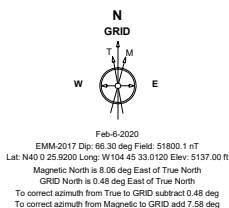


Petro Operating Company

Location	Weld County, CO	Slot	Homestead 6
Field	Wattenberg	Well	Homestead 6
Installation	Homestead Pad - Rev 02	Wellbore	Homestead 6 (PWB)



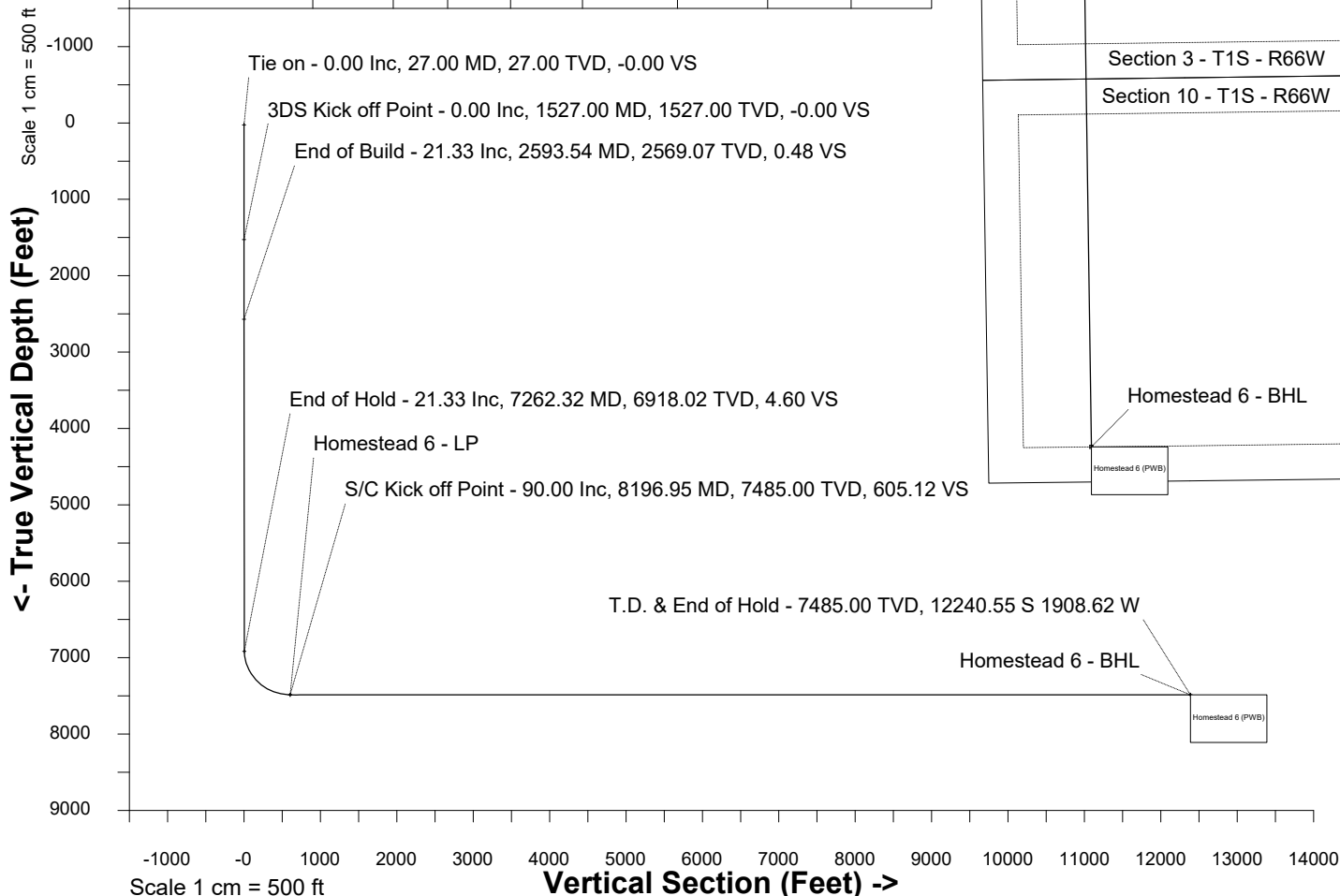
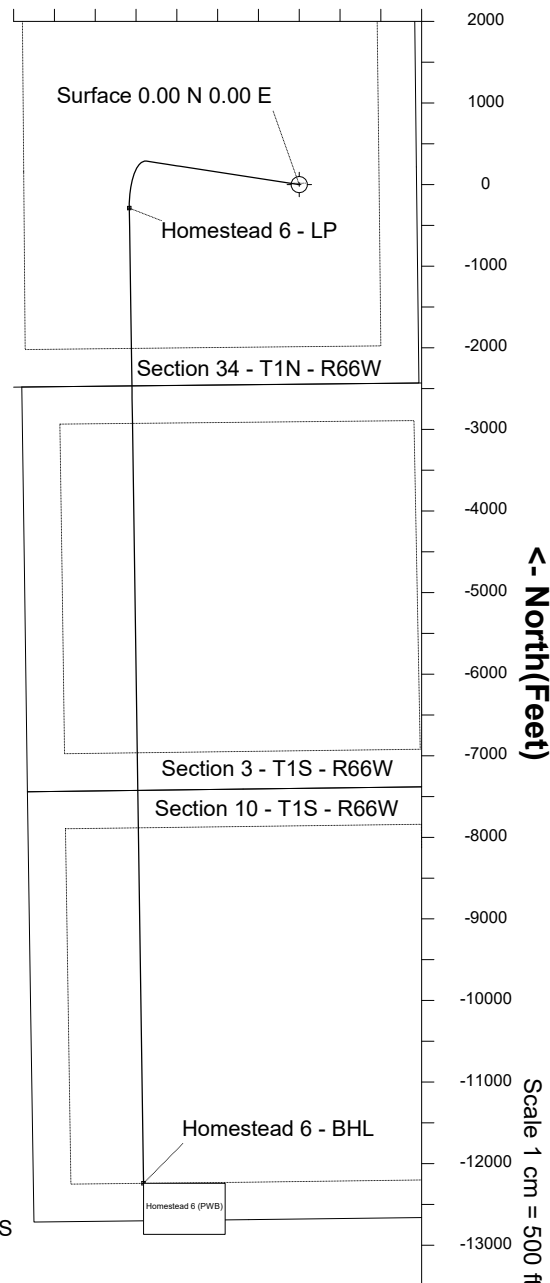
Created by sean.dolfinger
Date plotted 9-Mar-2020
Plot reference is Homestead 6 (PWB).
Ref wellpath is Homestead 6 (PWP#1).
Coordinates are in Feet reference Homestead 6.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 5165.00 ft.
Plot North is aligned to GRID North.

