297.02) NS(42.66) EW(-296.80) TEMP(164.1)

#67 MD(6426.00) Inc(14.8) Azm(275.8) TVD(6409.29)
VS(314.07) NS(42.87) EW(-313.85) TEMP(149.3)

#68 MD(6521.00) Inc(22.5) Azm(273.4) TVD(6499.24)
VS(344.35) NS(45.17) EW(-344.11) TEMP(149.3)

#69 MD(6617.00) Inc(28.5) Azm(270.9) TVD(6585.85)
VS(385.63) NS(46.62) EW(-385.39) TEMP(149.3)

#70 MD(6664.00) Inc(29.6) Azm(271.3) TVD(6626.94)
VS(408.45) NS(47.06) EW(-408.20) TEMP(149.3)

#71 MD(6712.00) Inc(31.9) Azm(269.2) TVD(6668.19)
VS(432.99) NS(47.16) EW(-432.74) TEMP(149.3)

#72 MD(6759.00) Inc(34.9) Azm(269.7) TVD(6707.42)
VS(458.86) NS(46.91) EW(-458.61) TEMP(149.3)

#73 MD(6808.00) Inc(38.2) Azm(270.7) TVD(6746.78)
VS(488.03) NS(47.02) EW(-487.78) TEMP(149.3)

#74 MD(6855.00) Inc(40.8) Azm(271.6) TVD(6783.04)
VS(517.92) NS(47.63) EW(-517.67) TEMP(164.1)

#75 MD(6903.00) Inc(42.7) Azm(272.3) TVD(6818.85)
VS(549.87) NS(48.72) EW(-549.61) TEMP(164.1)

#76 MD(6950.00) Inc(45.5) Azm(272.0) TVD(6852.60)
VS(582.56) NS(49.95) EW(-582.29) TEMP(104.9)

#77 MD(6998.00) Inc(49.2) Azm(269.5) TVD(6885.12)
VS(617.85) NS(50.39) EW(-617.58) TEMP(164.1)

#78 MD(7045.00) Inc(52.2) Azm(269.5) TVD(6914.88)
VS(654.21) NS(50.07) EW(-653.95) TEMP(164.1)

#79 MD(7094.00) Inc(52.4) Azm(270.2) TVD(6944.85)
VS(692.98) NS(49.97) EW(-692.72) TEMP(164.1)

#80 MD(7141.00) Inc(54.0) Azm(266.9) TVD(6973.01)
VS(730.58) NS(49.00) EW(-730.33) TEMP(164.1)

#81 MD(7189.00) Inc(58.3) Azm(266.7) TVD(6999.74)
VS(770.36) NS(46.78) EW(-770.12) TEMP(164.1)

#82 MD(7236.00) Inc(62.8) Azm(268.3) TVD(7022.84)
VS(811.23) NS(45.01) EW(-811.00) TEMP(164.1)

#83 MD(7285.00) Inc(68.1) Azm(269.5) TVD(7043.19)
VS(855.77) NS(44.16) EW(-855.54) TEMP(164.1)

#84 MD(7332.00) Inc(73.5) Azm(270.4) TVD(7058.64)
VS(900.14) NS(44.13) EW(-899.91) TEMP(164.1)

#85 MD(7380.00) Inc(81.3) Azm(270.7) TVD(7069.11)
VS(946.95) NS(44.58) EW(-946.72) TEMP(164.1)

#86 MD(7425.00) Inc(87.0) Azm(268.5) TVD(7073.69)
VS(991.69) NS(44.26) EW(-991.46) TEMP(104.9)

#87 MD(7590.00) Inc(89.3) Azm(267.9) TVD(7079.02)
VS(1156.48) NS(39.08) EW(-1156.28) TEMP(193.7)

#88 MD(7685.00) Inc(90.9) Azm(268.5) TVD(7078.85)
VS(1251.41) NS(36.10) EW(-1251.23) TEMP(193.7)

#89 MD(7780.00) Inc(90.9) Azm(268.6) TVD(7077.36)
VS(1346.35) NS(33.69) EW(-1346.19) TEMP(193.7)

