

# Cub Creek Energy, LLC

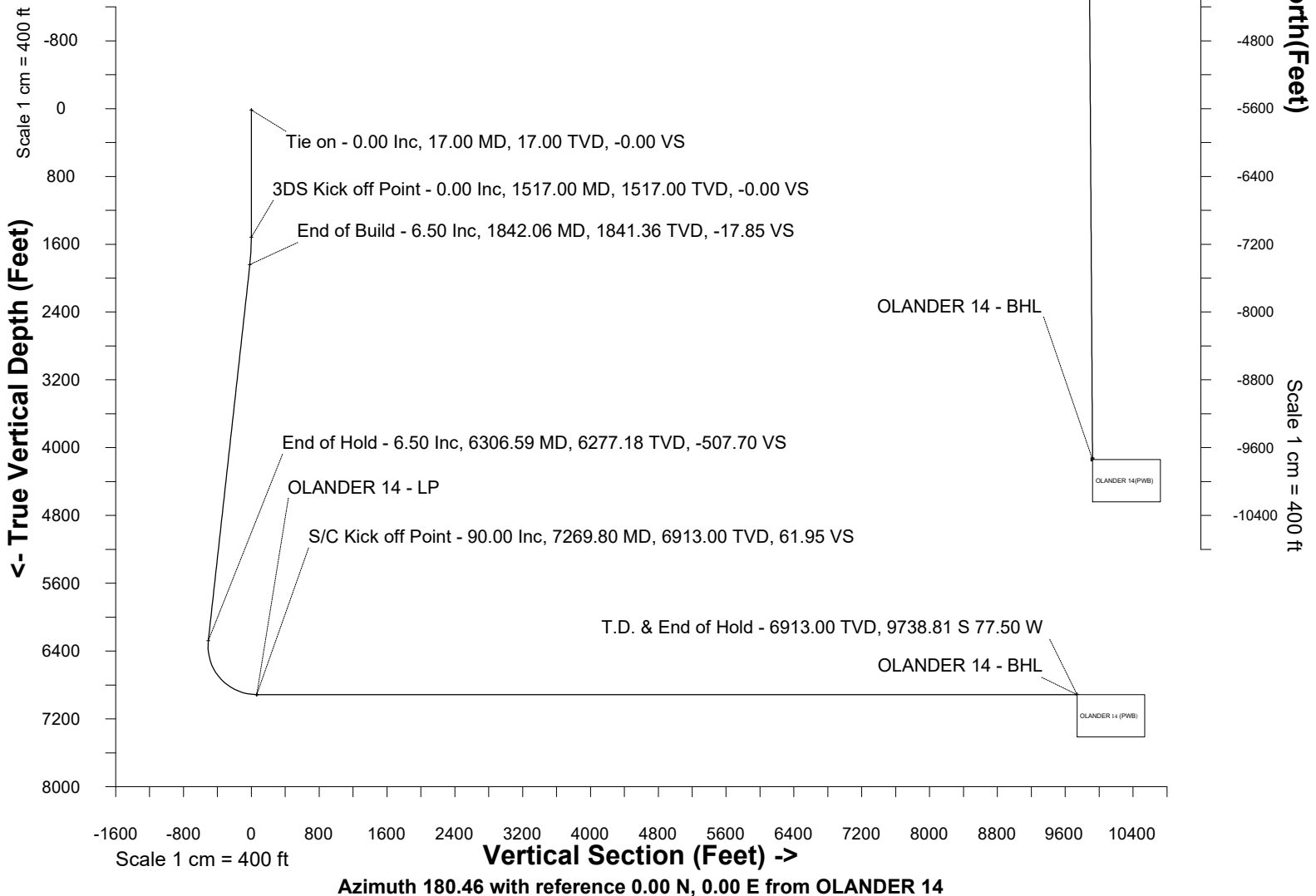
<b>Location</b>	<b>Weld County, CO</b>	<b>Slot</b>	<b>OLANDER 14</b>
<b>Field</b>	<b>WATTENBERG</b>	<b>Well</b>	<b>OLANDER 14</b>
<b>Installation</b>	<b>Olander Pad Rework 04-09-2019</b>	<b>Wellbore</b>	<b>OLANDER 14 (PWB)</b>

N  
 GRID  
 W E  
 Jul-12-2017  
 EMM-2015 Dip: 66.61 deg Field: 52203.1 nT  
 Lat: N40 12 10.3680 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 8.26 deg