Scale 1 cm = 500 ft **East (Feet) ->**

-3000 -2000 -1000 0 1000

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	27.00	0.00	0.00	27.00	S 0.00	W 0.00		-0.00
KOP	1527.00	0.00	278.72	1527.00	S 0.00	W 0.00	0.00	-0.00
End of Build	2593.54	21.33	278.72	2569.07	N 29.76	W 193.98	2.00	0.48
End of Hold	7262.32	21.33	278.72	6918.02	N 287.33	W 1872.61	0.00	4.60
Target Homest...6 - LP	8196.95	90.00	179.17	7485.00	S 287.70	W 2082.60	10.00	605.12
T.D. & Target Hom...BHL	20151.06	90.00	179.17	7485.00	S 12240.55	W 1908.62	0.00	12388.46



SYSDRILL
Well Design Combined Report
Wellbore: Homestead 6 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
Homestead 6	40.00720000	-104.75900000	1246336.8714	3207569.4782	0.40	47.62	0.00

Declination		
Date	Source	Time
Feb-6-2020	EMM-2017	14:16

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Homestead Pad - Rev 02	40.00720000	-104.75917000	1246336.4735	3207521.8588	NAD83 Colorado State Planes, North Zone, US Foot	Grid

Summary Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	Vertical Depth SS	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
27.00	0.00	0.00	27.00	-5138.00	0.00	0.00		0.00
1527.00	0.00	278.72	1527.00	-3638.00	0.00	0.00	==>	0.00
2593.54	21.33	278.72	2569.07	-2595.93	29.76	-193.98	2.00	0.48
7262.32	21.33	278.72	6918.02	1753.02	287.33	-1872.61	==>	4.60
8196.95	90.00	179.17	7485.00	2320.00	-287.70	-2082.60	10.00	605.12
20151.06	90.00	179.17	7485.00	2320.00	-12240.55	-1908.62	==>	12388.46

