

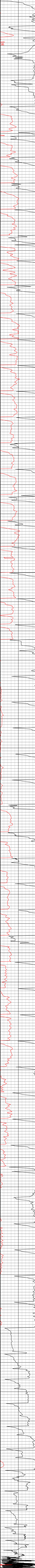
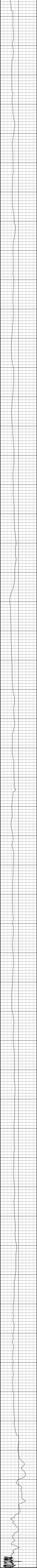


LDS 1W-414

TVD
2"=100'

Company: PDC Energy
Well Name: LDS 1W-414
API: 05123412050000
Rig Id: Ensign 161

State: Colorado
County/Parish: Weld
Survey Company: Ensign Directional Services
Job number: 161-39



	#16 MD(1587.00) Inc(1.1) Azm(256.5) TVD(1588.77) VSI(21.49) NSI(-1.59) EW(21.48)
	#17 MD(1676.00) Inc(1.1) Azm(191.3) TVD(1675.76) VSI(22.04) NSI(-2.30) EW(21.98)
	#18 MD(1766.00) Inc(2.8) Azm(145.3) TVD(1765.71) VSI(20.63) NSI(-0.07) EW(20.31)
	#19 MD(1856.00) Inc(3.3) Azm(129.1) TVD(1854.60) VSI(17.57) NSI(-3.39) EW(17.37)
	#20 MD(1946.00) Inc(4.3) Azm(122.8) TVD(1944.40) VSI(12.81) NSI(-11.81) EW(12.53)
	#21 MD(2034.00) Inc(5.6) Azm(119.4) TVD(2033.06) VSI(8.30) NSI(-15.75) EW(8.94)
	#22 MD(2124.00) Inc(6.8) Azm(116.1) TVD(2122.54) VSI(2.18) NSI(-20.25) EW(2.67)
	#23 MD(2215.00) Inc(7.3) Azm(119.2) TVD(2210.84) VSI(11.89) NSI(-25.40) EW(12.47)
	#24 MD(2305.00) Inc(8.3) Azm(115.7) TVD(2300.13) VSI(21.72) NSI(-30.67) EW(22.47)
	#25 MD(2392.00) Inc(7.3) Azm(118.4) TVD(2388.45) VSI(17.90) NSI(-35.43) EW(22.26)
	#26 MD(2481.00) Inc(6.5) Azm(117.0) TVD(2476.77) VSI(47.00) NSI(-46.70) EW(25.09)
	#27 MD(2571.00) Inc(7.7) Azm(125.6) TVD(2566.04) VSI(50.07) NSI(-46.70) EW(27.72)
	#28 MD(2660.00) Inc(7.5) Azm(123.3) TVD(2654.22) VSI(45.30) NSI(-53.83) EW(25.68)
	#29 MD(2750.00) Inc(8.5) Azm(122.2) TVD(2743.30) VSI(25.00) NSI(-40.47) EW(22.48)
	#30 MD(2839.00) Inc(8.4) Azm(121.7) TVD(2837.33) VSI(81.32) NSI(-47.39) EW(23.58)
	#31 MD(2928.00) Inc(8.1) Azm(130.8) TVD(2919.41) VSI(42.67) NSI(-74.01) EW(24.49)
	#32 MD(3018.00) Inc(7.7) Azm(130.1) TVD(3008.58) VSI(103.04) NSI(-40.21) EW(105.02)
	#33 MD(3107.00) Inc(8.5) Azm(118.9) TVD(3098.71) VSI(113.68) NSI(-48.30) EW(115.80)
	#34 MD(3197.00) Inc(7.7) Azm(113.1) TVD(3185.61) VSI(124.62) NSI(-42.45) EW(126.90)
	#35 MD(3286.00) Inc(7.8) Azm(118.7) TVD(3274.00) VSI(134.98) NSI(-48.25) EW(137.40)
	#36 MD(3375.00) Inc(8.3) Azm(116.6) TVD(3362.13) VSI(145.61) NSI(-103.99) EW(148.38)
	#37 MD(3465.00) Inc(7.7) Azm(119.0) TVD(3451.27) VSI(156.98) NSI(-109.41) EW(159.58)
	#38 MD(3554.00) Inc(7.7) Azm(112.4) TVD(3539.46) VSI(167.85) NSI(-114.59) EW(170.50)
	#39 MD(3644.00) Inc(8.4) Azm(115.0) TVD(3628.58) VSI(178.68) NSI(-119.28) EW(182.03)
	#40 MD(3733.00) Inc(8.3) Azm(116.3) TVD(3716.64) VSI(189.14) NSI(-124.51) EW(194.23)
	#41 MD(3822.00) Inc(8.3) Azm(116.5) TVD(3804.27) VSI(204.27) NSI(-133.06) EW(207.53)
	#42 MD(3912.00) Inc(8.3) Azm(116.9) TVD(3892.78) VSI(218.32) NSI(-139.86) EW(221.78)
	#43 MD(4001.00) Inc(9.4) Azm(113.1) TVD(3980.45) VSI(231.59) NSI(-147.32) EW(235.23)
	#44 MD(4091.00) Inc(8.8) Azm(118.9) TVD(4069.32) VSI(243.87) NSI(-154.22) EW(247.88)
	#45 MD(4180.00) Inc(7.8) Azm(117.8) TVD(4157.38) VSI(255.02) NSI(-160.32) EW(258.98)
	#46 MD(4269.00) Inc(8.3) Azm(111.2) TVD(4245.66) VSI(265.16) NSI(-165.05) EW(269.24)
