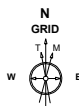


Petro Operating Company

Location	Weld County, CO	Slot	Homestead 3
Field	Wattenberg	Well	Homestead 3
Installation	Homestead Pad - Rev 02	Wellbore	Homestead 3 (PWB)



Feb-6-2020
 EMM-2017 Dip: 66.30 deg Field: 51800.1 nT
 Lat: N40 0 25.9200 Long: W104 45 33.0120 Elev: 5137.00 ft
 Magnetic North is 0.06 deg East of True North
 GRID North is 0.48 deg East of True North
 To correct azimuth from True to GRID subtract 0.48 deg
 To correct azimuth from Magnetic to GRID add 7.58 deg

Created by sean.dolfinger
 Date plotted 12-Aug-2020
 Plot reference is Homestead 3 (PWB).
 Ref wellpath is Homestead 3 (PWP#1).
 Coordinates are in Feet reference Homestead 3.
 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) ->

-4000 -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	276.24	1527.00	S 0.00	W 0.00	0.00	-0.00
End of Build	2962.02	28.70	276.24	2902.76	N 38.28	W 349.87	2.00	36.88
End of Hold	7578.16	28.70	276.24	6951.77	N 279.36	W 2553.53	0.00	269.15
Target Homest...3 - LP	8512.07	90.00	179.17	7485.00	S 296.75	W 2834.91	10.00	891.86
T.D. & Target Hom...BHL	20465.59	90.00	179.17	7485.00	S 12249.00	W 2661.25	0.00	12534.76

Tie on - 0.00 Inc, 27.00 MD, 27.00 TVD, -0.00 VS

3DS Kick off Point - 0.00 Inc, 1527.00 MD, 1527.00 TVD, -0.00 VS

End of Build - 28.70 Inc, 2962.02 MD, 2902.76 TVD, 36.88 VS

End of Hold - 28.70 Inc, 7578.16 MD, 6951.77 TVD, 269.15 VS

Homestead 3 - LP

S/C Kick off Point - 90.00 Inc, 8512.07 MD, 7485.00 TVD, 891.86 VS

T.D. & End of Hold - 7485.00 TVD, 12249.00 S 2661.25 W

Homestead 3 - BHL

Homestead 3 (PWB)

Surface 0.00 N 0.00 E

Homestead 3 - LP

Section 34 - T1N - R66W

Section 3 - T1S - R66W

Homestead 3 - BHL

Section 10 - T1S - R66W

Homestead 3 (PWB)

<- North(Feet)

Scale 1 cm = 500 ft

<- True Vertical Depth (Feet)

Scale 1 cm = 500 ft

-1000 -0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 11000 12000 13000 14000

Scale 1 cm = 500 ft

Vertical Section (Feet) ->

Azimuth 192.26 with reference 0.00 N, 0.00 E from Homestead 3

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 3 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
Homestead 3	40.00720000	-104.75917000	1246336.4735	3207521.8588	0.00N	0.00E	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	0.00N	0.00E		0.00
1527.00	0.00	276.24	1527.00	-3638.00	0.00N	0.00E	==>	0.00
2962.02	28.70	276.24	2902.76	-2262.24	38.28N	349.87W	2.00	36.88
7578.16	28.70	276.24	6951.77	1786.77	279.36N	2553.53W	==>	269.15
8512.07	90.00	179.17	7485.00	2320.00	296.75S	2834.91W	10.00	891.86
20465.59	90.00	179.17	7485.00	2320.00	12249.00S	2661.25W	==>	12534.76

