Barr 11L-321

MD
2":100'

Company: PDC Energy Inc
Well Name: Barr 11L-321
API: 05123456900
County/Parish: WELD
State: COLORADO
Country: USA
Job number: 152-135
Field: Wattenberg
Rig Id: Ensign 152
Survey Company: Ensign Directional
DD1 Jesus Gallego
DD2 Dan Hanson
DD3 Joe Edgerton
MWD1 Justin Klatt
MWD2 Ryan Prue
MWD3

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

	Depth	**Date**
Start:	0 ft	4-15-18
End:	12050 ft	4-18-18

Casing	**Depth**	**Size**
Surface:	1646 ft	9 5/8"
Intermediate:		

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

Elevations
KB: 23 ft
GL: 4611 ft
DF: 4634 ft

Run	**Bit Size**	**Offsets**		**Depths**		**Dates**	
		Gamma	**Survey**	**Start**	**End**	**Start**	**End**
1	12.25"		58.73 ft	0 ft	1645 ft	4-15-2018	4-15-2018
2	8.5"	62.15 ft	57.32 ft	1645 ft	12050 ft	4-16-2018	4-18-2018
3							
4							
5							
6							
7							
8							
9							
10							

Ensign Directional uses its best efforts to provide to 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(1523.00) Inc(13.7) Azm(106.5) TVD(1487.42) DLS(1.8)
#16 MD(1586.00) Inc(13.0) Azm(107.9) TVD(1548.72) DLS(1.2)
#17 MD(1679.00) Inc(12.8) Azm(108.4) TVD(1639.37) DLS(0.2)
#18 MD(1775.00) Inc(13.3) Azm(108.8) TVD(1732.89) DLS(0.5)
#19 MD(1869.00) Inc(14.4) Azm(114.4) TVD(1824.16) DLS(1.8)
#20 MD(1965.00) Inc(16.4) Azm(120.4) TVD(1916.71) DLS(2.7)
#21 MD(2060.00) Inc(18.7) Azm(124.9) TVD(2007.29) DLS(2.8)
#22 MD(2156.00) Inc(22.3) Azm(124.9) TVD(2097.20) DLS(3.8)
#23 MD(2251.00) Inc(24.4) Azm(125.5) TVD(2184.41) DLS(2.2)
#24 MD(2346.00) Inc(26.0) Azm(118.8) TVD(2270.39) DLS(3.4)
#25 MD(2442.00) Inc(27.9) Azm(113.7) TVD(2355.97) DLS(3.1)
#26 MD(2537.00) Inc(28.1) Azm(109.3) TVD(2439.86) DLS(2.2)
#27 MD(2632.00) Inc(27.3) Azm(108.2) TVD(2523.97) DLS(1.0)
#28 MD(2728.00) Inc(27.4) Azm(108.2) TVD(2609.24) DLS(0.1)
#29 MD(2824.00) Inc(28.1) Azm(104.9) TVD(2694.20) DLS(1.8)
#30 MD(2919.00) Inc(27.3) Azm(105.1) TVD(2778.31) DLS(0.8)
#31 MD(3015.00) Inc(26.8) Azm(106.0) TVD(2863.81) DLS(0.7)
#32 MD(3110.00) Inc(26.4) Azm(105.6) TVD(2948.76) DLS(0.5)
#33 MD(3206.00) Inc(25.6) Azm(105.8) TVD(3035.04) DLS(0.8)
#34 MD(3302.00) Inc(24.6) Azm(104.7) TVD(3121.97) DLS(1.1)
#35 MD(3398.00) Inc(23.9) Azm(104.7) TVD(3209.50) DLS(0.7)
#36 MD(3493.00) Inc(22.8) Azm(104.2) TVD(3296.72) DLS(1.2)
#37 MD(3590.00) Inc(21.5) Azm(103.1) TVD(3386.56) DLS(1.4)
#38 MD(3684.00) Inc(20.6) Azm(104.2) TVD(3474.29) DLS(1.0)
#39 MD(3779.00) Inc(20.6) Azm(104.5) TVD(3563.21) DLS(0.1)
#40 MD(3875.00) Inc(20.8) Azm(104.2) TVD(3653.02) DLS(0.2)
#41 MD(3971.00) Inc(20.6) Azm(103.8) TVD(3742.82) DLS(0.3)
#42 MD(4067.00) Inc(20.4) Azm(102.6) TVD(3832.74) DLS(0.5)
#43 MD(4162.00) Inc(19.1) Azm(102.6) TVD(3922.15) DLS(1.4)
#44 MD(4257.00) Inc(18.3) Azm(102.4) TVD(4012.13) DLS(0.8)
#45 MD(4353.00) Inc(18.9) Azm(101.4) TVD(4103.12) DLS(0.7)
#46 MD(4448.00) Inc(18.0) Azm(98.9) TVD(4193.24) DLS(1.3)
#47 MD(4543.00) Inc(17.1) Azm(98.6) TVD(4283.81) DLS(1.0)
#48 MD(4639.00) Inc(17.6) Azm(98.2) TVD(4375.45) DLS(0.5)
#49 MD(4735.00) Inc(18.8) Azm(99.6) TVD(4466.64) DLS(1.3)
#50 MD(4830.00) Inc(19.8) Azm(101.6) TVD(4556.30) DLS(1.3)
#51 MD(4926.00) Inc(19.3) Azm(100.9) TVD(4646.77) DLS(0.6)
#52 MD(5021.00) Inc(19.6) Azm(104.5) TVD(4736.35) DLS(1.3)
#53 MD(5117.00) Inc(20.0) Azm(103.8) TVD(4826.67) DLS(0.5)