	#47 MD(4359.00) Inc(8.3) Azm(118.9) TVD(4335.20) VSI(274.33) NSI(-168.70) EW(277.50)
	#48 MD(4448.00) Inc(8.3) Azm(116.1) TVD(4423.97) VSI(278.62) NSI(-171.72) EW(283.07)
	#49 MD(4537.00) Inc(1.8) Azm(104.6) TVD(4512.36) VSI(282.13) NSI(-172.13) EW(286.36)
	#50 MD(4626.00) Inc(2.8) Azm(106.8) TVD(4601.63) VSI(284.58) NSI(-174.59) EW(288.78)
	#51 MD(4716.00) Inc(3.1) Azm(104.6) TVD(4691.71) VSI(287.53) NSI(-168.10) EW(291.65)
	#52 MD(4805.00) Inc(2.7) Azm(128.6) TVD(4780.67) VSI(289.44) NSI(-164.91) EW(293.53)
	#53 MD(4895.00) Inc(0.8) Azm(180.2) TVD(4870.66) VSI(289.64) NSI(-165.46) EW(293.64)
	#54 MD(4984.00) Inc(0.7) Azm(191.3) TVD(4959.65) VSI(289.71) NSI(-165.64) EW(293.63)
	#55 MD(5073.00) Inc(0.4) Azm(189.6) TVD(5048.65) VSI(289.47) NSI(-167.46) EW(293.63)
	#56 MD(5163.00) Inc(0.3) Azm(215.9) TVD(5138.65) VSI(289.17) NSI(-168.07) EW(293.33)
	#57 MD(5252.00) Inc(0.3) Azm(281.0) TVD(5227.65) VSI(289.62) NSI(-168.13) EW(293.79)
	#58 MD(5341.00) Inc(0.7) Azm(317.2) TVD(5316.64) VSI(287.91) NSI(-167.58) EW(293.68)
	#59 MD(5431.00) Inc(0.3) Azm(294.3) TVD(5405.64) VSI(287.17) NSI(-167.08) EW(291.31)
	#60 MD(5520.00) Inc(0.8) Azm(268.7) TVD(5495.63) VSI(286.11) NSI(-167.13) EW(291.25)
	#61 MD(5609.00) Inc(0.8) Azm(260.7) TVD(5584.62) VSI(284.94) NSI(-167.50) EW(289.59)
	#62 MD(5699.00) Inc(0.3) Azm(294.3) TVD(5674.62) VSI(284.03) NSI(-167.87) EW(289.18)
	#63 MD(5788.00) Inc(0.3) Azm(287.1) TVD(5763.62) VSI(283.87) NSI(-167.20) EW(289.07)
	#64 MD(5878.00) Inc(0.3) Azm(12.3) TVD(5853.61) VSI(283.59) NSI(-166.42) EW(288.07)
	#65 MD(5967.00) Inc(0.8) Azm(358.2) TVD(5942.61) VSI(283.60) NSI(-165.34) EW(288.06)
	#66 MD(6057.00) Inc(0.8) Azm(14.3) TVD(6032.60) VSI(284.00) NSI(-164.88) EW(288.06)
	#67 MD(6146.00) Inc(0.3) Azm(284.0) TVD(6121.43) VSI(278.65) NSI(-162.36) EW(283.67)
	#68 MD(6235.00) Inc(1.7) Azm(287.1) TVD(6210.36) VSI(282.40) NSI(-157.21) EW(288.10)
	#69 MD(6325.00) Inc(2.2) Azm(280.2) TVD(6299.87) VSI(282.32) NSI(-160.03) EW(286.06)
	#70 MD(6414.00) Inc(0.8) Azm(269.4) TVD(6389.71) VSI(195.86) NSI(-147.21) EW(199.49)
	#71 MD(6503.00) Inc(3.1) Azm(265.0) TVD(6478.78) VSI(192.84) NSI(-149.44) EW(196.51)
	#72 MD(6592.00) Inc(3.4) Azm(264.7) TVD(6568.41) VSI(194.40) NSI(-152.50) EW(199.25)
	#73 MD(6682.00) Inc(3.2) Azm(262.2) TVD(6658.73) VSI(82.52) NSI(-103.03) EW(82.42)
	#74 MD(6771.00) Inc(4.5) Azm(262.3) TVD(6748.51) VSI(232.30) NSI(-167.49) EW(171.72)
	#75 MD(6860.00) Inc(4.3) Azm(116.5) TVD(6838.50) VSI(84.25) NSI(-174.01) EW(80.69)
	#76 MD(6950.00) Inc(6.0) Azm(266.8) TVD(6928.17) VSI(130.37) NSI(-172.52) EW(134.10)
	#77 MD(7039.00) Inc(6.6) Azm(271.6) TVD(7018.87) VSI(42.62) NSI(-172.26) EW(121.03)
	#78 MD(7128.00) Inc(6.8) Azm(272.5) TVD(7108.53) VSI(301.71) NSI(-174.69) EW(297.56)
	#79 MD(7218.00) Inc(8.9) Azm(270.9) TVD(7198.64) VSI(708.30) NSI(-168.15) EW(706.12)

