Blanca 3N

MD
2":100'

Company: PDC Energy Inc.
Well Name: Blanca 3N
API: 05 123 46306 00
County/Parish: WELD
State: CO
Country: USA
Job number: 158-108
Field: WATTENBERG
Rig Id: Ensign 158
Survey Company: Ensign
Operator: Petroleum Development Corp.
Company Man: Jeremy Stolz/Shane Paris

Daylight DD: Danial Barton
Night DD: Richard Stahl

Daylight MWD: Justin Klatt
Night MWD: Ryan Prue

Log measurements:
Depth measured from: 1696 ft
Maximum temperature:

	Depth	Date
Start:	0 ft	8-4-2018
End:	15300 ft	8-8-2018

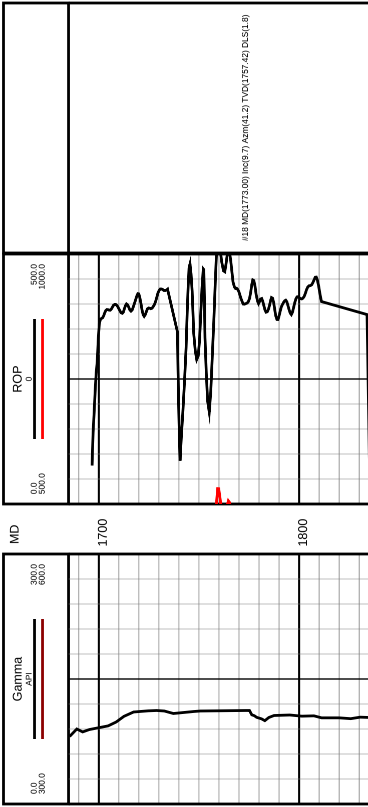
Casing	Depth	Size
Surface:	1675 ft	9 5/8"
Intermediate:		

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

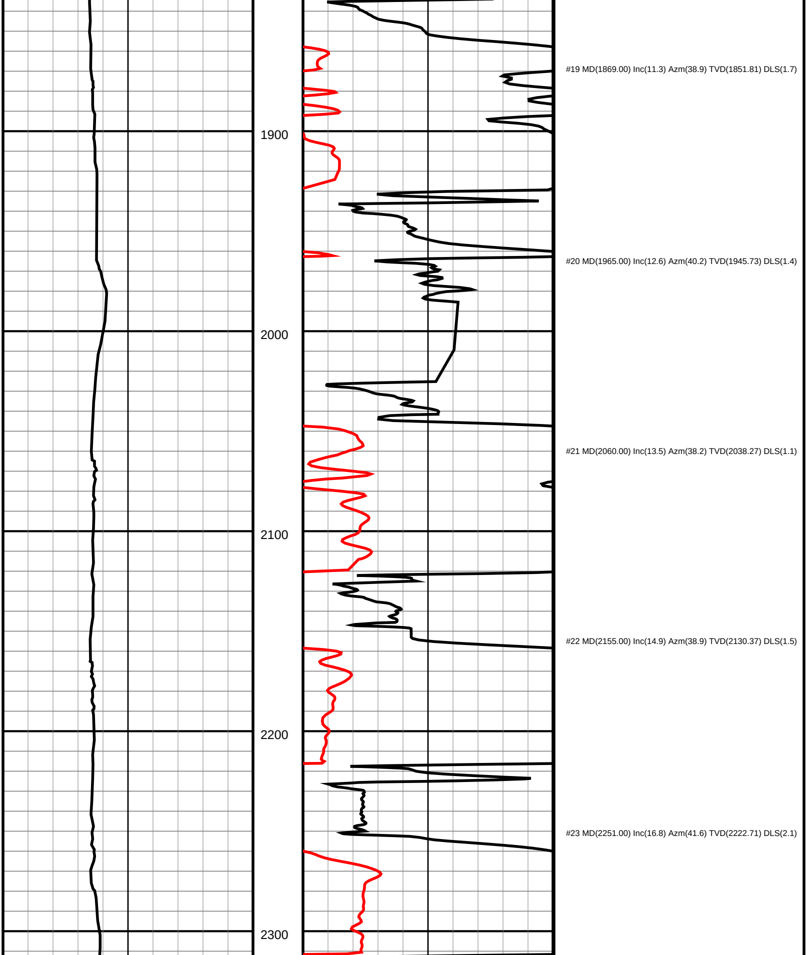
Elevations
KB: 23 ft
GL: 4690 ft
DF: 4713 ft

		Offsets		Depths		Dates	
Run	**Bit Size**	**Gamma**	**Survey**	**Start**	**End**	**Start**	**End**
1	8.5"	63.79 ft	58.21 ft	1675 ft	6807 ft	8-4-2018	8-5-2018
2	8.5"	59.26 ft	54.43 ft	6807 ft	7376 ft	8-5-2018	8-6-2018
3	8.5"	62.61 ft	57.78 ft	7376 ft	15300 ft	8-6-2018	8-8-2018
4							
5							
6							
7							
8							
9							
10							

Ensign 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.



#18 MD(1773.00) Inc(9.7) Azm(41.2) TVD(1757.42) DLS(1.8)



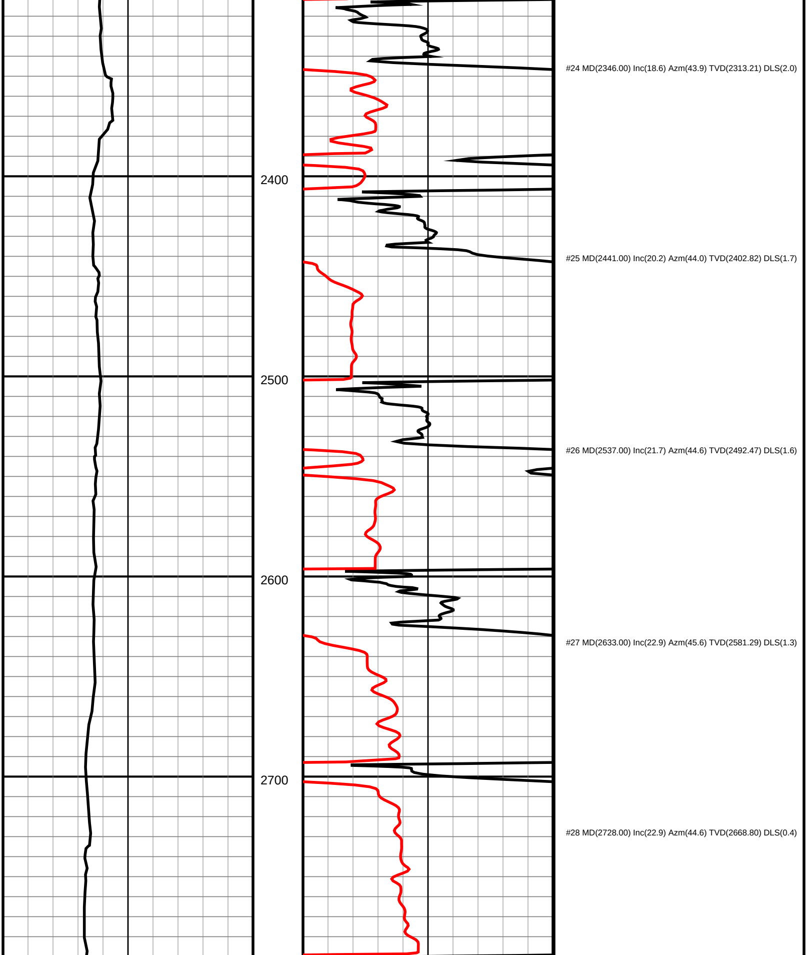
#19 MD(1869.00) Inc(11.3) Azm(38.9) TVD(1851.81) DLS(1.7)

