

<div><div><div></div><div>Sater 19J-443</div><div></div><div>TVD 2":100'</div></div></div>													
Company: PDC Energy													
Well Name: Sater 19J-443													
API: 05-123-42061													
County/Parish: Weld													
State: CO													
Country: USA													
Job number: 2016-006-135													
Field: DJ Basin													
Rig Id: Ensign 135													
Survey Company: Total Directional													
Daylight DD Chris Lewis													
Night DD James Hope													
Daylight MWD Tim Sinning													
Night MWD Ty Parker													
Log measurements: Gamma					Depth					Date			
Depth measured from:					Start:					0 ft	2/10/2016		
Maximum temperature:					End:					ft			
Casing			Depth		Size		Mud Type: WBM			Elevations			
Surface:			9 5/8"				Density:			KB: 4673 ft			
Intermediate:							Viscosity:			GL: 4660 ft			
			Run:		Rmt:		Rmc:			DF: 13 ft			
Offsets										Depths		Dates	
Run	Bit Size	Gamma	Survey	Start	End	Start	End	Start	End				
1	12.25"		57.00 ft	0 ft				2/10/2016					
2													
3													
4													
5													
6													
7													
8													
9													
10													

Total 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.

Gamma API		TVD		ROP 0	
0.0 200.0	200.0 400.0		0.0 500.0	500.0 1000.0	
Gamma API			ROP 0		
200.0 400.0	400.0 800.0		500.0 1000.0	1000.0 2000.0	
		5480 5490 5500 5510 5520 5530 5540 5550 5560 5570 5580 5590 5600 5610 5620 5630 5640 5650 5660 5670 5680 5690 5700 5710 5720 5730 5740 5750 5760 5770 5780 5790 5800 5810 5820 5830 5840 5850 5860 5870 5880 5890 5900 5910 5920 5930 5940 5950 5960 5970 5980 5990 6000 6010 6020 6030 6040 6050 6060 6070 6080 6090 6100 6110 6120 6130 6140 6150 6160 6170 6180 6190 6200 6210 6220 6230 6240 6250 6260 6270 6280 6290 6300 6310 6320 6330 6340 6350 6360 6370 6380 6390 6400 6410 6420 6430 6440 6450 6460 6470 6480 6490 6500 6510 6520 6530 6540 6550 6560 6570 6580 6590 6600 6610 6620 6630 6640 6650 6660 6670 6680 6690 6700 6710 6720 6730 6740			
					#21 MD(5723.00) Inc(0.7) Azm(281.5) TVD(5690.32) DLS(0.4)
					#22 MD(5911.00) Inc(0.8) Azm(274.4) TVD(5878.30) DLS(0.1)
					#23 MD(6003.00) Inc(5.1) Azm(188.1) TVD(5970.18) DLS(5.6)
					#24 MD(6096.00) Inc(8.4) Azm(190.6) TVD(6062.52) DLS(3.6)
					#25 MD(6188.00) Inc(13.9) Azm(179.8) TVD(6152.76) DLS(6.4)
					#26 MD(6280.00) Inc(19.8) Azm(181.4) TVD(6240.77) DLS(6.4)
					#27 MD(6372.00) Inc(26.2) Azm(183.5) TVD(6325.42) DLS(7.0)
					#28 MD(6464.00) Inc(32.9) Azm(176.2) TVD(6405.43) DLS(8.3)
					#29 MD(6560.00) Inc(40.2) Azm(173.6) TVD(6482.50) DLS(7.8)
					#30 MD(6656.00) Inc(47.1) Azm(177.1) TVD(6551.93) DLS(7.6)
					#31 MD(6751.00) Inc(56.4) Azm(180.3) TVD(6610.69) DLS(10.1)
					#32 MD(6847.00) Inc(69.5) Azm(180.7) TVD(6654.25) DLS(13.7)
					#33 MD(6942.00) Inc(76.9) Azm(178.7) TVD(6681.70) DLS(8.0)
					#34 MD(7038.00) Inc(81.2) Azm(180.4) TVD(6699.93) DLS(4.8)
					#51 MD(8598.00) Inc(87.9) Azm(180.2) TVD(6714.68) DLS(1.4)
					#57 MD(9173.00) Inc(88.9) Azm(181.1) TVD(6724.71) DLS(1.1)
					#78 MD(11109.00) Inc(91.8) Azm(177.4) TVD(6737.10) DLS(2.2)
Gamma API			ROP 0		
0.0 200.0	200.0 400.0		0.0 500.0	500.0 1000.0	
Gamma API			ROP 0		
200.0 400.0	400.0 800.0		500.0 1000.0	1000.0 2000.0	