

VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL, SEC.34)
Field: WELD COUNTY (NAD83/TN) Well: HOMESTEAD 3
Facility: SEC 34-T1N-R66W Wellbore: HOMESTEAD 3 PWB

Plot reference wellpath is HOMESTEAD 3 (REV-A.0) PWP
Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to XTREME 20 (16°RXB+5138'GL) (RKB) * - Wellpath was transformed from a different geodetic datum
Measured depths are referenced to XTREME 20 (16°RXB+5138'GL) (RKB) North Reference: True north
XTREME 20 (16°RXB+5138'GL) (RKB) to Mean Sea Level: 5154 feet Scale: True distance
Mean Sea Level to Mud line (N Slot: SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL, SEC.34)): 0 feet Depths are in feet
Coordinates are in feet referenced to Slot Created by: guesler on 2018-01-31
Database: WA_DEN_Denver_Datb

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 34-T1N-R66W	3207958.837	1246340.128	40°00'25.920"N	104°45'27.396"W
Slot	Local N (ft)	Local E (ft)	Grid North (US ft)	Grid East (US ft)
SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL, SEC.34)	0.00	-437.01	3207521.859	1246336.474
XTREME 20 (16°RXB+5138'GL) (RKB) to Mud line (N Slot: SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL, SEC.34))				5154ft
Mean Sea Level to Mud line (N Slot: SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL, SEC.34))				0ft
XTREME 20 (16°RXB+5138'GL) (RKB) to Mean Sea Level				5154ft

Bottom Hole Location

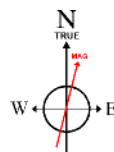
MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
20394.18	90.024	180.852	7551.00	-12225.31	-2735.45	3204888.73	1234089.18	39°58'25.104"N	104°46'08.148"W

Well Profile Data

Design Comment	MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	16.00	0.000	277.345	16.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	277.345	1500.00	0.00	0.00	0.00	0.00
End of Build	2770.30	25.406	277.345	2729.08	35.42	-274.78	2.00	25.43
End of Tangent	7512.60	25.406	277.345	7012.75	295.54	-2292.68	0.00	212.21
End of 3D Arc	8440.62	90.024	180.852	7556.00	-273.08	-2557.65	10.00	824.97
End of Tangent	20394.18	90.024	180.852	7551.00	-12225.31	-2735.45	0.00	12527.61

Targets

Name	MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
HOMESTEAD 1 SEC 34-T1N-R66W	-1.00	-0.00	-0.00	3207495.08	1246332.07	40°00'25.920"N	104°45'27.396"W	
HOMESTEAD 1 SEC 10-T1S-R66W	-1.00	-0.00	-0.00	3207495.08	1246332.07	40°00'25.920"N	104°45'27.396"W	
HOMESTEAD 1 SEC 3-T1S-R66W	-1.00	-0.00	-0.00	3207495.08	1246332.07	40°00'25.920"N	104°45'27.396"W	
HOMESTEAD 1 SEC 34-T1N-R66W Hardline (460' Setback)	7551.00	-0.00	-0.00	3204888.73	1234089.18	39°58'25.104"N	104°46'08.148"W	
HOMESTEAD 1 SEC 10-T1S-R66W Hardline (460' Setback)	7551.00	-0.00	-0.00	3207495.08	1246332.07	40°00'25.920"N	104°45'27.396"W	
HOMESTEAD 1 SEC 34-T1N-R66W Hardline (460' Setback)	7551.00	-0.00	-0.00	3207495.08	1246332.07	40°00'25.920"N	104°45'27.396"W	
HOMESTEAD 1 SEC 3-T1S-R66W Hardline (460' Setback)	7551.00	-0.00	-0.00	3207495.08	1246332.07	40°00'25.920"N	104°45'27.396"W	