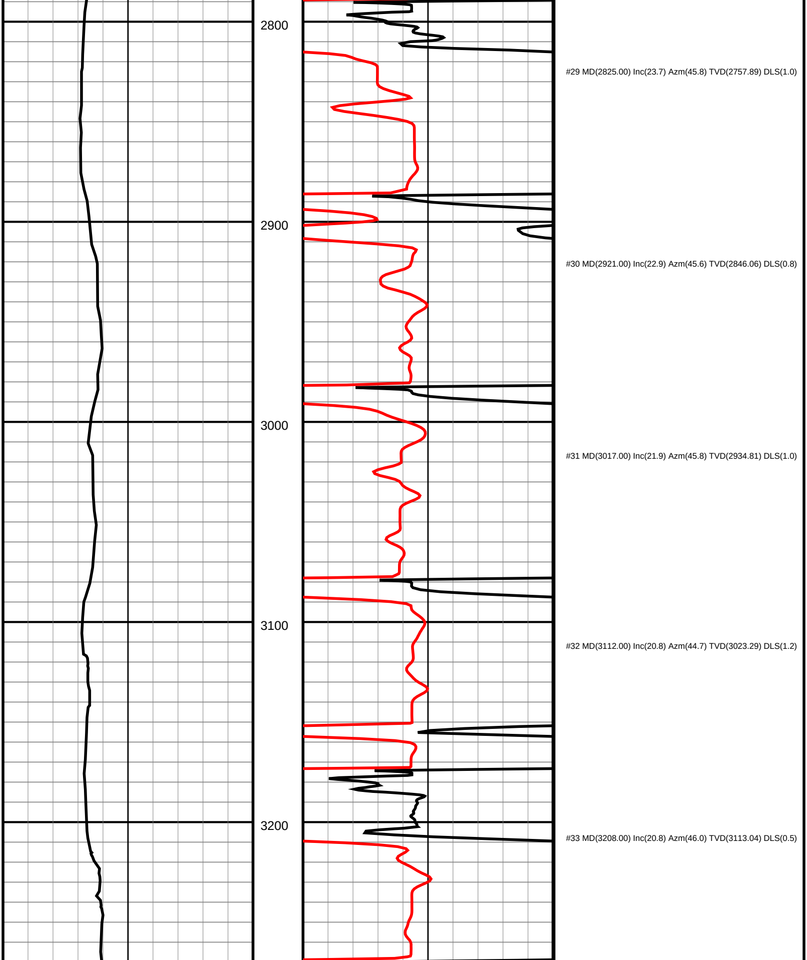
#20 MD(1965.00) Inc(12.6) Azm(40.2) TVD(1945.73) DLS(1.4)

#21 MD(2060.00) Inc(13.5) Azm(38.2) TVD(2038.27) DLS(1.1)

#22 MD(2155.00) Inc(14.9) Azm(38.9) TVD(2130.37) DLS(1.5)

#23 MD(2251.00) Inc(16.8) Azm(41.6) TVD(2222.71) DLS(2.1)





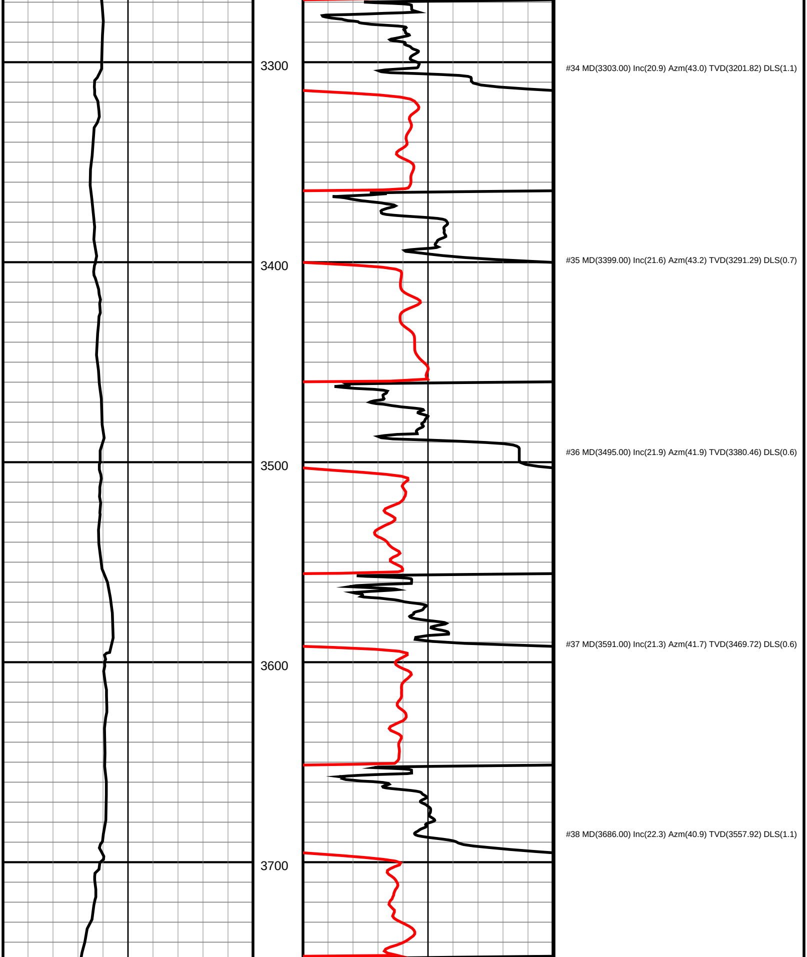
#29 MD(2825.00) Inc(23.7) Azm(45.8) TVD(2757.89) DLS(1.0)

#30 MD(2921.00) Inc(22.9) Azm(45.6) TVD(2846.06) DLS(0.8)

#31 MD(3017.00) Inc(21.9) Azm(45.8) TVD(2934.81) DLS(1.0)

#32 MD(3112.00) Inc(20.8) Azm(44.7) TVD(3023.29) DLS(1.2)

#33 MD(3208.00) Inc(20.8) Azm(46.0) TVD(3113.04) DLS(0.5)