#54 MD(5212.00) Inc(23.3) Azm(104.4) TVD(4914.96) DLS(3.5)
#55 MD(5308.00) Inc(22.9) Azm(103.8) TVD(5003.26) DLS(0.5)
#56 MD(5404.00) Inc(25.3) Azm(107.5) TVD(5090.89) DLS(3.0)
#57 MD(5499.00) Inc(23.6) Azm(106.1) TVD(5177.37) DLS(1.9)
#58 MD(5595.00) Inc(22.1) Azm(104.2) TVD(5265.84) DLS(1.7)
#59 MD(5690.00) Inc(20.6) Azm(102.3) TVD(5354.32) DLS(1.7)
#60 MD(5786.00) Inc(22.1) Azm(105.6) TVD(5443.73) DLS(2.0)
#61 MD(5881.00) Inc(23.9) Azm(100.9) TVD(5531.18) DLS(2.7)
#62 MD(5977.00) Inc(22.7) Azm(100.0) TVD(5619.35) DLS(1.3)
#63 MD(6072.00) Inc(23.4) Azm(101.9) TVD(5706.77) DLS(1.1)
#64 MD(6168.00) Inc(21.9) Azm(101.6) TVD(5795.36) DLS(1.6)
#65 MD(6264.00) Inc(23.5) Azm(103.8) TVD(5883.92) DLS(1.9)
#66 MD(6359.00) Inc(23.0) Azm(102.6) TVD(5971.21) DLS(0.7)
#67 MD(6455.00) Inc(21.5) Azm(100.3) TVD(6060.06) DLS(1.8)
#68 MD(6551.00) Inc(23.3) Azm(89.6) TVD(6148.85) DLS(4.6)
#69 MD(6646.00) Inc(28.0) Azm(75.2) TVD(6234.55) DLS(8.2)
#70 MD(6741.00) Inc(29.1) Azm(64.5) TVD(6318.05) DLS(5.5)
#71 MD(6837.00) Inc(32.7) Azm(52.3) TVD(6400.49) DLS(7.5)
#72 MD(6933.00) Inc(38.4) Azm(37.4) TVD(6478.71) DLS(10.8)
#73 MD(7028.00) Inc(46.1) Azm(27.0) TVD(6549.07) DLS(10.9)
#74 MD(7124.00) Inc(50.1) Azm(24.0) TVD(6613.17) DLS(4.8)
#75 MD(7220.00) Inc(55.0) Azm(17.9) TVD(6671.57) DLS(7.2)
#76 MD(7315.00) Inc(61.4) Azm(11.6) TVD(6721.64) DLS(8.8)
#77 MD(7411.00) Inc(66.5) Azm(4.4) TVD(6763.83) DLS(8.6)
#78 MD(7506.00) Inc(72.9) Azm(5.1) TVD(6796.77) DLS(6.8)
#79 MD(7602.00) Inc(77.6) Azm(1.7) TVD(6821.21) DLS(6.0)
#80 MD(7698.00) Inc(84.0) Azm(0.8) TVD(6836.55) DLS(6.7)
#81 MD(7793.00) Inc(88.8) Azm(1.0) TVD(6842.51) DLS(5.1)
#82 MD(7888.00) Inc(89.4) Azm(1.0) TVD(6844.01) DLS(0.6)
#83 MD(7984.00) Inc(90.0) Azm(0.7) TVD(6844.51) DLS(0.7)
#84 MD(8080.00) Inc(90.5) Azm(0.8) TVD(6844.09) DLS(0.5)
#85 MD(8175.00) Inc(91.5) Azm(0.8) TVD(6842.43) DLS(1.1)
#86 MD(8271.00) Inc(90.2) Azm(359.6) TVD(6841.01) DLS(1.8)
#87 MD(8366.00) Inc(91.2) Azm(359.6) TVD(6839.85) DLS(1.1)
#88 MD(8462.00) Inc(88.6) Azm(358.7) TVD(6840.02) DLS(2.9)
#89 MD(8557.00) Inc(89.1) Azm(358.4) TVD(6841.92) DLS(0.6)
#90 MD(8653.00) Inc(89.7) Azm(358.6) TVD(6842.93) DLS(0.7)
#91 MD(8749.00) Inc(90.7) Azm(359.1) TVD(6842.59) DLS(1.2)
#92 MD(8845.00) Inc(91.0) Azm(358.7) TVD(6841.17) DLS(0.5)
#93 MD(8941.00) Inc(91.5) Azm(358.7) TVD(6839.07) DLS(0.5)
#94 MD(9036.00) Inc(89.2) Azm(358.9) TVD(6838.49) DLS(2.4)
#95 MD(9132.00) Inc(89.7) Azm(359.1) TVD(6839.42) DLS(0.6)
#96 MD(9227.00) Inc(90.4) Azm(359.3) TVD(6839.33) DLS(0.8)
#97 MD(9322.00) Inc(90.8) Azm(358.7) TVD(6838.34) DLS(0.8)
#98 MD(9418.00) Inc(91.5) Azm(358.6) TVD(6836.41) DLS(0.7)
#99 MD(9514.00) Inc(89.7) Azm(359.3) TVD(6835.41) DLS(2.0)
#100 MD(9609.00) Inc(89.3) Azm(358.9) TVD(6836.23) DLS(0.6)
#101 MD(9704.00) Inc(89.4) Azm(358.4) TVD(6837.31) DLS(0.5)
#102 MD(9800.00) Inc(88.6) Azm(0.3) TVD(6838.99) DLS(2.1)
#103 MD(9895.00) Inc(88.7) Azm(0.3) TVD(6841.23) DLS(0.1)
#104 MD(9991.00) Inc(88.8) Azm(0.3) TVD(6843.32) DLS(0.1)
#105 MD(10086.00) Inc(89.1) Azm(0.0) TVD(6845.06) DLS(0.4)
#106 MD(10181.00) Inc(89.3) Azm(359.8) TVD(6846.39) DLS(0.3)
#107 MD(10277.00) Inc(89.9) Azm(1.4) TVD(6847.06) DLS(1.8)
#108 MD(10372.00) Inc(90.4) Azm(0.7) TVD(6846.81) DLS(0.9)
#109 MD(10468.00) Inc(90.7) Azm(0.5) TVD(6845.89) DLS(0.4)

