ENSIGN

Harold 6X-232

MD
2":100’

Company: Petroleum Development Corp.
Well Name: Harold 6X-232
API: 051234575600
County/Parish: Weld
State: Colorado
Country: United States
Job number: 161-155
Field: Wattenburg
Rig Id: Ensign 161
Survey Company: Ensign
Operator: Petroleum Development Corp.
Company Man: Brady Sharp / John Falton

Daylight DD: Zach Gentry
Swing Shift DD: Tony Callow
Night DD: Eric Mays
Daylight MWD: Ryan Prue
Night MWD: Paul Wilson

Log measurements: Gamma, ROP
Depth measured from: 1651 ft
Maximum temperature:

	Depth	Date
Start:	0 ft	12-15-18
End:	17598 ft	12-21-18

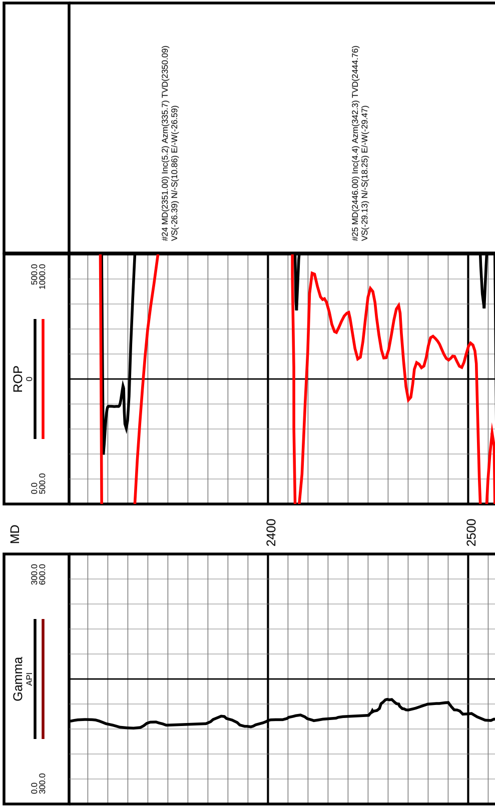
Casing	Depth	Size
Surface:	1651 ft	9 5/8"
Intermediate:		

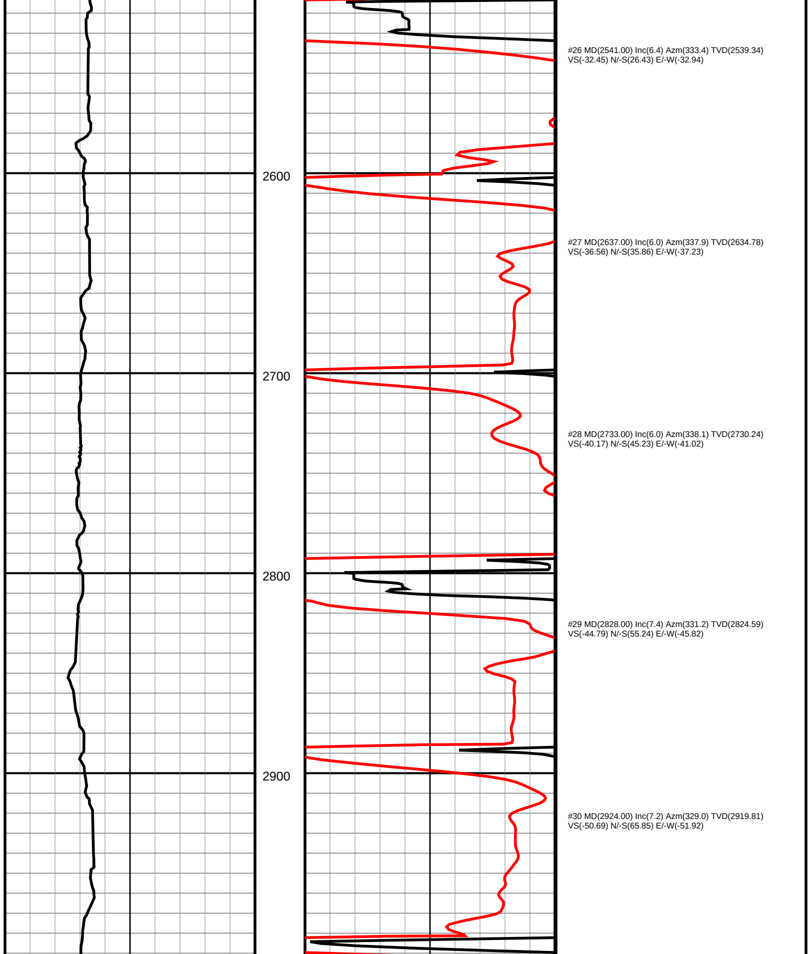
Mud Type: H2O
Density:
Viscosity:
Rm: **Rmf:** **Rmc:**

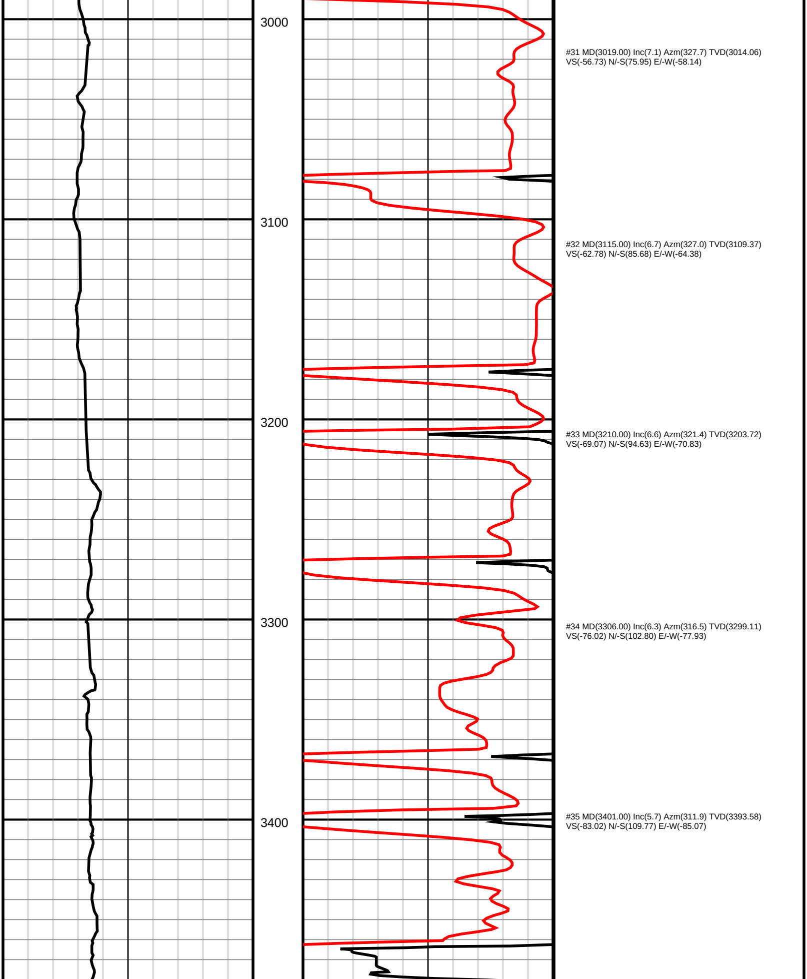
Elevations
KB: 23 ft
GL: 4788 ft
DF: 4811 ft

		Offsets		Depths		Dates	
Run	**Bit Size**	**Gamma**	**Survey**	**Start**	**End**	**Start**	**End**
1	12.25"		70.00 ft	0 ft	1651 ft	12-15-18	12-15-18
2	8.5"	65.00 ft	60.00 ft	1651 ft	14717 ft	12-16-18	12-19-18
3	8.5"	62.77 ft	57.94 ft	14717 ft	17598 ft	12-20-18	12-21-18
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.