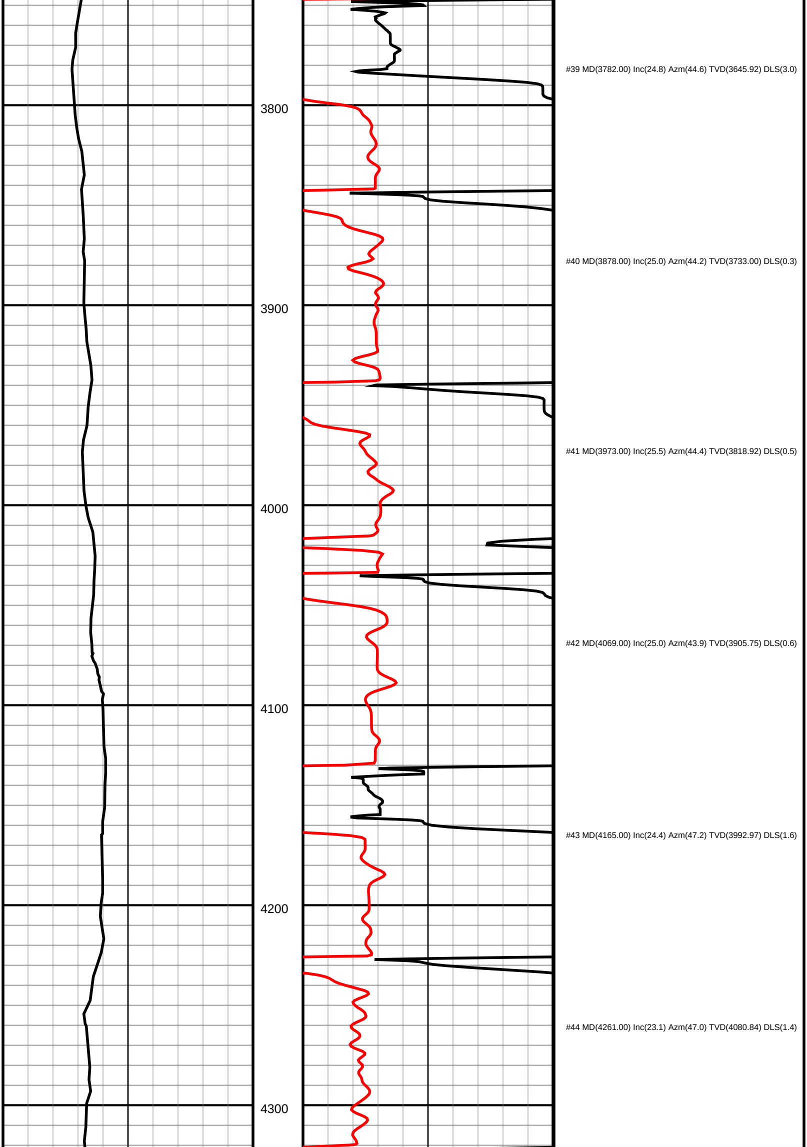
#34 MD(3303.00) Inc(20.9) Azm(43.0) TVD(3201.82) DLS(1.1)

#35 MD(3399.00) Inc(21.6) Azm(43.2) TVD(3291.29) DLS(0.7)

#36 MD(3495.00) Inc(21.9) Azm(41.9) TVD(3380.46) DLS(0.6)

#37 MD(3591.00) Inc(21.3) Azm(41.7) TVD(3469.72) DLS(0.6)

#38 MD(3686.00) Inc(22.3) Azm(40.9) TVD(3557.92) DLS(1.1)



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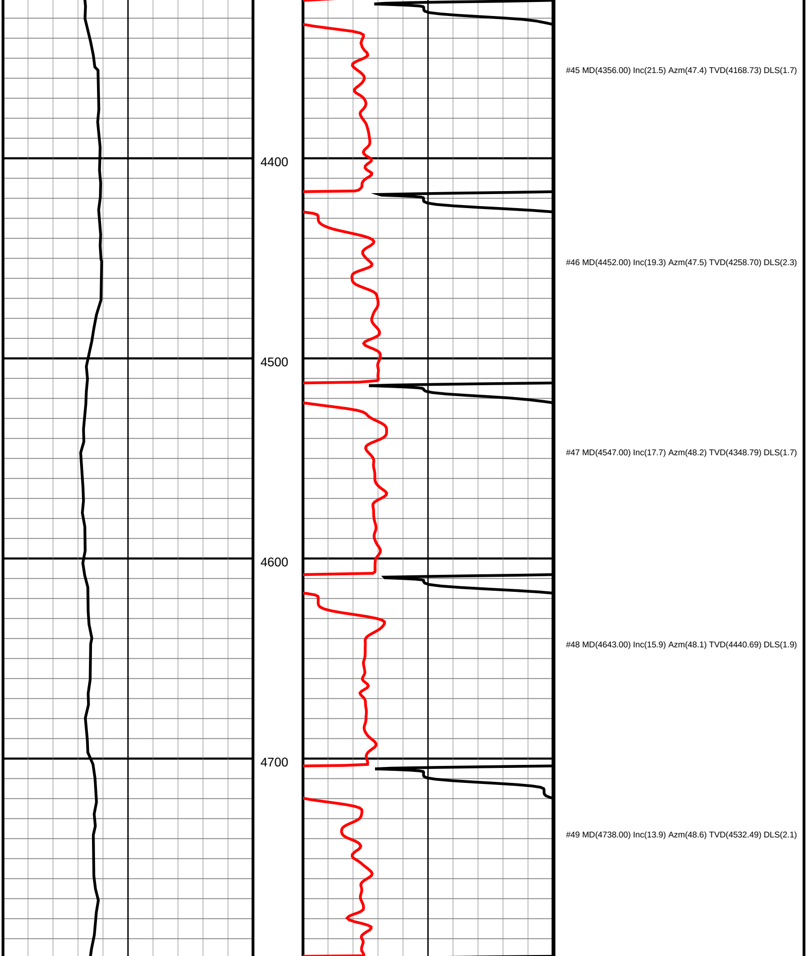
#40 MD(3878.00) Inc(25.0) Azm(44.2) TVD(3733.00) DLS(0.3)

#41 MD(3973.00) Inc(25.5) Azm(44.4) TVD(3818.92) DLS(0.5)

#42 MD(4069.00) Inc(25.0) Azm(43.9) TVD(3905.75) DLS(0.6)

#43 MD(4165.00) Inc(24.4) Azm(47.2) TVD(3992.97) DLS(1.6)

#44 MD(4261.00) Inc(23.1) Azm(47.0) TVD(4080.84) DLS(1.4)



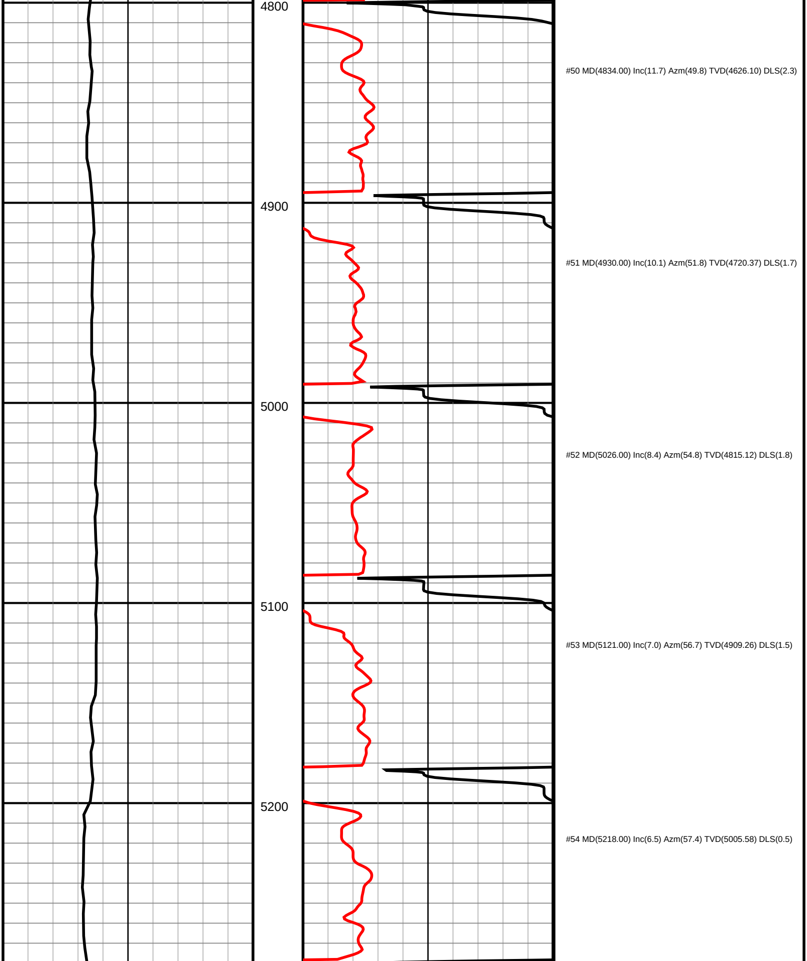
#45 MD(4356.00) Inc(21.5) Azm(47.4) TVD(4168.73) DLS(1.7)

