

# Cub Creek Energy, LLC

**Location** Weld County, CO  
**Field** WATTENBERG  
**Installation** Olander Pad Rework 04-09-2019  
**Slot** OLANDER 15  
**Well** OLANDER 15  
**Wellbore** OLANDER 15 (PWB)

N  
 GRID  
 T  
 M  
 W  
 E  
 Jul-12-2017  
 EMM-2015 Dip: 66.61 deg Field: 52203.1 xT  
 Lat: N40 12 10.3080 Long: W105 1 31.6200 Elev: 5033.00 ft  
 Magnetic North is 8.59 deg East of True North  
 GRID North is 0.31 deg East of True North  
 To correct azimuth from True to GRID subtract 0.31 deg  
 To correct azimuth from Magnetic to GRID add 8.28 deg

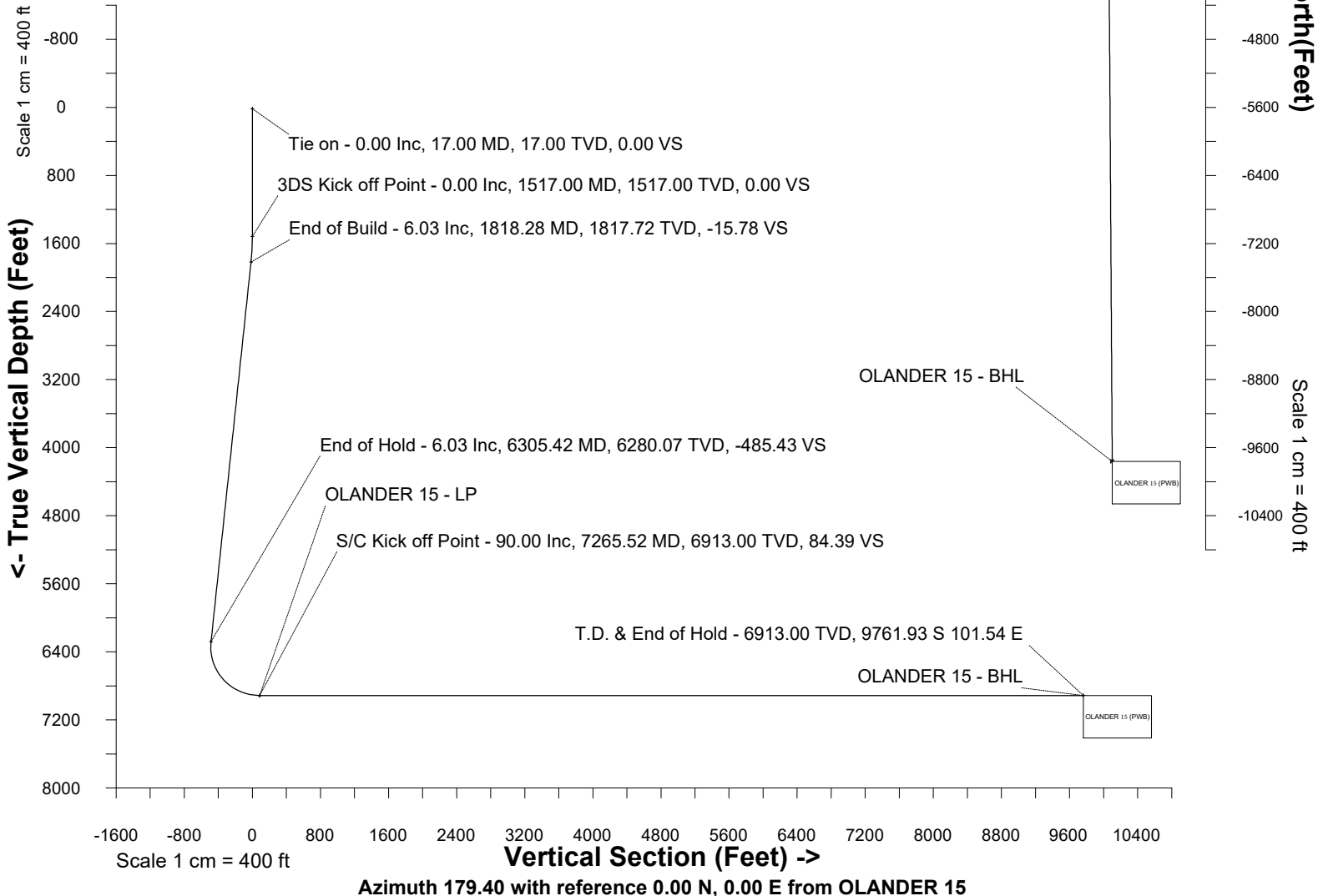
Created by sean.dolfinger  
 Date plotted 11-Apr-2019  
 Plot reference is OLANDER 15 (PWB).  
 Ref wellpath is OLANDER 15 (PWP#1).  
 Coordinates are in Feet reference OLANDER 15.  
 True Vertical Depths are reference Rig Datum.  
 Measured Depths are reference Rig Datum. Rig  
 Datum: Planned Datum #1  
 Rig Datum to Mean Sea Level: 5048.00 ft. Plot  
 North is aligned to GRID North.