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	40.00720000	-104.75917000
27.00	0.00	0.00	27.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1527.00	0.00	276.24	1527.00	0.00N	0.00E	==>	0.00	40.00720000	-104.75917000
1627.00	2.00	276.24	1626.98	0.19N	1.73W	2.00	0.18	40.00720056	-104.75917619
1727.00	4.00	276.24	1726.84	0.76N	6.94W	2.00	0.73	40.00720224	-104.75919474
1827.00	6.00	276.24	1826.45	1.71N	15.60W	2.00	1.64	40.00720504	-104.75922564
1927.00	8.00	276.24	1925.70	3.03N	27.71W	2.00	2.92	40.00720896	-104.75926884
2027.00	10.00	276.24	2024.47	4.73N	43.26W	2.00	4.56	40.00721398	-104.75932430
2127.00	12.00	276.24	2122.62	6.81N	62.23W	2.00	6.56	40.00722012	-104.75939194
2227.00	14.00	276.24	2220.06	9.25N	84.59W	2.00	8.92	40.00722734	-104.75947168
2327.00	16.00	276.24	2316.64	12.07N	110.32W	2.00	11.63	40.00723566	-104.75956343
2427.00	18.00	276.24	2412.27	15.25N	139.38W	2.00	14.69	40.00724505	-104.75966708
2527.00	20.00	276.24	2506.82	18.79N	171.74W	2.00	18.10	40.00725551	-104.75978249
2627.00	22.00	276.24	2600.17	22.69N	207.37W	2.00	21.86	40.00726703	-104.75990954
2727.00	24.00	276.24	2692.21	26.93N	246.21W	2.00	25.95	40.00727958	-104.76004805
2827.00	26.00	276.24	2782.84	31.53N	288.21W	2.00	30.38	40.00729316	-104.76019787
2927.00	28.00	276.24	2871.94	36.47N	333.34W	2.00	35.14	40.00730774	-104.76035881

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 0.00N 0.00E on azimuth 192.26 degrees
Bottom hole distance is 12534.76 Feet on azimuth 192.26 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 12-Aug-2020