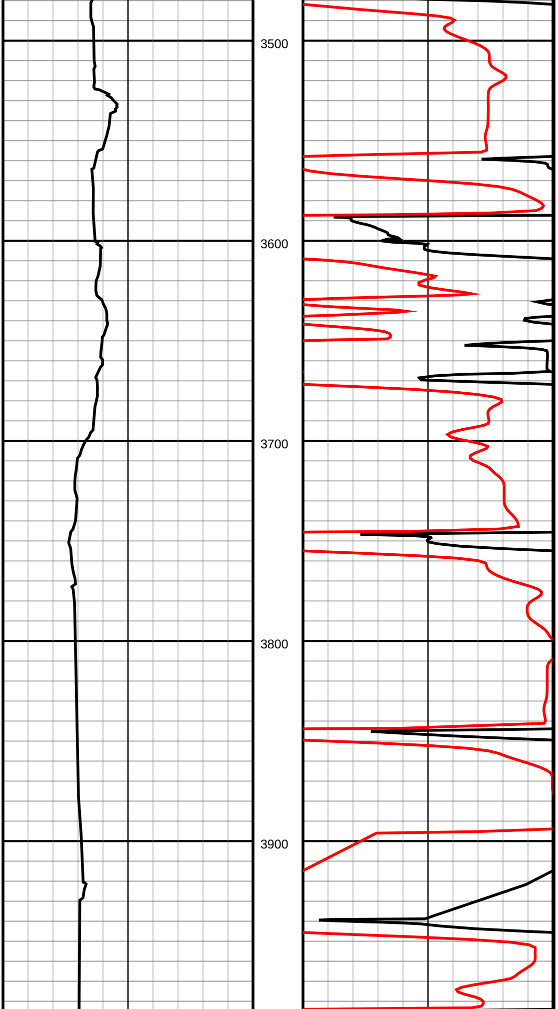
#31 MD(3019.00) Inc(7.1) Azm(327.7) TVD(3014.06)
VS(-56.73) N/-S(75.95) E/-W(-58.14)

#32 MD(3115.00) Inc(6.7) Azm(327.0) TVD(3109.37)
VS(-62.78) N/-S(85.68) E/-W(-64.38)

#33 MD(3210.00) Inc(6.6) Azm(321.4) TVD(3203.72)
VS(-69.07) N/-S(94.63) E/-W(-70.83)

#34 MD(3306.00) Inc(6.3) Azm(316.5) TVD(3299.11)
VS(-76.02) N/-S(102.80) E/-W(-77.93)

#35 MD(3401.00) Inc(5.7) Azm(311.9) TVD(3393.58)
VS(-83.02) N/-S(109.77) E/-W(-85.07)



#36 MD(3496.00) Inc(6.3) Azm(312.2) TVD(3488.06)
VS(-90.31) N/-S(116.44) E/-W(-92.48)

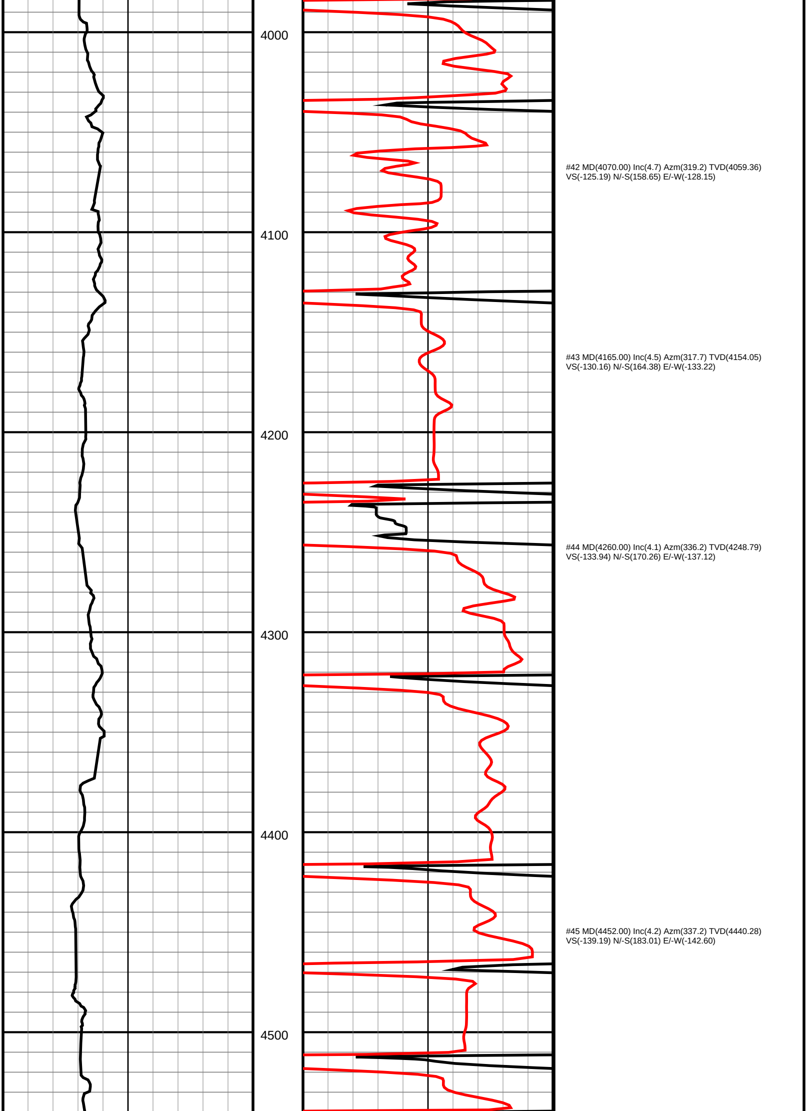
#37 MD(3592.00) Inc(6.3) Azm(318.7) TVD(3583.47)
VS(-97.59) N/-S(123.99) E/-W(-99.90)

#38 MD(3688.00) Inc(5.7) Azm(319.1) TVD(3678.94)
VS(-104.06) N/-S(131.56) E/-W(-106.52)

#39 MD(3783.00) Inc(5.5) Azm(321.0) TVD(3773.49)
VS(-109.90) N/-S(138.68) E/-W(-112.48)

#40 MD(3878.00) Inc(5.4) Azm(322.9) TVD(3868.06)
VS(-115.33) N/-S(145.79) E/-W(-118.05)

#41 MD(3974.00) Inc(4.7) Azm(322.6) TVD(3963.68)
VS(-120.32) N/-S(152.52) E/-W(-123.17)

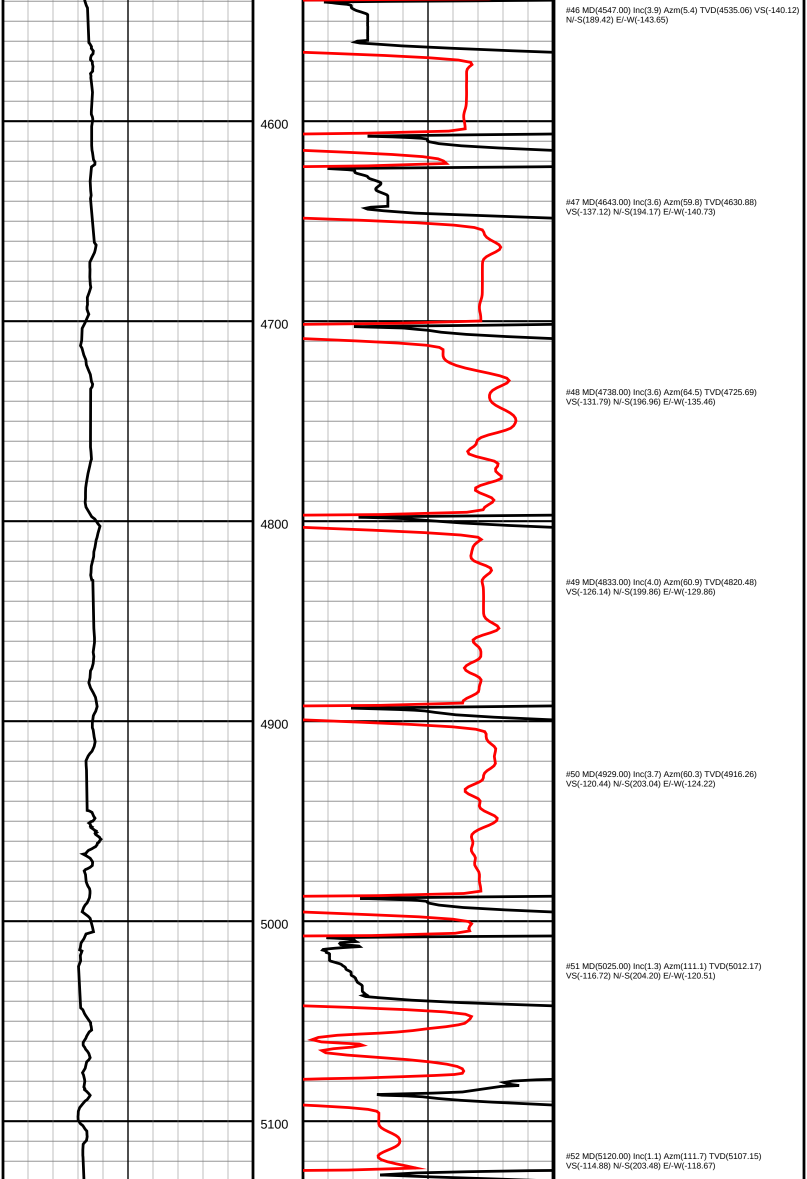


#42 MD(4070.00) Inc(4.7) Azm(319.2) TVD(4059.36)
VS(-125.19) N/-S(158.65) E/-W(-128.15)

