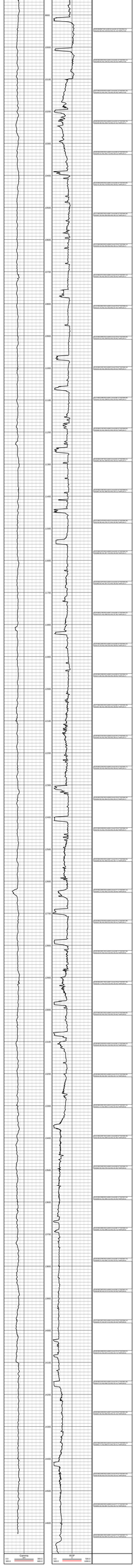

ENSIGN Directional

Jacobucci 32O-443

MD
2":100'

Company: Petroleum Development Corp.
Well Name: Jacobucci 32O-443
API: 05123411900000
County/Parish: WELD
State: COLORADO
Country: UNITED STATES
Job number: 121-276
Field: WATTENBURG
Rig Id: Ensign 121
Survey Company: Ensign Directional Services
Operator: Petroleum Development Corp.
Company Man: Dean Haight/Carl Gerrard
Night DD: Daryl Bailey/Tyler Batchelder
Daylight DD: Breven Williams/David Van Dorin
Daylight MWD: Louie Ascione/Kabel Skelton
Night MWD: Matt Mason/Jeff Barrels

Log measurements: Gamma, ROP
Depth measured from:
Maximum temperature: 208.5

	Depth	Date
Start:	0 ft	8-10-2016
End:	14696 ft	8-20-2016

Casing	Depth	Size
Surface:	2034 ft	9 5/8"
Intermediate:		

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

Elevations
KB5071.5 ft
GL: 5058 ft
DF5071.5 ft

Run	Bit Size	Offsets Gamma	Offsets Survey	Depths Start	Depths End	Dates Start	Dates End
1	12.25"		58.48 ft	0 ft	2050 ft	8-10-2016	8-11-2016
2	8.5"	61.52 ft	56.52 ft	2050 ft	8658 ft	8-12-2016	8-16-2016
3	8.5"	61.62 ft	56.62 ft	8658 ft	14696 ft	8-17-2016	8-20-2016
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.

#9 MD(917.00) Inc(2.1) Azm(280.7) TVD(916.89) VS(-2.26) NS(2.76) EW(-10.54) TEMP(0.0)

#10 MD(1013.00) Inc(2.5) Azm(278.6) TVD(1012.81) VS(-2.71) NS(3.40) EW(-14.34) TEMP(0.0)

#11 MD(1109.00) Inc(2.3) Azm(279.3) TVD(1108.73) VS(-3.15) NS(4.03) EW(-18.31) TEMP(0.0)

#12 MD(1205.00) Inc(2.5) Azm(300.0) TVD(1204.65) VS(-4.33) NS(5.38) EW(-22.03) TEMP(0.0)

#13 MD(1300.00) Inc(2.6) Azm(296.9) TVD(1299.55) VS(-6.16) NS(7.39) EW(-25.74) TEMP(0.0)

#14 MD(1397.00) Inc(2.0) Azm(293.7) TVD(1396.47) VS(-7.67) NS(9.07) EW(-29.25) TEMP(0.0)

#15 MD(1493.00) Inc(2.1) Azm(293.9) TVD(1492.41) VS(-8.90) NS(10.46) EW(-32.40) TEMP(0.0)

#16 MD(1588.00) Inc(2.2) Azm(280.2) TVD(1587.35) VS(-9.77) NS(11.48) EW(-35.78) TEMP(0.0)

#17 MD(1684.00) Inc(2.6) Azm(289.8) TVD(1683.26) VS(-10.65) NS(12.55) EW(-39.64) TEMP(0.0)

#18 MD(1780.00) Inc(3.8) Azm(300.7) TVD(1779.11) VS(-12.78) NS(14.91) EW(-44.43) TEMP(0.0)