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	0.00	0.00		0.00	40.00720000	-104.75900000
27.00	0.00	0.00	27.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
100.00	0.00	0.00	100.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
200.00	0.00	0.00	200.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
300.00	0.00	0.00	300.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
400.00	0.00	0.00	400.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
500.00	0.00	0.00	500.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
600.00	0.00	0.00	600.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
700.00	0.00	0.00	700.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
800.00	0.00	0.00	800.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
900.00	0.00	0.00	900.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1000.00	0.00	0.00	1000.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1100.00	0.00	0.00	1100.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1200.00	0.00	0.00	1200.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1300.00	0.00	0.00	1300.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1400.00	0.00	0.00	1400.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1500.00	0.00	0.00	1500.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1527.00	0.00	278.72	1527.00	0.00	0.00	==>	0.00	40.00720000	-104.75900000
1627.00	2.00	278.72	1626.98	0.26	-1.72	2.00	0.00	40.00720077	-104.75900615
1727.00	4.00	278.72	1726.84	1.06	-6.90	2.00	0.02	40.00720306	-104.75902459
1827.00	6.00	278.72	1826.45	2.38	-15.51	2.00	0.04	40.00720689	-104.75905530
1927.00	8.00	278.72	1925.70	4.23	-27.56	2.00	0.07	40.00721224	-104.75909824
2027.00	10.00	278.72	2024.47	6.60	-43.02	2.00	0.11	40.00721911	-104.75915336
2127.00	12.00	278.72	2122.62	9.49	-61.88	2.00	0.15	40.00722748	-104.75922060
2227.00	14.00	278.72	2220.06	12.91	-84.11	2.00	0.21	40.00723736	-104.75929986
2327.00	16.00	278.72	2316.64	16.83	-109.69	2.00	0.27	40.00724872	-104.75939106
2427.00	18.00	278.72	2412.27	21.27	-138.59	2.00	0.34	40.00726155	-104.75949408
2527.00	20.00	278.72	2506.82	26.20	-170.77	2.00	0.42	40.00727584	-104.75960880
2593.54	21.33	278.72	2569.07	29.76	-193.98	2.00	0.48	40.00728615	-104.75969154
2627.00	21.33	278.72	2600.24	31.61	-206.01	==>	0.51	40.00729149	-104.75973443
2727.00	21.33	278.72	2693.39	37.13	-241.96	==>	0.59	40.00730746	-104.75986261
2827.00	21.33	278.72	2786.54	42.64	-277.92	==>	0.68	40.00732343	-104.75999079

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 5165.0ft above Mean Sea Level)
Vertical Section is from 0.00 0.00 on azimuth 188.86 degrees
Bottom hole distance is 12388.46 Feet on azimuth 188.86 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 9-Mar-2020