#43 MD(4165.00) Inc(4.5) Azm(317.7) TVD(4154.05)
VS(-130.16) N/-S(164.38) E/-W(-133.22)

#44 MD(4260.00) Inc(4.1) Azm(336.2) TVD(4248.79)
VS(-133.94) N/-S(170.26) E/-W(-137.12)

#45 MD(4452.00) Inc(4.2) Azm(337.2) TVD(4440.28)
VS(-139.19) N/-S(183.01) E/-W(-142.60)



#46 MD(4547.00) Inc(3.9) Azm(5.4) TVD(4535.06) VS(-140.12) N/-S(189.42) E/-W(-143.65)

#47 MD(4643.00) Inc(3.6) Azm(59.8) TVD(4630.88) VS(-137.12) N/-S(194.17) E/-W(-140.73)

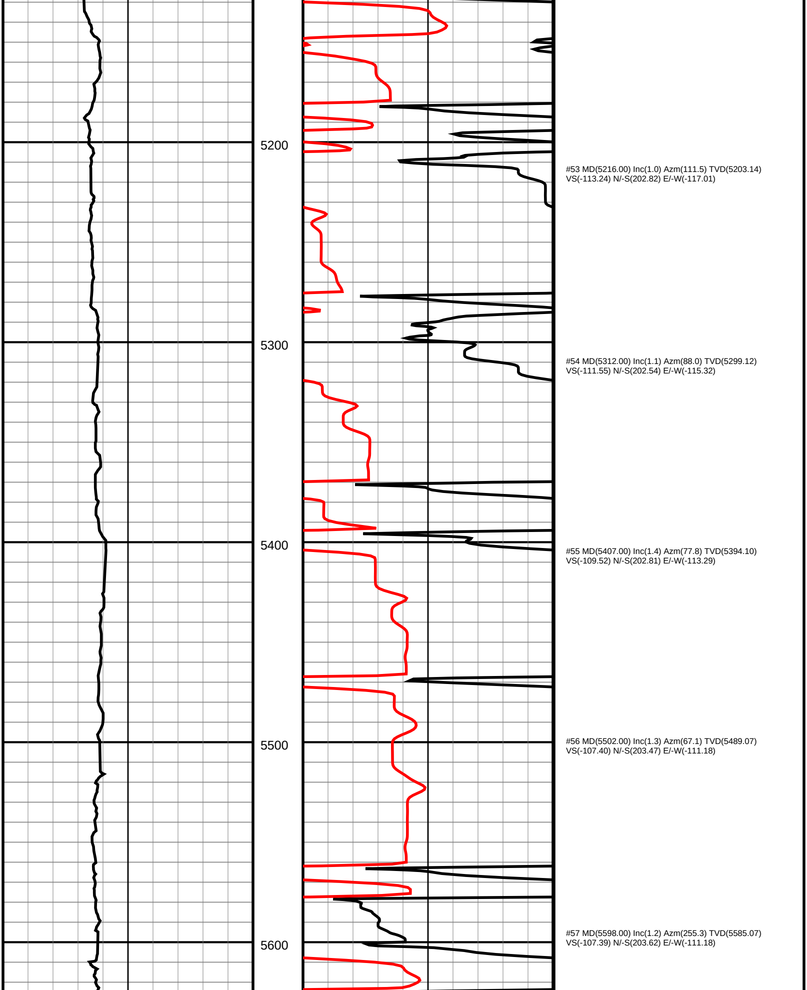
#48 MD(4738.00) Inc(3.6) Azm(64.5) TVD(4725.69) VS(-131.79) N/-S(196.96) E/-W(-135.46)

#49 MD(4833.00) Inc(4.0) Azm(60.9) TVD(4820.48) VS(-126.14) N/-S(199.86) E/-W(-129.86)

#50 MD(4929.00) Inc(3.7) Azm(60.3) TVD(4916.26) VS(-120.44) N/-S(203.04) E/-W(-124.22)

#51 MD(5025.00) Inc(1.3) Azm(111.1) TVD(5012.17) VS(-116.72) N/-S(204.20) E/-W(-120.51)

#52 MD(5120.00) Inc(1.1) Azm(111.7) TVD(5107.15) VS(-114.88) N/-S(203.48) E/-W(-118.67)



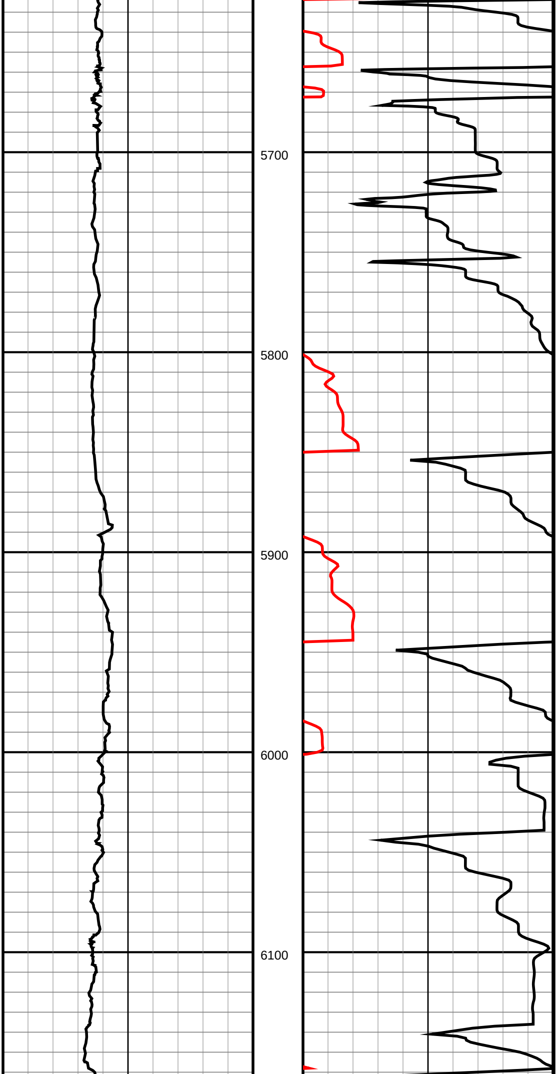
#53 MD(5216.00) Inc(1.0) Azm(111.5) TVD(5203.14)
VS(-113.24) N/-S(202.82) E/-W(-117.01)

#54 MD(5312.00) Inc(1.1) Azm(88.0) TVD(5299.12)
VS(-111.55) N/-S(202.54) E/-W(-115.32)

#55 MD(5407.00) Inc(1.4) Azm(77.8) TVD(5394.10)
VS(-109.52) N/-S(202.81) E/-W(-113.29)

#56 MD(5502.00) Inc(1.3) Azm(67.1) TVD(5489.07)
VS(-107.40) N/-S(203.47) E/-W(-111.18)

#57 MD(5598.00) Inc(1.2) Azm(255.3) TVD(5585.07)
VS(-107.39) N/-S(203.62) E/-W(-111.18)



