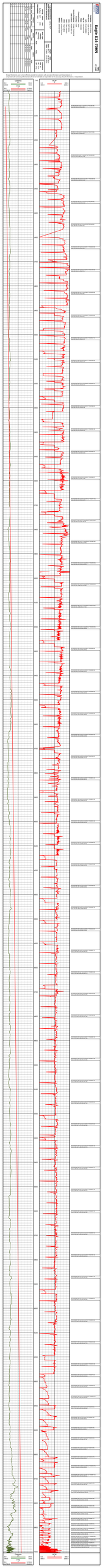

ENSIGN
Directional Services

Eagle E14-79HN

TVD
2":100'

Company: Noble Energy
Well Name: Eagle E14-79HN
API: 05-123-38863
Rig Id: Precision 829
State: Colorado
County/Parish: Weld
Country: USA
Survey Company: Ensign Directional
Job number: PD829-207-19
DD1 Zach Gentry
DD2 Colby Hansen
DD3 Tony Callow
MWD1 Andrew Demrow
MWD2 Johnnie Kibel

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

	Depth	Date
Start:	667 ft	06-26-2014
End:	11288 ft	07-02-2014

Casing	Depth	Size
Surface:	657	9 5/8
Intermediate:	7408	7

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

Elevations
KB: 16
GL: 4737
DF: 4753

Run	Bit Size	Offsets		Depths		Dates	
		Gamma	Survey	Start	End	Start	End
1	13.5			0	667	06-25-2014	06-25-2014
2	8.75	53.45	48.45	667	7408	06-26-2014	06-28-2014
3	6.125	65.82	60.82	7408	11288	06-30-2014	07-02-2014
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.

#7 MD(1063.00) Inc(0.7) Azm(153.1) TVD(1062.95)
VS(2.62) NS(2.12) EW(-4.65)

#8 MD(1171.00) Inc(0.9) Azm(156.1) TVD(1170.94)
VS(1.20) NS(0.76) EW(-4.01)

#9 MD(1266.00) Inc(0.7) Azm(157.5) TVD(1265.93)
VS(-0.07) NS(-0.46) EW(-3.48)

#10 MD(1363.00) Inc(0.3) Azm(166.4) TVD(1362.93)
VS(-0.89) NS(-1.25) EW(-3.20)

#11 MD(1457.00) Inc(1.1) Azm(14.1) TVD(1456.92)
VS(-0.29) NS(-0.62) EW(-2.92)

#12 MD(1550.00) Inc(1.1) Azm(18.3) TVD(1549.91)
VS(1.36) NS(1.10) EW(-2.42)

#13 MD(1643.00) Inc(0.7) Azm(345.7) TVD(1642.89)
VS(2.73) NS(2.49) EW(-2.28)

#14 MD(1737.00) Inc(0.4) Azm(281.0) TVD(1736.89)
VS(3.40) NS(3.11) EW(-2.74)

#15 MD(1830.00) Inc(1.1) Azm(296.8) TVD(1829.88)
VS(3.98) NS(3.58) EW(-3.86)

#16 MD(1924.00) Inc(2.7) Azm(265.6) TVD(1923.83)
VS(4.55) NS(3.81) EW(-6.87)

#17 MD(2017.00) Inc(3.1) Azm(268.2) TVD(2016.71)
VS(4.82) NS(3.57) EW(-11.57)

#18 MD(2110.00) Inc(3.9) Azm(272.1) TVD(2109.54)
VS(5.48) NS(3.60) EW(-17.24)

#19 MD(2205.00) Inc(4.7) Azm(263.8) TVD(2204.27)
VS(5.97) NS(3.30) EW(-24.34)

#20 MD(2298.00) Inc(6.5) Azm(267.0) TVD(2296.82)
VS(6.28) NS(2.62) EW(-33.39)

#21 MD(2393.00) Inc(6.8) Azm(261.3) TVD(2391.18)
VS(6.36) NS(1.48) EW(-44.32)

#22 MD(2486.00) Inc(8.3) Azm(262.8) TVD(2483.37)
VS(6.03) NS(-0.19) EW(-56.42)

#23 MD(2593.00) Inc(9.6) Azm(263.9) TVD(2589.07)
VS(5.95) NS(-2.11) EW(-72.95)

#24 MD(2683.00) Inc(10.9) Azm(263.5) TVD(2677.63)
VS(5.95) NS(-3.87) EW(-88.87)

#25 MD(2773.00) Inc(12.1) Azm(259.1) TVD(2765.83)
VS(5.18) NS(-6.62) EW(-106.59)

#26 MD(2862.00) Inc(12.1) Azm(259.9) TVD(2852.85)
VS(3.82) NS(-10.02) EW(-124.93)

