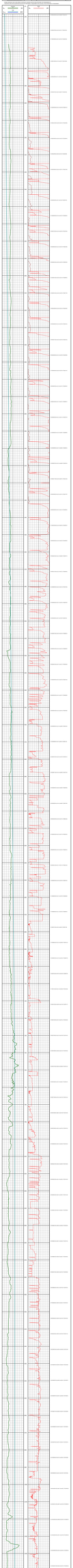

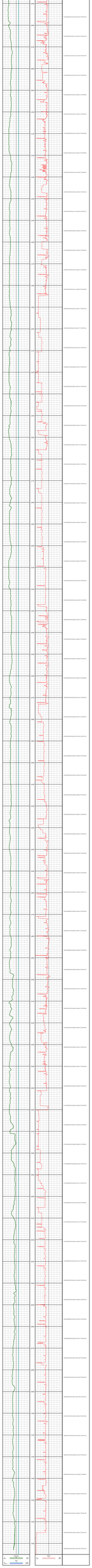

Stout 11N

MD
2":100'

Company: PDC Energy Inc
Well Name: Stout 11N
API: 05-123-50480-00-00
County/Parish: WELD
State: COLORADO
Country: USA
Job number: 152-239
Field: Wattenberg
Rig Id: Ensign 152
Survey Company: Ensign Directional
DD1 Jesus Gallego
DD2 Dan Hanson
DD3 Eric Cherry
MWD1 Justin Klatt
MWD2 Lucas Henkenius

Log measurements: Gamma, ROP
Depth measured from: 1634 ft
Maximum temperature:

Depth	Date
Start: 1500 ft End: 17650 ft	12-19-2020

Casing	Depth	Size
Surface:	1634 ft	9 5/8"
Intermediate:		

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

Elevations
KB: 23 ft
GL: 5080 ft
DF: 5103 ft

Run	Bit Size	Offsets		Depths		Dates	
		Gamma	Survey	Start	End	Start	End
1	8.75"	62.77 ft	57.94 ft	1500 ft	8077 ft	02-10-2020	02-12-2020
2	8.5"	20.84 ft	25.42 ft	8077 ft		02-13-2020	
3							
4							
5							
6							
7							
8							
9							
10							

Ensign 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.