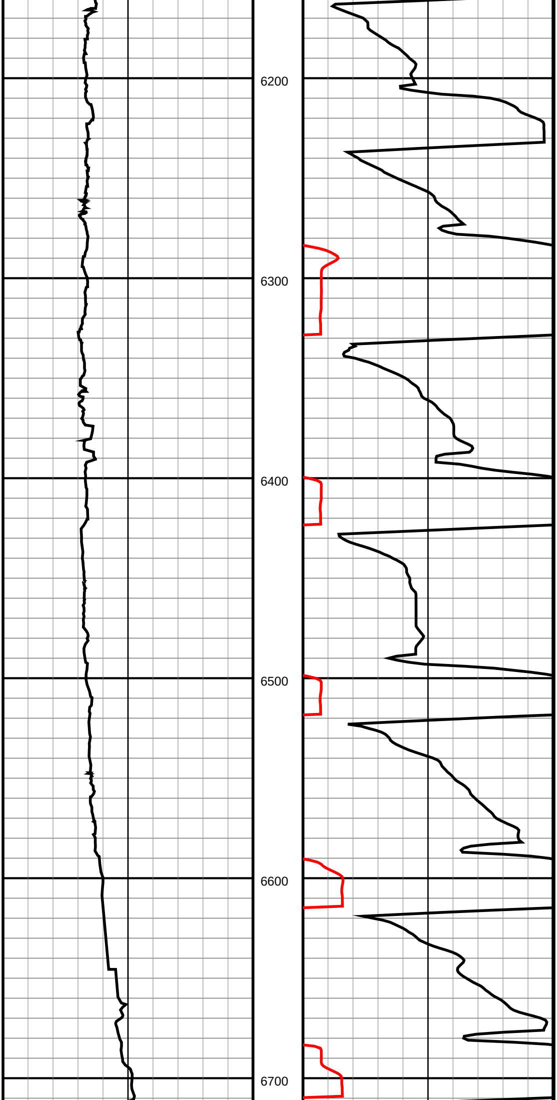
#58 MD(5694.00) Inc(1.0) Azm(242.9) TVD(5681.05)
VS(-109.08) N/-S(203.00) E/-W(-112.86)

#59 MD(5789.00) Inc(0.9) Azm(249.5) TVD(5776.04)
VS(-110.48) N/-S(202.39) E/-W(-114.24)

#60 MD(5885.00) Inc(0.3) Azm(246.5) TVD(5872.03)
VS(-111.36) N/-S(202.05) E/-W(-115.12)

#61 MD(5981.00) Inc(0.4) Azm(235.9) TVD(5968.03)
VS(-111.83) N/-S(201.78) E/-W(-115.59)

#62 MD(6076.00) Inc(0.5) Azm(293.2) TVD(6063.03)
VS(-112.44) N/-S(201.75) E/-W(-116.20)



#63 MD(6172.00) Inc(2.2) Azm(74.1) TVD(6159.01)
VS(-111.01) N/-S(202.41) E/-W(-114.78)

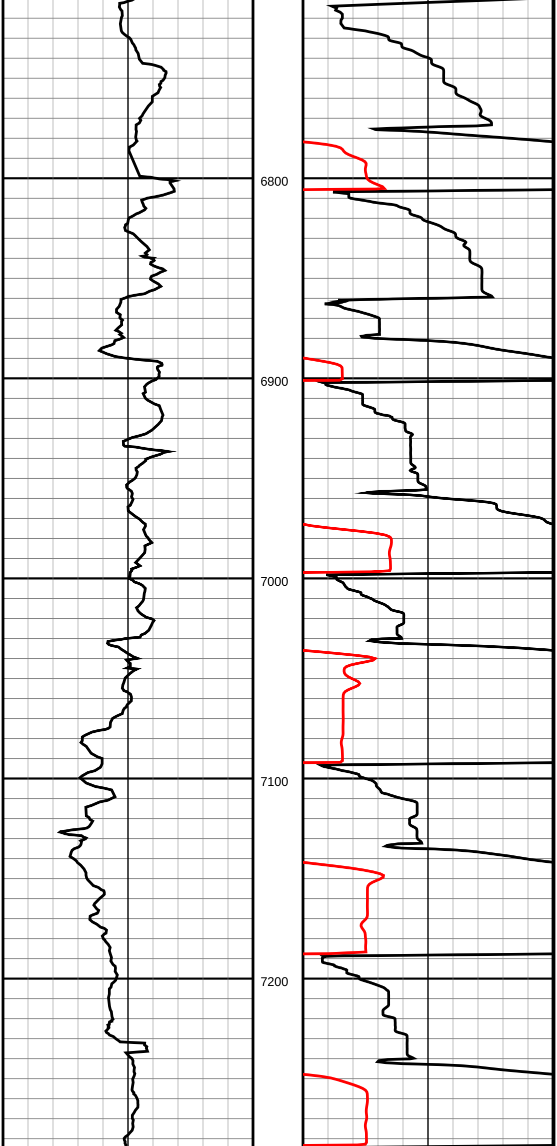
#64 MD(6267.00) Inc(10.2) Azm(83.4) TVD(6253.38)
VS(-100.86) N/-S(203.88) E/-W(-104.65)

#65 MD(6363.00) Inc(15.2) Azm(85.0) TVD(6346.99)
VS(-79.79) N/-S(205.96) E/-W(-83.62)

#66 MD(6458.00) Inc(22.7) Azm(87.3) TVD(6436.77)
VS(-48.99) N/-S(207.92) E/-W(-52.84)

#67 MD(6554.00) Inc(31.1) Azm(89.3) TVD(6522.31) VS(-5.59)
N/-S(209.11) E/-W(-9.46)

#68 MD(6650.00) Inc(39.5) Azm(90.7) TVD(6600.59) VS(49.82)
N/-S(209.03) E/-W(45.96)



#69 MD(6746.00) Inc(46.4) Azm(90.6) TVD(6670.84)
VS(115.13) N/-S(208.30) E/-W(111.30)

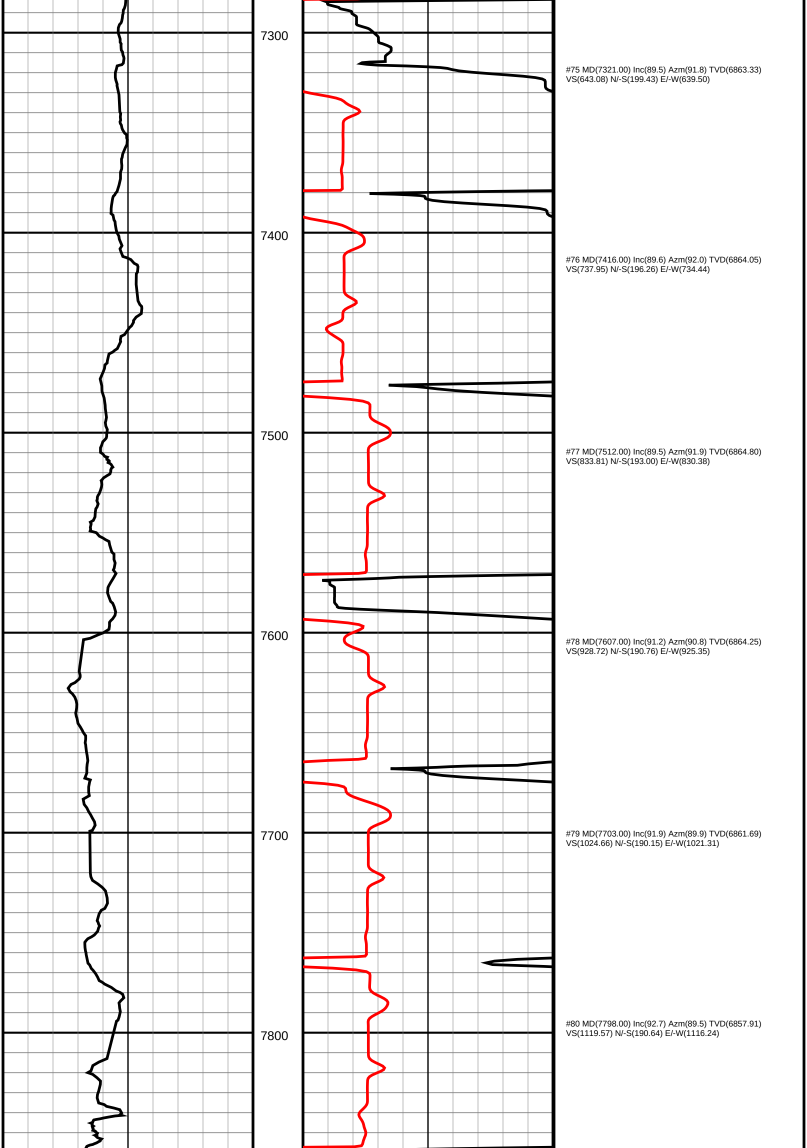
#70 MD(6842.00) Inc(55.1) Azm(89.8) TVD(6731.49)
VS(189.40) N/-S(208.10) E/-W(185.59)

