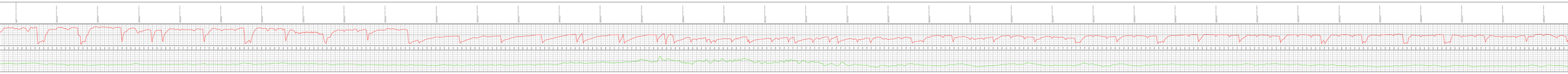

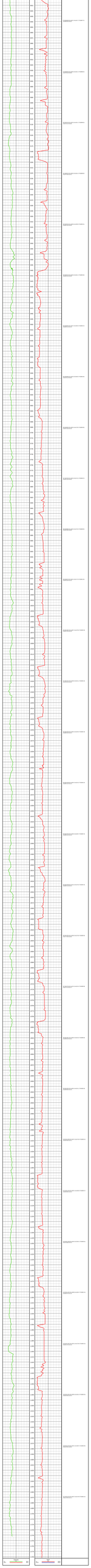

Extraction_WS-Sunrise 2-5-5_Patterson 346

MD 5":100'

Company: Extraction Oil & Gas
Well Name: WS-Sunrise 2-5-5
API: 05-123-46048
County/Parish: Weld
State: Colorado
Country: United States of America
Job number: 18183EX-CO
Field: DJ Basin
Rig Id: Patterson #346
Survey Company: Integrity Directional Services
MWD 1: Ben Kilby
MWD 2: Eric Smith

Log measurements: Gamma
Depth measured from: Drill Floor ft
Maximum temperature: 257.8

Depth	Date
Start: 1537 ft	03/11/2018
End: 11782 ft	03/14/2018

Casing	Depth	Size
Surface:	1537 ft	9 5/8"
Intermediate:		

Mud Type: Oil Base
Density: 10.5
Viscosity: 38
Rm:
Rmf:
Rmc:

Elevations
KB: 25 ft
GL: 4641 ft
DF: 4666 ft

Run	Bit Size	Offsets Gamma	Offsets Survey	Depths Start	Depths End	Dates Start	Dates End
1	8.5"	33.66 ft	53.00 ft	1537 ft	9435 ft	03/11/2018	03/13/2018
2	8.5"	39.42 ft	59.00 ft	9435 ft	11782 ft	03/13/2018	03/14/2018
3							
4							
5							
6							
7							
8							
9							
10							

Integrity Directional Services 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.