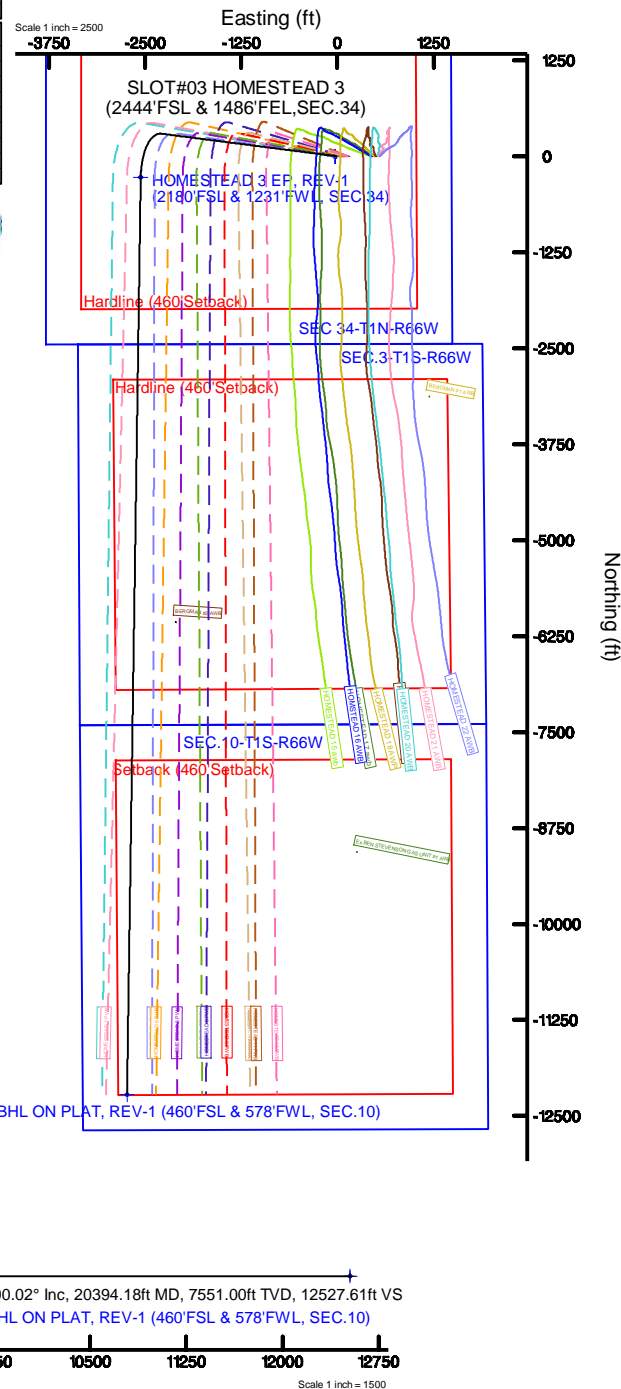


BGGM (1900.0 to 2019.0) Dip: 66.54° Field: 52093.7 nT
Magnetic North is 8.30 degrees East of True North (at 1/24/2018)

To correct azimuth from Magnetic to True add 8.30 degrees

Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	20394.18	BH NavTrak	BH NavTrak (Rotating+Axial Corr)		HOMESTEAD 3 PWB





Planned Wellpath Report

HOMESTEAD 3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Guenaler
Scale	0.999966	Report Generated	1/31/2018 at 4:39:30 PM
Convergence at slot	0.48° East	Database/Source file	WA_DEN_Denver_Defn/HOMESTEAD_3__REV-A.0__PWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	-437.01	3207521.86	1246336.47	40°00'25.920"N	104°45'33.012"W
Facility Reference Pt			3207958.84	1246340.13	40°00'25.920"N	104°45'27.396"W
Field Reference Pt			3242930.13	1254608.21	40°01'44.490"N	104°37'56.946"W

WELLPATH DATUM			
Calculation method	Minimum curvature	XTREME 20 (16'RKB+5138'GL) (RKB) to Facility Vertical Datum	5154.00ft
Horizontal Reference Pt	Slot	XTREME 20 (16'RKB+5138'GL) (RKB) to Mean Sea Level	5154.00ft
Vertical Reference Pt	XTREME 20 (16'RKB+5138'GL) (RKB)	XTREME 20 (16'RKB+5138'GL) (RKB) to Mud Line at Slot (SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34))	5154.00ft
MD Reference Pt	XTREME 20 (16'RKB+5138'GL) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	192.61°