#19 MD(1876.00) Inc(4.1) Azm(299.5) TVD(1874.88) VS(-15.81) NS(18.22) EW(-50.15) TEMP(0.0)

#20 MD(1990.00) Inc(4.7) Azm(296.3) TVD(1988.55) VS(-19.52) NS(22.30) EW(-57.88) TEMP(0.0)

#21 MD(2066.00) Inc(5.2) Azm(293.3) TVD(2064.26) VS(-21.97) NS(25.04) EW(-63.84) TEMP(0.0)

#22 MD(2162.00) Inc(6.9) Azm(299.1) TVD(2159.73) VS(-26.06) NS(29.57) EW(-72.87) TEMP(0.0)

#23 MD(2258.00) Inc(6.7) Azm(297.6) TVD(2255.05) VS(-30.98) NS(34.97) EW(-82.88) TEMP(0.0)

#24 MD(2354.00) Inc(8.2) Azm(294.4) TVD(2350.24) VS(-35.86) NS(40.39) EW(-94.07) TEMP(0.0)

#25 MD(2450.00) Inc(7.0) Azm(303.7) TVD(2445.40) VS(-41.40) NS(46.46) EW(-105.18) TEMP(0.0)

#26 MD(2545.00) Inc(6.7) Azm(299.0) TVD(2539.72) VS(-46.83) NS(52.36) EW(-114.84) TEMP(0.0)

#27 MD(2641.00) Inc(7.3) Azm(314.1) TVD(2635.01) VS(-53.34) NS(59.32) EW(-124.12) TEMP(0.0)

#28 MD(2737.00) Inc(6.9) Azm(312.8) TVD(2730.28) VS(-61.09) NS(67.49) EW(-132.73) TEMP(0.0)

#29 MD(2833.00) Inc(6.2) Azm(307.8) TVD(2825.65) VS(-67.78) NS(74.58) EW(-141.06) TEMP(0.0)

#30 MD(2929.00) Inc(7.0) Azm(299.5) TVD(2921.01) VS(-73.39) NS(80.64) EW(-150.24) TEMP(0.0)

#31 MD(3025.00) Inc(6.4) Azm(294.2) TVD(3016.36) VS(-77.98) NS(85.71) EW(-160.22) TEMP(0.0)

#32 MD(3121.00) Inc(8.3) Azm(306.7) TVD(3111.57) VS(-83.82) NS(92.05) EW(-170.65) TEMP(0.0)

#33 MD(3216.00) Inc(7.7) Azm(305.5) TVD(3205.65) VS(-91.09) NS(99.84) EW(-181.33) TEMP(0.0)

#34 MD(3312.00) Inc(7.5) Azm(299.5) TVD(3300.81) VS(-97.39) NS(106.66) EW(-192.02) TEMP(0.0)

#35 MD(3408.00) Inc(6.7) Azm(295.6) TVD(3396.07) VS(-102.39) NS(112.17) EW(-202.53) TEMP(0.0)

#36 MD(3504.00) Inc(7.7) Azm(302.0) TVD(3491.31) VS(-107.71) NS(117.99) EW(-213.03) TEMP(0.0)

#37 MD(3600.00) Inc(6.9) Azm(300.2) TVD(3586.53) VS(-113.52) NS(124.30) EW(-223.47) TEMP(0.0)

#38 MD(3695.00) Inc(6.4) Azm(302.0) TVD(3680.89) VS(-118.74) NS(129.98) EW(-232.89) TEMP(0.0)

#39 MD(3791.00) Inc(6.5) Azm(302.1) TVD(3776.29) VS(-124.02) NS(135.70) EW(-242.03) TEMP(0.0)

#40 MD(3887.00) Inc(8.4) Azm(298.1) TVD(3871.47) VS(-129.69) NS(141.89) EW(-252.82) TEMP(0.0)

#41 MD(3983.00) Inc(8.0) Azm(298.8) TVD(3966.49) VS(-135.63) NS(148.41) EW(-264.86) TEMP(0.0)