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 3 (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)
2962.02	28.70	276.24	2902.76	38.28N	349.87W	2.00	36.88	40.00731308	-104.76041776
3027.00	28.70	276.24	2959.75	41.67N	380.89W	==>	40.15	40.00732311	-104.76052839
3127.00	28.70	276.24	3047.47	46.89N	428.63W	==>	45.18	40.00733854	-104.76069864
3227.00	28.70	276.24	3135.18	52.11N	476.37W	==>	50.21	40.00735397	-104.76086889
3327.00	28.70	276.24	3222.90	57.34N	524.11W	==>	55.24	40.00736939	-104.76103914
3427.00	28.70	276.24	3310.61	62.56N	571.85W	==>	60.27	40.00738482	-104.76120939
3527.00	28.70	276.24	3398.32	67.78N	619.58W	==>	65.31	40.00740025	-104.76137965
3627.00	28.70	276.24	3486.04	73.00N	667.32W	==>	70.34	40.00741568	-104.76154990
3727.00	28.70	276.24	3573.75	78.23N	715.06W	==>	75.37	40.00743110	-104.76172015
3827.00	28.70	276.24	3661.47	83.45N	762.80W	==>	80.40	40.00744653	-104.76189040
3927.00	28.70	276.24	3749.18	88.67N	810.54W	==>	85.43	40.00746196	-104.76206065
4027.00	28.70	276.24	3836.90	93.89N	858.27W	==>	90.47	40.00747738	-104.76223090
4127.00	28.70	276.24	3924.61	99.12N	906.01W	==>	95.50	40.00749281	-104.76240115
4227.00	28.70	276.24	4012.32	104.34N	953.75W	==>	100.53	40.00750823	-104.76257140
4327.00	28.70	276.24	4100.04	109.56N	1001.49W	==>	105.56	40.00752366	-104.76274165
4427.00	28.70	276.24	4187.75	114.78N	1049.23W	==>	110.59	40.00753909	-104.76291191
4527.00	28.70	276.24	4275.47	120.01N	1096.96W	==>	115.62	40.00755451	-104.76308216
4627.00	28.70	276.24	4363.18	125.23N	1144.70W	==>	120.66	40.00756993	-104.76325241
4727.00	28.70	276.24	4450.90	130.45N	1192.44W	==>	125.69	40.00758536	-104.76342266
4827.00	28.70	276.24	4538.61	135.68N	1240.18W	==>	130.72	40.00760078	-104.76359291
4927.00	28.70	276.24	4626.33	140.90N	1287.92W	==>	135.75	40.00761621	-104.76376317
5027.00	28.70	276.24	4714.04	146.12N	1335.65W	==>	140.78	40.00763163	-104.76393342
5127.00	28.70	276.24	4801.75	151.34N	1383.39W	==>	145.82	40.00764705	-104.76410367
5227.00	28.70	276.24	4889.47	156.57N	1431.13W	==>	150.85	40.00766248	-104.76427392
5327.00	28.70	276.24	4977.18	161.79N	1478.87W	==>	155.88	40.00767790	-104.76444417
5427.00	28.70	276.24	5064.90	167.01N	1526.61W	==>	160.91	40.00769332	-104.76461443
5527.00	28.70	276.24	5152.61	172.23N	1574.35W	==>	165.94	40.00770875	-104.76478468
5627.00	28.70	276.24	5240.33	177.46N	1622.08W	==>	170.97	40.00772417	-104.76495493
5727.00	28.70	276.24	5328.04	182.68N	1669.82W	==>	176.01	40.00773959	-104.76512518
5827.00	28.70	276.24	5415.75	187.90N	1717.56W	==>	181.04	40.00775501	-104.76529544
5927.00	28.70	276.24	5503.47	193.12N	1765.30W	==>	186.07	40.00777043	-104.76546569
6027.00	28.70	276.24	5591.18	198.35N	1813.04W	==>	191.10	40.00778585	-104.76563594
6127.00	28.70	276.24	5678.90	203.57N	1860.77W	==>	196.13	40.00780128	-104.76580619
6227.00	28.70	276.24	5766.61	208.79N	1908.51W	==>	201.16	40.00781670	-104.76597645
6327.00	28.70	276.24	5854.33	214.01N	1956.25W	==>	206.20	40.00783212	-104.76614670
6427.00	28.70	276.24	5942.04	219.24N	2003.99W	==>	211.23	40.00784754	-104.76631695
6527.00	28.70	276.24	6029.75	224.46N	2051.73W	==>	216.26	40.00786296	-104.76648721
6627.00	28.70	276.24	6117.47	229.68N	2099.46W	==>	221.29	40.00787838	-104.76665746
6727.00	28.70	276.24	6205.18	234.90N	2147.20W	==>	226.32	40.00789380	-104.76682771
6827.00	28.70	276.24	6292.90	240.13N	2194.94W	==>	231.36	40.00790921	-104.76699797
6927.00	28.70	276.24	6380.61	245.35N	2242.68W	==>	236.39	40.00792463	-104.76716822
7027.00	28.70	276.24	6468.33	250.57N	2290.42W	==>	241.42	40.00794005	-104.76733847
7127.00	28.70	276.24	6556.04	255.79N	2338.15W	==>	246.45	40.00795547	-104.76750873
7227.00	28.70	276.24	6643.75	261.02N	2385.89W	==>	251.48	40.00797089	-104.76767898
7327.00	28.70	276.24	6731.47	266.24N	2433.63W	==>	256.51	40.00798631	-104.76784923
7427.00	28.70	276.24	6819.18	271.46N	2481.37W	==>	261.55	40.00800172	-104.76801949
7527.00	28.70	276.24	6906.90	276.68N	2529.11W	==>	266.58	40.00801714	-104.76818974
7578.16	28.70	276.24	6951.77	279.36N	2553.53W	==>	269.15	40.00802503	-104.76827684
7627.00	28.55	266.04	6994.67	279.83N	2576.85W	10.00	273.64	40.00802685	-104.76836006
7727.00	30.56	246.10	7081.86	267.85N	2624.05W	10.00	295.37	40.00799503	-104.76852892
7827.00	35.16	229.65	7166.01	238.83N	2669.35W	10.00	333.34	40.00791641	-104.76869148
7927.00	41.47	217.10	7244.55	193.66N	2711.37W	10.00	386.40	40.00779338	-104.76884281
8027.00	48.84	207.53	7315.10	133.72N	2748.84W	10.00	452.94	40.00762967	-104.76897831
8127.00	56.83	199.97	7375.51	60.81N	2780.61W	10.00	530.93	40.00743027	-104.76909386
8227.00	65.21	193.70	7423.96	22.84S	2805.72W	10.00	618.00	40.00720122	-104.76918595
8327.00	73.80	188.25	7458.96	114.69S	2823.40W	10.00	711.51	40.00694949	-104.76925178
8427.00	82.53	183.25	7479.46	211.95S	2833.13W	10.00	808.62	40.00668272	-104.76928936
8512.07	90.00	179.17	7485.00	296.75S	2834.91W	10.00	891.86	40.00645000	-104.76929820