Gamma
API
0.0
300.0
300.0
600.0
MD
ROP
ft/hr
0.0
1000.0
1000.0
2000.0
#2 MD(1755.00) Inc(1.1) Azm(172.7) TVD(1754.40) VS(27.18) DLS(0.4)
#3 MD(1849.00) Inc(3.0) Azm(160.2) TVD(1848.34) VS(30.35) DLS(2.1)
#4 MD(1944.00) Inc(2.6) Azm(156.5) TVD(1943.23) VS(34.67) DLS(0.5)
#5 MD(2038.00) Inc(2.2) Azm(153.9) TVD(2037.15) VS(38.23) DLS(0.5)
#6 MD(2132.00) Inc(2.0) Azm(154.9) TVD(2131.08) VS(41.30) DLS(0.2)
#7 MD(2226.00) Inc(1.6) Azm(156.2) TVD(2225.04) VS(43.97) DLS(0.4)
#8 MD(2321.00) Inc(1.5) Azm(152.4) TVD(2320.00) VS(46.25) DLS(0.2)
#9 MD(2415.00) Inc(1.2) Azm(151.4) TVD(2413.98) VS(48.17) DLS(0.3)
#10 MD(2509.00) Inc(2.7) Azm(149.0) TVD(2507.92) VS(50.92) DLS(1.6)
#11 MD(2603.00) Inc(2.6) Azm(148.9) TVD(2601.82) VS(54.64) DLS(0.1)
#12 MD(2697.00) Inc(2.7) Azm(146.7) TVD(2695.72) VS(58.35) DLS(0.2)
#13 MD(2792.00) Inc(2.6) Azm(149.8) TVD(2790.62) VS(62.08) DLS(0.2)
#14 MD(2886.00) Inc(2.2) Azm(150.9) TVD(2884.54) VS(65.44) DLS(0.4)
#15 MD(2980.00) Inc(2.0) Azm(153.2) TVD(2978.47) VS(68.48) DLS(0.2)
#16 MD(3075.00) Inc(1.6) Azm(166.6) TVD(3073.43) VS(71.26) DLS(0.6)
#17 MD(3169.00) Inc(1.5) Azm(177.6) TVD(3167.39) VS(73.76) DLS(0.3)
#18 MD(3263.00) Inc(1.7) Azm(194.2) TVD(3261.36) VS(76.36) DLS(0.5)
#19 MD(3357.00) Inc(1.9) Azm(188.4) TVD(3355.31) VS(79.23) DLS(0.2)
#20 MD(3452.00) Inc(1.0) Azm(110.5) TVD(3450.29) VS(81.05) DLS(2.0)
#21 MD(3546.00) Inc(0.8) Azm(119.2) TVD(3544.27) VS(81.66) DLS(0.3)
#22 MD(3640.00) Inc(0.7) Azm(123.7) TVD(3638.27) VS(82.31) DLS(0.1)
#23 MD(3734.00) Inc(0.9) Azm(128.1) TVD(3732.26) VS(83.07) DLS(0.2)
#24 MD(3828.00) Inc(2.6) Azm(148.2) TVD(3826.21) VS(85.30) DLS(1.9)
#25 MD(3923.00) Inc(2.8) Azm(148.3) TVD(3921.11) VS(89.06) DLS(0.2)
#26 MD(4017.00) Inc(3.0) Azm(144.6) TVD(4014.99) VS(93.03) DLS(0.3)
#27 MD(4112.00) Inc(2.7) Azm(140.6) TVD(4109.87) VS(96.84) DLS(0.4)
#28 MD(4206.00) Inc(2.4) Azm(141.0) TVD(4203.77) VS(100.09) DLS(0.4)
#29 MD(4300.00) Inc(2.2) Azm(143.9) TVD(4297.70) VS(103.07) DLS(0.2)
#30 MD(4394.00) Inc(1.9) Azm(148.1) TVD(4391.64) VS(105.85) DLS(0.4)
#31 MD(4489.00) Inc(1.7) Azm(149.2) TVD(4486.59) VS(108.38) DLS(0.2)
#32 MD(4583.00) Inc(1.2) Azm(151.8) TVD(4580.56) VS(110.46) DLS(0.5)
#33 MD(4677.00) Inc(1.0) Azm(164.4) TVD(4674.54) VS(112.12) DLS(0.4)
#34 MD(4772.00) Inc(0.9) Azm(178.2) TVD(4769.53) VS(113.63) DLS(0.3)
#35 MD(4866.00) Inc(0.6) Azm(176.2) TVD(4863.52) VS(114.86) DLS(0.3)
#36 MD(4960.00) Inc(1.6) Azm(163.6) TVD(4957.50) VS(116.58) DLS(1.0)
#37 MD(5055.00) Inc(1.3) Azm(161.9) TVD(5052.47) VS(118.82) DLS(0.3)
#38 MD(5149.00) Inc(2.2) Azm(145.6) TVD(5146.43) VS(121.29) DLS(1.1)
#39 MD(5243.00) Inc(1.2) Azm(127.2) TVD(5240.39) VS(123.32) DLS(1.2)

#40 MD(5338.00) Inc(0.6) Azm(87.1) TVD(5335.38) VS(123.87) DLS(0.8)

#41 MD(5431.00) Inc(2.0) Azm(153.1) TVD(5428.36) VS(125.31) DLS(2.0)

#42 MD(5525.00) Inc(3.2) Azm(153.8) TVD(5522.26) VS(129.13) DLS(1.2)

#43 MD(5620.00) Inc(2.6) Azm(154.4) TVD(5617.14) VS(133.40) DLS(0.7)

#44 MD(5714.00) Inc(2.1) Azm(153.7) TVD(5711.06) VS(136.82) DLS(0.5)

#45 MD(5808.00) Inc(1.7) Azm(146.2) TVD(5805.01) VS(139.49) DLS(0.5)