#71 MD(6937.00) Inc(65.5) Azm(89.7) TVD(6778.46)
VS(271.82) N/-S(208.43) E/-W(268.01)

#72 MD(7033.00) Inc(71.2) Azm(91.7) TVD(6813.85)
VS(360.98) N/-S(207.31) E/-W(357.20)

#73 MD(7129.00) Inc(76.5) Azm(92.2) TVD(6840.51)
VS(453.04) N/-S(204.20) E/-W(449.34)

#74 MD(7225.00) Inc(83.3) Azm(90.9) TVD(6857.32)
VS(547.40) N/-S(201.69) E/-W(543.76)



#75 MD(7321.00) Inc(89.5) Azm(91.8) TVD(6863.33)
VS(643.08) N/-S(199.43) E/-W(639.50)

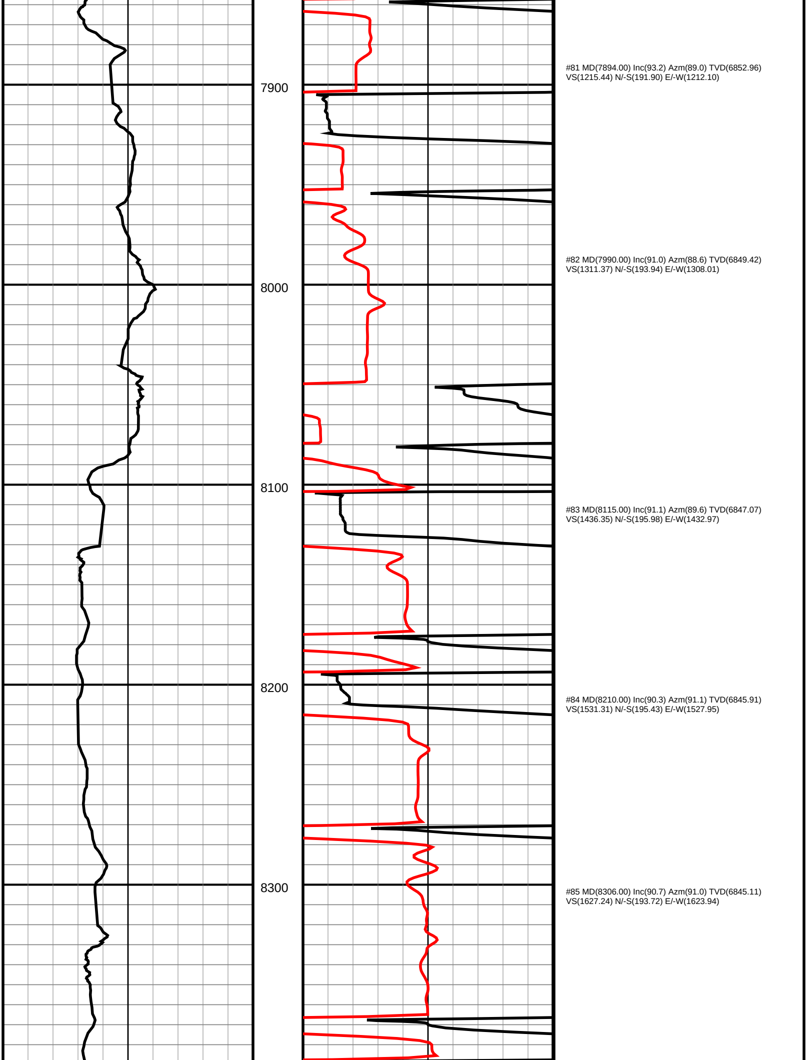
#76 MD(7416.00) Inc(89.6) Azm(92.0) TVD(6864.05)
VS(737.95) N/-S(196.26) E/-W(734.44)

#77 MD(7512.00) Inc(89.5) Azm(91.9) TVD(6864.80)
VS(833.81) N/-S(193.00) E/-W(830.38)

#78 MD(7607.00) Inc(91.2) Azm(90.8) TVD(6864.25)
VS(928.72) N/-S(190.76) E/-W(925.35)

#79 MD(7703.00) Inc(91.9) Azm(89.9) TVD(6861.69)
VS(1024.66) N/-S(190.15) E/-W(1021.31)

#80 MD(7798.00) Inc(92.7) Azm(89.5) TVD(6857.91)
VS(1119.57) N/-S(190.64) E/-W(1116.24)



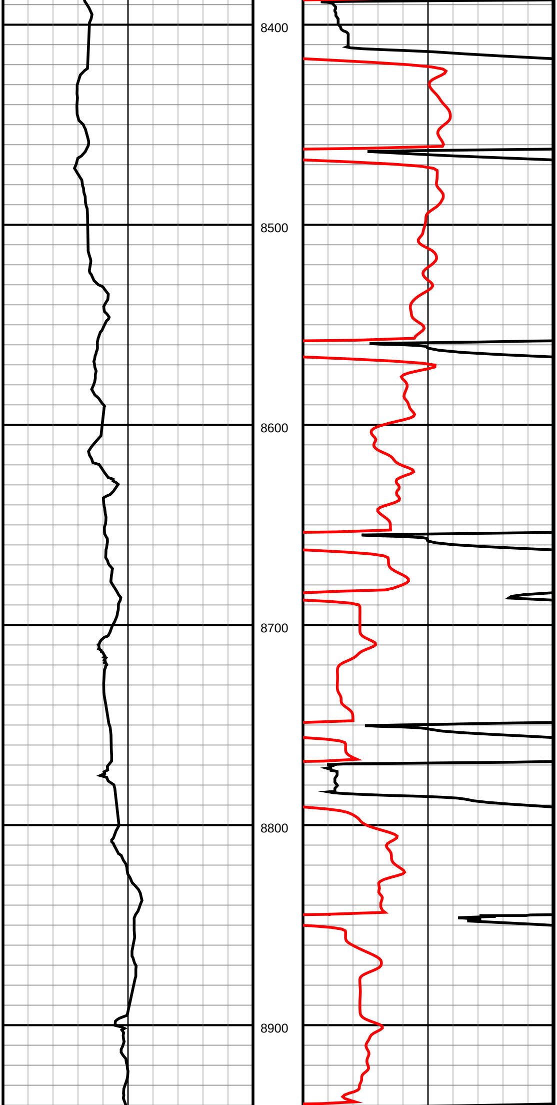
#81 MD(7894.00) Inc(93.2) Azm(89.0) TVD(6852.96)
VS(1215.44) N/-S(191.90) E/-W(1212.10)

#82 MD(7990.00) Inc(91.0) Azm(88.6) TVD(6849.42)
VS(1311.37) N/-S(193.94) E/-W(1308.01)

#83 MD(8115.00) Inc(91.1) Azm(89.6) TVD(6847.07)
VS(1436.35) N/-S(195.98) E/-W(1432.97)

#84 MD(8210.00) Inc(90.3) Azm(91.1) TVD(6845.91)
VS(1531.31) N/-S(195.43) E/-W(1527.95)

#85 MD(8306.00) Inc(90.7) Azm(91.0) TVD(6845.11)
VS(1627.24) N/-S(193.72) E/-W(1623.94)



#86 MD(8401.00) Inc(89.0) Azm(91.5) TVD(6845.36)
VS(1722.16) N/-S(191.68) E/-W(1718.91)