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 0.00N 0.00E on azimuth 192.26 degrees
Bottom hole distance is 12534.76 Feet on azimuth 192.26 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 12-Aug-2020

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 3 (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	311.67S	2834.69W	==>	906.40	40.00640902	-104.76929786
8627.00	90.00	179.17	7485.00	411.66S	2833.24W	==>	1003.80	40.00613452	-104.76929562
8727.00	90.00	179.17	7485.00	511.65S	2831.78W	==>	1101.20	40.00586002	-104.76929338
8827.00	90.00	179.17	7485.00	611.64S	2830.33W	==>	1198.60	40.00558551	-104.76929113
8927.00	90.00	179.17	7485.00	711.63S	2828.88W	==>	1296.01	40.00531101	-104.76928889
9027.00	90.00	179.17	7485.00	811.62S	2827.42W	==>	1393.41	40.00503651	-104.76928664
9127.00	90.00	179.17	7485.00	911.61S	2825.97W	==>	1490.81	40.00476200	-104.76928440
9227.00	90.00	179.17	7485.00	1011.60S	2824.52W	==>	1588.21	40.00448750	-104.76928215
9327.00	90.00	179.17	7485.00	1111.59S	2823.07W	==>	1685.61	40.00421300	-104.76927991
9427.00	90.00	179.17	7485.00	1211.58S	2821.61W	==>	1783.01	40.00393849	-104.76927766
9527.00	90.00	179.17	7485.00	1311.57S	2820.16W	==>	1880.41	40.00366399	-104.76927542
9627.00	90.00	179.17	7485.00	1411.56S	2818.71W	==>	1977.82	40.00338949	-104.76927318
9727.00	90.00	179.17	7485.00	1511.55S	2817.26W	==>	2075.22	40.00311498	-104.76927093
9827.00	90.00	179.17	7485.00	1611.54S	2815.80W	==>	2172.62	40.00284048	-104.76926869
9927.00	90.00	179.17	7485.00	1711.53S	2814.35W	==>	2270.02	40.00256598	-104.76926644
10027.00	90.00	179.17	7485.00	1811.52S	2812.90W	==>	2367.42	40.00229147	-104.76926420
10127.00	90.00	179.17	7485.00	1911.50S	2811.44W	==>	2464.82	40.00201697	-104.76926195
10227.00	90.00	179.17	7485.00	2011.49S	2809.99W	==>	2562.23	40.00174247	-104.76925971
10327.00	90.00	179.17	7485.00	2111.48S	2808.54W	==>	2659.63	40.00146796	-104.76925747
10427.00	90.00	179.17	7485.00	2211.47S	2807.09W	==>	2757.03	40.00119346	-104.76925522
10527.00	90.00	179.17	7485.00	2311.46S	2805.63W	==>	2854.43	40.00091896	-104.76925298
10627.00	90.00	179.17	7485.00	2411.45S	2804.18W	==>	2951.83	40.00064445	-104.76925073
10727.00	90.00	179.17	7485.00	2511.44S	2802.73W	==>	3049.23	40.00036995	-104.76924849
10827.00	90.00	179.17	7485.00	2611.43S	2801.28W	==>	3146.63	40.00009545	-104.76924625
10927.00	90.00	179.17	7485.00	2711.42S	2799.82W	==>	3244.04	39.99982094	-104.76924400
11027.00	90.00	179.17	7485.00	2811.41S	2798.37W	==>	3341.44	39.99954644	-104.76924176
11127.00	90.00	179.17	7485.00	2911.40S	2796.92W	==>	3438.84	39.99927194	-104.76923951
11227.00	90.00	179.17	7485.00	3011.39S	2795.46W	==>	3536.24	39.99899743	-104.76923727
11327.00	90.00	179.17	7485.00	3111.38S	2794.01W	==>	3633.64	39.99872293	-104.76923503