#42 MD(4079.00) Inc(6.7) Azm(300.9) TVD(4061.70) VS(-141.21) NS(154.51) EW(-275.52) TEMP(0.0)

#43 MD(4174.00) Inc(7.7) Azm(297.7) TVD(4155.95) VS(-146.51) NS(160.31) EW(-285.91) TEMP(0.0)

#44 MD(4269.00) Inc(7.1) Azm(299.7) TVD(4250.16) VS(-151.86) NS(166.18) EW(-296.65) TEMP(0.0)

#45 MD(4365.00) Inc(7.0) Azm(297.7) TVD(4345.43) VS(-157.02) NS(171.84) EW(-306.98) TEMP(0.0)

#46 MD(4462.00) Inc(5.2) Azm(296.3) TVD(4441.88) VS(-161.28) NS(176.54) EW(-316.15) TEMP(0.0)

#47 MD(4558.00) Inc(3.3) Azm(295.1) TVD(4537.61) VS(-164.07) NS(179.64) EW(-322.56) TEMP(0.0)

#48 MD(4654.00) Inc(2.3) Azm(308.3) TVD(4633.50) VS(-166.24) NS(182.00) EW(-326.57) TEMP(0.0)

#49 MD(4749.00) Inc(1.1) Azm(327.1) TVD(4728.45) VS(-168.09) NS(183.95) EW(-328.56) TEMP(0.0)

#50 MD(4845.00) Inc(1.5) Azm(320.2) TVD(4824.43) VS(-169.77) NS(185.69) EW(-329.87) TEMP(0.0)

#51 MD(4941.00) Inc(1.6) Azm(318.5) TVD(4920.39) VS(-171.65) NS(187.66) EW(-331.56) TEMP(0.0)

#52 MD(5037.00) Inc(1.8) Azm(309.3) TVD(5016.35) VS(-173.51) NS(189.62) EW(-333.61) TEMP(0.0)

#53 MD(5133.00) Inc(1.6) Azm(312.3) TVD(5112.31) VS(-175.26) NS(191.47) EW(-335.77) TEMP(0.0)

#54 MD(5229.00) Inc(1.3) Azm(305.3) TVD(5208.28) VS(-176.70) NS(193.00) EW(-337.65) TEMP(0.0)

#55 MD(5325.00) Inc(1.2) Azm(345.4) TVD(5304.26) VS(-178.25) NS(194.61) EW(-338.79) TEMP(0.0)

#56 MD(5420.00) Inc(0.6) Azm(340.3) TVD(5399.25) VS(-179.66) NS(196.04) EW(-339.21) TEMP(0.0)

#57 MD(5516.00) Inc(1.8) Azm(154.3) TVD(5495.23) VS(-178.80) NS(195.15) EW(-338.73) TEMP(0.0)

#58 MD(5612.00) Inc(1.7) Azm(153.6) TVD(5591.19) VS(-176.23) NS(192.52) EW(-337.44) TEMP(0.0)

#59 MD(5708.00) Inc(1.3) Azm(159.4) TVD(5687.16) VS(-173.98) NS(190.22) EW(-336.42) TEMP(0.0)

#60 MD(5804.00) Inc(1.1) Azm(167.3) TVD(5783.13) VS(-172.09) NS(188.30) EW(-335.84) TEMP(0.0)

#61 MD(5900.00) Inc(1.1) Azm(167.3) TVD(5879.12) VS(-170.32) NS(186.51) EW(-335.43) TEMP(0.0)

#62 MD(5996.00) Inc(1.0) Azm(169.1) TVD(5975.10) VS(-168.62) NS(184.78) EW(-335.07) TEMP(0.0)

#63 MD(6092.00) Inc(1.1) Azm(188.4) TVD(6071.09) VS(-166.88) NS(183.05) EW(-335.05) TEMP(0.0)

#64 MD(6187.00) Inc(0.8) Azm(169.1) TVD(6166.07) VS(-165.33) NS(181.50) EW(-335.06) TEMP(0.0)