#46 MD(5902.00) Inc(0.2) Azm(355.4) TVD(5899.00) VS(140.46) DLS(2.0)

#47 MD(5997.00) Inc(0.3) Azm(356.6) TVD(5994.00) VS(140.02) DLS(0.1)

#48 MD(6091.00) Inc(0.6) Azm(355.6) TVD(6087.99) VS(139.26) DLS(0.3)

#49 MD(6185.00) Inc(1.2) Azm(356.7) TVD(6181.98) VS(137.81) DLS(0.6)

#50 MD(6303.00) Inc(6.9) Azm(186.5) TVD(6299.73) VS(143.72) DLS(6.8)

#51 MD(6397.00) Inc(16.7) Azm(188.2) TVD(6391.63) VS(162.79) DLS(10.4)

#52 MD(6491.00) Inc(22.4) Azm(180.5) TVD(6480.17) VS(194.14) DLS(6.7)

#53 MD(6585.00) Inc(32.1) Azm(176.8) TVD(6563.62) VS(237.15) DLS(10.5)

#54 MD(6679.00) Inc(39.4) Azm(181.7) TVD(6639.85) VS(292.02) DLS(8.3)

#55 MD(6774.00) Inc(50.9) Azm(182.3) TVD(6706.75) VS(359.21) DLS(12.0)

#56 MD(6869.00) Inc(58.3) Azm(180.7) TVD(6761.77) VS(436.55) DLS(7.9)

#57 MD(6963.00) Inc(65.4) Azm(180.3) TVD(6806.10) VS(519.37) DLS(7.6)

#58 MD(7057.00) Inc(73.2) Azm(181.5) TVD(6839.32) VS(607.22) DLS(8.4)

#59 MD(7151.00) Inc(79.5) Azm(180.9) TVD(6861.47) VS(698.50) DLS(6.8)

#60 MD(7246.00) Inc(84.3) Azm(180.3) TVD(6874.85) VS(792.52) DLS(5.0)

#61 MD(7340.00) Inc(85.7) Azm(180.5) TVD(6883.04) VS(886.16) DLS(1.6)

#62 MD(7434.00) Inc(89.4) Azm(180.4) TVD(6887.00) VS(980.06) DLS(3.9)

#63 MD(7528.00) Inc(89.9) Azm(180.6) TVD(6887.56) VS(1074.06) DLS(0.5)

#64 MD(7623.00) Inc(90.3) Azm(180.1) TVD(6887.43) VS(1169.06) DLS(0.7)

#65 MD(7717.00) Inc(90.2) Azm(179.8) TVD(6887.01) VS(1263.05) DLS(0.4)

#66 MD(7811.00) Inc(91.4) Azm(181.0) TVD(6885.65) VS(1357.04) DLS(1.8)

#67 MD(7905.00) Inc(91.8) Azm(179.9) TVD(6882.97) VS(1451.00) DLS(1.3)

#68 MD(7999.00) Inc(90.1) Azm(181.2) TVD(6881.42) VS(1544.98) DLS(2.4)

#69 MD(8093.00) Inc(90.2) Azm(181.2) TVD(6881.25) VS(1638.96) DLS(0.1)

#70 MD(8187.00) Inc(90.5) Azm(180.5) TVD(6880.75) VS(1732.95) DLS(0.8)

#71 MD(8281.00) Inc(90.5) Azm(179.9) TVD(6879.99) VS(1826.95) DLS(0.6)

#72 MD(8376.00) Inc(90.5) Azm(180.5) TVD(6879.20) VS(1921.94) DLS(0.6)

#73 MD(8469.00) Inc(90.2) Azm(179.6) TVD(6878.67) VS(2014.94) DLS(1.0)

#74 MD(8563.00) Inc(89.8) Azm(180.9) TVD(6878.75) VS(2108.94) DLS(1.5)

#75 MD(8657.00) Inc(88.1) Azm(182.3) TVD(6880.54) VS(2202.88) DLS(2.3)

#76 MD(8751.00) Inc(88.3) Azm(182.1) TVD(6883.49) VS(2296.78) DLS(0.4)

#77 MD(8845.00) Inc(88.9) Azm(181.7) TVD(6885.76) VS(2390.70) DLS(0.7)