11427.00	90.00	179.17	7485.00	3211.37S	2792.56W	==>	3731.04	39.99844843	-104.76923278
11527.00	90.00	179.17	7485.00	3311.36S	2791.11W	==>	3828.44	39.99817392	-104.76923054
11627.00	90.00	179.17	7485.00	3411.35S	2789.65W	==>	3925.85	39.99789942	-104.76922829
11727.00	90.00	179.17	7485.00	3511.34S	2788.20W	==>	4023.25	39.99762492	-104.76922605
11827.00	90.00	179.17	7485.00	3611.33S	2786.75W	==>	4120.65	39.99735041	-104.76922381
11927.00	90.00	179.17	7485.00	3711.31S	2785.30W	==>	4218.05	39.99707591	-104.76922156
12027.00	90.00	179.17	7485.00	3811.30S	2783.84W	==>	4315.45	39.99680141	-104.76921932
12127.00	90.00	179.17	7485.00	3911.29S	2782.39W	==>	4412.85	39.99652690	-104.76921707
12227.00	90.00	179.17	7485.00	4011.28S	2780.94W	==>	4510.26	39.99625240	-104.76921483
12327.00	90.00	179.17	7485.00	4111.27S	2779.48W	==>	4607.66	39.99597790	-104.76921259
12427.00	90.00	179.17	7485.00	4211.26S	2778.03W	==>	4705.06	39.99570339	-104.76921034
12527.00	90.00	179.17	7485.00	4311.25S	2776.58W	==>	4802.46	39.99542889	-104.76920810
12627.00	90.00	179.17	7485.00	4411.24S	2775.13W	==>	4899.86	39.99515439	-104.76920585
12727.00	90.00	179.17	7485.00	4511.23S	2773.67W	==>	4997.26	39.99487988	-104.76920361
12827.00	90.00	179.17	7485.00	4611.22S	2772.22W	==>	5094.66	39.99460538	-104.76920137
12927.00	90.00	179.17	7485.00	4711.21S	2770.77W	==>	5192.07	39.99433088	-104.76919912
13027.00	90.00	179.17	7485.00	4811.20S	2769.31W	==>	5289.47	39.99405637	-104.76919688
13127.00	90.00	179.17	7485.00	4911.19S	2767.86W	==>	5386.87	39.99378187	-104.76919464
13227.00	90.00	179.17	7485.00	5011.18S	2766.41W	==>	5484.27	39.99350736	-104.76919239
13327.00	90.00	179.17	7485.00	5111.17S	2764.96W	==>	5581.67	39.99323286	-104.76919015
13427.00	90.00	179.17	7485.00	5211.16S	2763.50W	==>	5679.07	39.99295836	-104.76918791
13527.00	90.00	179.17	7485.00	5311.15S	2762.05W	==>	5776.47	39.99268385	-104.76918566
13627.00	90.00	179.17	7485.00	5411.14S	2760.60W	==>	5873.88	39.99240935	-104.76918342
13727.00	90.00	179.17	7485.00	5511.12S	2759.15W	==>	5971.28	39.99213485	-104.76918117
13827.00	90.00	179.17	7485.00	5611.11S	2757.69W	==>	6068.68	39.99186034	-104.76917893
13927.00	90.00	179.17	7485.00	5711.10S	2756.24W	==>	6166.08	39.99158584	-104.76917669
14027.00	90.00	179.17	7485.00	5811.09S	2754.79W	==>	6263.48	39.99131134	-104.76917444
14127.00	90.00	179.17	7485.00	5911.08S	2753.33W	==>	6360.88	39.99103683	-104.76917220
14227.00	90.00	179.17	7485.00	6011.07S	2751.88W	==>	6458.29	39.99076233	-104.76916996
14327.00	90.00	179.17	7485.00	6111.06S	2750.43W	==>	6555.69	39.99048783	-104.76916771

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Bottom hole distance is 12534.76 Feet on azimuth 192.26 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 12-Aug-2020