Created by sean.dolfiger  
 Date plotted 11-Apr-2019  
 Plot reference is OLANDER 14 (PWB).  
 Ref wellpath is OLANDER 14 (PWP#1).  
 Coordinates are in Feet reference OLANDER 14.  
 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

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	346.17	1517.00	S 0.00	W 0.00	0.00	-0.00
End of Build	1842.06	6.50	346.17	1841.36	N 17.89	W 4.40	2.00	-17.85
End of Hold	6306.59	6.50	346.17	6277.18	N 508.72	W 125.27	0.00	-507.70
Target OLANDER 14 - LP	7269.80	90.00	179.64	6913.00	S 60.85	W 138.56	10.00	61.95
T.D. & Target OLA...BHL	16947.95	90.00	179.64	6913.00	S 9738.81	W 77.50	0.00	9739.12



SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 14 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
OLANDER 14	40.20281000	-105.02508000	1317081.3274	3132654.2307	24.95S	103.49E	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	346.17	1517.00	-3531.00	0.00N	0.00E	==>	0.00
1842.06	6.50	346.17	1841.36	-3206.64	17.89N	4.40W	2.00	-17.85
6306.59	6.50	346.17	6277.18	1229.18	508.72N	125.27W	==>	-507.70
7269.80	90.00	179.64	6913.00	1865.00	60.85S	138.56W	10.00	61.95
16947.95	90.00	179.64	6913.00	1865.00	9738.81S	77.50W	==>	9739.12

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	40.20281000	-105.02508000
17.00	0.00	0.00	17.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1517.00	0.00	346.17	1517.00	0.00N	0.00E	==>	0.00	40.20281000	-105.02508000
1600.00	1.66	346.17	1599.99	1.17N	0.29W	2.00	-1.17	40.20281321	-105.02508101
1700.00	3.66	346.17	1699.88	5.67N	1.40W	2.00	-5.66	40.20282559	-105.02508489
1800.00	5.66	346.17	1799.54	13.56N	3.34W	2.00	-13.53	40.20284728	-105.02509170
1842.06	6.50	346.17	1841.36	17.89N	4.40W	2.00	-17.85	40.20285917	-105.02509543
1900.00	6.50	346.17	1898.93	24.26N	5.97W	==>	-24.21	40.20287667	-105.02510092
2000.00	6.50	346.17	1998.29	35.25N	8.68W	==>	-35.18	40.20290689	-105.02511040
2100.00	6.50	346.17	2097.64	46.25N	11.39W	==>	-46.15	40.20293711	-105.02511988
2200.00	6.50	346.17	2197.00	57.24N	14.10W	==>	-57.13	40.20296733	-105.02512936
2300.00	6.50	346.17	2296.36	68.23N	16.80W	==>	-68.10	40.20299755	-105.02513884
2400.00	6.50	346.17	2395.72	79.23N	19.51W	==>	-79.07	40.20302776	-105.02514833
2500.00	6.50	346.17	2495.07	90.22N	22.22W	==>	-90.04	40.20305798	-105.02515781
2600.00	6.50	346.17	2594.43	101.22N	24.92W	==>	-101.01	40.20308820	-105.02516729
2700.00	6.50	346.17	2693.79	112.21N	27.63W	==>	-111.99	40.20311842	-105.02517677
2800.00	6.50	346.17	2793.14	123.20N	30.34W	==>	-122.96	40.20314863	-105.02518625

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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 180.46 degrees  
Bottom hole distance is 9739.12 Feet on azimuth 180.46 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 11-Apr-2019

SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 14 (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	6.50	346.17	2892.50	134.20N	33.05W	==>	-133.93	40.20317885	-105.02519573
3000.00	6.50	346.17	2991.86	145.19N	35.75W	==>	-144.90	40.20320907	-105.02520521
3100.00	6.50	346.17	3091.21	156.19N	38.46W	==>	-155.87	40.20323929	-105.02521469
3200.00	6.50	346.17	3190.57	167.18N	41.17W	==>	-166.85	40.20326951	-105.02522417
3300.00	6.50	346.17	3289.93	178.17N	43.88W	==>	-177.82	40.20329972	-105.02523366
3400.00	6.50	346.17	3389.28	189.17N	46.58W	==>	-188.79	40.20332994	-105.02524314
3500.00	6.50	346.17	3488.64	200.16N	49.29W	==>	-199.76	40.20336016	-105.02525262
3600.00	6.50	346.17	3588.00	211.16N	52.00W	==>	-210.73	40.20339038	-105.02526210
3700.00	6.50	346.17	3687.36	222.15N	54.70W	==>	-221.71	40.20342059	-105.02527158
3800.00	6.50	346.17	3786.71	233.14N	57.41W	==>	-232.68	40.20345081	-105.02528106
3900.00	6.50	346.17	3886.07	244.14N	60.12W	==>	-243.65	40.20348103	-105.02529054
4000.00	6.50	346.17	3985.43	255.13N	62.83W	==>	-254.62	40.20351125	-105.02530002
4100.00	6.50	346.17	4084.78	266.13N	65.53W	==>	-265.60	40.20354147	-105.02530951
4200.00	6.50	346.17	4184.14	277.12N	68.24W	==>	-276.57	40.20357168	-105.02531899
4300.00	6.50	346.17	4283.50	288.11N	70.95W	==>	-287.54	40.20360190	-105.02532847
4400.00	6.50	346.17	4382.85	299.11N	73.66W	==>	-298.51	40.20363212	-105.02533795
4500.00	6.50	346.17	4482.21	310.10N	76.36W	==>	-309.48	40.20366234	-105.02534743
4600.00	6.50	346.17	4581.57	321.10N	79.07W	==>	-320.46	40.20369255	-105.02535691
4700.00	6.50	346.17	4680.92	332.09N	81.78W	==>	-331.43	40.20372277	-105.02536639
4800.00	6.50	346.17	4780.28	343.08N	84.49W	==>	-342.40	40.20375299	-105.02537588
4900.00	6.50	346.17	4879.64	354.08N	87.19W	==>	-353.37	40.20378321	-105.02538536
5000.00	6.50	346.17	4979.00	365.07N	89.90W	==>	-364.34	40.20381342	-105.02539484
5100.00	6.50	346.17	5078.35	376.07N	92.61W	==>	-375.32	40.20384364	-105.02540432
5200.00	6.50	346.17	5177.71	387.06N	95.31W	==>	-386.29	40.20387386	-105.02541380
5300.00	6.50	346.17	5277.07	398.05N	98.02W	==>	-397.26	40.20390408	-105.02542328
5400.00	6.50	346.17	5376.42	409.05N	100.73W	==>	-408.23	40.20393430	-105.02543276
5500.00	6.50	346.17	5475.78	420.04N	103.44W	==>	-419.20	40.20396451	-105.02544224
5600.00	6.50	346.17	5575.14	431.04N	106.14W	==>	-430.18	40.20399473	-105.02545173
5700.00	6.50	346.17	5674.49	442.03N	108.85W	==>	-441.15	40.20402495	-105.02546121
5800.00	6.50	346.17	5773.85	453.02N	111.56W	==>	-452.12	40.20405517	-105.02547069
5900.00	6.50	346.17	5873.21	464.02N	114.27W	==>	-463.09	40.20408538	-105.02548017
6000.00	6.50	346.17	5972.57	475.01N	116.97W	==>	-474.07	40.20411560	-105.02548965
6100.00	6.50	346.17	6071.92	486.01N	119.68W	==>	-485.04	40.20414582	-105.02549913
6200.00	6.50	346.17	6171.28	497.00N	122.39W	==>	-496.01	40.20417604	-105.02550861
6300.00	6.50	346.17	6270.64	507.99N	125.09W	==>	-506.98	40.20420626	-105.02551810
6306.59	6.50	346.17	6277.18	508.72N	125.27W	==>	-507.70	40.20420825	-105.02551872
6400.00	3.38	206.34	6370.42	511.39N	127.77W	10.00	-510.36	40.20421562	-105.02552759
6500.00	13.11	186.19	6469.28	497.44N	130.30W	10.00	-496.39	40.20417736	-105.02553694
6600.00	23.07	183.21	6564.22	466.53N	132.63W	10.00	-465.46	40.20409255	-105.02554586
6700.00	33.05	181.98	6652.36	419.60N	134.67W	10.00	-418.51	40.20396375	-105.02555408
6800.00	43.04	181.27	6731.01	358.07N	136.37W	10.00	-356.97	40.20379489	-105.02556134
6900.00	53.04	180.78	6797.79	283.82N	137.68W	10.00	-282.71	40.20359108	-105.02556743
7000.00	63.03	180.41	6850.66	199.09N	138.55W	10.00	-197.98	40.20335854	-105.02557217
7100.00	73.03	180.10	6888.03	106.47N	138.95W	10.00	-105.37	40.20310431	-105.02557540
7200.00	83.02	179.82	6908.75	8.78N	138.89W	10.00	-7.67	40.20283613	-105.02557704
7269.80	90.00	179.64	6913.00	60.85S	138.56W	10.00	61.95	40.20264500	-105.02557720
7300.00	90.00	179.64	6913.00	91.05S	138.37W	==>	92.15	40.20256210	-105.02557710
7400.00	90.00	179.64	6913.00	191.05S	137.74W	==>	192.14	40.20228760	-105.02557675
7500.00	90.00	179.64	6913.00	291.05S	137.11W	==>	292.13	40.20201311	-105.02557641
7600.00	90.00	179.64	6913.00	391.04S	136.48W	==>	392.12	40.20173861	-105.02557607
7700.00	90.00	179.64	6913.00	491.04S	135.85W	==>	492.11	40.20146411	-105.02557572
7800.00	90.00	179.64	6913.00	591.04S	135.22W	==>	592.10	40.20118961	-105.02557538
7900.00	90.00	179.64	6913.00	691.04S	134.59W	==>	692.09	40.20091511	-105.02557504
8000.00	90.00	179.64	6913.00	791.04S	133.95W	==>	792.08	40.20064061	-105.02557469
8100.00	90.00	179.64	6913.00	891.03S	133.32W	==>	892.07	40.20036611	-105.02557435
8200.00	90.00	179.64	6913.00	991.03S	132.69W	==>	992.06	40.20009161	-105.02557401
8300.00	90.00	179.64	6913.00	1091.03S	132.06W	==>	1092.05	40.19981711	-105.02557366
8400.00	90.00	179.64	6913.00	1191.03S	131.43W	==>	1192.04	40.19954261	-105.02557332