#65 MD(6283.00) Inc(0.5) Azm(174.7) TVD(6262.07) VS(-164.27) NS(180.42) EW(-334.89) TEMP(0.0)

#66 MD(6379.00) Inc(1.0) Azm(189.3) TVD(6358.06) VS(-163.02) NS(179.18) EW(-334.99) TEMP(0.0)

#67 MD(6476.00) Inc(0.9) Azm(188.9) TVD(6455.04) VS(-161.42) NS(177.59) EW(-335.24) TEMP(0.0)

#68 MD(6571.00) Inc(0.3) Azm(107.9) TVD(6550.04) VS(-160.61) NS(176.78) EW(-335.12) TEMP(0.0)

#69 MD(6667.00) Inc(0.3) Azm(355.2) TVD(6646.04) VS(-160.80) NS(176.95) EW(-334.90) TEMP(0.0)

#70 MD(6762.00) Inc(0.5) Azm(72.6) TVD(6741.04) VS(-161.19) NS(177.32) EW(-334.53) TEMP(0.0)

#71 MD(6858.00) Inc(1.2) Azm(83.8) TVD(6837.03) VS(-161.49) NS(177.56) EW(-333.13) TEMP(149.3)

#72 MD(6954.00) Inc(1.1) Azm(72.6) TVD(6933.01) VS(-161.96) NS(177.94) EW(-331.25) TEMP(149.3)

#73 MD(7077.00) Inc(3.3) Azm(159.4) TVD(7055.93) VS(-159.12) NS(174.98) EW(-328.88) TEMP(134.5)

#74 MD(7173.00) Inc(8.3) Azm(169.6) TVD(7151.41) VS(-149.82) NS(165.57) EW(-326.65) TEMP(149.3)

#75 MD(7269.00) Inc(16.8) Azm(176.6) TVD(7245.04) VS(-129.24) NS(144.87) EW(-324.58) TEMP(149.3)

#76 MD(7365.00) Inc(22.3) Azm(176.1) TVD(7335.47) VS(-97.33) NS(112.82) EW(-322.51) TEMP(149.3)

#77 MD(7460.00) Inc(27.4) Azm(176.8) TVD(7421.64) VS(-57.66) NS(72.99) EW(-320.06) TEMP(149.3)

#78 MD(7556.00) Inc(33.7) Azm(174.2) TVD(7504.28) VS(-9.30) NS(24.38) EW(-316.14) TEMP(149.3)

#79 MD(7652.00) Inc(40.2) Azm(176.6) TVD(7580.96) VS(47.91) NS(-33.10) EW(-311.60) TEMP(164.1)

#80 MD(7748.00) Inc(49.3) Azm(182.8) TVD(7649.10) VS(115.28) NS(-100.55) EW(-311.54) TEMP(164.1)

#81 MD(7844.00) Inc(57.7) Azm(187.7) TVD(7706.17) VS(192.26) NS(-177.27) EW(-318.77) TEMP(164.1)

#82 MD(7939.00) Inc(61.6) Azm(182.6) TVD(7754.19) VS(274.11) NS(-258.87) EW(-326.05) TEMP(164.1)

#83 MD(8035.00) Inc(68.6) Azm(182.8) TVD(7794.58) VS(361.13) NS(-345.80) EW(-330.16) TEMP(164.1)

#84 MD(8131.00) Inc(74.4) Azm(180.7) TVD(7825.04) VS(452.11) NS(-436.75) EW(-332.91) TEMP(164.1)

#85 MD(8179.00) Inc(76.4) Azm(178.6) TVD(7837.14) VS(498.49) NS(-483.20) EW(-332.62) TEMP(164.1)

#86 MD(8226.00) Inc(82.1) Azm(179.6) TVD(7845.90) VS(544.55) NS(-529.34) EW(-331.90) TEMP(164.1)

#87 MD(8274.00) Inc(87.8) Azm(179.6) TVD(7850.12) VS(592.27) NS(-577.14) EW(-331.56) TEMP(164.1)