<- West (Feet) : East (Feet) ->  
 Scale 1 cm = 400 ft  
 -800 0 800

Surface 0.00 N 0.00 E

OLANDER 15 - LP

WELL PROFILE DATA								
Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	17.00	0.00	0.00	17.00	S 0.00	W 0.00		0.00
KOP	1517.00	0.00	3.78	1517.00	S 0.00	W 0.00	0.00	0.00
End of Build	1818.28	6.03	3.78	1817.72	N 15.79	E 1.04	2.00	-15.78
End of Hold	6305.42	6.03	3.78	6280.07	N 485.79	E 32.09	0.00	-485.43
Target OLANDER 15 - LP	7265.52	90.00	179.64	6913.00	S 83.97	E 40.51	10.00	84.39
T.D. & Target OLA...BHL	16943.67	90.00	179.64	6913.00	S 9761.93	E 101.54	0.00	9762.46



SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 15 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
OLANDER 15	40.20288000	-105.02513000	1317106.7520	3132640.1283	0.48N	89.39E	0.00

Declination		
Date	Source	Time
Jul-12-2017	EMM-2015	14:01

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Olander Pad Rework 04-09-2019	40.20288000	-105.02545000	1317106.2735	3132550.7471	NAD83 Based Colorado State Planes, Northern Zone, US Feet	Grid

Summary Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	Vertical Depth SS	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
17.00	0.00	0.00	17.00	-5031.00	0.00N	0.00E		0.00
1517.00	0.00	3.78	1517.00	-3531.00	0.00N	0.00E	==>	0.00
1818.28	6.03	3.78	1817.72	-3230.28	15.79N	1.04E	2.00	-15.78
6305.42	6.03	3.78	6280.07	1232.07	485.79N	32.09E	==>	-485.43
7265.52	90.00	179.64	6913.00	1865.00	83.97S	40.51E	10.00	84.39
16943.67	90.00	179.64	6913.00	1865.00	9761.93S	101.54E	==>	9762.46