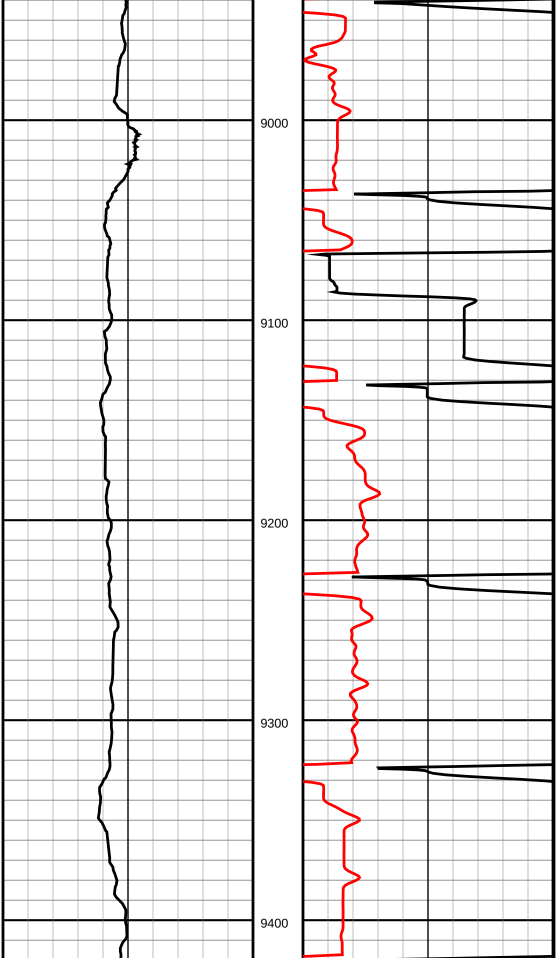
#87 MD(8497.00) Inc(88.5) Azm(91.5) TVD(6847.44)
VS(1818.04) N/-S(189.14) E/-W(1814.85)

#88 MD(8593.00) Inc(88.5) Azm(91.2) TVD(6849.98)
VS(1913.92) N/-S(186.88) E/-W(1910.79)

#89 MD(8688.00) Inc(88.1) Azm(90.8) TVD(6852.84)
VS(2008.82) N/-S(185.26) E/-W(2005.74)

#90 MD(8784.00) Inc(88.7) Azm(89.5) TVD(6855.51)
VS(2104.76) N/-S(184.98) E/-W(2101.70)

#91 MD(8879.00) Inc(88.5) Azm(89.0) TVD(6857.83)
VS(2199.73) N/-S(186.23) E/-W(2196.66)



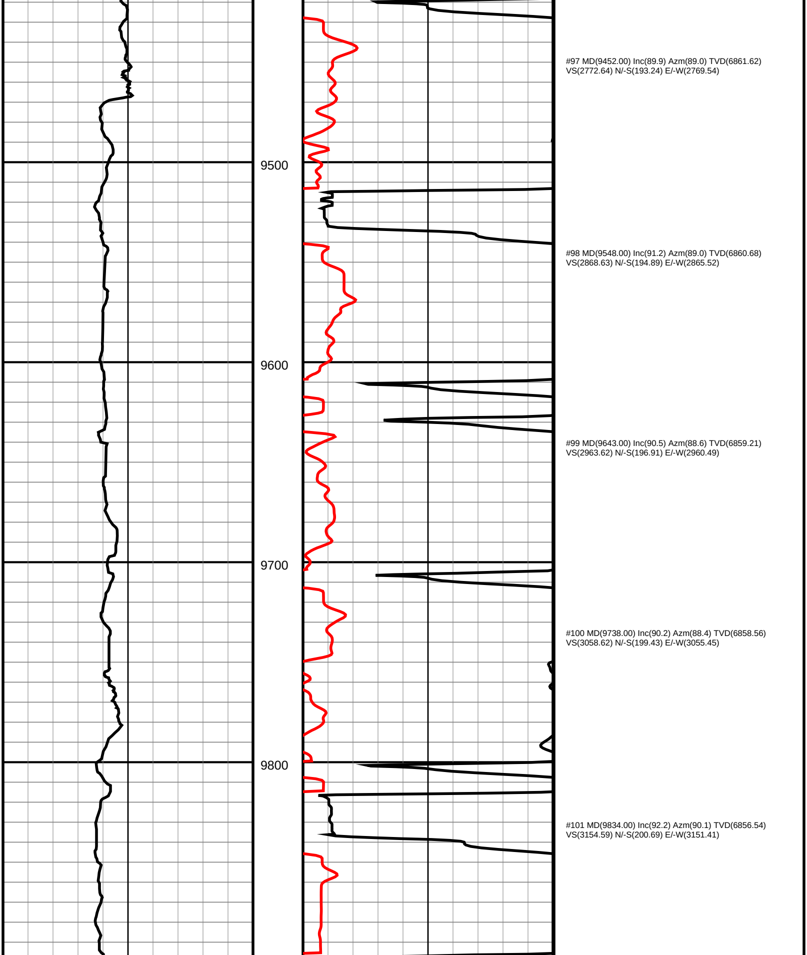
#92 MD(8975.00) Inc(88.2) Azm(89.5) TVD(6860.63)
VS(2295.69) N/-S(187.57) E/-W(2292.61)

#93 MD(9071.00) Inc(89.3) Azm(89.6) TVD(6862.73)
VS(2391.66) N/-S(188.34) E/-W(2388.58)

#94 MD(9166.00) Inc(90.3) Azm(89.1) TVD(6863.07)
VS(2486.65) N/-S(189.36) E/-W(2483.57)

#95 MD(9262.00) Inc(90.5) Azm(89.4) TVD(6862.39)
VS(2582.65) N/-S(190.60) E/-W(2579.56)

#96 MD(9357.00) Inc(90.2) Azm(89.2) TVD(6861.73)
VS(2677.64) N/-S(191.77) E/-W(2674.55)



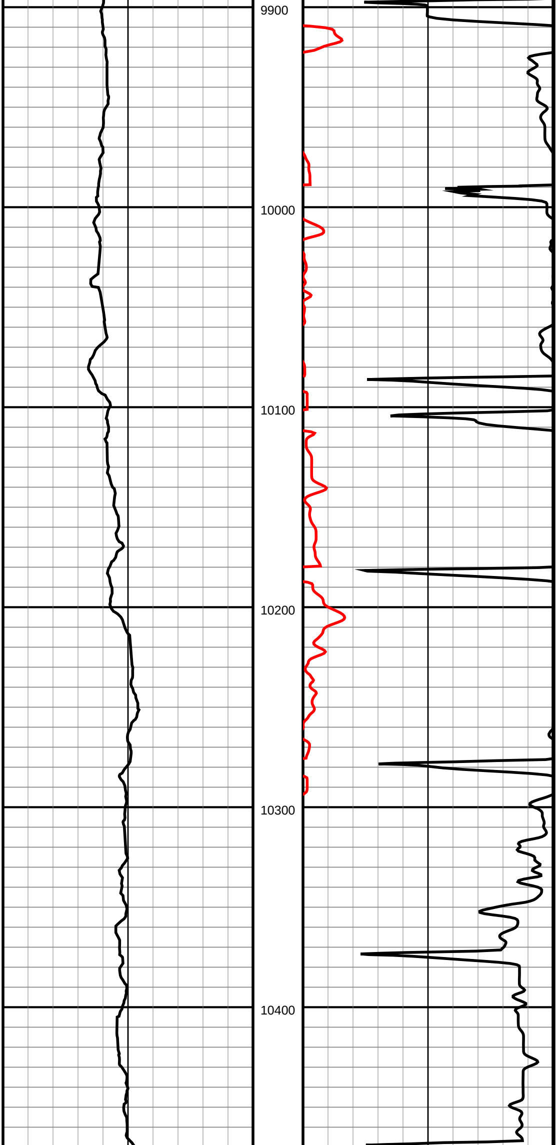
#97 MD(9452.00) Inc(89.9) Azm(89.0) TVD(6861.62)
VS(2772.64) N/-S(193.24) E/-W(2769.54)

#98 MD(9548.00) Inc(91.2) Azm(89.0) TVD(6860.68)
VS(2868.63) N/-S(194.89) E/-W(2865.52)

#99 MD(9643.00) Inc(90.5) Azm(88.6) TVD(6859.21)
VS(2963.62) N/-S(196.91) E/-W(2960.49)

#100 MD(9738.00) Inc(90.2) Azm(88.4) TVD(6858.56)
VS(3058.62) N/-S(199.43) E/-W(3055.45)

#101 MD(9834.00) Inc(92.2) Azm(90.1) TVD(6856.54)
VS(3154.59) N/-S(200.69) E/-W(3151.41)



#102 MD(9928.00) Inc(91.9) Azm(89.6) TVD(6853.21)
VS(3248.51) N/-S(200.89) E/-W(3245.35)