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Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (210 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	277.345	0.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
16.00	0.000	277.345	16.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	Tie On
116.00†	0.000	277.345	116.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
216.00†	0.000	277.345	216.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
316.00†	0.000	277.345	316.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
416.00†	0.000	277.345	416.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
516.00†	0.000	277.345	516.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
616.00†	0.000	277.345	616.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
716.00†	0.000	277.345	716.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
816.00†	0.000	277.345	816.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
916.00†	0.000	277.345	916.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
1016.00†	0.000	277.345	1016.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
1116.00†	0.000	277.345	1116.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
1216.00†	0.000	277.345	1216.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
1316.00†	0.000	277.345	1316.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
1416.00†	0.000	277.345	1416.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	
1500.00	0.000	277.345	1500.00	0.00	0.00	0.00	40°00'25.920"N	104°45'33.012"W	0.00	End of Tangent
1516.00†	0.320	277.345	1516.00	0.00	0.01	-0.04	40°00'25.920"N	104°45'33.013"W	2.00	
1616.00†	2.320	277.345	1615.97	0.22	0.30	-2.33	40°00'25.923"N	104°45'33.042"W	2.00	
1716.00†	4.320	277.345	1715.80	0.75	1.04	-8.07	40°00'25.930"N	104°45'33.116"W	2.00	
1816.00†	6.320	277.345	1815.36	1.60	2.23	-17.27	40°00'25.942"N	104°45'33.234"W	2.00	
1916.00†	8.320	277.345	1914.54	2.77	3.85	-29.90	40°00'25.958"N	104°45'33.396"W	2.00	
2016.00†	10.320	277.345	2013.21	4.25	5.93	-45.96	40°00'25.979"N	104°45'33.603"W	2.00	
2116.00†	12.320	277.345	2111.26	6.06	8.43	-65.43	40°00'26.003"N	104°45'33.853"W	2.00	
2216.00†	14.320	277.345	2208.57	8.17	11.38	-88.28	40°00'26.032"N	104°45'34.146"W	2.00	
2316.00†	16.320	277.345	2305.01	10.60	14.76	-114.48	40°00'26.066"N	104°45'34.483"W	2.00	
2416.00†	18.320	277.345	2400.47	13.33	18.56	-144.01	40°00'26.103"N	104°45'34.863"W	2.00	
2516.00†	20.320	277.345	2494.84	16.37	22.79	-176.82	40°00'26.145"N	104°45'35.284"W	2.00	
2616.00†	22.320	277.345	2587.99	19.70	27.44	-212.88	40°00'26.191"N	104°45'35.748"W	2.00	
2716.00†	24.320	277.345	2679.81	23.34	32.50	-252.14	40°00'26.241"N	104°45'36.252"W	2.00	