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
0.00	0.00	0.00	0.00	0.00N	0.00E		0.00	40.20288000	-105.02513000
17.00	0.00	0.00	17.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1517.00	0.00	3.78	1517.00	0.00N	0.00E	==>	0.00	40.20288000	-105.02513000
1600.00	1.66	3.78	1599.99	1.20N	0.08E	2.00	-1.20	40.20288329	-105.02512969
1700.00	3.66	3.78	1699.88	5.83N	0.39E	2.00	-5.83	40.20289600	-105.02512851
1800.00	5.66	3.78	1799.54	13.94N	0.92E	2.00	-13.93	40.20291824	-105.02512644
1818.28	6.03	3.78	1817.72	15.79N	1.04E	2.00	-15.78	40.20292334	-105.02512596
1900.00	6.03	3.78	1898.99	24.35N	1.61E	==>	-24.33	40.20294682	-105.02512377
2000.00	6.03	3.78	1998.44	34.83N	2.30E	==>	-34.80	40.20297557	-105.02512110
2100.00	6.03	3.78	2097.89	45.30N	2.99E	==>	-45.27	40.20300431	-105.02511842
2200.00	6.03	3.78	2197.34	55.78N	3.68E	==>	-55.73	40.20303305	-105.02511574
2300.00	6.03	3.78	2296.78	66.25N	4.38E	==>	-66.20	40.20306179	-105.02511306
2400.00	6.03	3.78	2396.23	76.72N	5.07E	==>	-76.67	40.20309053	-105.02511039
2500.00	6.03	3.78	2495.68	87.20N	5.76E	==>	-87.13	40.20311927	-105.02510771
2600.00	6.03	3.78	2595.13	97.67N	6.45E	==>	-97.60	40.20314801	-105.02510503
2700.00	6.03	3.78	2694.57	108.15N	7.14E	==>	-108.07	40.20317676	-105.02510235
2800.00	6.03	3.78	2794.02	118.62N	7.84E	==>	-118.53	40.20320550	-105.02509967

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 5048.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 179.40 degrees  
Bottom hole distance is 9762.46 Feet on azimuth 179.40 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 11-Apr-2019

SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 15 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
2900.00	6.03	3.78	2893.47	129.10N	8.53E	==>	-129.00	40.20323424	-105.02509700
3000.00	6.03	3.78	2992.92	139.57N	9.22E	==>	-139.47	40.20326298	-105.02509432
3100.00	6.03	3.78	3092.36	150.05N	9.91E	==>	-149.93	40.20329172	-105.02509164
3200.00	6.03	3.78	3191.81	160.52N	10.60E	==>	-160.40	40.20332046	-105.02508896
3300.00	6.03	3.78	3291.26	170.99N	11.30E	==>	-170.87	40.20334921	-105.02508629
3400.00	6.03	3.78	3390.71	181.47N	11.99E	==>	-181.33	40.20337795	-105.02508361
3500.00	6.03	3.78	3490.15	191.94N	12.68E	==>	-191.80	40.20340669	-105.02508093
3600.00	6.03	3.78	3589.60	202.42N	13.37E	==>	-202.27	40.20343543	-105.02507825
3700.00	6.03	3.78	3689.05	212.89N	14.06E	==>	-212.73	40.20346417	-105.02507557
3800.00	6.03	3.78	3788.50	223.37N	14.75E	==>	-223.20	40.20349291	-105.02507290
3900.00	6.03	3.78	3887.94	233.84N	15.45E	==>	-233.67	40.20352165	-105.02507022
4000.00	6.03	3.78	3987.39	244.31N	16.14E	==>	-244.13	40.20355040	-105.02506754
4100.00	6.03	3.78	4086.84	254.79N	16.83E	==>	-254.60	40.20357914	-105.02506486
4200.00	6.03	3.78	4186.29	265.26N	17.52E	==>	-265.07	40.20360788	-105.02506219
4300.00	6.03	3.78	4285.73	275.74N	18.21E	==>	-275.53	40.20363662	-105.02505951
4400.00	6.03	3.78	4385.18	286.21N	18.91E	==>	-286.00	40.20366536	-105.02505683
4500.00	6.03	3.78	4484.63	296.69N	19.60E	==>	-296.47	40.20369410	-105.02505415
4600.00	6.03	3.78	4584.08	307.16N	20.29E	==>	-306.93	40.20372284	-105.02505148
4700.00	6.03	3.78	4683.52	317.64N	20.98E	==>	-317.40	40.20375159	-105.02504880
4800.00	6.03	3.78	4782.97	328.11N	21.67E	==>	-327.87	40.20378033	-105.02504612
4900.00	6.03	3.78	4882.42	338.58N	22.37E	==>	-338.33	40.20380907	-105.02504344
5000.00	6.03	3.78	4981.87	349.06N	23.06E	==>	-348.80	40.20383781	-105.02504076
5100.00	6.03	3.78	5081.31	359.53N	23.75E	==>	-359.27	40.20386655	-105.02503809
5200.00	6.03	3.78	5180.76	370.01N	24.44E	==>	-369.73	40.20389529	-105.02503541
5300.00	6.03	3.78	5280.21	380.48N	25.13E	==>	-380.20	40.20392404	-105.02503273
5400.00	6.03	3.78	5379.66	390.96N	25.82E	==>	-390.67	40.20395278	-105.02503005
5500.00	6.03	3.78	5479.10	401.43N	26.52E	==>	-401.13	40.20398152	-105.02502737
5600.00	6.03	3.78	5578.55	411.90N	27.21E	==>	-411.60	40.20401026	-105.02502470
5700.00	6.03	3.78	5678.00	422.38N	27.90E	==>	-422.07	40.20403900	-105.02502202
5800.00	6.03	3.78	5777.45	432.85N	28.59E	==>	-432.53	40.20406774	-105.02501934
5900.00	6.03	3.78	5876.89	443.33N	29.28E	==>	-443.00	40.20409648	-105.02501666
6000.00	6.03	3.78	5976.34	453.80N	29.98E	==>	-453.47	40.20412523	-105.02501399
6100.00	6.03	3.78	6075.79	464.28N	30.67E	==>	-463.93	40.20415397	-105.02501131
6200.00	6.03	3.78	6175.24	474.75N	31.36E	==>	-474.40	40.20418271	-105.02500863
6300.00	6.03	3.78	6274.68	485.23N	32.05E	==>	-484.87	40.20421145	-105.02500595
6305.42	6.03	3.78	6280.07	485.79N	32.09E	==>	-485.43	40.20421301	-105.02500581
6400.00	3.48	172.43	6374.52	487.91N	32.80E	10.00	-487.54	40.20421881	-105.02500324
6500.00	13.46	177.81	6473.31	473.24N	33.64E	10.00	-472.87	40.20417853	-105.02500049
6600.00	23.45	178.63	6568.04	441.64N	34.56E	10.00	-441.26	40.20409178	-105.02499780
6700.00	33.45	178.98	6655.86	394.07N	35.53E	10.00	-393.68	40.20396118	-105.02499524
6800.00	43.45	179.18	6734.07	331.97N	36.52E	10.00	-331.58	40.20379071	-105.02499290
6900.00	53.45	179.31	6800.31	257.24N	37.50E	10.00	-256.83	40.20358555	-105.02499084
7000.00	63.45	179.42	6852.57	172.13N	38.43E	10.00	-171.72	40.20335193	-105.02498912
7100.00	73.45	179.51	6889.26	79.25N	39.30E	10.00	-78.83	40.20309695	-105.02498780
7200.00	83.45	179.59	6909.26	18.60S	40.07E	10.00	19.02	40.20282835	-105.02498692
7265.52	90.00	179.64	6913.00	83.97S	40.51E	10.00	84.39	40.20264890	-105.02498660
7300.00	90.00	179.64	6913.00	118.46S	40.72E	==>	118.87	40.20255424	-105.02498648
7400.00	90.00	179.64	6913.00	218.45S	41.35E	==>	218.87	40.20227974	-105.02498614
7500.00	90.00	179.64	6913.00	318.45S	41.99E	==>	318.87	40.20200524	-105.02498580
7600.00	90.00	179.64	6913.00	418.45S	42.62E	==>	418.87	40.20173075	-105.02498546
7700.00	90.00	179.64	6913.00	518.45S	43.25E	==>	518.87	40.20145625	-105.02498512
7800.00	90.00	179.64	6913.00	618.45S	43.88E	==>	618.87	40.20118175	-105.02498478
7900.00	90.00	179.64	6913.00	718.44S	44.51E	==>	718.87	40.20090725	-105.02498444
8000.00	90.00	179.64	6913.00	818.44S	45.14E	==>	818.87	40.20063275	-105.02498410
8100.00	90.00	179.64	6913.00	918.44S	45.77E	==>	918.87	40.20035825	-105.02498376
8200.00	90.00	179.64	6913.00	1018.44S	46.40E	==>	1018.87	40.20008375	-105.02498342
8300.00	90.00	179.64	6913.00	1118.44S	47.03E	==>	1118.87	40.19980925	-105.02498308
8400.00	90.00	179.64	6913.00	1218.43S	47.66E	==>	1218.86	40.19953475	-105.02498274