#88 MD(8322.00) Inc(89.4) Azm(179.8) TVD(7851.29) VS(640.19) NS(-625.12) EW(-331.31) TEMP(164.1)

#89 MD(8417.00) Inc(90.2) Azm(178.9) TVD(7851.63) VS(735.02) NS(-720.11) EW(-330.24) TEMP(164.1)

#90 MD(8513.00) Inc(90.3) Azm(178.7) TVD(7851.21) VS(830.80) NS(-816.09) EW(-328.23) TEMP(164.1)

#91 MD(8606.00) Inc(90.9) Azm(179.1) TVD(7850.23) VS(923.58) NS(-909.07) EW(-326.44) TEMP(164.1)

#92 MD(8701.00) Inc(92.3) Azm(180.8) TVD(7847.58) VS(1018.43) NS(-1004.02) EW(-326.36) TEMP(104.9)

#93 MD(8797.00) Inc(90.3) Azm(180.8) TVD(7845.40) VS(1114.35) NS(-1099.99) EW(-327.70) TEMP(164.1)

#94 MD(8893.00) Inc(88.6) Azm(179.4) TVD(7846.32) VS(1210.23) NS(-1195.98) EW(-327.86) TEMP(164.1)

#95 MD(8988.00) Inc(90.7) Azm(179.6) TVD(7846.90) VS(1305.08) NS(-1290.96) EW(-327.04) TEMP(178.9)

#96 MD(9084.00) Inc(91.3) Azm(180.1) TVD(7845.23) VS(1400.94) NS(-1386.95) EW(-326.78) TEMP(178.9)

#97 MD(9180.00) Inc(91.3) Azm(179.8) TVD(7843.05) VS(1496.80) NS(-1482.92) EW(-326.70) TEMP(178.9)

#98 MD(9276.00) Inc(89.0) Azm(178.9) TVD(7842.80) VS(1592.63) NS(-1578.91) EW(-325.61) TEMP(178.9)

#99 MD(9372.00) Inc(90.7) Azm(179.3) TVD(7843.05) VS(1688.43) NS(-1674.89) EW(-324.10) TEMP(178.9)

#100 MD(9468.00) Inc(90.5) Azm(180.0) TVD(7842.05) VS(1784.29) NS(-1770.89) EW(-323.52) TEMP(178.9)

#101 MD(9564.00) Inc(89.5) Azm(180.3) TVD(7842.05) VS(1880.19) NS(-1866.89) EW(-323.77) TEMP(178.9)

#102 MD(9660.00) Inc(89.5) Azm(179.6) TVD(7842.88) VS(1976.07) NS(-1962.88) EW(-323.68) TEMP(178.9)

#103 MD(9755.00) Inc(89.3) Azm(178.6) TVD(7843.88) VS(2070.87) NS(-2057.86) EW(-322.19) TEMP(178.9)

#104 MD(9851.00) Inc(90.3) Azm(179.6) TVD(7844.21) VS(2166.68) NS(-2153.85) EW(-320.68) TEMP(178.9)

#105 MD(9947.00) Inc(90.9) Azm(181.0) TVD(7843.21) VS(2262.58) NS(-2249.84) EW(-321.19) TEMP(178.9)

#106 MD(10043.00) Inc(90.4) Azm(181.4) TVD(7842.12) VS(2358.54) NS(-2345.81) EW(-323.20) TEMP(178.9)

#107 MD(10139.00) Inc(90.7) Azm(181.2) TVD(7841.20) VS(2454.51) NS(-2441.78) EW(-325.38) TEMP(178.9)

#108 MD(10234.00) Inc(89.8) Azm(181.5) TVD(7840.78) VS(2549.49) NS(-2536.75) EW(-327.61) TEMP(193.7)

#109 MD(10330.00) Inc(88.0) Azm(180.3) TVD(7842.63) VS(2645.41) NS(-2632.72) EW(-329.12) TEMP(193.7)