#46 MD(4452.00) Inc(19.3) Azm(47.5) TVD(4258.70) DLS(2.3)

#47 MD(4547.00) Inc(17.7) Azm(48.2) TVD(4348.79) DLS(1.7)

#48 MD(4643.00) Inc(15.9) Azm(48.1) TVD(4440.69) DLS(1.9)

#49 MD(4738.00) Inc(13.9) Azm(48.6) TVD(4532.49) DLS(2.1)



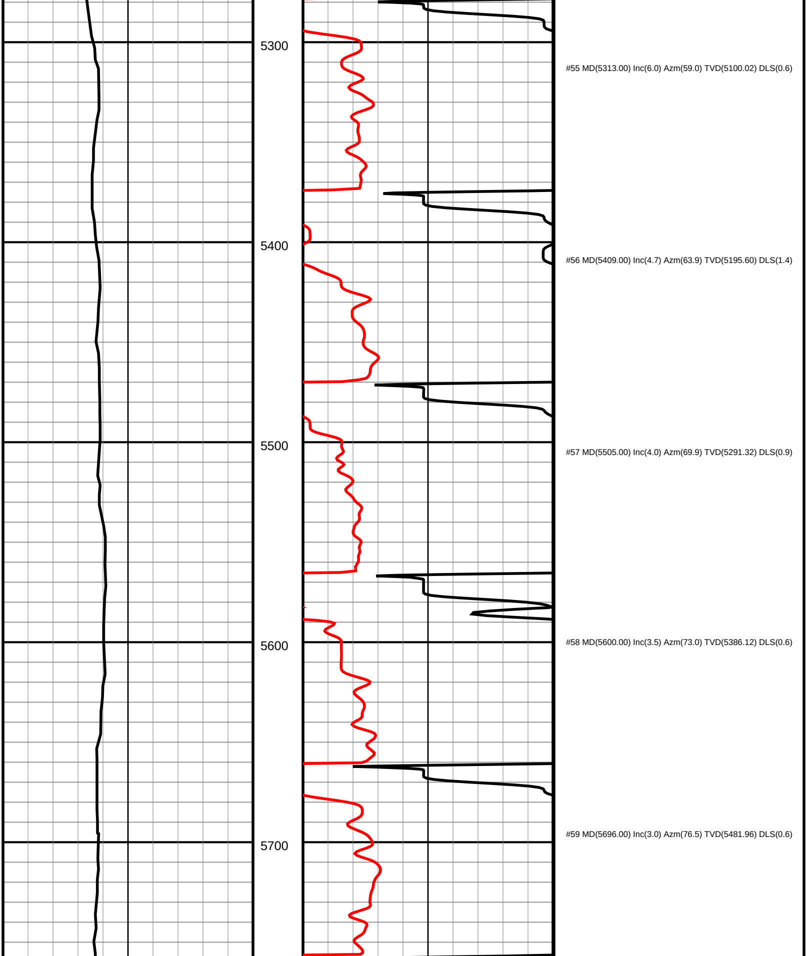
#50 MD(4834.00) Inc(11.7) Azm(49.8) TVD(4626.10) DLS(2.3)

#51 MD(4930.00) Inc(10.1) Azm(51.8) TVD(4720.37) DLS(1.7)

#52 MD(5026.00) Inc(8.4) Azm(54.8) TVD(4815.12) DLS(1.8)

#53 MD(5121.00) Inc(7.0) Azm(56.7) TVD(4909.26) DLS(1.5)

#54 MD(5218.00) Inc(6.5) Azm(57.4) TVD(5005.58) DLS(0.5)



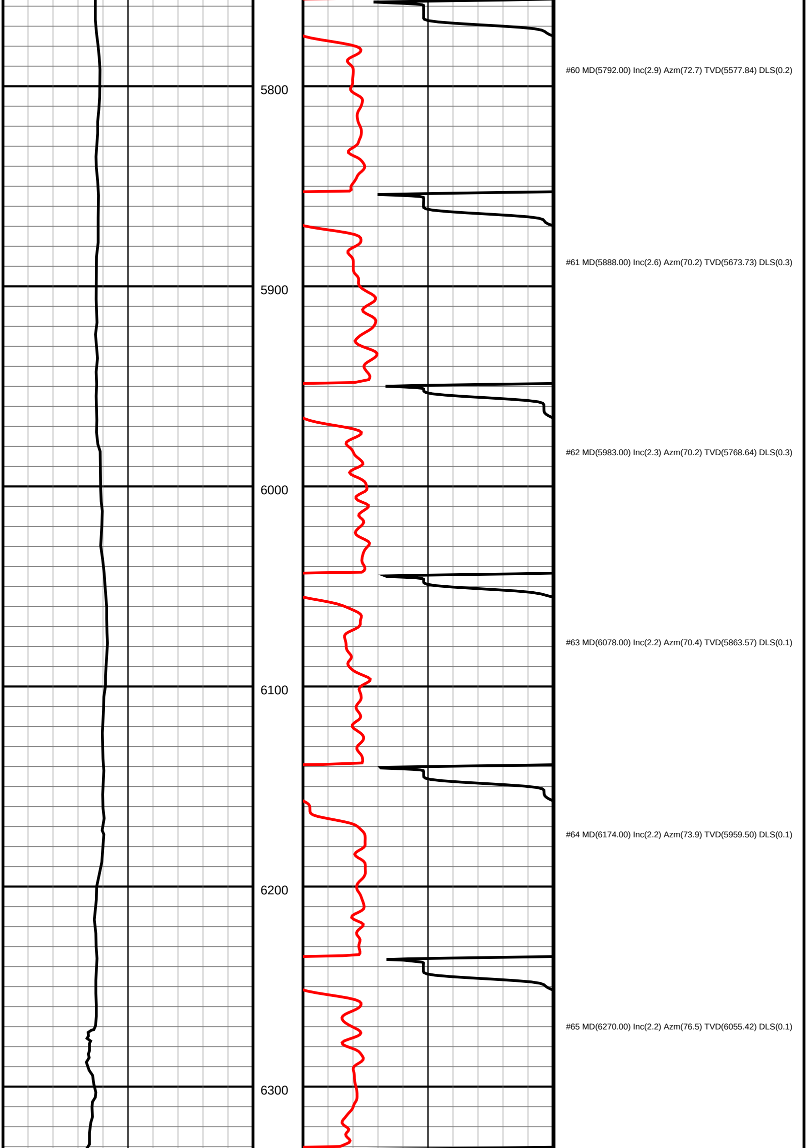
#55 MD(5313.00) Inc(6.0) Azm(59.0) TVD(5100.02) DLS(0.6)