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 6 (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)
2927.00	21.33	278.72	2879.69	48.16	-313.87	==>	0.77	40.00733939	-104.76011897
3027.00	21.33	278.72	2972.84	53.68	-349.83	==>	0.86	40.00735536	-104.76024715
3127.00	21.33	278.72	3065.99	59.19	-385.78	==>	0.95	40.00737133	-104.76037532
3227.00	21.33	278.72	3159.14	64.71	-421.74	==>	1.04	40.00738729	-104.76050350
3327.00	21.33	278.72	3252.29	70.23	-457.69	==>	1.13	40.00740326	-104.76063168
3427.00	21.33	278.72	3345.44	75.74	-493.65	==>	1.21	40.00741923	-104.76075986
3527.00	21.33	278.72	3438.59	81.26	-529.60	==>	1.30	40.00743519	-104.76088804
3627.00	21.33	278.72	3531.74	86.78	-565.55	==>	1.39	40.00745116	-104.76101622
3727.00	21.33	278.72	3624.89	92.29	-601.51	==>	1.48	40.00746712	-104.76114440
3827.00	21.33	278.72	3718.04	97.81	-637.46	==>	1.57	40.00748309	-104.76127258
3927.00	21.33	278.72	3811.19	103.33	-673.42	==>	1.66	40.00749906	-104.76140076
4027.00	21.33	278.72	3904.33	108.84	-709.37	==>	1.74	40.00751502	-104.76152894
4127.00	21.33	278.72	3997.48	114.36	-745.33	==>	1.83	40.00753099	-104.76165711
4227.00	21.33	278.72	4090.63	119.88	-781.28	==>	1.92	40.00754695	-104.76178529
4327.00	21.33	278.72	4183.78	125.39	-817.24	==>	2.01	40.00756292	-104.76191347
4427.00	21.33	278.72	4276.93	130.91	-853.19	==>	2.10	40.00757888	-104.76204165
4527.00	21.33	278.72	4370.08	136.43	-889.14	==>	2.19	40.00759485	-104.76216983
4627.00	21.33	278.72	4463.23	141.94	-925.10	==>	2.27	40.00761081	-104.76229801
4727.00	21.33	278.72	4556.38	147.46	-961.05	==>	2.36	40.00762677	-104.76242619
4827.00	21.33	278.72	4649.53	152.98	-997.01	==>	2.45	40.00764274	-104.76255437
4927.00	21.33	278.72	4742.68	158.49	-1032.96	==>	2.54	40.00765870	-104.76268255
5027.00	21.33	278.72	4835.83	164.01	-1068.92	==>	2.63	40.00767467	-104.76281073
5127.00	21.33	278.72	4928.98	169.53	-1104.87	==>	2.72	40.00769063	-104.76293891
5227.00	21.33	278.72	5022.13	175.05	-1140.83	==>	2.81	40.00770659	-104.76306709
5327.00	21.33	278.72	5115.28	180.56	-1176.78	==>	2.89	40.00772256	-104.76319527
5427.00	21.33	278.72	5208.43	186.08	-1212.73	==>	2.98	40.00773852	-104.76332345
5527.00	21.33	278.72	5301.58	191.60	-1248.69	==>	3.07	40.00775449	-104.76345163
5627.00	21.33	278.72	5394.73	197.11	-1284.64	==>	3.16	40.00777045	-104.76357981
5727.00	21.33	278.72	5487.88	202.63	-1320.60	==>	3.25	40.00778641	-104.76370799
5827.00	21.33	278.72	5581.03	208.15	-1356.55	==>	3.34	40.00780237	-104.76383617
5927.00	21.33	278.72	5674.18	213.66	-1392.51	==>	3.42	40.00781834	-104.76396435
6027.00	21.33	278.72	5767.33	219.18	-1428.46	==>	3.51	40.00783430	-104.76409253
6127.00	21.33	278.72	5860.48	224.70	-1464.42	==>	3.60	40.00785026	-104.76422071
6227.00	21.33	278.72	5953.63	230.21	-1500.37	==>	3.69	40.00786622	-104.76434890
6327.00	21.33	278.72	6046.78	235.73	-1536.32	==>	3.78	40.00788219	-104.76447708
6427.00	21.33	278.72	6139.92	241.25	-1572.28	==>	3.87	40.00789815	-104.76460526
6527.00	21.33	278.72	6233.07	246.76	-1608.23	==>	3.95	40.00791411	-104.76473344
6627.00	21.33	278.72	6326.22	252.28	-1644.19	==>	4.04	40.00793007	-104.76486162
6727.00	21.33	278.72	6419.37	257.80	-1680.14	==>	4.13	40.00794603	-104.76498980
6827.00	21.33	278.72	6512.52	263.31	-1716.10	==>	4.22	40.00796200	-104.76511798
6927.00	21.33	278.72	6605.67	268.83	-1752.05	==>	4.31	40.00797796	-104.76524616
7027.00	21.33	278.72	6698.82	274.35	-1788.01	==>	4.40	40.00799392	-104.76537434
7127.00	21.33	278.72	6791.97	279.86	-1823.96	==>	4.48	40.00800988	-104.76550252
7227.00	21.33	278.72	6885.12	285.38	-1859.91	==>	4.57	40.00802584	-104.76563070
7262.32	21.33	278.72	6918.02	287.33	-1872.61	==>	4.60	40.00803148	-104.76567598
7327.00	21.26	260.85	6978.35	287.25	-1895.85	10.00	8.26	40.00803179	-104.76575891
7427.00	24.60	236.44	7070.64	272.82	-1931.18	10.00	27.96	40.00799299	-104.76588547
7527.00	30.80	219.41	7159.28	241.46	-1964.86	10.00	64.14	40.00790766	-104.76600662
7627.00	38.50	208.12	7241.57	194.11	-1995.86	10.00	115.70	40.00777839	-104.76611868
7727.00	46.97	200.24	7315.01	132.21	-2023.24	10.00	181.08	40.00760909	-104.76621826
7827.00	55.84	194.32	7377.36	57.64	-2046.17	10.00	258.29	40.00740492	-104.76630231
7927.00	64.94	189.54	7426.75	-27.33	-2063.95	10.00	344.99	40.00717209	-104.76636829
8027.00	74.17	185.43	7461.65	-120.12	-2076.05	10.00	438.53	40.00691765	-104.76641420
8127.00	83.47	181.69	7481.02	-217.91	-2082.08	10.00	536.08	40.00664936	-104.76643863
8196.95	90.00	179.17	7485.00	-287.70	-2082.60	10.00	605.12	40.00645780	-104.76644254
8227.00	90.00	179.17	7485.00	-317.75	-2082.16	==>	634.74	40.00637530	-104.76644186
8327.00	90.00	179.17	7485.00	-417.74	-2080.71	==>	733.31	40.00610080	-104.76643962
8427.00	90.00	179.17	7485.00	-517.73	-2079.25	==>	831.89	40.00582630	-104.76643738