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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 180.46 degrees  
Bottom hole distance is 9739.12 Feet on azimuth 180.46 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 11-Apr-2019

SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 14 (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	1291.03S	130.80W	==>	1292.03	40.19926811	-105.02557298
8600.00	90.00	179.64	6913.00	1391.02S	130.17W	==>	1392.02	40.19899361	-105.02557264
8700.00	90.00	179.64	6913.00	1491.02S	129.54W	==>	1492.01	40.19871911	-105.02557229
8800.00	90.00	179.64	6913.00	1591.02S	128.91W	==>	1592.00	40.19844461	-105.02557195
8900.00	90.00	179.64	6913.00	1691.02S	128.28W	==>	1691.99	40.19817011	-105.02557161
9000.00	90.00	179.64	6913.00	1791.02S	127.65W	==>	1791.98	40.19789562	-105.02557126
9100.00	90.00	179.64	6913.00	1891.01S	127.01W	==>	1891.97	40.19762112	-105.02557092
9200.00	90.00	179.64	6913.00	1991.01S	126.38W	==>	1991.96	40.19734662	-105.02557058
9300.00	90.00	179.64	6913.00	2091.01S	125.75W	==>	2091.95	40.19707212	-105.02557023
9400.00	90.00	179.64	6913.00	2191.01S	125.12W	==>	2191.94	40.19679762	-105.02556989
9500.00	90.00	179.64	6913.00	2291.01S	124.49W	==>	2291.92	40.19652312	-105.02556955
9600.00	90.00	179.64	6913.00	2391.00S	123.86W	==>	2391.91	40.19624862	-105.02556920
9700.00	90.00	179.64	6913.00	2491.00S	123.23W	==>	2491.90	40.19597412	-105.02556886
9800.00	90.00	179.64	6913.00	2591.00S	122.60W	==>	2591.89	40.19569962	-105.02556852
9900.00	90.00	179.64	6913.00	2691.00S	121.97W	==>	2691.88	40.19542512	-105.02556817
10000.00	90.00	179.64	6913.00	2791.00S	121.34W	==>	2791.87	40.19515062	-105.02556783
10100.00	90.00	179.64	6913.00	2890.99S	120.71W	==>	2891.86	40.19487612	-105.02556749
10200.00	90.00	179.64	6913.00	2990.99S	120.08W	==>	2991.85	40.19460162	-105.02556715
10300.00	90.00	179.64	6913.00	3090.99S	119.44W	==>	3091.84	40.19432712	-105.02556680
10400.00	90.00	179.64	6913.00	3190.99S	118.81W	==>	3191.83	40.19405262	-105.02556646
10500.00	90.00	179.64	6913.00	3290.99S	118.18W	==>	3291.82	40.19377812	-105.02556612
10600.00	90.00	179.64	6913.00	3390.98S	117.55W	==>	3391.81	40.19350362	-105.02556577
10700.00	90.00	179.64	6913.00	3490.98S	116.92W	==>	3491.80	40.19322912	-105.02556543
10800.00	90.00	179.64	6913.00	3590.98S	116.29W	==>	3591.79	40.19295462	-105.02556509
10900.00	90.00	179.64	6913.00	3690.98S	115.66W	==>	3691.78	40.19268012	-105.02556474
11000.00	90.00	179.64	6913.00	3790.98S	115.03W	==>	3791.77	40.19240563	-105.02556440
11100.00	90.00	179.64	6913.00	3890.97S	114.40W	==>	3891.76	40.19213113	-105.02556406
11200.00	90.00	179.64	6913.00	3990.97S	113.77W	==>	3991.75	40.19185663	-105.02556371