#56 MD(5409.00) Inc(4.7) Azm(63.9) TVD(5195.60) DLS(1.4)

#57 MD(5505.00) Inc(4.0) Azm(69.9) TVD(5291.32) DLS(0.9)

#58 MD(5600.00) Inc(3.5) Azm(73.0) TVD(5386.12) DLS(0.6)

#59 MD(5696.00) Inc(3.0) Azm(76.5) TVD(5481.96) DLS(0.6)



#60 MD(5792.00) Inc(2.9) Azm(72.7) TVD(5577.84) DLS(0.2)

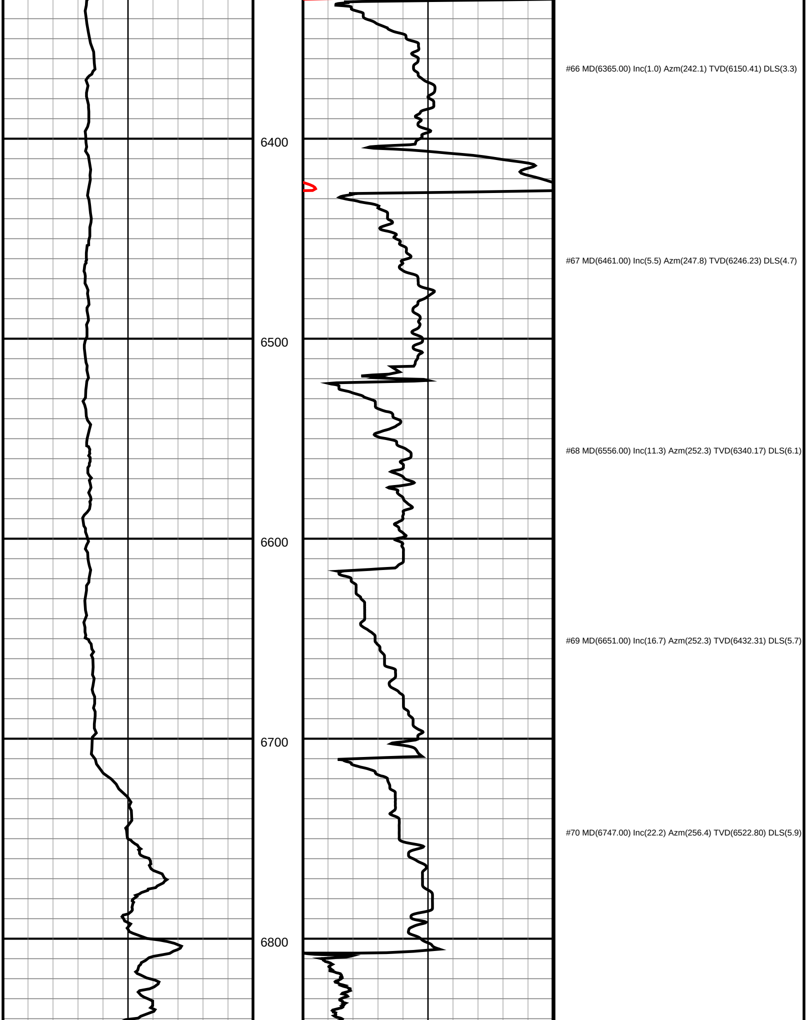
#61 MD(5888.00) Inc(2.6) Azm(70.2) TVD(5673.73) DLS(0.3)

#62 MD(5983.00) Inc(2.3) Azm(70.2) TVD(5768.64) DLS(0.3)

#63 MD(6078.00) Inc(2.2) Azm(70.4) TVD(5863.57) DLS(0.1)

#64 MD(6174.00) Inc(2.2) Azm(73.9) TVD(5959.50) DLS(0.1)

#65 MD(6270.00) Inc(2.2) Azm(76.5) TVD(6055.42) DLS(0.1)



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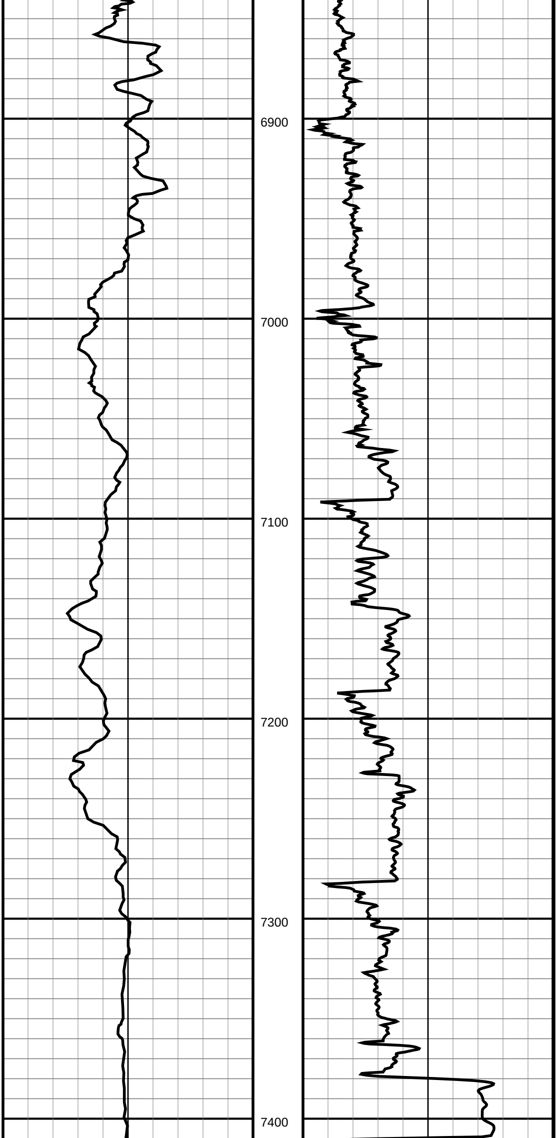
#67 MD(6461.00) Inc(5.5) Azm(247.8) TVD(6246.23) DLS(4.7)

#68 MD(6556.00) Inc(11.3) Azm(252.3) TVD(6340.17) DLS(6.1)

#69 MD(6651.00) Inc(16.7) Azm(252.3) TVD(6432.31) DLS(5.7)

#70 MD(6747.00) Inc(22.2) Azm(256.4) TVD(6522.80) DLS(5.9)