#15 MD(1484.00) Inc(3.3) Azm(68.9) TVD(1483.74)
#16 MD(1579.00) Inc(4.6) Azm(72.7) TVD(1578.51)
#17 MD(1630.00) Inc(5.2) Azm(74.0) TVD(1629.32)
#18 MD(1758.00) Inc(7.2) Azm(76.7) TVD(1756.56)
#19 MD(1848.00) Inc(7.1) Azm(76.8) TVD(1845.85)
#20 MD(1937.00) Inc(9.4) Azm(80.7) TVD(1933.92)
#21 MD(2026.00) Inc(11.3) Azm(73.8) TVD(2021.47)
#22 MD(2116.00) Inc(10.8) Azm(74.5) TVD(2109.80)
#23 MD(2206.00) Inc(10.5) Azm(74.3) TVD(2198.24)
#24 MD(2295.00) Inc(9.8) Azm(74.3) TVD(2285.85)
#25 MD(2385.00) Inc(10.3) Azm(74.7) TVD(2374.48)
#26 MD(2563.00) Inc(9.7) Azm(73.6) TVD(2549.78)
#27 MD(2653.00) Inc(11.0) Azm(74.2) TVD(2638.32)
#28 MD(2743.00) Inc(11.9) Azm(75.3) TVD(2726.53)
#29 MD(2833.00) Inc(11.5) Azm(74.0) TVD(2814.66)
#30 MD(2922.00) Inc(10.9) Azm(72.6) TVD(2901.95)
#31 MD(3012.00) Inc(10.9) Azm(71.9) TVD(2990.32)
#32 MD(3101.00) Inc(13.6) Azm(76.4) TVD(3077.29)
#33 MD(3190.00) Inc(12.8) Azm(74.5) TVD(3163.94)
#34 MD(3280.00) Inc(11.6) Azm(73.9) TVD(3251.91)
#35 MD(3371.00) Inc(10.3) Azm(72.8) TVD(3341.25)
#36 MD(3460.00) Inc(11.4) Azm(70.8) TVD(3428.65)
#37 MD(3550.00) Inc(10.0) Azm(70.3) TVD(3517.07)
#38 MD(3640.00) Inc(11.3) Azm(73.1) TVD(3605.52)
#39 MD(3730.00) Inc(11.7) Azm(74.7) TVD(3693.71)
#40 MD(3820.00) Inc(12.1) Azm(71.4) TVD(3781.79)
#41 MD(3909.00) Inc(11.6) Azm(68.7) TVD(3868.90)
#42 MD(3998.00) Inc(10.7) Azm(68.0) TVD(3956.22)
#43 MD(4087.00) Inc(12.4) Azm(68.8) TVD(4043.42)
#44 MD(4177.00) Inc(12.9) Azm(67.1) TVD(4131.25)
#45 MD(4266.00) Inc(13.2) Azm(71.4) TVD(4217.97)
#46 MD(4356.00) Inc(13.1) Azm(71.3) TVD(4305.61)
#47 MD(4446.00) Inc(11.9) Azm(67.5) TVD(4393.47)
#48 MD(4535.00) Inc(11.9) Azm(67.8) TVD(4480.55)
#49 MD(4624.00) Inc(11.2) Azm(66.5) TVD(4567.74)
#50 MD(4714.00) Inc(11.2) Azm(72.1) TVD(4656.02)
#51 MD(4803.00) Inc(10.4) Azm(71.0) TVD(4743.45)
#52 MD(4893.00) Inc(10.7) Azm(78.2) TVD(4831.93)
#53 MD(4983.00) Inc(9.7) Azm(78.6) TVD(4920.51)
#54 MD(5072.00) Inc(10.4) Azm(74.0) TVD(5008.14)
#55 MD(5161.00) Inc(11.5) Azm(72.4) TVD(5095.52)
#56 MD(5251.00) Inc(12.7) Azm(72.7) TVD(5183.53)
#57 MD(5340.00) Inc(12.2) Azm(72.8) TVD(5270.44)
#58 MD(5430.00) Inc(11.2) Azm(72.7) TVD(5358.56)
#59 MD(5519.00) Inc(11.5) Azm(73.3) TVD(5445.83)
#60 MD(5609.00) Inc(11.4) Azm(68.6) TVD(5534.04)
#61 MD(5698.00) Inc(9.7) Azm(66.3) TVD(5621.54)
#62 MD(5787.00) Inc(10.5) Azm(73.0) TVD(5709.17)