11300.00	90.00	179.64	6913.00	4090.97S	113.14W	==>	4091.74	40.19158213	-105.02556337
11400.00	90.00	179.64	6913.00	4190.97S	112.50W	==>	4191.73	40.19130763	-105.02556303
11500.00	90.00	179.64	6913.00	4290.97S	111.87W	==>	4291.72	40.19103313	-105.02556269
11600.00	90.00	179.64	6913.00	4390.97S	111.24W	==>	4391.71	40.19075863	-105.02556234
11700.00	90.00	179.64	6913.00	4490.96S	110.61W	==>	4491.70	40.19048413	-105.02556200
11800.00	90.00	179.64	6913.00	4590.96S	109.98W	==>	4591.69	40.19020963	-105.02556166
11900.00	90.00	179.64	6913.00	4690.96S	109.35W	==>	4691.68	40.18993513	-105.02556131
12000.00	90.00	179.64	6913.00	4790.96S	108.72W	==>	4791.67	40.18966063	-105.02556097
12100.00	90.00	179.64	6913.00	4890.96S	108.09W	==>	4891.66	40.18938613	-105.02556063
12200.00	90.00	179.64	6913.00	4990.95S	107.46W	==>	4991.65	40.18911163	-105.02556028
12300.00	90.00	179.64	6913.00	5090.95S	106.83W	==>	5091.64	40.18883713	-105.02555994
12400.00	90.00	179.64	6913.00	5190.95S	106.20W	==>	5191.63	40.18856263	-105.02555960
12500.00	90.00	179.64	6913.00	5290.95S	105.57W	==>	5291.62	40.18828813	-105.02555926
12600.00	90.00	179.64	6913.00	5390.95S	104.93W	==>	5391.61	40.18801363	-105.02555891
12700.00	90.00	179.64	6913.00	5490.94S	104.30W	==>	5491.60	40.18773913	-105.02555857
12800.00	90.00	179.64	6913.00	5590.94S	103.67W	==>	5591.59	40.18746463	-105.02555823
12900.00	90.00	179.64	6913.00	5690.94S	103.04W	==>	5691.58	40.18719013	-105.02555788
13000.00	90.00	179.64	6913.00	5790.94S	102.41W	==>	5791.57	40.18691563	-105.02555754
13100.00	90.00	179.64	6913.00	5890.94S	101.78W	==>	5891.56	40.18664113	-105.02555720
13200.00	90.00	179.64	6913.00	5990.93S	101.15W	==>	5991.55	40.18636663	-105.02555685
13300.00	90.00	179.64	6913.00	6090.93S	100.52W	==>	6091.54	40.18609213	-105.02555651
13400.00	90.00	179.64	6913.00	6190.93S	99.89W	==>	6191.53	40.18581763	-105.02555617
13500.00	90.00	179.64	6913.00	6290.93S	99.26W	==>	6291.52	40.18554313	-105.02555582
13600.00	90.00	179.64	6913.00	6390.93S	98.63W	==>	6391.51	40.18526863	-105.02555548
13700.00	90.00	179.64	6913.00	6490.92S	97.99W	==>	6491.50	40.18499413	-105.02555514
13800.00	90.00	179.64	6913.00	6590.92S	97.36W	==>	6591.49	40.18471963	-105.02555480
13900.00	90.00	179.64	6913.00	6690.92S	96.73W	==>	6691.48	40.18444513	-105.02555445
14000.00	90.00	179.64	6913.00	6790.92S	96.10W	==>	6791.47	40.18417063	-105.02555411
14100.00	90.00	179.64	6913.00	6890.92S	95.47W	==>	6891.46	40.18389613	-105.02555377
14200.00	90.00	179.64	6913.00	6990.91S	94.84W	==>	6991.45	40.18362163	-105.02555342
14300.00	90.00	179.64	6913.00	7090.91S	94.21W	==>	7091.44	40.18334713	-105.02555308