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 5165.0ft above Mean Sea Level)
Vertical Section is from 0.00 0.00 on azimuth 188.86 degrees
Bottom hole distance is 12388.46 Feet on azimuth 188.86 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 9-Mar-2020

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 6 (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)
8527.00	90.00	179.17	7485.00	-617.72	-2077.80	==>	930.46	40.00555179	-104.76643514
8627.00	90.00	179.17	7485.00	-717.71	-2076.34	==>	1029.03	40.00527729	-104.76643289
8727.00	90.00	179.17	7485.00	-817.70	-2074.89	==>	1127.60	40.00500279	-104.76643065
8827.00	90.00	179.17	7485.00	-917.69	-2073.43	==>	1226.17	40.00472828	-104.76642841
8927.00	90.00	179.17	7485.00	-1017.68	-2071.97	==>	1324.74	40.00445378	-104.76642617
9027.00	90.00	179.17	7485.00	-1117.66	-2070.52	==>	1423.31	40.00417928	-104.76642392
9127.00	90.00	179.17	7485.00	-1217.65	-2069.06	==>	1521.89	40.00390477	-104.76642168
9227.00	90.00	179.17	7485.00	-1317.64	-2067.61	==>	1620.46	40.00363027	-104.76641944
9327.00	90.00	179.17	7485.00	-1417.63	-2066.15	==>	1719.03	40.00335577	-104.76641720
9427.00	90.00	179.17	7485.00	-1517.62	-2064.70	==>	1817.60	40.00308126	-104.76641495
9527.00	90.00	179.17	7485.00	-1617.61	-2063.24	==>	1916.17	40.00280676	-104.76641271
9627.00	90.00	179.17	7485.00	-1717.60	-2061.79	==>	2014.74	40.00253226	-104.76641047
9727.00	90.00	179.17	7485.00	-1817.59	-2060.33	==>	2113.31	40.00225775	-104.76640823
9827.00	90.00	179.17	7485.00	-1917.58	-2058.88	==>	2211.89	40.00198325	-104.76640599
9927.00	90.00	179.17	7485.00	-2017.57	-2057.42	==>	2310.46	40.00170875	-104.76640374
10027.00	90.00	179.17	7485.00	-2117.56	-2055.97	==>	2409.03	40.00143424	-104.76640150
10127.00	90.00	179.17	7485.00	-2217.55	-2054.51	==>	2507.60	40.00115974	-104.76639926
10227.00	90.00	179.17	7485.00	-2317.54	-2053.05	==>	2606.17	40.00088524	-104.76639702
10327.00	90.00	179.17	7485.00	-2417.53	-2051.60	==>	2704.74	40.00061073	-104.76639477
10427.00	90.00	179.17	7485.00	-2517.52	-2050.14	==>	2803.31	40.00033623	-104.76639253
10527.00	90.00	179.17	7485.00	-2617.51	-2048.69	==>	2901.89	40.00006173	-104.76639029
10627.00	90.00	179.17	7485.00	-2717.50	-2047.23	==>	3000.46	39.99978722	-104.76638805
10727.00	90.00	179.17	7485.00	-2817.48	-2045.78	==>	3099.03	39.99951272	-104.76638581
10827.00	90.00	179.17	7485.00	-2917.47	-2044.32	==>	3197.60	39.99923822	-104.76638356
10927.00	90.00	179.17	7485.00	-3017.46	-2042.87	==>	3296.17	39.99896371	-104.76638132
11027.00	90.00	179.17	7485.00	-3117.45	-2041.41	==>	3394.74	39.99868921	-104.76637908
11127.00	90.00	179.17	7485.00	-3217.44	-2039.96	==>	3493.31	39.99841471	-104.76637684