#90 MD(7876.00) Inc(91.6) Azm(270.6) TVD(7075.26)
VS(1442.32) NS(33.02) EW(-1442.16) TEMP(193.7)

#91 MD(7971.00) Inc(91.5) Azm(270.7) TVD(7072.70)
VS(1537.28) NS(34.10) EW(-1537.12) TEMP(193.7)

#92 MD(8064.00) Inc(90.8) Azm(271.6) TVD(7070.83)
VS(1630.25) NS(35.97) EW(-1630.08) TEMP(178.9)

#93 MD(8156.00) Inc(90.5) Azm(271.6) TVD(7069.78)
VS(1722.22) NS(38.54) EW(-1722.04) TEMP(178.9)

#94 MD(8248.00) Inc(90.0) Azm(270.6) TVD(7069.38)
VS(1814.21) NS(40.30) EW(-1814.02) TEMP(178.9)

#95 MD(8340.00) Inc(90.7) Azm(269.7) TVD(7068.82)
VS(1906.21) NS(40.54) EW(-1906.01) TEMP(178.9)

#96 MD(8433.00) Inc(91.6) Azm(270.0) TVD(7066.95)
VS(1999.18) NS(40.30) EW(-1998.99) TEMP(193.7)

#97 MD(8525.00) Inc(90.7) Azm(271.3) TVD(7065.11)
VS(2091.16) NS(41.34) EW(-2090.97) TEMP(193.7)

#98 MD(8617.00) Inc(89.8) Azm(272.3) TVD(7064.71)
VS(2183.13) NS(44.23) EW(-2182.92) TEMP(193.7)

#99 MD(8709.00) Inc(90.0) Azm(272.3) TVD(7064.87)
VS(2275.07) NS(47.92) EW(-2274.84) TEMP(208.5)

#100 MD(8802.00) Inc(91.3) Azm(272.7) TVD(7063.81)
VS(2367.99) NS(51.98) EW(-2367.75) TEMP(208.5)

#101 MD(8894.00) Inc(90.0) Azm(271.8) TVD(7062.77)
VS(2459.93) NS(55.59) EW(-2459.67) TEMP(208.5)

#102 MD(8986.00) Inc(89.9) Azm(270.7) TVD(7062.85)
VS(2551.92) NS(57.60) EW(-2551.64) TEMP(208.5)

#103 MD(9078.00) Inc(89.5) Azm(269.0) TVD(7063.33)
VS(2643.91) NS(57.36) EW(-2643.64) TEMP(208.5)

#104 MD(9171.00) Inc(89.3) Azm(269.0) TVD(7064.30)
VS(2736.88) NS(55.73) EW(-2736.62) TEMP(208.5)

#105 MD(9263.00) Inc(88.6) Azm(268.8) TVD(7065.99)
VS(2828.84) NS(53.97) EW(-2828.59) TEMP(208.5)

#106 MD(9355.00) Inc(89.4) Azm(268.3) TVD(7067.60)
VS(2920.78) NS(51.64) EW(-2920.54) TEMP(208.5)

#107 MD(9447.00) Inc(90.7) Azm(267.8) TVD(7067.52)
VS(3012.70) NS(48.51) EW(-3012.49) TEMP(208.5)

#108 MD(9540.00) Inc(89.7) Azm(268.3) TVD(7067.19)
VS(3105.63) NS(45.35) EW(-3105.43) TEMP(208.5)

#109 MD(9632.00) Inc(90.3) Azm(269.9) TVD(7067.19)
VS(3197.61) NS(43.90) EW(-3197.42) TEMP(208.5)

#110 MD(9724.00) Inc(90.1) Azm(270.2) TVD(7066.87)
VS(3289.60) NS(43.98) EW(-3289.42) TEMP(208.5)

#111 MD(9817.00) Inc(90.0) Azm(270.9) TVD(7066.79)
VS(3382.60) NS(44.87) EW(-3382.41) TEMP(178.9)