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 5048.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 179.40 degrees  
Bottom hole distance is 9762.46 Feet on azimuth 179.40 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 11-Apr-2019

SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 15 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
8500.00	90.00	179.64	6913.00	1318.43S	48.29E	==>	1318.86	40.19926025	-105.02498240
8600.00	90.00	179.64	6913.00	1418.43S	48.92E	==>	1418.86	40.19898575	-105.02498206
8700.00	90.00	179.64	6913.00	1518.43S	49.55E	==>	1518.86	40.19871125	-105.02498172
8800.00	90.00	179.64	6913.00	1618.43S	50.18E	==>	1618.86	40.19843675	-105.02498138
8900.00	90.00	179.64	6913.00	1718.42S	50.81E	==>	1718.86	40.19816225	-105.02498104
9000.00	90.00	179.64	6913.00	1818.42S	51.45E	==>	1818.86	40.19788775	-105.02498070
9100.00	90.00	179.64	6913.00	1918.42S	52.08E	==>	1918.86	40.19761326	-105.02498036
9200.00	90.00	179.64	6913.00	2018.42S	52.71E	==>	2018.86	40.19733876	-105.02498002
9300.00	90.00	179.64	6913.00	2118.42S	53.34E	==>	2118.86	40.19706426	-105.02497968
9400.00	90.00	179.64	6913.00	2218.42S	53.97E	==>	2218.86	40.19678976	-105.02497934
9500.00	90.00	179.64	6913.00	2318.41S	54.60E	==>	2318.86	40.19651526	-105.02497900
9600.00	90.00	179.64	6913.00	2418.41S	55.23E	==>	2418.85	40.19624076	-105.02497866
9700.00	90.00	179.64	6913.00	2518.41S	55.86E	==>	2518.85	40.19596626	-105.02497832
9800.00	90.00	179.64	6913.00	2618.41S	56.49E	==>	2618.85	40.19569176	-105.02497798
9900.00	90.00	179.64	6913.00	2718.41S	57.12E	==>	2718.85	40.19541726	-105.02497764
10000.00	90.00	179.64	6913.00	2818.40S	57.75E	==>	2818.85	40.19514276	-105.02497730
10100.00	90.00	179.64	6913.00	2918.40S	58.38E	==>	2918.85	40.19486826	-105.02497696
10200.00	90.00	179.64	6913.00	3018.40S	59.01E	==>	3018.85	40.19459376	-105.02497662
10300.00	90.00	179.64	6913.00	3118.40S	59.64E	==>	3118.85	40.19431926	-105.02497628
10400.00	90.00	179.64	6913.00	3218.40S	60.27E	==>	3218.85	40.19404476	-105.02497594
10500.00	90.00	179.64	6913.00	3318.39S	60.91E	==>	3318.85	40.19377026	-105.02497560
10600.00	90.00	179.64	6913.00	3418.39S	61.54E	==>	3418.85	40.19349576	-105.02497526
10700.00	90.00	179.64	6913.00	3518.39S	62.17E	==>	3518.85	40.19322126	-105.02497492
10800.00	90.00	179.64	6913.00	3618.39S	62.80E	==>	3618.84	40.19294676	-105.02497458
10900.00	90.00	179.64	6913.00	3718.39S	63.43E	==>	3718.84	40.19267226	-105.02497424
11000.00	90.00	179.64	6913.00	3818.38S	64.06E	==>	3818.84	40.19239776	-105.02497390
11100.00	90.00	179.64	6913.00	3918.38S	64.69E	==>	3918.84	40.19212327	-105.02497356