Planned Wellpath Report

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Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (210 stations) † = interpolated/extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
2770.30	25.406	277.345	2729.08	25.43	35.42	-274.78	40°00'26.270"N	104°45'36.543"W	2.00	End of Build	
2816.00†	25.406	277.345	2770.36	27.23	37.93	-294.22	40°00'26.295"N	104°45'36.793"W	0.00		
2916.00†	25.406	277.345	2860.69	31.17	43.41	-336.78	40°00'26.349"N	104°45'37.340"W	0.00		
3016.00†	25.406	277.345	2951.02	35.11	48.90	-379.33	40°00'26.403"N	104°45'37.887"W	0.00		
3116.00†	25.406	277.345	3041.35	39.05	54.38	-421.88	40°00'26.457"N	104°45'38.434"W	0.00		
3216.00†	25.406	277.345	3131.68	42.99	59.87	-464.43	40°00'26.512"N	104°45'38.980"W	0.00		
3316.00†	25.406	277.345	3222.00	46.93	65.35	-506.98	40°00'26.566"N	104°45'39.527"W	0.00		
3416.00†	25.406	277.345	3312.33	50.86	70.84	-549.53	40°00'26.620"N	104°45'40.074"W	0.00		
3516.00†	25.406	277.345	3402.66	54.80	76.32	-592.08	40°00'26.674"N	104°45'40.621"W	0.00		
3616.00†	25.406	277.345	3492.99	58.74	81.81	-634.63	40°00'26.728"N	104°45'41.168"W	0.00		
3716.00†	25.406	277.345	3583.32	62.68	87.29	-677.18	40°00'26.783"N	104°45'41.715"W	0.00		
3816.00†	25.406	277.345	3673.65	66.62	92.78	-719.74	40°00'26.837"N	104°45'42.261"W	0.00		
3916.00†	25.406	277.345	3763.98	70.56	98.26	-762.29	40°00'26.891"N	104°45'42.808"W	0.00		
4016.00†	25.406	277.345	3854.31	74.50	103.75	-804.84	40°00'26.945"N	104°45'43.355"W	0.00		
4116.00†	25.406	277.345	3944.64	78.43	109.23	-847.39	40°00'26.999"N	104°45'43.902"W	0.00		
4216.00†	25.406	277.345	4034.97	82.37	114.72	-889.94	40°00'27.054"N	104°45'44.449"W	0.00		
4316.00†	25.406	277.345	4125.29	86.31	120.20	-932.49	40°00'27.108"N	104°45'44.995"W	0.00		
4416.00†	25.406	277.345	4215.62	90.25	125.69	-975.04	40°00'27.162"N	104°45'45.542"W	0.00		
4516.00†	25.406	277.345	4305.95	94.19	131.17	-1017.59	40°00'27.216"N	104°45'46.089"W	0.00		
4616.00†	25.406	277.345	4396.28	98.13	136.66	-1060.14	40°00'27.270"N	104°45'46.636"W	0.00		
4716.00†	25.406	277.345	4486.61	102.07	142.14	-1102.69	40°00'27.324"N	104°45'47.183"W	0.00		
4816.00†	25.406	277.345	4576.94	106.00	147.63	-1145.25	40°00'27.379"N	104°45'47.730"W	0.00		
4916.00†	25.406	277.345	4667.27	109.94	153.11	-1187.80	40°00'27.433"N	104°45'48.276"W	0.00		
5016.00†	25.406	277.345	4757.60	113.88	158.60	-1230.35	40°00'27.487"N	104°45'48.823"W	0.00		
5116.00†	25.406	277.345	4847.93	117.82	164.08	-1272.90	40°00'27.541"N	104°45'49.370"W	0.00		
5216.00†	25.406	277.345	4938.26	121.76	169.57	-1315.45	40°00'27.595"N	104°45'49.917"W	0.00		
5316.00†	25.406	277.345	5028.58	125.70	175.05	-1358.00	40°00'27.650"N	104°45'50.464"W	0.00		
5416.00†	25.406	277.345	5118.91	129.63	180.54	-1400.55	40°00'27.704"N	104°45'51.011"W	0.00		
5516.00†	25.406	277.345	5209.24	133.57	186.02	-1443.10	40°00'27.758"N	104°45'51.557"W	0.00		
5616.00†	25.406	277.345	5299.57	137.51	191.51	-1485.65	40°00'27.812"N	104°45'52.104"W	0.00		