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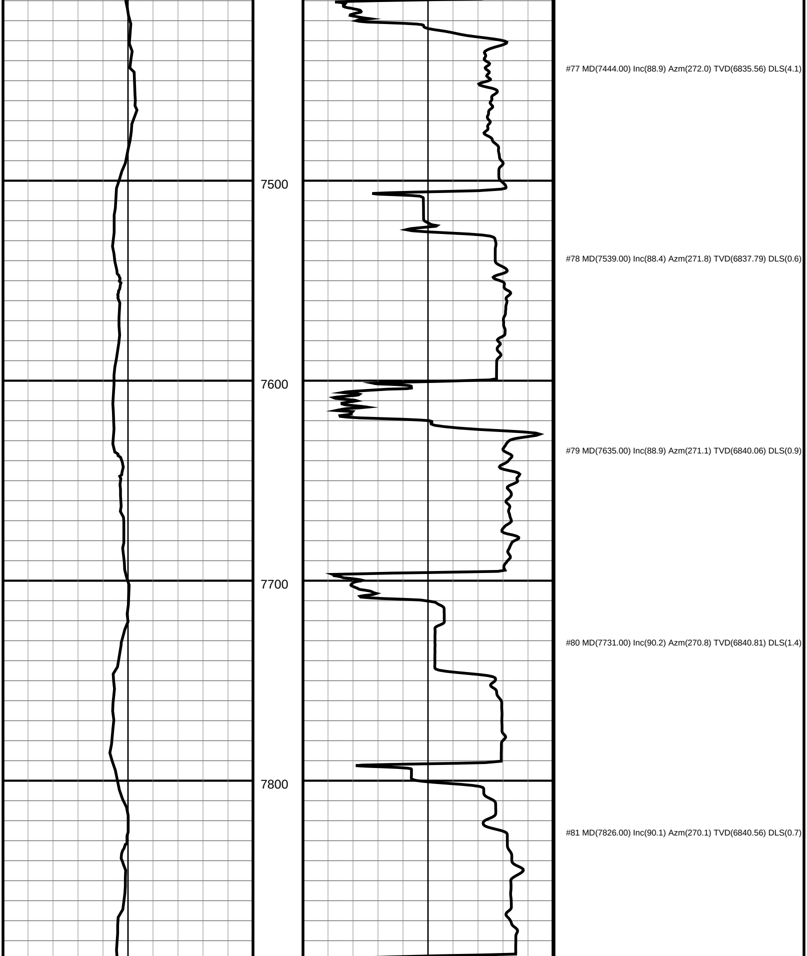
#72 MD(6939.00) Inc(45.2) Azm(263.6) TVD(6684.03) DLS(15.1)

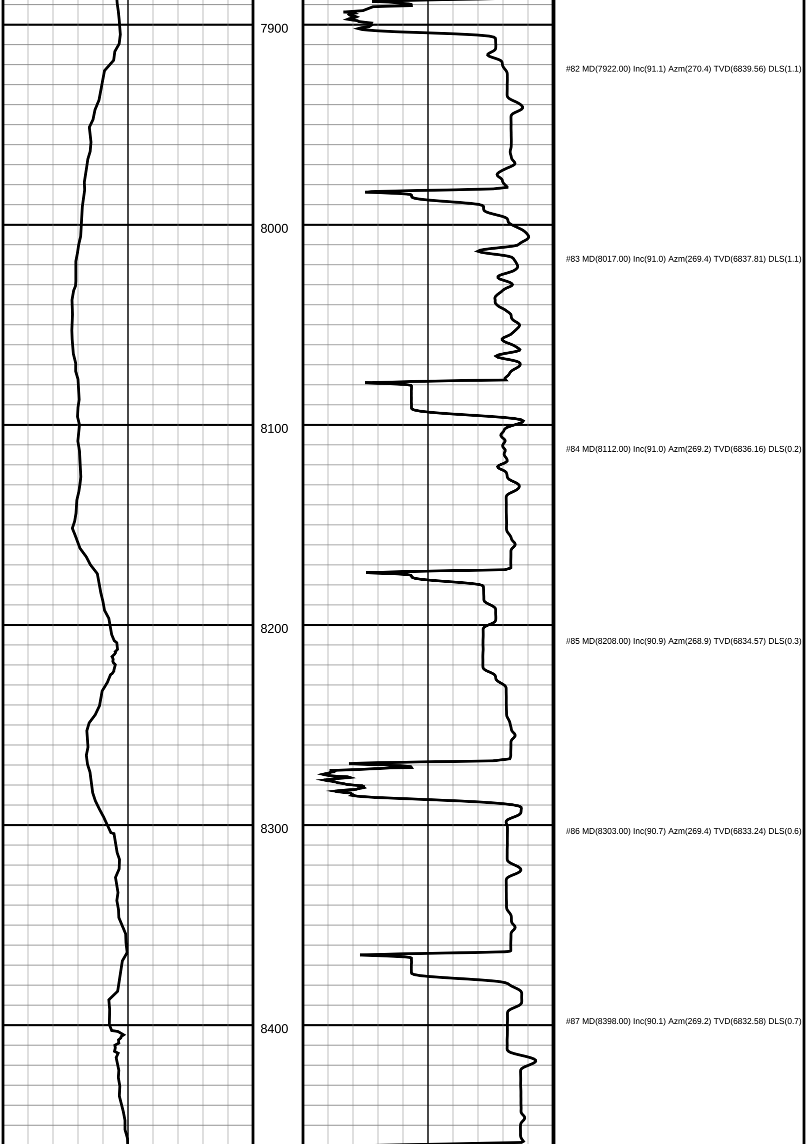
#73 MD(7035.00) Inc(59.4) Azm(266.6) TVD(6742.60) DLS(15.0)

#74 MD(7130.00) Inc(69.8) Azm(270.3) TVD(6783.30) DLS(11.5)

#75 MD(7225.00) Inc(76.2) Azm(273.1) TVD(6811.07) DLS(7.3)

#76 MD(7321.00) Inc(83.8) Azm(271.8) TVD(6827.73) DLS(8.0)





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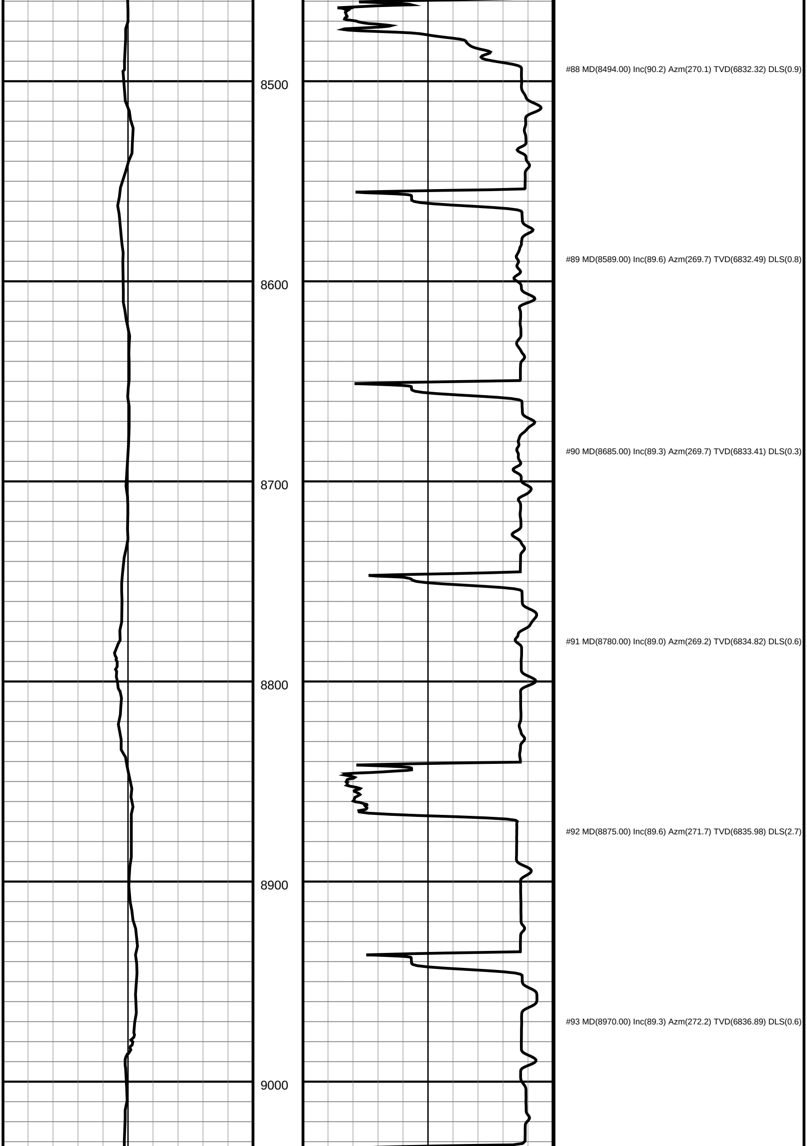
#83 MD(8017.00) Inc(91.0) Azm(269.4) TVD(6837.81) DLS(1.1)