11200.00	90.00	179.64	6913.00	4018.38S	65.32E	==>	4018.84	40.19184877	-105.02497322
11300.00	90.00	179.64	6913.00	4118.38S	65.95E	==>	4118.84	40.19157427	-105.02497288
11400.00	90.00	179.64	6913.00	4218.38S	66.58E	==>	4218.84	40.19129977	-105.02497254
11500.00	90.00	179.64	6913.00	4318.37S	67.21E	==>	4318.84	40.19102527	-105.02497220
11600.00	90.00	179.64	6913.00	4418.37S	67.84E	==>	4418.84	40.19075077	-105.02497186
11700.00	90.00	179.64	6913.00	4518.37S	68.47E	==>	4518.84	40.19047627	-105.02497152
11800.00	90.00	179.64	6913.00	4618.37S	69.10E	==>	4618.84	40.19020177	-105.02497118
11900.00	90.00	179.64	6913.00	4718.37S	69.74E	==>	4718.84	40.18992727	-105.02497084
12000.00	90.00	179.64	6913.00	4818.36S	70.37E	==>	4818.83	40.18965277	-105.02497050
12100.00	90.00	179.64	6913.00	4918.36S	71.00E	==>	4918.83	40.18937827	-105.02497016
12200.00	90.00	179.64	6913.00	5018.36S	71.63E	==>	5018.83	40.18910377	-105.02496982
12300.00	90.00	179.64	6913.00	5118.36S	72.26E	==>	5118.83	40.18882927	-105.02496948
12400.00	90.00	179.64	6913.00	5218.36S	72.89E	==>	5218.83	40.18855477	-105.02496914
12500.00	90.00	179.64	6913.00	5318.35S	73.52E	==>	5318.83	40.18828027	-105.02496880
12600.00	90.00	179.64	6913.00	5418.35S	74.15E	==>	5418.83	40.18800577	-105.02496846
12700.00	90.00	179.64	6913.00	5518.35S	74.78E	==>	5518.83	40.18773127	-105.02496812
12800.00	90.00	179.64	6913.00	5618.35S	75.41E	==>	5618.83	40.18745677	-105.02496778
12900.00	90.00	179.64	6913.00	5718.35S	76.04E	==>	5718.83	40.18718227	-105.02496744
13000.00	90.00	179.64	6913.00	5818.34S	76.67E	==>	5818.83	40.18690777	-105.02496710
13100.00	90.00	179.64	6913.00	5918.34S	77.30E	==>	5918.83	40.18663327	-105.02496676
13200.00	90.00	179.64	6913.00	6018.34S	77.93E	==>	6018.82	40.18635877	-105.02496642
13300.00	90.00	179.64	6913.00	6118.34S	78.56E	==>	6118.82	40.18608427	-105.02496608
13400.00	90.00	179.64	6913.00	6218.34S	79.20E	==>	6218.82	40.18580977	-105.02496574
13500.00	90.00	179.64	6913.00	6318.33S	79.83E	==>	6318.82	40.18553527	-105.02496540
13600.00	90.00	179.64	6913.00	6418.33S	80.46E	==>	6418.82	40.18526077	-105.02496506
13700.00	90.00	179.64	6913.00	6518.33S	81.09E	==>	6518.82	40.18498627	-105.02496472
13800.00	90.00	179.64	6913.00	6618.33S	81.72E	==>	6618.82	40.18471177	-105.02496438
13900.00	90.00	179.64	6913.00	6718.33S	82.35E	==>	6718.82	40.18443727	-105.02496404
14000.00	90.00	179.64	6913.00	6818.32S	82.98E	==>	6818.82	40.18416277	-105.02496370
14100.00	90.00	179.64	6913.00	6918.32S	83.61E	==>	6918.82	40.18388827	-105.02496336
14200.00	90.00	179.64	6913.00	7018.32S	84.24E	==>	7018.82	40.18361377	-105.02496302
14300.00	90.00	179.64	6913.00	7118.32S	84.87E	==>	7118.82	40.18333927	-105.02496268