#112 MD(9909.00) Inc(90.0) Azm(269.5) TVD(7066.79) VS(3474.60) NS(45.20) EW(-3474.41) TEMP(178.9)

#113 MD(10001.00) Inc(89.3) Azm(269.9) TVD(7067.35) VS(3566.59) NS(44.71) EW(-3566.40) TEMP(193.7)

#114 MD(10093.00) Inc(88.5) Azm(270.2) TVD(7069.12) VS(3658.57) NS(44.79) EW(-3658.39) TEMP(193.7)

#115 MD(10185.00) Inc(89.2) Azm(269.5) TVD(7070.96) VS(3750.55) NS(44.55) EW(-3750.37) TEMP(193.7)

#116 MD(10278.00) Inc(89.5) Azm(268.6) TVD(7072.02) VS(3843.52) NS(43.01) EW(-3843.35) TEMP(223.3)

#117 MD(10370.00) Inc(90.0) Azm(267.9) TVD(7072.42) VS(3935.46) NS(40.20) EW(-3935.30) TEMP(223.3)

#118 MD(10465.00) Inc(90.3) Azm(266.9) TVD(7072.17) VS(4030.34) NS(35.89) EW(-4030.20) TEMP(223.3)

#119 MD(10560.00) Inc(92.0) Azm(268.1) TVD(7070.26) VS(4125.20) NS(31.75) EW(-4125.09) TEMP(223.3)

#120 MD(10656.00) Inc(92.6) Azm(270.0) TVD(7066.41) VS(4221.09) NS(30.16) EW(-4220.99) TEMP(223.3)

#121 MD(10751.00) Inc(92.5) Azm(271.4) TVD(7062.18) VS(4315.99) NS(31.32) EW(-4315.89) TEMP(223.3)

#122 MD(10847.00) Inc(89.8) Azm(272.3) TVD(7060.26) VS(4411.93) NS(34.42) EW(-4411.81) TEMP(223.3)

#123 MD(10942.00) Inc(90.9) Azm(271.6) TVD(7059.68) VS(4506.89) NS(37.65) EW(-4506.75) TEMP(223.3)

#124 MD(11038.00) Inc(89.3) Azm(272.5) TVD(7059.51) VS(4602.84) NS(41.08) EW(-4602.68) TEMP(223.3)

#125 MD(11133.00) Inc(89.9) Azm(272.3) TVD(7060.17) VS(4697.77) NS(45.06) EW(-4697.60) TEMP(223.3)

#126 MD(11228.00) Inc(90.4) Azm(271.8) TVD(7059.93) VS(4792.73) NS(48.46) EW(-4792.54) TEMP(223.3)

#127 MD(11324.00) Inc(91.5) Azm(271.8) TVD(7058.33) VS(4888.68) NS(51.47) EW(-4888.47) TEMP(223.3)

#128 MD(11419.00) Inc(90.0) Azm(272.0) TVD(7057.09) VS(4983.63) NS(54.62) EW(-4983.41) TEMP(223.3)

#129 MD(11515.00) Inc(89.4) Azm(271.3) TVD(7057.59) VS(5079.61) NS(57.39) EW(-5079.37) TEMP(223.3)

#130 MD(11610.00) Inc(90.7) Azm(270.9) TVD(7057.51) VS(5174.59) NS(59.21) EW(-5174.35) TEMP(238.1)

#131 MD(11705.00) Inc(90.3) Azm(270.2) TVD(7056.68) VS(5269.59) NS(60.12) EW(-5269.34) TEMP(238.1)

#132 MD(11801.00) Inc(90.0) Azm(270.0) TVD(7056.43) VS(5365.59) NS(60.29) EW(-5365.34) TEMP(238.1)

#133 MD(11896.00) Inc(89.3) Azm(268.5) TVD(7057.01) VS(5460.57) NS(59.05) EW(-5460.33) TEMP(238.1)

#134 MD(11991.00) Inc(89.9) Azm(267.9) TVD(7057.67) VS(5555.50) NS(56.06) EW(-5555.28) TEMP(238.1)