#84 MD(8112.00) Inc(91.0) Azm(269.2) TVD(6836.16) DLS(0.2)

#85 MD(8208.00) Inc(90.9) Azm(268.9) TVD(6834.57) DLS(0.3)

#86 MD(8303.00) Inc(90.7) Azm(269.4) TVD(6833.24) DLS(0.6)

#87 MD(8398.00) Inc(90.1) Azm(269.2) TVD(6832.58) DLS(0.7)



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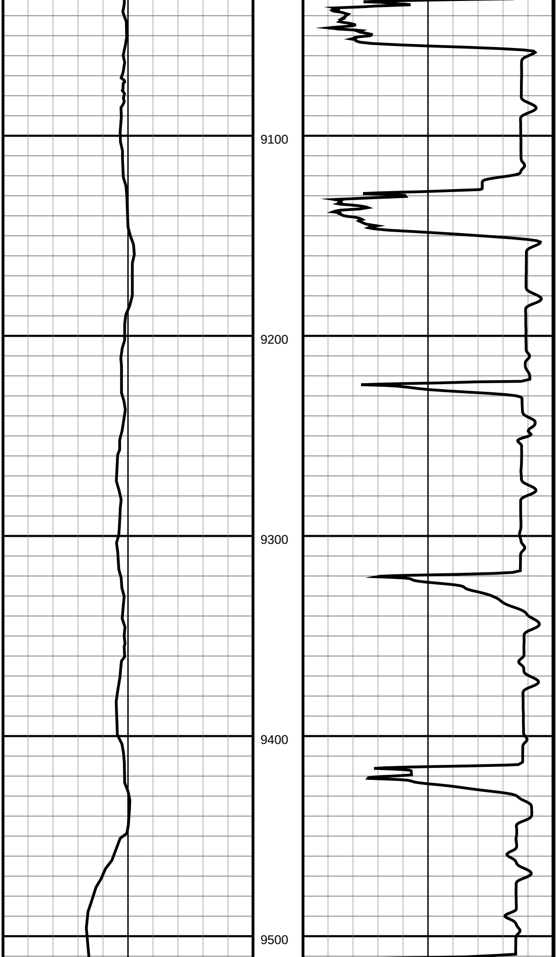
#89 MD(8589.00) Inc(89.6) Azm(269.7) TVD(6832.49) DLS(0.8)

#90 MD(8685.00) Inc(89.3) Azm(269.7) TVD(6833.41) DLS(0.3)

#91 MD(8780.00) Inc(89.0) Azm(269.2) TVD(6834.82) DLS(0.6)

#92 MD(8875.00) Inc(89.6) Azm(271.7) TVD(6835.98) DLS(2.7)

#93 MD(8970.00) Inc(89.3) Azm(272.2) TVD(6836.89) DLS(0.6)



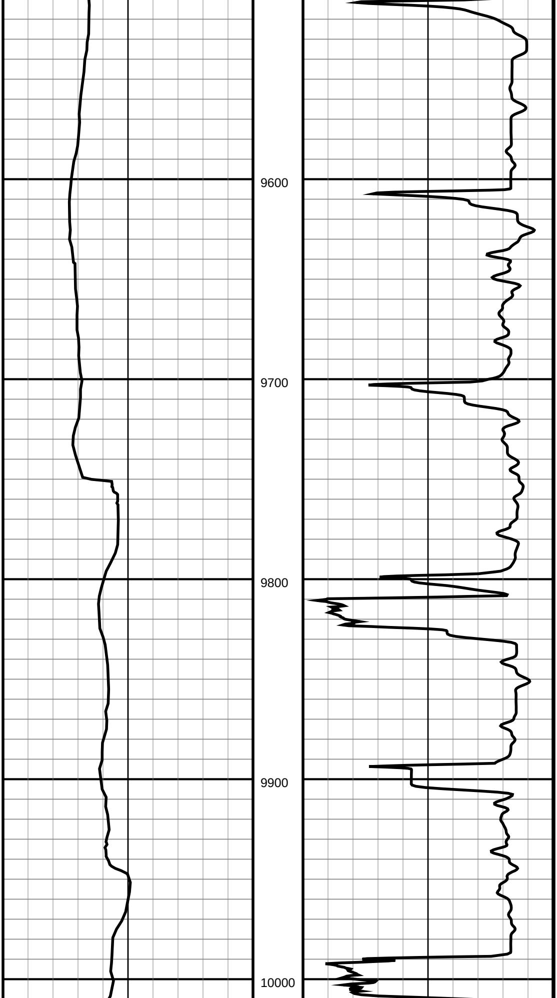
#94 MD(9067.00) Inc(89.8) Azm(273.4) TVD(6837.66) DLS(1.3)

#95 MD(9162.00) Inc(92.0) Azm(272.7) TVD(6836.16) DLS(2.4)

#96 MD(9258.00) Inc(91.7) Azm(271.7) TVD(6833.06) DLS(1.1)

#97 MD(9354.00) Inc(91.4) Azm(271.1) TVD(6830.47) DLS(0.7)

#98 MD(9450.00) Inc(91.2) Azm(271.1) TVD(6828.29) DLS(0.2)