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Vertical Section is from 0.00N 0.00E on azimuth 179.40 degrees  
Bottom hole distance is 9762.46 Feet on azimuth 179.40 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 11-Apr-2019

SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 15 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
14400.00	90.00	179.64	6913.00	7218.32S	85.50E	==>	7218.81	40.18306477	-105.02496234
14500.00	90.00	179.64	6913.00	7318.31S	86.13E	==>	7318.81	40.18279027	-105.02496200
14600.00	90.00	179.64	6913.00	7418.31S	86.76E	==>	7418.81	40.18251577	-105.02496166
14700.00	90.00	179.64	6913.00	7518.31S	87.39E	==>	7518.81	40.18224127	-105.02496132
14800.00	90.00	179.64	6913.00	7618.31S	88.02E	==>	7618.81	40.18196677	-105.02496098
14900.00	90.00	179.64	6913.00	7718.31S	88.66E	==>	7718.81	40.18169227	-105.02496065
15000.00	90.00	179.64	6913.00	7818.30S	89.29E	==>	7818.81	40.18141777	-105.02496031
15100.00	90.00	179.64	6913.00	7918.30S	89.92E	==>	7918.81	40.18114327	-105.02495997
15200.00	90.00	179.64	6913.00	8018.30S	90.55E	==>	8018.81	40.18086877	-105.02495963
15300.00	90.00	179.64	6913.00	8118.30S	91.18E	==>	8118.81	40.18059427	-105.02495929
15400.00	90.00	179.64	6913.00	8218.30S	91.81E	==>	8218.81	40.18031977	-105.02495895
15500.00	90.00	179.64	6913.00	8318.29S	92.44E	==>	8318.81	40.18004527	-105.02495861
15600.00	90.00	179.64	6913.00	8418.29S	93.07E	==>	8418.80	40.17977077	-105.02495827
15700.00	90.00	179.64	6913.00	8518.29S	93.70E	==>	8518.80	40.17949627	-105.02495793
15800.00	90.00	179.64	6913.00	8618.29S	94.33E	==>	8618.80	40.17922177	-105.02495759
15900.00	90.00	179.64	6913.00	8718.29S	94.96E	==>	8718.80	40.17894727	-105.02495725
16000.00	90.00	179.64	6913.00	8818.28S	95.59E	==>	8818.80	40.17867277	-105.02495691
16100.00	90.00	179.64	6913.00	8918.28S	96.22E	==>	8918.80	40.17839827	-105.02495657
16200.00	90.00	179.64	6913.00	9018.28S	96.85E	==>	9018.80	40.17812377	-105.02495623
16300.00	90.00	179.64	6913.00	9118.28S	97.48E	==>	9118.80	40.17784927	-105.02495589
16400.00	90.00	179.64	6913.00	9218.28S	98.12E	==>	9218.80	40.17757477	-105.02495555
16500.00	90.00	179.64	6913.00	9318.27S	98.75E	==>	9318.80	40.17730027	-105.02495521
16600.00	90.00	179.64	6913.00	9418.27S	99.38E	==>	9418.80	40.17702577	-105.02495487
16700.00	90.00	179.64	6913.00	9518.27S	100.01E	==>	9518.80	40.17675127	-105.02495453
16800.00	90.00	179.64	6913.00	9618.27S	100.64E	==>	9618.79	40.17647677	-105.02495419
16900.00	90.00	179.64	6913.00	9718.27S	101.27E	==>	9718.79	40.17620227	-105.02495385
16943.67	90.00	179.64	6913.00	9761.93S	101.54E	==>	9762.46	40.17608240	-105.02495370

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