#110 MD(10426.00) Inc(89.4) Azm(180.3) TVD(7844.80) VS(2741.29) NS(-2728.69) EW(-329.62) TEMP(193.7)

#111 MD(10522.00) Inc(89.7) Azm(180.3) TVD(7845.56) VS(2837.20) NS(-2824.68) EW(-330.13) TEMP(193.7)

#112 MD(10618.00) Inc(89.6) Azm(179.8) TVD(7846.14) VS(2933.10) NS(-2920.68) EW(-330.21) TEMP(193.7)

#113 MD(10713.00) Inc(89.2) Azm(179.3) TVD(7847.14) VS(3027.94) NS(-3015.67) EW(-329.46) TEMP(193.7)

#114 MD(10810.00) Inc(89.3) Azm(178.9) TVD(7848.41) VS(3124.74) NS(-3112.65) EW(-327.94) TEMP(193.7)

#115 MD(10906.00) Inc(89.9) Azm(178.6) TVD(7849.08) VS(3220.51) NS(-3208.63) EW(-325.85) TEMP(193.7)

#116 MD(11001.00) Inc(90.0) Azm(179.8) TVD(7849.16) VS(3315.32) NS(-3303.62) EW(-324.52) TEMP(193.7)

#117 MD(11096.00) Inc(90.1) Azm(180.7) TVD(7849.08) VS(3410.23) NS(-3398.61) EW(-324.93) TEMP(193.7)

#118 MD(11192.00) Inc(89.9) Azm(180.0) TVD(7849.63) VS(3506.15) NS(-3494.61) EW(-325.52) TEMP(193.7)

#119 MD(11287.00) Inc(90.3) Azm(181.2) TVD(7850.41) VS(3601.08) NS(-3589.60) EW(-326.52) TEMP(193.7)

#120 MD(11383.00) Inc(91.5) Azm(181.9) TVD(7848.91) VS(3697.04) NS(-3685.55) EW(-329.11) TEMP(193.7)

#121 MD(11479.00) Inc(91.5) Azm(181.5) TVD(7846.39) VS(3792.99) NS(-3781.47) EW(-331.96) TEMP(193.7)

#122 MD(11575.00) Inc(89.9) Azm(181.4) TVD(7845.22) VS(3888.96) NS(-3877.43) EW(-334.39) TEMP(193.7)

#123 MD(11670.00) Inc(90.3) Azm(181.0) TVD(7845.05) VS(3983.92) NS(-3972.41) EW(-336.38) TEMP(193.7)

#124 MD(11766.00) Inc(90.7) Azm(180.7) TVD(7844.22) VS(4079.87) NS(-4068.40) EW(-337.80) TEMP(193.7)

#125 MD(11863.00) Inc(89.3) Azm(180.3) TVD(7844.22) VS(4176.79) NS(-4165.39) EW(-338.65) TEMP(193.7)

#126 MD(11958.00) Inc(89.5) Azm(180.0) TVD(7845.21) VS(4271.69) NS(-4260.38) EW(-338.90) TEMP(193.7)

#127 MD(12054.00) Inc(90.4) Azm(180.1) TVD(7845.29) VS(4367.58) NS(-4356.38) EW(-338.98) TEMP(193.7)

#128 MD(12150.00) Inc(89.8) Azm(179.1) TVD(7845.13) VS(4463.44) NS(-4452.38) EW(-338.31) TEMP(193.7)

#129 MD(12246.00) Inc(89.5) Azm(178.2) TVD(7845.71) VS(4559.19) NS(-4548.35) EW(-336.05) TEMP(193.7)

#130 MD(12342.00) Inc(89.6) Azm(179.6) TVD(7846.30) VS(4654.92) NS(-4644.31) EW(-333.37) TEMP(193.7)

#131 MD(12438.00) Inc(90.4) Azm(179.6) TVD(7846.13) VS(4750.72) NS(-4740.30) EW(-331.86) TEMP(193.7)

#132 MD(12534.00) Inc(89.7) Azm(179.1) TVD(7846.05) VS(4846.55) NS(-4836.29) EW(-330.77) TEMP(208.5)