#27 MD(2952.00) Inc(11.6) Azm(256.7) TVD(2940.93)
VS(2.10) NS(-13.75) EW(-143.03)

#28 MD(3041.00) Inc(11.3) Azm(262.4) TVD(3028.16)
VS(0.82) NS(-16.96) EW(-160.38)

#29 MD(3131.00) Inc(11.1) Azm(259.7) TVD(3116.45)
VS(0.03) NS(-19.68) EW(-177.64)

#30 MD(3220.00) Inc(10.1) Azm(256.4) TVD(3203.93)
VS(-1.55) NS(-23.04) EW(-193.66)

#31 MD(3310.00) Inc(9.4) Azm(265.0) TVD(3292.63)
VS(-3.38) NS(-25.54) EW(-208.65)

#32 MD(3400.00) Inc(8.5) Azm(262.5) TVD(3381.54)
VS(-2.35) NS(-27.05) EW(-222.57)

#33 MD(3489.00) Inc(8.2) Azm(263.4) TVD(3469.59)
VS(-2.51) NS(-28.64) EW(-235.39)

#34 MD(3579.00) Inc(8.9) Azm(261.9) TVD(3558.59)
VS(-2.76) NS(-30.36) EW(-248.66)

#35 MD(3668.00) Inc(8.4) Azm(260.6) TVD(3646.58)
VS(-3.32) NS(-32.39) EW(-261.89)

#36 MD(3758.00) Inc(8.8) Azm(265.6) TVD(3735.57)
VS(-3.44) NS(-33.99) EW(-275.24)

#37 MD(3848.00) Inc(9.4) Azm(263.7) TVD(3824.44)
VS(-3.20) NS(-35.33) EW(-289.41)

#38 MD(3937.00) Inc(8.5) Azm(262.6) TVD(3912.35)
VS(-3.32) NS(-36.97) EW(-303.16)

#39 MD(4027.00) Inc(8.6) Azm(260.6) TVD(4001.35)
VS(-3.80) NS(-38.93) EW(-316.39)

#40 MD(4116.00) Inc(7.3) Azm(257.6) TVD(4089.50)
VS(-4.76) NS(-41.23) EW(-328.48)

#41 MD(4206.00) Inc(9.0) Azm(261.7) TVD(4178.58)
VS(-5.61) NS(-43.47) EW(-341.03)

#42 MD(4295.00) Inc(7.8) Azm(257.7) TVD(4266.63)
VS(-6.47) NS(-45.76) EW(-353.82)

#43 MD(4385.00) Inc(8.1) Azm(255.9) TVD(4355.76)
VS(-7.97) NS(-48.61) EW(-365.94)

#44 MD(4475.00) Inc(8.5) Azm(258.4) TVD(4444.82)
VS(-9.43) NS(-51.49) EW(-378.60)

#45 MD(4564.00) Inc(9.1) Azm(262.0) TVD(4532.77)
VS(-10.24) NS(-53.79) EW(-392.01)

#46 MD(4654.00) Inc(7.4) Azm(257.0) TVD(4621.84)
VS(-11.12) NS(-56.09) EW(-404.71)

#47 MD(4743.00) Inc(8.1) Azm(259.6) TVD(4710.03)
VS(-12.23) NS(-58.51) EW(-416.46)

#48 MD(4833.00) Inc(6.9) Azm(257.5) TVD(4799.26)
VS(-13.27) NS(-60.82) EW(-427.98)

#49 MD(4923.00) Inc(5.5) Azm(256.7) TVD(4888.73)
VS(-14.37) NS(-62.99) EW(-437.45)

#50 MD(5012.00) Inc(4.5) Azm(253.6) TVD(4977.39)
VS(-15.50) NS(-64.95) EW(-444.95)

#51 MD(5102.00) Inc(4.3) Azm(253.8) TVD(5067.12)
VS(-16.69) NS(-66.89) EW(-451.58)

#52 MD(5191.00) Inc(3.6) Azm(241.5) TVD(5155.91)
VS(-18.32) NS(-69.15) EW(-457.24)

#53 MD(5281.00) Inc(1.5) Azm(258.1) TVD(5245.82)
VS(-19.50) NS(-70.75) EW(-460.88)

#54 MD(5371.00) Inc(1.4) Azm(217.8) TVD(5335.79)
VS(-20.40) NS(-71.86) EW(-462.70)

#55 MD(5460.00) Inc(1.1) Azm(194.5) TVD(5424.77)
VS(-21.98) NS(-73.54) EW(-463.58)

#56 MD(5550.00) Inc(1.2) Azm(206.1) TVD(5514.75)
VS(-23.59) NS(-75.23) EW(-464.21)

#57 MD(5639.00) Inc(0.4) Azm(128.4) TVD(5603.75)
VS(-24.59) NS(-76.26) EW(-464.38)