#135 MD(12087.00) Inc(91.1) Azm(267.6) TVD(7056.84) VS(5651.40) NS(52.30) EW(-5651.20) TEMP(238.1)

#136 MD(12182.00) Inc(90.6) Azm(269.7) TVD(7055.43) VS(5746.34) NS(50.06) EW(-5746.15) TEMP(238.1)

#137 MD(12278.00) Inc(90.7) Azm(269.2) TVD(7054.34) VS(5842.32) NS(49.14) EW(-5842.14) TEMP(238.1)

#138 MD(12373.00) Inc(89.4) Azm(270.2) TVD(7054.25) VS(5937.32) NS(48.64) EW(-5937.14) TEMP(208.5)

#139 MD(12469.00) Inc(90.1) Azm(270.4) TVD(7054.67) VS(6033.31) NS(49.14) EW(-6033.14) TEMP(238.1)

#140 MD(12564.00) Inc(90.5) Azm(270.4) TVD(7054.18) VS(6128.31) NS(49.80) EW(-6128.13) TEMP(208.5)

#141 MD(12660.00) Inc(89.9) Azm(270.4) TVD(7053.84) VS(6224.31) NS(50.47) EW(-6224.13) TEMP(208.5)

#142 MD(12755.00) Inc(90.4) Azm(270.0) TVD(7053.59) VS(6319.31) NS(50.81) EW(-6319.13) TEMP(208.5)

#143 MD(12850.00) Inc(91.0) Azm(269.3) TVD(7052.43) VS(6414.30) NS(50.23) EW(-6414.12) TEMP(238.1)

#144 MD(12945.00) Inc(89.1) Azm(268.5) TVD(7052.35) VS(6509.26) NS(48.40) EW(-6509.10) TEMP(238.1)

#145 MD(13041.00) Inc(89.6) Azm(270.0) TVD(7053.44) VS(6605.24) NS(47.15) EW(-6605.08) TEMP(238.1)

#146 MD(13136.00) Inc(88.6) Azm(268.1) TVD(7054.93) VS(6700.20) NS(45.57) EW(-6700.05) TEMP(238.1)

#147 MD(13232.00) Inc(90.6) Azm(269.3) TVD(7055.60) VS(6796.15) NS(43.39) EW(-6796.01) TEMP(238.1)

#148 MD(13327.00) Inc(90.0) Azm(269.3) TVD(7055.10) VS(6891.13) NS(42.23) EW(-6891.00) TEMP(238.1)

#149 MD(13422.00) Inc(91.8) Azm(269.2) TVD(7053.61) VS(6986.10) NS(40.99) EW(-6985.98) TEMP(238.1)

#150 MD(13517.00) Inc(91.9) Azm(268.1) TVD(7050.54) VS(7081.01) NS(38.75) EW(-7080.90) TEMP(238.1)

#151 MD(13612.00) Inc(92.0) Azm(269.3) TVD(7047.31) VS(7175.92) NS(36.60) EW(-7175.82) TEMP(238.1)

#152 MD(13707.00) Inc(91.5) Azm(268.5) TVD(7044.41) VS(7270.84) NS(34.78) EW(-7270.76) TEMP(238.1)

#153 MD(13803.00) Inc(91.5) Azm(267.0) TVD(7041.90) VS(7366.71) NS(31.01) EW(-7366.65) TEMP(238.1)

#154 MD(13898.00) Inc(90.4) Azm(266.2) TVD(7040.32) VS(7461.50) NS(25.38) EW(-7461.47) TEMP(238.1)

#155 MD(13993.00) Inc(91.2) Azm(267.4) TVD(7038.99) VS(7556.31) NS(20.07) EW(-7556.31) TEMP(297.4)

#156 MD(14089.00) Inc(91.2) Azm(267.2) TVD(7036.98) VS(7652.15) NS(15.55) EW(-7652.18) TEMP(297.4)

#157 MD(14107.00) Inc(91.4) Azm(267.0) TVD(7036.58) VS(7670.12) NS(14.64) EW(-7670.15) TEMP(297.4)