#110 MD(10563.00) Inc(90.9) Azm(0.3) TVD(6844.56) DLS(0.3)

#111 MD(10659.00) Inc(91.1) Azm(359.8) TVD(6842.89) DLS(0.6)

#112 MD(10754.00) Inc(91.5) Azm(359.4) TVD(6840.73) DLS(0.6)

#113 MD(10850.00) Inc(91.7) Azm(359.3) TVD(6838.05) DLS(0.2)

#114 MD(10945.00) Inc(91.7) Azm(359.8) TVD(6835.23) DLS(0.5)

#115 MD(11041.00) Inc(89.6) Azm(0.7) TVD(6834.14) DLS(2.4)

#116 MD(11136.00) Inc(89.8) Azm(0.5) TVD(6834.64) DLS(0.3)

#117 MD(11232.00) Inc(89.6) Azm(359.6) TVD(6835.14) DLS(1.0)

#118 MD(11328.00) Inc(89.7) Azm(2.8) TVD(6835.73) DLS(3.3)

#119 MD(11423.00) Inc(89.7) Azm(2.6) TVD(6836.23) DLS(0.2)

#120 MD(11519.00) Inc(89.8) Azm(2.2) TVD(6836.65) DLS(0.4)

#121 MD(11615.00) Inc(91.7) Azm(2.8) TVD(6835.39) DLS(2.1)

#122 MD(11710.00) Inc(92.5) Azm(2.8) TVD(6831.91) DLS(0.8)

#123 MD(11805.00) Inc(92.0) Azm(1.7) TVD(6828.18) DLS(1.3)

#124 MD(11900.00) Inc(92.7) Azm(1.5) TVD(6824.28) DLS(0.8)

#125 MD(11992.00) Inc(93.2) Azm(1.0) TVD(6819.55) DLS(0.8)