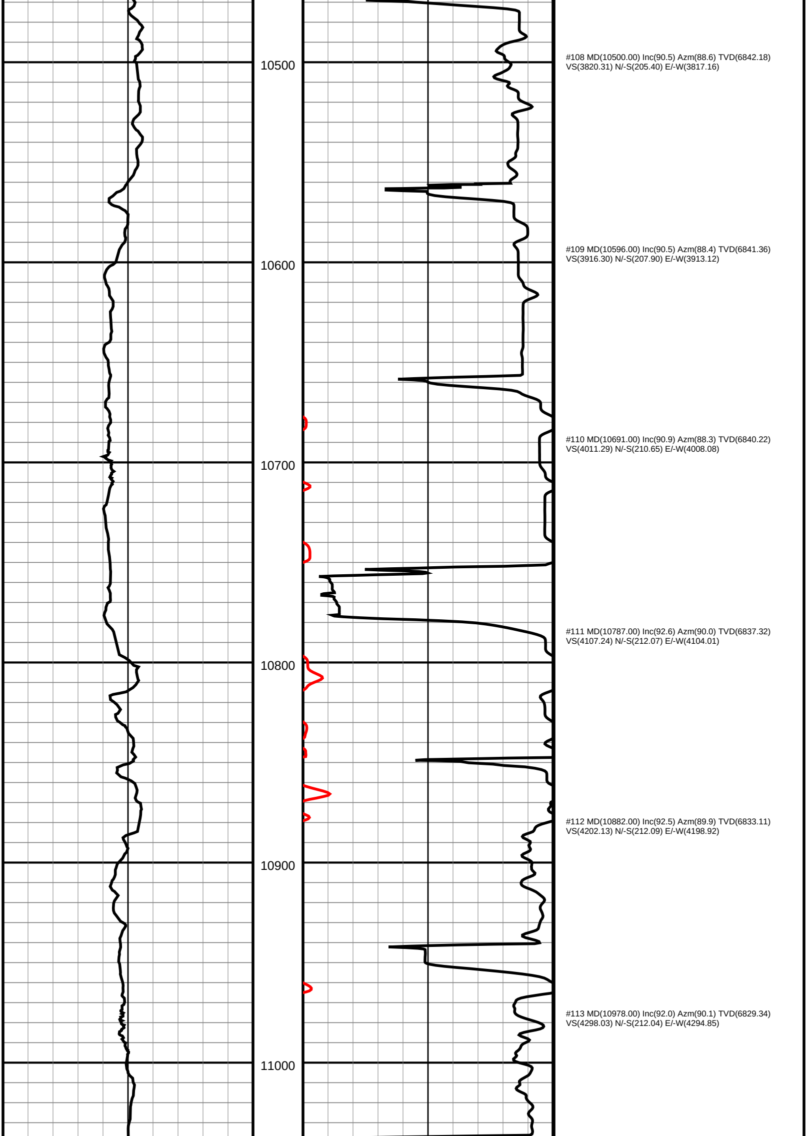
#103 MD(10024.00) Inc(91.6) Azm(89.4) TVD(6850.30)
VS(3344.46) N/-S(201.67) E/-W(3341.31)

#104 MD(10119.00) Inc(91.5) Azm(89.3) TVD(6847.72)
VS(3439.43) N/-S(202.73) E/-W(3436.26)

#105 MD(10213.00) Inc(90.7) Azm(91.7) TVD(6845.86)
VS(3533.37) N/-S(201.95) E/-W(3530.24)

#106 MD(10309.00) Inc(91.0) Azm(88.9) TVD(6844.39)
VS(3629.32) N/-S(201.47) E/-W(3626.21)

#107 MD(10404.00) Inc(90.6) Azm(88.9) TVD(6843.07)
VS(3724.31) N/-S(203.30) E/-W(3721.19)



#108 MD(10500.00) Inc(90.5) Azm(88.6) TVD(6842.18)
VS(3820.31) N/-S(205.40) E/-W(3817.16)

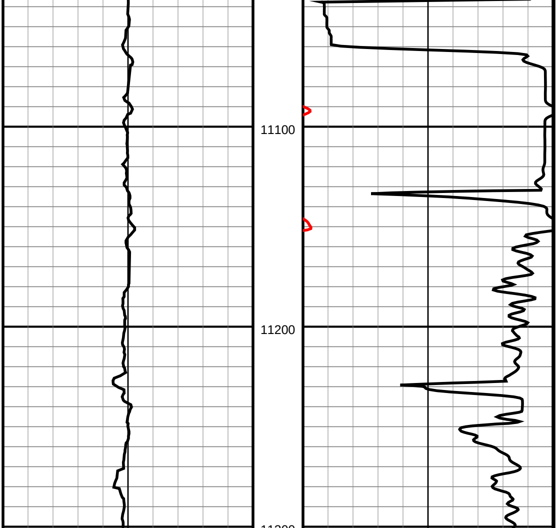
#109 MD(10596.00) Inc(90.5) Azm(88.4) TVD(6841.36)
VS(3916.30) N/-S(207.90) E/-W(3913.12)

#110 MD(10691.00) Inc(90.9) Azm(88.3) TVD(6840.22)
VS(4011.29) N/-S(210.65) E/-W(4008.08)

#111 MD(10787.00) Inc(92.6) Azm(90.0) TVD(6837.32)
VS(4107.24) N/-S(212.07) E/-W(4104.01)

#112 MD(10882.00) Inc(92.5) Azm(89.9) TVD(6833.11)
VS(4202.13) N/-S(212.09) E/-W(4198.92)

#113 MD(10978.00) Inc(92.0) Azm(90.1) TVD(6829.34)
VS(4298.03) N/-S(212.04) E/-W(4294.85)



#114 MD(11073.00) Inc(90.0) Azm(90.9) TVD(6827.66)
VS(4392.98) N/-S(211.15) E/-W(4389.82)

#115 MD(11169.00) Inc(89.5) Azm(91.0) TVD(6828.06)
VS(4488.92) N/-S(209.57) E/-W(4485.81)

#116 MD(11265.00) Inc(89.4) Azm(90.1) TVD(6828.97)
VS(4584.88) N/-S(208.69) E/-W(4581.80)

#117 MD(11361.00) Inc(89.7) Azm(90.0) TVD(6829.77)
VS(4680.85) N/-S(208.60) E/-W(4677.80)

#118 MD(11457.00) Inc(89.3) Azm(89.8) TVD(6830.63)
VS(4776.84) N/-S(208.74) E/-W(4773.79)

#119 MD(11553.00) Inc(89.2) Azm(89.5) TVD(6831.87)
VS(4872.82) N/-S(209.31) E/-W(4869.78)

#120 MD(11648.00) Inc(89.0) Azm(89.1) TVD(6833.31)
VS(4967.81) N/-S(210.51) E/-W(4964.76)

#121 MD(11744.00) Inc(89.2) Azm(91.9) TVD(6834.77)
VS(5063.75) N/-S(209.70) E/-W(5060.74)

#122 MD(11839.00) Inc(89.1) Azm(91.3) TVD(6836.19)
VS(5158.64) N/-S(207.08) E/-W(5155.69)

#123 MD(11935.00) Inc(89.0) Azm(91.1) TVD(6837.79)
VS(5254.55) N/-S(205.08) E/-W(5251.66)

#124 MD(12031.00) Inc(92.1) Azm(92.9) TVD(6836.83)
VS(5350.39) N/-S(201.67) E/-W(5347.58)

#125 MD(12126.00) Inc(91.9) Azm(92.3) TVD(6833.49)
VS(5445.13) N/-S(197.29) E/-W(5442.42)

#126 MD(12222.00) Inc(91.9) Azm(91.7) TVD(6830.26)
VS(5540.94) N/-S(193.90) E/-W(5538.30)

#127 MD(12317.00) Inc(91.9) Azm(90.8) TVD(6827.06)
VS(5635.81) N/-S(191.80) E/-W(5633.22)

#128 MD(12413.00) Inc(92.1) Azm(90.6) TVD(6823.70)
VS(5731.70) N/-S(190.58) E/-W(5729.16)

#129 MD(12509.00) Inc(90.3) Azm(91.4) TVD(6821.72)
VS(5827.61) N/-S(188.89) E/-W(5825.12)

#130 MD(12604.00) Inc(90.0) Azm(90.9) TVD(6821.53)
VS(5922.54) N/-S(186.97) E/-W(5920.10)