#63 MD(5877.00) Inc(11.5) Azm(69.8) TVD(5797.53)
#64 MD(5966.00) Inc(10.0) Azm(68.0) TVD(5884.98)
#65 MD(6056.00) Inc(11.6) Azm(68.5) TVD(5973.39)
#66 MD(6146.00) Inc(12.8) Azm(73.1) TVD(6061.36)
#67 MD(6235.00) Inc(12.4) Azm(77.0) TVD(6148.22)
#68 MD(6325.00) Inc(11.9) Azm(76.2) TVD(6236.21)
#69 MD(6414.00) Inc(11.7) Azm(71.3) TVD(6323.33)
#70 MD(6503.00) Inc(12.0) Azm(70.3) TVD(6410.44)
#71 MD(6593.00) Inc(12.7) Azm(70.6) TVD(6498.36)
#72 MD(6683.00) Inc(11.1) Azm(70.0) TVD(6586.43)
#73 MD(6773.00) Inc(9.4) Azm(82.6) TVD(6674.99)
#74 MD(6862.00) Inc(14.2) Azm(109.0) TVD(6762.14)
#75 MD(6952.00) Inc(17.3) Azm(126.4) TVD(6848.79)
#76 MD(7042.00) Inc(23.3) Azm(145.8) TVD(6933.26)
#77 MD(7131.00) Inc(27.1) Azm(162.9) TVD(7013.89)
#78 MD(7220.00) Inc(30.9) Azm(172.8) TVD(7091.77)
#79 MD(7310.00) Inc(37.2) Azm(175.1) TVD(7166.33)
#80 MD(7400.00) Inc(44.4) Azm(176.8) TVD(7234.42)
#81 MD(7489.00) Inc(53.8) Azm(173.4) TVD(7292.63)
#82 MD(7579.00) Inc(59.5) Azm(168.9) TVD(7342.14)
#83 MD(7669.00) Inc(67.4) Azm(168.7) TVD(7382.37)
#84 MD(7758.00) Inc(76.2) Azm(171.6) TVD(7410.14)
#85 MD(7848.00) Inc(88.1) Azm(174.8) TVD(7422.39)
#86 MD(7938.00) Inc(92.2) Azm(179.2) TVD(7422.15)
#87 MD(8028.00) Inc(91.5) Azm(181.9) TVD(7419.22)
#88 MD(8144.00) Inc(91.8) Azm(182.5) TVD(7415.80)
#89 MD(8233.00) Inc(91.1) Azm(183.1) TVD(7413.49)
#90 MD(8323.00) Inc(91.2) Azm(183.7) TVD(7411.68)
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#97 MD(8948.00) Inc(90.5) Azm(181.2) TVD(7403.42)
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#99 MD(9128.00) Inc(90.5) Azm(179.6) TVD(7401.75)
#100 MD(9218.00) Inc(90.5) Azm(180.8) TVD(7401.02)
#101 MD(9307.00) Inc(90.4) Azm(180.2) TVD(7400.35)
#102 MD(9397.00) Inc(90.8) Azm(180.1) TVD(7399.37)
#103 MD(9487.00) Inc(90.7) Azm(180.6) TVD(7398.15)
#104 MD(9577.00) Inc(90.8) Azm(181.0) TVD(7396.93)
#105 MD(9666.00) Inc(90.3) Azm(182.7) TVD(7396.04)
#106 MD(9755.00) Inc(90.7) Azm(182.4) TVD(7395.21)
#107 MD(9844.00) Inc(91.2) Azm(180.4) TVD(7393.68)
#108 MD(9934.00) Inc(91.0) Azm(178.5) TVD(7391.95)
#109 MD(10024.00) Inc(90.7) Azm(180.7) TVD(7390.65)
#110 MD(10114.00) Inc(90.7) Azm(179.5) TVD(7389.54)
#111 MD(10203.00) Inc(90.8) Azm(181.5) TVD(7388.32)
#112 MD(10293.00) Inc(91.7) Azm(179.9) TVD(7386.28)
#113 MD(10382.00) Inc(91.3) Azm(181.3) TVD(7383.91)
#114 MD(10472.00) Inc(91.6) Azm(178.7) TVD(7381.60)