11227.00	90.00	179.17	7485.00	-3317.43	-2038.50	==>	3591.88	39.99814020	-104.76637460
11327.00	90.00	179.17	7485.00	-3417.42	-2037.05	==>	3690.46	39.99786570	-104.76637235
11427.00	90.00	179.17	7485.00	-3517.41	-2035.59	==>	3789.03	39.99759120	-104.76637011
11527.00	90.00	179.17	7485.00	-3617.40	-2034.13	==>	3887.60	39.99731669	-104.76636787
11627.00	90.00	179.17	7485.00	-3717.39	-2032.68	==>	3986.17	39.99704219	-104.76636563
11727.00	90.00	179.17	7485.00	-3817.38	-2031.22	==>	4084.74	39.99676769	-104.76636339
11827.00	90.00	179.17	7485.00	-3917.37	-2029.77	==>	4183.31	39.99649318	-104.76636115
11927.00	90.00	179.17	7485.00	-4017.36	-2028.31	==>	4281.88	39.99621868	-104.76635890
12027.00	90.00	179.17	7485.00	-4117.35	-2026.86	==>	4380.46	39.99594417	-104.76635666
12127.00	90.00	179.17	7485.00	-4217.34	-2025.40	==>	4479.03	39.99566967	-104.76635442
12227.00	90.00	179.17	7485.00	-4317.33	-2023.95	==>	4577.60	39.99539517	-104.76635218
12327.00	90.00	179.17	7485.00	-4417.32	-2022.49	==>	4676.17	39.99512066	-104.76634994
12427.00	90.00	179.17	7485.00	-4517.30	-2021.04	==>	4774.74	39.99484616	-104.76634770
12527.00	90.00	179.17	7485.00	-4617.29	-2019.58	==>	4873.31	39.99457166	-104.76634545
12627.00	90.00	179.17	7485.00	-4717.28	-2018.13	==>	4971.88	39.99429715	-104.76634321
12727.00	90.00	179.17	7485.00	-4817.27	-2016.67	==>	5070.46	39.99402265	-104.76634097
12827.00	90.00	179.17	7485.00	-4917.26	-2015.21	==>	5169.03	39.99374815	-104.76633873
12927.00	90.00	179.17	7485.00	-5017.25	-2013.76	==>	5267.60	39.99347364	-104.76633649
13027.00	90.00	179.17	7485.00	-5117.24	-2012.30	==>	5366.17	39.99319914	-104.76633425
13127.00	90.00	179.17	7485.00	-5217.23	-2010.85	==>	5464.74	39.99292464	-104.76633200
13227.00	90.00	179.17	7485.00	-5317.22	-2009.39	==>	5563.31	39.99265013	-104.76632976
13327.00	90.00	179.17	7485.00	-5417.21	-2007.94	==>	5661.88	39.99237563	-104.76632752
13427.00	90.00	179.17	7485.00	-5517.20	-2006.48	==>	5760.46	39.99210113	-104.76632528
13527.00	90.00	179.17	7485.00	-5617.19	-2005.03	==>	5859.03	39.99182662	-104.76632304
13627.00	90.00	179.17	7485.00	-5717.18	-2003.57	==>	5957.60	39.99155212	-104.76632080
13727.00	90.00	179.17	7485.00	-5817.17	-2002.12	==>	6056.17	39.99127761	-104.76631855
13827.00	90.00	179.17	7485.00	-5917.16	-2000.66	==>	6154.74	39.99100311	-104.76631631
13927.00	90.00	179.17	7485.00	-6017.15	-1999.20	==>	6253.31	39.99072861	-104.76631407
14027.00	90.00	179.17	7485.00	-6117.14	-1997.75	==>	6351.88	39.99045410	-104.76631183
14127.00	90.00	179.17	7485.00	-6217.12	-1996.29	==>	6450.46	39.99017960	-104.76630959
14227.00	90.00	179.17	7485.00	-6317.11	-1994.84	==>	6549.03	39.98990510	-104.76630735
14327.00	90.00	179.17	7485.00	-6417.10	-1993.38	==>	6647.60	39.98963059	-104.76630511