SYSDRILL
Well Design Combined Report
Wellbore: Homestead 3 (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	6211.05S	2748.98W	==>	6653.09	39.99021332	-104.76916547
14527.00	90.00	179.17	7485.00	6311.04S	2747.52W	==>	6750.49	39.98993882	-104.76916323
14627.00	90.00	179.17	7485.00	6411.03S	2746.07W	==>	6847.89	39.98966431	-104.76916098
14727.00	90.00	179.17	7485.00	6511.02S	2744.62W	==>	6945.29	39.98938981	-104.76915874
14827.00	90.00	179.17	7485.00	6611.01S	2743.17W	==>	7042.69	39.98911531	-104.76915650
14927.00	90.00	179.17	7485.00	6711.00S	2741.71W	==>	7140.10	39.98884080	-104.76915425
15027.00	90.00	179.17	7485.00	6810.99S	2740.26W	==>	7237.50	39.98856630	-104.76915201
15127.00	90.00	179.17	7485.00	6910.98S	2738.81W	==>	7334.90	39.98829180	-104.76914977
15227.00	90.00	179.17	7485.00	7010.97S	2737.35W	==>	7432.30	39.98801729	-104.76914752
15327.00	90.00	179.17	7485.00	7110.96S	2735.90W	==>	7529.70	39.98774279	-104.76914528
15427.00	90.00	179.17	7485.00	7210.95S	2734.45W	==>	7627.10	39.98746829	-104.76914304
15527.00	90.00	179.17	7485.00	7310.93S	2733.00W	==>	7724.50	39.98719378	-104.76914079
15627.00	90.00	179.17	7485.00	7410.92S	2731.54W	==>	7821.91	39.98691928	-104.76913855
15727.00	90.00	179.17	7485.00	7510.91S	2730.09W	==>	7919.31	39.98664477	-104.76913631
15827.00	90.00	179.17	7485.00	7610.90S	2728.64W	==>	8016.71	39.98637027	-104.76913406
15927.00	90.00	179.17	7485.00	7710.89S	2727.19W	==>	8114.11	39.98609577	-104.76913182
16027.00	90.00	179.17	7485.00	7810.88S	2725.73W	==>	8211.51	39.98582126	-104.76912958
16127.00	90.00	179.17	7485.00	7910.87S	2724.28W	==>	8308.91	39.98554676	-104.76912733
16227.00	90.00	179.17	7485.00	8010.86S	2722.83W	==>	8406.32	39.98527226	-104.76912509
16327.00	90.00	179.17	7485.00	8110.85S	2721.37W	==>	8503.72	39.98499775	-104.76912285
16427.00	90.00	179.17	7485.00	8210.84S	2719.92W	==>	8601.12	39.98472325	-104.76912060
16527.00	90.00	179.17	7485.00	8310.83S	2718.47W	==>	8698.52	39.98444874	-104.76911836
16627.00	90.00	179.17	7485.00	8410.82S	2717.02W	==>	8795.92	39.98417424	-104.76911612
16727.00	90.00	179.17	7485.00	8510.81S	2715.56W	==>	8893.32	39.98389974	-104.76911388
16827.00	90.00	179.17	7485.00	8610.80S	2714.11W	==>	8990.72	39.98362523	-104.76911163
16927.00	90.00	179.17	7485.00	8710.79S	2712.66W	==>	9088.13	39.98335073	-104.76910939
17027.00	90.00	179.17	7485.00	8810.78S	2711.21W	==>	9185.53	39.98307622	-104.76910715
17127.00	90.00	179.17	7485.00	8910.77S	2709.75W	==>	9282.93	39.98280172	-104.76910490
17227.00	90.00	179.17	7485.00	9010.76S	2708.30W	==>	9380.33	39.98252722	-104.76910266
17327.00	90.00	179.17	7485.00	9110.74S	2706.85W	==>	9477.73	39.98225271	-104.76910042
17427.00	90.00	179.17	7485.00	9210.73S	2705.39W	==>	9575.13	39.98197821	-104.76909817
17527.00	90.00	179.17	7485.00	9310.72S	2703.94W	==>	9672.53	39.98170371	-104.76909593
17627.00	90.00	179.17	7485.00	9410.71S	2702.49W	==>	9769.94	39.98142920	-104.76909369
17727.00	90.00	179.17	7485.00	9510.70S	2701.04W	==>	9867.34	39.98115470	-104.76909145
17827.00	90.00	179.17	7485.00	9610.69S	2699.58W	==>	9964.74	39.98088019	-104.76908920