#131 MD(12700.00) Inc(90.0) Azm(90.6) TVD(6821.56)
VS(6018.49) N/-S(185.73) E/-W(6016.09)

#132 MD(12796.00) Inc(90.8) Azm(91.3) TVD(6820.84)
VS(6114.43) N/-S(184.17) E/-W(6112.07)

#133 MD(12892.00) Inc(90.4) Azm(91.4) TVD(6819.81)
VS(6210.34) N/-S(181.93) E/-W(6208.04)

#134 MD(12988.00) Inc(90.3) Azm(91.1) TVD(6819.22)
VS(6306.26) N/-S(179.86) E/-W(6304.01)

#135 MD(13083.00) Inc(90.6) Azm(91.0) TVD(6818.46)
VS(6401.19) N/-S(178.08) E/-W(6398.99)

#136 MD(13178.00) Inc(90.3) Azm(91.0) TVD(6817.72)
VS(6496.13) N/-S(176.35) E/-W(6493.98)

#137 MD(13275.00) Inc(90.5) Azm(90.6) TVD(6817.03)
VS(6593.07) N/-S(174.92) E/-W(6590.96)

#138 MD(13371.00) Inc(90.6) Azm(91.1) TVD(6816.10)
VS(6689.01) N/-S(173.44) E/-W(6686.95)

#139 MD(13467.00) Inc(90.7) Azm(91.0) TVD(6815.01)
VS(6784.94) N/-S(171.69) E/-W(6782.92)

#140 MD(13563.00) Inc(90.8) Azm(90.5) TVD(6813.72)
VS(6880.88) N/-S(170.44) E/-W(6878.91)

#141 MD(13658.00) Inc(91.2) Azm(90.4) TVD(6812.01)
VS(6975.83) N/-S(169.63) E/-W(6973.89)

#142 MD(13753.00) Inc(91.0) Azm(88.8) TVD(6810.15)
VS(7070.80) N/-S(170.26) E/-W(7068.86)

#143 MD(13848.00) Inc(90.5) Azm(88.5) TVD(6808.90)
VS(7165.80) N/-S(172.46) E/-W(7163.83)

#144 MD(13944.00) Inc(90.5) Azm(87.7) TVD(6808.03)
VS(7261.78) N/-S(175.58) E/-W(7259.78)

#145 MD(14040.00) Inc(90.3) Azm(88.5) TVD(6807.30)
VS(7357.77) N/-S(178.74) E/-W(7355.72)

#146 MD(14135.00) Inc(90.3) Azm(88.1) TVD(6806.77)
VS(7452.76) N/-S(181.59) E/-W(7450.68)

#147 MD(14232.00) Inc(90.4) Azm(87.7) TVD(6806.18)
VS(7549.74) N/-S(185.21) E/-W(7547.61)

#148 MD(14327.00) Inc(90.7) Azm(87.4) TVD(6805.31)
VS(7644.71) N/-S(189.30) E/-W(7642.51)

#149 MD(14423.00) Inc(90.0) Azm(89.3) TVD(6804.75)
VS(7740.70) N/-S(192.02) E/-W(7738.47)

#150 MD(14519.00) Inc(90.0) Azm(88.6) TVD(6804.75)
VS(7836.70) N/-S(193.76) E/-W(7834.45)

#151 MD(14615.00) Inc(90.5) Azm(88.2) TVD(6804.33)
VS(7932.69) N/-S(196.46) E/-W(7930.41)

#152 MD(14710.00) Inc(90.4) Azm(88.1) TVD(6803.58)
VS(8027.68) N/-S(199.53) E/-W(8025.36)

#153 MD(14806.00) Inc(89.8) Azm(87.6) TVD(6803.39)
VS(8123.66) N/-S(203.10) E/-W(8121.29)

#154 MD(14902.00) Inc(89.8) Azm(87.4) TVD(6803.64)
VS(8219.63) N/-S(207.26) E/-W(8217.20)

#155 MD(14998.00) Inc(87.5) Azm(88.8) TVD(6805.87)
VS(8315.59) N/-S(210.39) E/-W(8313.12)

#156 MD(15093.00) Inc(89.3) Azm(89.0) TVD(6808.54)
VS(8410.54) N/-S(212.21) E/-W(8408.06)

#157 MD(15188.00) Inc(89.8) Azm(88.8) TVD(6809.32)
VS(8505.54) N/-S(214.03) E/-W(8503.04)

#158 MD(15283.00) Inc(89.6) Azm(88.2) TVD(6809.84)
VS(8600.54) N/-S(216.44) E/-W(8598.00)

#159 MD(15378.00) Inc(88.8) Azm(90.4) TVD(6811.11)
VS(8695.52) N/-S(217.58) E/-W(8692.98)

#160 MD(15474.00) Inc(88.9) Azm(89.6) TVD(6812.99)
VS(8791.48) N/-S(217.60) E/-W(8788.96)

#161 MD(15569.00) Inc(89.2) Azm(91.7) TVD(6814.52)
VS(8886.42) N/-S(216.52) E/-W(8883.94)

#162 MD(15665.00) Inc(89.2) Azm(91.8) TVD(6815.81)
VS(8982.30) N/-S(213.52) E/-W(8979.88)

#163 MD(15760.00) Inc(91.4) Azm(93.1) TVD(6815.26)
VS(9077.10) N/-S(209.39) E/-W(9074.78)

#164 MD(15855.00) Inc(91.7) Azm(92.8) TVD(6812.66)
VS(9171.84) N/-S(204.52) E/-W(9169.62)

#165 MD(15951.00) Inc(91.6) Azm(92.2) TVD(6809.93)
VS(9267.62) N/-S(200.39) E/-W(9265.49)

#166 MD(16046.00) Inc(91.6) Azm(91.4) TVD(6807.31)
VS(9362.46) N/-S(197.44) E/-W(9360.41)

#167 MD(16142.00) Inc(91.9) Azm(90.8) TVD(6804.40)
VS(9458.35) N/-S(195.58) E/-W(9456.35)

#168 MD(16237.00) Inc(92.2) Azm(90.3) TVD(6800.98)
VS(9553.25) N/-S(194.64) E/-W(9551.28)

#169 MD(16332.00) Inc(92.3) Azm(89.8) TVD(6797.22)
VS(9648.16) N/-S(194.61) E/-W(9646.21)

#170 MD(16428.00) Inc(90.2) Azm(89.8) TVD(6795.11)
VS(9744.12) N/-S(195.02) E/-W(9742.18)

#171 MD(16524.00) Inc(90.7) Azm(89.3) TVD(6794.36)
VS(9840.11) N/-S(195.83) E/-W(9838.17)

#172 MD(16619.00) Inc(89.6) Azm(90.4) TVD(6794.12)
VS(9935.10) N/-S(196.10) E/-W(9933.17)

#173 MD(16714.00) Inc(89.7) Azm(89.9) TVD(6794.69)
VS(10030.07) N/-S(195.90) E/-W(10028.17)

#174 MD(16809.00) Inc(90.3) Azm(89.3) TVD(6794.62)
VS(10125.07) N/-S(196.57) E/-W(10123.16)

#175 MD(16905.00) Inc(91.3) Azm(89.1) TVD(6793.26)
VS(10221.05) N/-S(197.86) E/-W(10219.14)

#176 MD(17000.00) Inc(90.5) Azm(90.2) TVD(6791.76)
VS(10316.03) N/-S(198.39) E/-W(10314.13)

#177 MD(17096.00) Inc(89.7) Azm(90.2) TVD(6791.52)
VS(10412.01) N/-S(198.00) E/-W(10410.13)

#178 MD(17191.00) Inc(90.4) Azm(90.0) TVD(6791.41)
VS(10506.99) N/-S(197.76) E/-W(10505.12)

#179 MD(17286.00) Inc(91.4) Azm(89.9) TVD(6789.90)
VS(10601.96) N/-S(197.80) E/-W(10600.11)

#180 MD(17382.00) Inc(90.7) Azm(90.7) TVD(6788.16)
VS(10697.91) N/-S(197.29) E/-W(10696.09)

#181 MD(17476.00) Inc(91.0) Azm(90.1) TVD(6786.81)
VS(10791.87) N/-S(196.61) E/-W(10790.08)

#182 MD(17538.00) Inc(91.1) Azm(90.0) TVD(6785.67)
VS(10853.85) N/-S(196.52) E/-W(10852.07)