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Vertical Section is from 0.00 0.00 on azimuth 188.86 degrees
Bottom hole distance is 12388.46 Feet on azimuth 188.86 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 9-Mar-2020

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 6 (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)
14427.00	90.00	179.17	7485.00	-6517.09	-1991.93	==>	6746.17	39.98935609	-104.76630286
14527.00	90.00	179.17	7485.00	-6617.08	-1990.47	==>	6844.74	39.98908159	-104.76630062
14627.00	90.00	179.17	7485.00	-6717.07	-1989.02	==>	6943.31	39.98880708	-104.76629838
14727.00	90.00	179.17	7485.00	-6817.06	-1987.56	==>	7041.88	39.98853258	-104.76629614
14827.00	90.00	179.17	7485.00	-6917.05	-1986.11	==>	7140.45	39.98825807	-104.76629390
14927.00	90.00	179.17	7485.00	-7017.04	-1984.65	==>	7239.03	39.98798357	-104.76629166
15027.00	90.00	179.17	7485.00	-7117.03	-1983.20	==>	7337.60	39.98770907	-104.76628942
15127.00	90.00	179.17	7485.00	-7217.02	-1981.74	==>	7436.17	39.98743456	-104.76628718
15227.00	90.00	179.17	7485.00	-7317.01	-1980.28	==>	7534.74	39.98716006	-104.76628493
15327.00	90.00	179.17	7485.00	-7417.00	-1978.83	==>	7633.31	39.98688556	-104.76628269
15427.00	90.00	179.17	7485.00	-7516.99	-1977.37	==>	7731.88	39.98661105	-104.76628045
15527.00	90.00	179.17	7485.00	-7616.98	-1975.92	==>	7830.45	39.98633655	-104.76627821
15627.00	90.00	179.17	7485.00	-7716.97	-1974.46	==>	7929.03	39.98606204	-104.76627597
15727.00	90.00	179.17	7485.00	-7816.96	-1973.01	==>	8027.60	39.98578754	-104.76627373
15827.00	90.00	179.17	7485.00	-7916.94	-1971.55	==>	8126.17	39.98551304	-104.76627149
15927.00	90.00	179.17	7485.00	-8016.93	-1970.10	==>	8224.74	39.98523853	-104.76626925
16027.00	90.00	179.17	7485.00	-8116.92	-1968.64	==>	8323.31	39.98496403	-104.76626701
16127.00	90.00	179.17	7485.00	-8216.91	-1967.19	==>	8421.88	39.98468953	-104.76626476
16227.00	90.00	179.17	7485.00	-8316.90	-1965.73	==>	8520.45	39.98441502	-104.76626252
16327.00	90.00	179.17	7485.00	-8416.89	-1964.28	==>	8619.03	39.98414052	-104.76626028
16427.00	90.00	179.17	7485.00	-8516.88	-1962.82	==>	8717.60	39.98386601	-104.76625804
16527.00	90.00	179.17	7485.00	-8616.87	-1961.36	==>	8816.17	39.98359151	-104.76625580
16627.00	90.00	179.17	7485.00	-8716.86	-1959.91	==>	8914.74	39.98331701	-104.76625356
16727.00	90.00	179.17	7485.00	-8816.85	-1958.45	==>	9013.31	39.98304250	-104.76625132
16827.00	90.00	179.17	7485.00	-8916.84	-1957.00	==>	9111.88	39.98276800	-104.76624908
16927.00	90.00	179.17	7485.00	-9016.83	-1955.54	==>	9210.45	39.98249350	-104.76624684
17027.00	90.00	179.17	7485.00	-9116.82	-1954.09	==>	9309.03	39.98221899	-104.76624460
17127.00	90.00	179.17	7485.00	-9216.81	-1952.63	==>	9407.60	39.98194449	-104.76624235
17227.00	90.00	179.17	7485.00	-9316.80	-1951.18	==>	9506.17	39.98166998	-104.76624011
17327.00	90.00	179.17	7485.00	-9416.79	-1949.72	==>	9604.74	39.98139548	-104.76623787
17427.00	90.00	179.17	7485.00	-9516.78	-1948.27	==>	9703.31	39.98112098	-104.76623563
17527.00	90.00	179.17	7485.00	-9616.76	-1946.81	==>	9801.88	39.98084647	-104.76623339