17927.00	90.00	179.17	7485.00	9710.68S	2698.13W	==>	10062.14	39.98060569	-104.76908696
18027.00	90.00	179.17	7485.00	9810.67S	2696.68W	==>	10159.54	39.98033119	-104.76908472
18127.00	90.00	179.17	7485.00	9910.66S	2695.22W	==>	10256.94	39.98005668	-104.76908247
18227.00	90.00	179.17	7485.00	10010.65S	2693.77W	==>	10354.35	39.97978218	-104.76908023
18327.00	90.00	179.17	7485.00	10110.64S	2692.32W	==>	10451.75	39.97950767	-104.76907799
18427.00	90.00	179.17	7485.00	10210.63S	2690.87W	==>	10549.15	39.97923317	-104.76907575
18527.00	90.00	179.17	7485.00	10310.62S	2689.41W	==>	10646.55	39.97895867	-104.76907350
18627.00	90.00	179.17	7485.00	10410.61S	2687.96W	==>	10743.95	39.97868416	-104.76907126
18727.00	90.00	179.17	7485.00	10510.60S	2686.51W	==>	10841.35	39.97840966	-104.76906902
18827.00	90.00	179.17	7485.00	10610.59S	2685.06W	==>	10938.75	39.97813516	-104.76906678
18927.00	90.00	179.17	7485.00	10710.58S	2683.60W	==>	11036.16	39.97786065	-104.76906453
19027.00	90.00	179.17	7485.00	10810.57S	2682.15W	==>	11133.56	39.97758615	-104.76906229
19127.00	90.00	179.17	7485.00	10910.55S	2680.70W	==>	11230.96	39.97731164	-104.76906005
19227.00	90.00	179.17	7485.00	11010.54S	2679.24W	==>	11328.36	39.97703714	-104.76905781
19327.00	90.00	179.17	7485.00	11110.53S	2677.79W	==>	11425.76	39.97676264	-104.76905556
19427.00	90.00	179.17	7485.00	11210.52S	2676.34W	==>	11523.16	39.97648813	-104.76905332
19527.00	90.00	179.17	7485.00	11310.51S	2674.89W	==>	11620.56	39.97621363	-104.76905108
19627.00	90.00	179.17	7485.00	11410.50S	2673.43W	==>	11717.97	39.97593912	-104.76904884
19727.00	90.00	179.17	7485.00	11510.49S	2671.98W	==>	11815.37	39.97566462	-104.76904659
19827.00	90.00	179.17	7485.00	11610.48S	2670.53W	==>	11912.77	39.97539012	-104.76904435
19927.00	90.00	179.17	7485.00	11710.47S	2669.08W	==>	12010.17	39.97511561	-104.76904211
20027.00	90.00	179.17	7485.00	11810.46S	2667.62W	==>	12107.57	39.97484111	-104.76903987
20127.00	90.00	179.17	7485.00	11910.45S	2666.17W	==>	12204.97	39.97456660	-104.76903762

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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)
20227.00	90.00	179.17	7485.00	12010.44S	2664.72W	==>	12302.38	39.97429210	-104.76903538
20327.00	90.00	179.17	7485.00	12110.43S	2663.26W	==>	12399.78	39.97401760	-104.76903314
20427.00	90.00	179.17	7485.00	12210.42S	2661.81W	==>	12497.18	39.97374309	-104.76903090
20465.59	90.00	179.17	7485.00	12249.00S	2661.25W	==>	12534.76	39.97363717	-104.76903003

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Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
Homestead 3 - BHL	12249.00S	2661.25W	7485.00	39.97363717	-104.76903003	1234087.92	3204860.70
Homestead 3 - LP	296.75S	2834.91W	7485.00	40.00645000	-104.76929820	1246039.74	3204687.06

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
925913	Planned	1527.00	1527.00	WdW Rate Gyro	Standard
925912	Planned	20465.59	7485.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes

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