#133 MD(12630.00) Inc(89.0) Azm(177.7) TVD(7847.14) VS(4942.27) NS(-4932.24) EW(-328.09) TEMP(208.5)

#134 MD(12726.00) Inc(90.0) Azm(179.1) TVD(7847.98) VS(5037.99) NS(-5028.20) EW(-325.41) TEMP(193.7)

#135 MD(12821.00) Inc(90.5) Azm(180.7) TVD(7847.56) VS(5132.87) NS(-5123.19) EW(-325.25) TEMP(208.5)

#136 MD(12917.00) Inc(89.7) Azm(179.6) TVD(7847.39) VS(5228.77) NS(-5219.19) EW(-325.50) TEMP(208.5)

#137 MD(13013.00) Inc(89.5) Azm(179.4) TVD(7848.06) VS(5324.62) NS(-5315.18) EW(-324.66) TEMP(208.5)

#138 MD(13109.00) Inc(90.3) Azm(180.1) TVD(7848.23) VS(5420.48) NS(-5411.18) EW(-324.24) TEMP(208.5)

#139 MD(13205.00) Inc(89.9) Azm(179.3) TVD(7848.06) VS(5516.35) NS(-5507.18) EW(-323.74) TEMP(208.5)

#140 MD(13301.00) Inc(91.0) Azm(179.3) TVD(7847.31) VS(5612.17) NS(-5603.17) EW(-322.56) TEMP(208.5)

#141 MD(13397.00) Inc(90.1) Azm(180.0) TVD(7846.39) VS(5708.03) NS(-5699.16) EW(-321.98) TEMP(208.5)

#142 MD(13492.00) Inc(89.5) Azm(180.0) TVD(7846.72) VS(5802.92) NS(-5794.16) EW(-321.98) TEMP(208.5)

#143 MD(13588.00) Inc(89.4) Azm(180.1) TVD(7847.64) VS(5898.81) NS(-5890.15) EW(-322.06) TEMP(208.5)

#144 MD(13684.00) Inc(90.0) Azm(180.7) TVD(7848.14) VS(5994.73) NS(-5986.15) EW(-322.73) TEMP(208.5)

#145 MD(13780.00) Inc(90.5) Azm(180.7) TVD(7847.73) VS(6090.67) NS(-6082.14) EW(-323.91) TEMP(208.5)

#146 MD(13876.00) Inc(89.8) Azm(180.1) TVD(7847.47) VS(6186.59) NS(-6178.14) EW(-324.58) TEMP(208.5)

#147 MD(13972.00) Inc(89.4) Azm(179.8) TVD(7848.14) VS(6282.47) NS(-6274.14) EW(-324.49) TEMP(208.5)

#148 MD(14068.00) Inc(88.9) Azm(179.3) TVD(7849.57) VS(6378.31) NS(-6370.12) EW(-323.74) TEMP(208.5)

#149 MD(14163.00) Inc(89.3) Azm(179.1) TVD(7851.06) VS(6473.12) NS(-6465.10) EW(-322.41) TEMP(208.5)

#150 MD(14258.00) Inc(90.7) Azm(179.6) TVD(7851.06) VS(6567.95) NS(-6560.09) EW(-321.33) TEMP(208.5)

#151 MD(14354.00) Inc(91.6) Azm(179.3) TVD(7849.13) VS(6663.77) NS(-6656.07) EW(-320.41) TEMP(208.5)

#152 MD(14450.00) Inc(90.2) Azm(179.3) TVD(7847.63) VS(6759.59) NS(-6752.04) EW(-319.24) TEMP(208.5)

#153 MD(14545.00) Inc(89.8) Azm(177.7) TVD(7847.63) VS(6854.32) NS(-6847.01) EW(-316.75) TEMP(208.5)

#154 MD(14641.00) Inc(90.1) Azm(177.0) TVD(7847.71) VS(6949.90) NS(-6942.91) EW(-312.31) TEMP(208.5)