#58 MD(5729.00) Inc(0.7) Azm(144.9) TVD(5693.74)
VS(-25.29) NS(-76.90) EW(-463.82)

#59 MD(5819.00) Inc(1.3) Azm(158.9) TVD(5783.73)
VS(-26.76) NS(-78.30) EW(-463.14)

#60 MD(5908.00) Inc(1.6) Azm(161.5) TVD(5872.70)
VS(-28.95) NS(-80.42) EW(-462.38)

#61 MD(5998.00) Inc(1.5) Azm(107.3) TVD(5962.67)
VS(-30.65) NS(-81.97) EW(-460.85)

#62 MD(6087.00) Inc(1.5) Azm(137.8) TVD(6051.64)
VS(-32.07) NS(-83.18) EW(-458.96)

#63 MD(6177.00) Inc(1.8) Azm(161.4) TVD(6141.60)
VS(-34.40) NS(-85.39) EW(-457.72)

#64 MD(6267.00) Inc(1.3) Azm(209.8) TVD(6231.58)
VS(-36.61) NS(-87.61) EW(-457.77)

#65 MD(6312.00) Inc(0.4) Azm(231.9) TVD(6276.57)
VS(-37.10) NS(-88.15) EW(-458.15)

#66 MD(6356.00) Inc(5.3) Azm(353.8) TVD(6320.51)
VS(-35.15) NS(-86.23) EW(-458.49)

#67 MD(6401.00) Inc(12.0) Azm(358.6) TVD(6364.97)
VS(-28.40) NS(-79.48) EW(-458.83)

#68 MD(6446.00) Inc(16.2) Azm(1.0) TVD(6408.61)
VS(-17.51) NS(-68.52) EW(-458.84)

#69 MD(6491.00) Inc(17.9) Azm(1.0) TVD(6451.63)
VS(-4.43) NS(-55.33) EW(-458.61)

#70 MD(6536.00) Inc(19.4) Azm(2.7) TVD(6494.26)
VS(9.82) NS(-40.95) EW(-458.13)

#71 MD(6581.00) Inc(23.2) Azm(2.9) TVD(6536.18)
VS(25.95) NS(-24.62) EW(-457.33)

#72 MD(6626.00) Inc(29.5) Azm(2.6) TVD(6576.49)
VS(45.67) NS(-4.68) EW(-456.38)

#73 MD(6670.00) Inc(34.5) Azm(1.3) TVD(6613.79)
VS(68.73) NS(18.61) EW(-455.61)

#74 MD(6715.00) Inc(34.9) Azm(359.4) TVD(6650.79)
VS(94.17) NS(44.23) EW(-455.45)

#75 MD(6760.00) Inc(37.5) Azm(357.8) TVD(6687.10)
VS(120.65) NS(70.79) EW(-456.11)

#76 MD(6805.00) Inc(41.9) Azm(0.9) TVD(6721.72)
VS(149.24) NS(99.52) EW(-456.40)

#77 MD(6850.00) Inc(45.1) Azm(2.2) TVD(6754.35)
VS(179.91) NS(130.48) EW(-455.55)

#78 MD(6895.00) Inc(47.7) Azm(2.2) TVD(6785.38)
VS(212.14) NS(163.04) EW(-454.30)

#79 MD(6939.00) Inc(49.1) Azm(2.3) TVD(6814.60)
VS(244.67) NS(195.92) EW(-453.01)

#80 MD(6984.00) Inc(54.0) Azm(2.2) TVD(6842.57)
VS(279.51) NS(231.12) EW(-451.63)

#81 MD(7029.00) Inc(59.7) Azm(2.4) TVD(6867.17)
VS(316.74) NS(268.75) EW(-450.12)

#82 MD(7074.00) Inc(62.8) Azm(2.9) TVD(6888.81)
VS(355.70) NS(308.16) EW(-448.29)

#83 MD(7118.00) Inc(65.2) Azm(1.5) TVD(6908.10)
VS(394.81) NS(347.67) EW(-446.78)

#84 MD(7163.00) Inc(69.0) Azm(0.0) TVD(6925.61)
VS(435.94) NS(389.11) EW(-446.24)

#85 MD(7208.00) Inc(71.4) Azm(359.1) TVD(6940.85)
VS(478.05) NS(431.45) EW(-446.58)

#86 MD(7253.00) Inc(73.3) Azm(359.8) TVD(6954.49)
VS(520.71) NS(474.32) EW(-446.99)

#87 MD(7298.00) Inc(75.3) Azm(0.0) TVD(6966.67)
VS(563.78) NS(517.64) EW(-447.06)

#132 MD(11226.00) Inc(92.1) Azm(356.5) TVD(6979.38)
VS(4471.01) NS(4441.38) EW(-514.35)