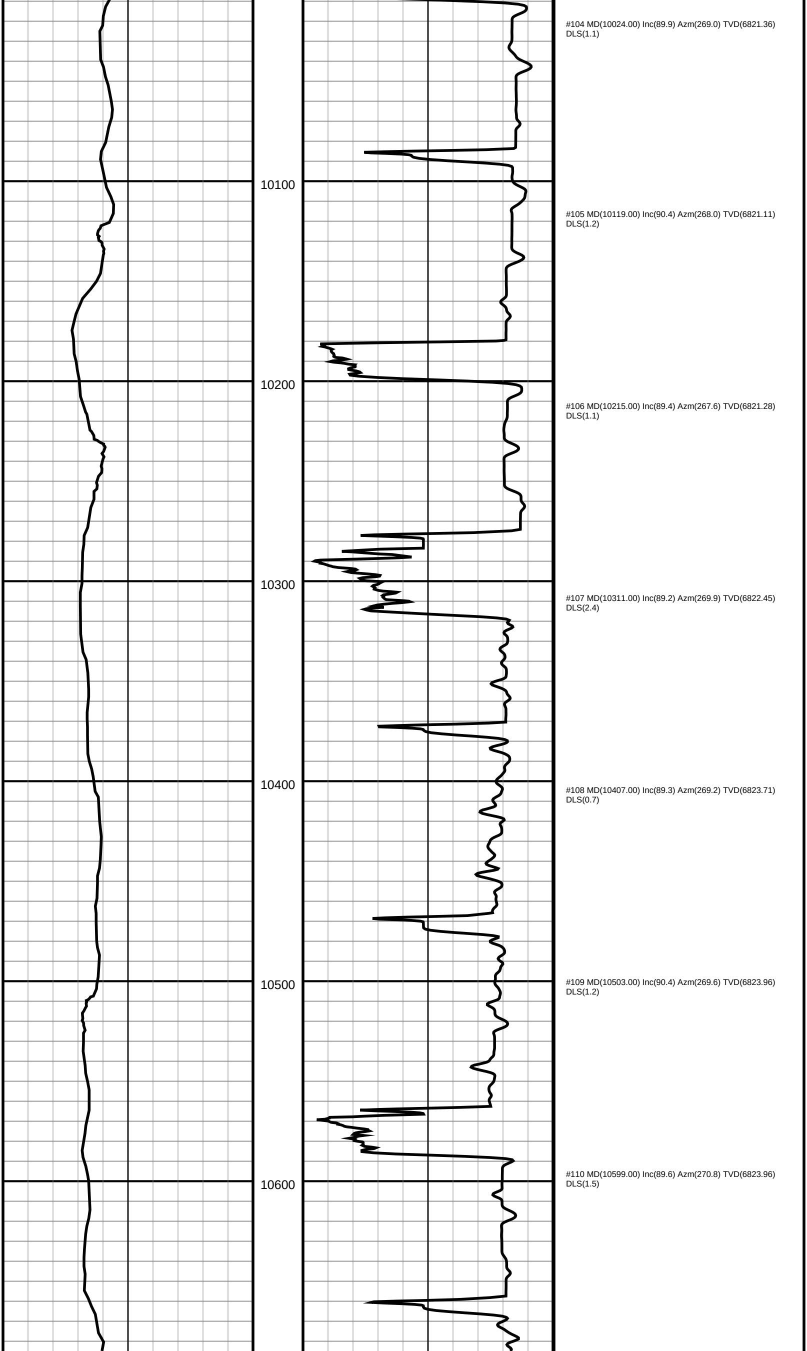
#99 MD(9545.00) Inc(90.9) Azm(269.9) TVD(6826.55) DLS(1.3)

#100 MD(9641.00) Inc(91.2) Azm(269.4) TVD(6824.79) DLS(0.6)

#101 MD(9737.00) Inc(91.2) Azm(268.2) TVD(6822.78) DLS(1.2)

#102 MD(9833.00) Inc(90.0) Azm(269.0) TVD(6821.77) DLS(1.5)

#103 MD(9928.00) Inc(90.3) Azm(268.0) TVD(6821.52) DLS(1.1)



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DLS(1.2)

#106 MD(10215.00) Inc(89.4) Azm(267.6) TVD(6821.28)
DLS(1.1)

#107 MD(10311.00) Inc(89.2) Azm(269.9) TVD(6822.45)
DLS(2.4)

#108 MD(10407.00) Inc(89.3) Azm(269.2) TVD(6823.71)
DLS(0.7)

#109 MD(10503.00) Inc(90.4) Azm(269.6) TVD(6823.96)
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#110 MD(10599.00) Inc(89.6) Azm(270.8) TVD(6823.96)
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#111 MD(10695.00) Inc(90.1) Azm(270.1) TVD(6824.21)
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#112 MD(10790.00) Inc(90.7) Azm(269.2) TVD(6823.54)
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#113 MD(10886.00) Inc(88.8) Azm(270.8) TVD(6823.96)
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#114 MD(10982.00) Inc(89.3) Azm(270.8) TVD(6825.56)
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#115 MD(11079.00) Inc(89.0) Azm(270.3) TVD(6826.99)
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#116 MD(11174.00) Inc(89.2) Azm(269.6) TVD(6828.49)
DLS(0.8)

#117 MD(11270.00) Inc(89.6) Azm(269.0) TVD(6829.49)
DLS(0.8)

#118 MD(11366.00) Inc(89.3) Azm(271.8) TVD(6830.41)
DLS(2.9)

#119 MD(11461.00) Inc(90.3) Azm(272.2) TVD(6830.75)
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#120 MD(11557.00) Inc(89.8) Azm(271.3) TVD(6830.66)
DLS(1.1)

#121 MD(11653.00) Inc(89.8) Azm(270.1) TVD(6831.00)
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#122 MD(11749.00) Inc(89.5) Azm(268.5) TVD(6831.58)
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#123 MD(11844.00) Inc(89.8) Azm(271.0) TVD(6832.16)
DLS(2.7)

#124 MD(11940.00) Inc(91.1) Azm(272.5) TVD(6831.41)
DLS(2.1)

#125 MD(12035.00) Inc(91.4) Azm(272.0) TVD(6829.34)
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#126 MD(12130.00) Inc(91.1) Azm(272.4) TVD(6827.26)
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#127 MD(12226.00) Inc(90.7) Azm(272.0) TVD(6825.76)
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#128 MD(12321.00) Inc(90.0) Azm(271.1) TVD(6825.18)
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#131 MD(12609.00) Inc(91.2) Azm(272.0) TVD(6827.52)
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#132 MD(12705.00) Inc(91.0) Azm(272.2) TVD(6825.68)
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#133 MD(12801.00) Inc(90.6) Azm(271.8) TVD(6824.34)
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#134 MD(12897.00) Inc(91.0) Azm(271.0) TVD(6823.00)
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#136 MD(13088.00) Inc(90.0) Azm(271.0) TVD(6821.00)
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#141 MD(13565.00) Inc(89.6) Azm(270.3) TVD(6818.00)
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#142 MD(13661.00) Inc(89.2) Azm(269.7) TVD(6819.01)
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#143 MD(13757.00) Inc(88.5) Azm(270.3) TVD(6820.93)
DLS(1.0)

#144 MD(13853.00) Inc(90.1) Azm(270.1) TVD(6822.11)
DLS(1.7)

#145 MD(13949.00) Inc(89.4) Azm(270.3) TVD(6822.52)
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#146 MD(14044.00) Inc(91.1) Azm(270.3) TVD(6822.11)
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#147 MD(14140.00) Inc(90.5) Azm(271.0) TVD(6820.77)
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#148 MD(14235.00) Inc(89.5) Azm(271.7) TVD(6820.77)
DLS(1.3)

#149 MD(14330.00) Inc(90.8) Azm(271.8) TVD(6820.52)
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#150 MD(14426.00) Inc(91.2) Azm(269.7) TVD(6818.85)
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#151 MD(14522.00) Inc(90.7) Azm(269.9) TVD(6817.25)
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#152 MD(14617.00) Inc(89.9) Azm(270.4) TVD(6816.76)
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#153 MD(14713.00) Inc(91.8) Azm(269.0) TVD(6815.33)
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#154 MD(14808.00) Inc(91.2) Azm(269.4) TVD(6812.85)
DLS(0.8)

#155 MD(14904.00) Inc(90.0) Azm(269.4) TVD(6811.84)
DLS(1.2)

#156 MD(14999.00) Inc(89.7) Azm(269.4) TVD(6812.09)
DLS(0.3)

#157 MD(15095.00) Inc(88.9) Azm(269.6) TVD(6813.26)
DLS(0.9)

#158 MD(15191.00) Inc(90.1) Azm(270.8) TVD(6814.10)
DLS(1.8)

#159 MD(15240.00) Inc(89.8) Azm(271.3) TVD(6814.14)
DLS(1.2)