#78 MD(8939.00) Inc(89.1) Azm(181.7) TVD(6887.37) VS(2484.65) DLS(0.2)
#79 MD(9034.00) Inc(89.6) Azm(181.1) TVD(6888.44) VS(2579.62) DLS(0.8)
#80 MD(9128.00) Inc(90.3) Azm(181.1) TVD(6888.53) VS(2673.61) DLS(0.8)
#81 MD(9222.00) Inc(88.3) Azm(181.2) TVD(6889.64) VS(2767.58) DLS(2.1)
#82 MD(9316.00) Inc(88.8) Azm(180.8) TVD(6892.01) VS(2861.54) DLS(0.6)
#83 MD(9410.00) Inc(89.6) Azm(181.1) TVD(6893.36) VS(2955.52) DLS(0.9)
#84 MD(9504.00) Inc(90.7) Azm(180.3) TVD(6893.13) VS(3049.51) DLS(1.5)
#85 MD(9598.00) Inc(90.0) Azm(180.0) TVD(6892.56) VS(3143.51) DLS(0.9)
#86 MD(9692.00) Inc(88.3) Azm(179.6) TVD(6893.99) VS(3237.50) DLS(1.9)
#87 MD(9786.00) Inc(88.3) Azm(179.1) TVD(6896.76) VS(3331.45) DLS(0.5)
#88 MD(9880.00) Inc(88.3) Azm(178.3) TVD(6899.50) VS(3425.38) DLS(0.8)
#89 MD(9973.00) Inc(89.1) Azm(177.8) TVD(6901.59) VS(3518.29) DLS(1.0)
#90 MD(10067.00) Inc(89.7) Azm(179.5) TVD(6902.59) VS(3612.25) DLS(1.9)
#91 MD(10161.00) Inc(90.8) Azm(181.1) TVD(6902.20) VS(3706.25) DLS(2.0)
#92 MD(10255.00) Inc(89.3) Azm(182.5) TVD(6902.18) VS(3800.20) DLS(2.2)
#93 MD(10349.00) Inc(89.4) Azm(181.4) TVD(6903.24) VS(3894.15) DLS(1.2)
#94 MD(10444.00) Inc(90.0) Azm(180.7) TVD(6903.70) VS(3989.13) DLS(1.0)
#95 MD(10538.00) Inc(91.5) Azm(179.3) TVD(6902.44) VS(4083.12) DLS(2.2)
#96 MD(10632.00) Inc(90.8) Azm(179.9) TVD(6900.50) VS(4177.09) DLS(0.9)
#97 MD(10726.00) Inc(91.0) Azm(181.4) TVD(6898.99) VS(4271.07) DLS(1.7)
#98 MD(10821.00) Inc(89.0) Azm(181.9) TVD(6899.00) VS(4366.03) DLS(2.2)
#99 MD(10915.00) Inc(89.4) Azm(181.1) TVD(6900.28) VS(4459.99) DLS(1.0)
#100 MD(11009.00) Inc(90.7) Azm(179.6) TVD(6900.15) VS(4553.99) DLS(2.1)
#101 MD(11104.00) Inc(89.1) Azm(180.6) TVD(6900.27) VS(4648.98) DLS(2.0)
#102 MD(11198.00) Inc(90.5) Azm(180.1) TVD(6900.61) VS(4742.98) DLS(1.5)
#103 MD(11292.00) Inc(88.8) Azm(180.7) TVD(6901.23) VS(4836.97) DLS(1.9)
#104 MD(11387.00) Inc(90.1) Azm(179.6) TVD(6902.19) VS(4931.97) DLS(1.8)
#105 MD(11481.00) Inc(89.5) Azm(181.3) TVD(6902.53) VS(5025.96) DLS(2.0)
#106 MD(11576.00) Inc(90.1) Azm(180.7) TVD(6902.83) VS(5120.95) DLS(0.8)
#107 MD(11670.00) Inc(90.7) Azm(179.9) TVD(6902.16) VS(5214.94) DLS(1.1)
Gamma
API
0.0
300.0
300.0
600.0
ROP
ft/hr
0.0
1000.0
1000.0
2000.0