17627.00	90.00	179.17	7485.00	-9716.75	-1945.36	==>	9900.45	39.98057197	-104.76623115
17727.00	90.00	179.17	7485.00	-9816.74	-1943.90	==>	9999.03	39.98029746	-104.76622891
17827.00	90.00	179.17	7485.00	-9916.73	-1942.44	==>	10097.60	39.98002296	-104.76622667
17927.00	90.00	179.17	7485.00	-10016.72	-1940.99	==>	10196.17	39.97974846	-104.76622443
18027.00	90.00	179.17	7485.00	-10116.71	-1939.53	==>	10294.74	39.97947395	-104.76622219
18127.00	90.00	179.17	7485.00	-10216.70	-1938.08	==>	10393.31	39.97919945	-104.76621995
18227.00	90.00	179.17	7485.00	-10316.69	-1936.62	==>	10491.88	39.97892494	-104.76621771
18327.00	90.00	179.17	7485.00	-10416.68	-1935.17	==>	10590.45	39.97865044	-104.76621547
18427.00	90.00	179.17	7485.00	-10516.67	-1933.71	==>	10689.02	39.97837594	-104.76621322
18527.00	90.00	179.17	7485.00	-10616.66	-1932.26	==>	10787.60	39.97810143	-104.76621098
18627.00	90.00	179.17	7485.00	-10716.65	-1930.80	==>	10886.17	39.97782693	-104.76620874
18727.00	90.00	179.17	7485.00	-10816.64	-1929.35	==>	10984.74	39.97755243	-104.76620650
18827.00	90.00	179.17	7485.00	-10916.63	-1927.89	==>	11083.31	39.97727792	-104.76620426
18927.00	90.00	179.17	7485.00	-11016.62	-1926.43	==>	11181.88	39.97700342	-104.76620202
19027.00	90.00	179.17	7485.00	-11116.61	-1924.98	==>	11280.45	39.97672891	-104.76619978
19127.00	90.00	179.17	7485.00	-11216.60	-1923.52	==>	11379.02	39.97645441	-104.76619754
19227.00	90.00	179.17	7485.00	-11316.58	-1922.07	==>	11477.60	39.97617991	-104.76619530
19327.00	90.00	179.17	7485.00	-11416.57	-1920.61	==>	11576.17	39.97590540	-104.76619306
19427.00	90.00	179.17	7485.00	-11516.56	-1919.16	==>	11674.74	39.97563090	-104.76619082
19527.00	90.00	179.17	7485.00	-11616.55	-1917.70	==>	11773.31	39.97535639	-104.76618858
19627.00	90.00	179.17	7485.00	-11716.54	-1916.25	==>	11871.88	39.97508189	-104.76618634
19727.00	90.00	179.17	7485.00	-11816.53	-1914.79	==>	11970.45	39.97480739	-104.76618410
19827.00	90.00	179.17	7485.00	-11916.52	-1913.34	==>	12069.02	39.97453288	-104.76618186
19927.00	90.00	179.17	7485.00	-12016.51	-1911.88	==>	12167.60	39.97425838	-104.76617962
20027.00	90.00	179.17	7485.00	-12116.50	-1910.43	==>	12266.17	39.97398387	-104.76617738
20127.00	90.00	179.17	7485.00	-12216.49	-1908.97	==>	12364.74	39.97370937	-104.76617514

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Vertical Section is from 0.00 0.00 on azimuth 188.86 degrees
Bottom hole distance is 12388.46 Feet on azimuth 188.86 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 9-Mar-2020

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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)
20151.06	90.00	179.17	7485.00	-12240.55	-1908.62	==>	12388.46	39.97364331	-104.76617460

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Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
Homestead 6 - BHL	-12240.55	-1908.62	7485.00	39.97364331	-104.76617460	1234096.76	3205660.93
Homestead 6 - LP	-287.70	-2082.60	7485.00	40.00645780	-104.76644254	1246049.18	3205486.95

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
925983	Planned	1527.00	1527.00	WdW Rate Gyro	Standard	
925982	Planned	20151.06	7485.00	ISCWSA MWD	Rev 4 + SAG + FLT	

Notes