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#115 MD(10562.00) Inc(91.9) Azm(179.5) TVD(7378.79)
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#117 MD(10741.00) Inc(91.7) Azm(176.8) TVD(7373.30)
#118 MD(10831.00) Inc(91.3) Azm(179.1) TVD(7370.95)
#119 MD(10921.00) Inc(91.6) Azm(183.1) TVD(7368.65)
#120 MD(11010.00) Inc(92.1) Azm(181.5) TVD(7365.76)
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#124 MD(11369.00) Inc(92.0) Azm(180.5) TVD(7354.16)
#125 MD(11459.00) Inc(91.1) Azm(182.9) TVD(7351.72)
#126 MD(11548.00) Inc(90.8) Azm(185.8) TVD(7350.22)
#127 MD(11638.00) Inc(91.6) Azm(183.4) TVD(7348.34)
#128 MD(11728.00) Inc(91.5) Azm(182.1) TVD(7345.93)
#129 MD(11818.00) Inc(91.1) Azm(185.6) TVD(7343.89)
#130 MD(11907.00) Inc(92.2) Azm(181.7) TVD(7341.34)
#131 MD(11997.00) Inc(92.2) Azm(177.7) TVD(7337.91)
#132 MD(12087.00) Inc(92.4) Azm(173.5) TVD(7334.31)
#133 MD(12176.00) Inc(90.2) Azm(172.2) TVD(7332.29)
#134 MD(12266.00) Inc(89.7) Azm(176.1) TVD(7332.40)
#135 MD(12355.00) Inc(90.0) Azm(178.9) TVD(7332.68)
#136 MD(12445.00) Inc(90.0) Azm(178.1) TVD(7332.75)
#137 MD(12535.00) Inc(90.1) Azm(177.3) TVD(7332.68)
#138 MD(12624.00) Inc(89.6) Azm(181.2) TVD(7332.91)
#139 MD(12714.00) Inc(90.0) Azm(185.0) TVD(7333.26)
#140 MD(12803.00) Inc(89.9) Azm(185.7) TVD(7333.35)
#141 MD(12893.00) Inc(89.9) Azm(183.5) TVD(7333.53)
#142 MD(12982.00) Inc(90.0) Azm(181.3) TVD(7333.63)
#143 MD(13071.00) Inc(90.2) Azm(181.3) TVD(7333.47)
#144 MD(13161.00) Inc(91.5) Azm(178.2) TVD(7332.10)
#145 MD(13251.00) Inc(90.1) Azm(179.8) TVD(7330.80)
#146 MD(13341.00) Inc(89.8) Azm(182.7) TVD(7330.84)
#147 MD(13431.00) Inc(90.1) Azm(183.7) TVD(7330.91)
#148 MD(13521.00) Inc(89.7) Azm(183.6) TVD(7331.07)
#149 MD(13610.00) Inc(91.0) Azm(181.4) TVD(7330.49)
#150 MD(13700.00) Inc(91.9) Azm(178.1) TVD(7328.15)
#151 MD(13789.00) Inc(89.9) Azm(176.7) TVD(7326.74)
#152 MD(13879.00) Inc(89.7) Azm(176.9) TVD(7327.07)
#153 MD(13969.00) Inc(89.1) Azm(180.3) TVD(7328.00)
#154 MD(14058.00) Inc(89.5) Azm(182.8) TVD(7329.08)
#155 MD(14149.00) Inc(89.9) Azm(183.3) TVD(7329.57)
#156 MD(14239.00) Inc(91.0) Azm(182.4) TVD(7328.91)
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#161 MD(14686.00) Inc(89.0) Azm(181.2) TVD(7332.94)
#162 MD(14775.00) Inc(89.1) Azm(181.1) TVD(7334.46)
#163 MD(14865.00) Inc(89.0) Azm(182.8) TVD(7335.93)
#164 MD(14954.00) Inc(89.6) Azm(182.0) TVD(7337.01)
#165 MD(15043.00) Inc(89.6) Azm(179.5) TVD(7337.69)
#166 MD(15133.00) Inc(88.9) Azm(180.2) TVD(7338.88)
#167 MD(15222.00) Inc(88.9) Azm(181.6) TVD(7340.58)
#168 MD(15312.00) Inc(89.4) Azm(181.1) TVD(7341.90)
#169 MD(15401.00) Inc(89.2) Azm(182.7) TVD(7342.96)
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#171 MD(15581.00) Inc(89.1) Azm(184.4) TVD(7345.59)
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#179 MD(16298.00) Inc(90.4) Azm(179.1) TVD(7344.92)
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#181 MD(16476.00) Inc(90.4) Azm(180.2) TVD(7344.18)
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#183 MD(16655.00) Inc(90.2) Azm(179.7) TVD(7343.19)
#184 MD(16745.00) Inc(90.2) Azm(179.9) TVD(7342.89)
#185 MD(16834.00) Inc(90.4) Azm(179.9) TVD(7342.46)
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#187 MD(17013.00) Inc(90.2) Azm(180.2) TVD(7341.90)
#188 MD(17103.00) Inc(90.5) Azm(179.6) TVD(7341.31)
#189 MD(17192.00) Inc(90.8) Azm(179.9) TVD(7340.23)
#190 MD(17282.00) Inc(91.2) Azm(180.0) TVD(7338.61)
#191 MD(17371.00) Inc(90.1) Azm(180.3) TVD(7337.55)
#192 MD(17461.00) Inc(90.1) Azm(180.7) TVD(7337.36)
#193 MD(17550.00) Inc(90.0) Azm(180.1) TVD(7337.30)
#194 MD(17624.00) Inc(90.2) Azm(179.9) TVD(7337.20)
Gamma
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