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SYSDRILL  
Well Design Combined Report  
Wellbore: OLANDER 14 (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	7190.91S	93.58W	==>	7191.43	40.18307263	-105.02555274
14500.00	90.00	179.64	6913.00	7290.91S	92.95W	==>	7291.42	40.18279813	-105.02555240
14600.00	90.00	179.64	6913.00	7390.91S	92.32W	==>	7391.41	40.18252363	-105.02555205
14700.00	90.00	179.64	6913.00	7490.90S	91.69W	==>	7491.40	40.18224913	-105.02555171
14800.00	90.00	179.64	6913.00	7590.90S	91.05W	==>	7591.39	40.18197463	-105.02555137
14900.00	90.00	179.64	6913.00	7690.90S	90.42W	==>	7691.38	40.18170013	-105.02555102
15000.00	90.00	179.64	6913.00	7790.90S	89.79W	==>	7791.37	40.18142563	-105.02555068
15100.00	90.00	179.64	6913.00	7890.90S	89.16W	==>	7891.36	40.18115113	-105.02555034
15200.00	90.00	179.64	6913.00	7990.89S	88.53W	==>	7991.34	40.18087663	-105.02554999
15300.00	90.00	179.64	6913.00	8090.89S	87.90W	==>	8091.33	40.18060213	-105.02554965
15400.00	90.00	179.64	6913.00	8190.89S	87.27W	==>	8191.32	40.18032763	-105.02554931
15500.00	90.00	179.64	6913.00	8290.89S	86.64W	==>	8291.31	40.18005313	-105.02554897
15600.00	90.00	179.64	6913.00	8390.89S	86.01W	==>	8391.30	40.17977863	-105.02554862
15700.00	90.00	179.64	6913.00	8490.88S	85.38W	==>	8491.29	40.17950413	-105.02554828
15800.00	90.00	179.64	6913.00	8590.88S	84.75W	==>	8591.28	40.17922963	-105.02554794
15900.00	90.00	179.64	6913.00	8690.88S	84.12W	==>	8691.27	40.17895513	-105.02554759
16000.00	90.00	179.64	6913.00	8790.88S	83.48W	==>	8791.26	40.17868063	-105.02554725
16100.00	90.00	179.64	6913.00	8890.88S	82.85W	==>	8891.25	40.17840613	-105.02554691
16200.00	90.00	179.64	6913.00	8990.87S	82.22W	==>	8991.24	40.17813163	-105.02554656
16300.00	90.00	179.64	6913.00	9090.87S	81.59W	==>	9091.23	40.17785713	-105.02554622
16400.00	90.00	179.64	6913.00	9190.87S	80.96W	==>	9191.22	40.17758263	-105.02554588
16500.00	90.00	179.64	6913.00	9290.87S	80.33W	==>	9291.21	40.17730813	-105.02554554
16600.00	90.00	179.64	6913.00	9390.87S	79.70W	==>	9391.20	40.17703363	-105.02554519
16700.00	90.00	179.64	6913.00	9490.86S	79.07W	==>	9491.19	40.17675913	-105.02554485
16800.00	90.00	179.64	6913.00	9590.86S	78.44W	==>	9591.18	40.17648463	-105.02554451
16900.00	90.00	179.64	6913.00	9690.86S	77.81W	==>	9691.17	40.17621013	-105.02554416
16947.95	90.00	179.64	6913.00	9738.81S	77.50W	==>	9739.12	40.17607850	-105.02554400

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