Planned Wellpath Report

HOMESTEAD 3 (REV-A.0) PWP



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Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (210 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5716.00†	25.406	277.345	5389.90	141.45	196.99	-1528.21	40°00'27.866"N	104°45'52.651"W	0.00	
5816.00†	25.406	277.345	5480.23	145.39	202.48	-1570.76	40°00'27.920"N	104°45'53.198"W	0.00	
5916.00†	25.406	277.345	5570.56	149.33	207.96	-1613.31	40°00'27.975"N	104°45'53.745"W	0.00	
6016.00†	25.406	277.345	5660.89	153.27	213.45	-1655.86	40°00'28.029"N	104°45'54.292"W	0.00	
6116.00†	25.406	277.345	5751.22	157.20	218.93	-1698.41	40°00'28.083"N	104°45'54.838"W	0.00	
6216.00†	25.406	277.345	5841.54	161.14	224.42	-1740.96	40°00'28.137"N	104°45'55.385"W	0.00	
6316.00†	25.406	277.345	5931.87	165.08	229.90	-1783.51	40°00'28.191"N	104°45'55.932"W	0.00	
6416.00†	25.406	277.345	6022.20	169.02	235.39	-1826.06	40°00'28.246"N	104°45'56.479"W	0.00	
6516.00†	25.406	277.345	6112.53	172.96	240.87	-1868.61	40°00'28.300"N	104°45'57.026"W	0.00	
6616.00†	25.406	277.345	6202.86	176.90	246.36	-1911.16	40°00'28.354"N	104°45'57.573"W	0.00	
6716.00†	25.406	277.345	6293.19	180.84	251.84	-1953.72	40°00'28.408"N	104°45'58.119"W	0.00	
6816.00†	25.406	277.345	6383.52	184.77	257.33	-1996.27	40°00'28.462"N	104°45'58.666"W	0.00	
6916.00†	25.406	277.345	6473.85	188.71	262.81	-2038.82	40°00'28.516"N	104°45'59.213"W	0.00	
7016.00†	25.406	277.345	6564.18	192.65	268.30	-2081.37	40°00'28.571"N	104°45'59.760"W	0.00	
7116.00†	25.406	277.345	6654.51	196.59	273.78	-2123.92	40°00'28.625"N	104°46'00.307"W	0.00	
7216.00†	25.406	277.345	6744.83	200.53	279.27	-2166.47	40°00'28.679"N	104°46'00.854"W	0.00	
7316.00†	25.406	277.345	6835.16	204.47	284.75	-2209.02	40°00'28.733"N	104°46'01.400"W	0.00	
7416.00†	25.406	277.345	6925.49	208.40	290.24	-2251.57	40°00'28.787"N	104°46'01.947"W	0.00	
7512.60	25.406	277.345	7012.75	212.21	295.54	-2292.68	40°00'28.840"N	104°46'02.476"W	0.00	End of Tangent
7516.00†	25.373	276.556	7015.82	212.35	295.71	-2294.12	40°00'28.841"N	104°46'02.494"W	10.00	
7616.00†	26.301	253.581	7106.05	225.40	291.89	-2336.77	40°00'28.803"N	104°46'03.042"W	10.00	
7716.00†	30.437	234.301	7194.21	255.14	270.79	-2378.70	40°00'28.595"N	104°46'03.581"W	10.00	
7816.00†	36.707	220.134	7277.62	300.67	233.07	-2418.63	40°00'28.222"N	104°46'04.094"W	10.00	
7916.00†	44.205	209.890	7353.74	360.62	179.86	-2455.36	40°00'27.696"N	104°46'04.566"W	10.00	
8016.00†	52.394	202.180	7420.26	433.15	112.78	-2487.77	40°00'27.033"N	104°46'04.982"W	10.00	
8116.00†	60.984	196.039	7475.16	516.07	33.88	-2514.87	40°00'26.254"N	104°46'05.331"W	10.00	
8216.00†	69.809	190.858	7516.78	606.85	-54.45	-2535.85	40°00'25.381"N	104°46'05.600"W	10.00	
8316.00†	78.770	186.240	7543.84	702.74	-149.53	-2550.05	40°00'24.441"N	104°46'05.782"W	10.00	
8416.00†	87.797	181.904	7555.53	800.82	-248.47	-2557.06	40°00'23.463"N	104°46'05.872"W	10.00	
8440.62	90.024	180.852	7556.00 ¹	824.97	-273.08	-2557.65	40°00'23.220"N	104°46'05.880"W	10.00	End of 3D Arc



Planned Wellpath Report

HOMESTEAD 3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (210 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8516.00†	90.024	180.852	7555.97	898.76	-348.45	-2558.77	40°00'22.475"N	104°46'05.894"W	0.00	
8616.00†	90.024	180.852	7555.93	996.66	-448.44	-2560.26	40°00'21.487"N	104°46'05.913"W	0.00	
8716.00†	90.024	180.852	7555.88	1094.56	-548.43	-2561.75	40°00'20.499"N	104°46'05.932"W	0.00	
8816.00†	90.024	180.852	7555.84	1192.46	-648.42	-2563.24	40°00'19.511"N	104°46'05.951"W	0.00	
8916.00†	90.024	180.852	7555.80	1290.37	-748.41	-2564.72	40°00'18.523"N	104°46'05.970"W	0.00	
9016.00†	90.024	180.852	7555.76	1388.27	-848.40	-2566.21	40°00'17.535"N	104°46'05.989"W	0.00	
9116.00†	90.024	180.852	7555.72	1486.17	-948.38	-2567.70	40°00'16.546"N	104°46'06.008"W	0.00	
9216.00†	90.024	180.852	7555.68	1584.07	-1048.37	-2569.19	40°00'15.558"N	104°46'06.027"W	0.00	
9316.00†	90.024	180.852	7555.63	1681.97	-1148.36	-2570.67	40°00'14.570"N	104°46'06.046"W	0.00	
9416.00†	90.024	180.852	7555.59	1779.87	-1248.35	-2572.16	40°00'13.582"N	104°46'06.065"W	0.00	
9516.00†	90.024	180.852	7555.55	1877.77	-1348.34	-2573.65	40°00'12.594"N	104°46'06.084"W	0.00	
9616.00†	90.024	180.852	7555.51	1975.67	-1448.33	-2575.14	40°00'11.606"N	104°46'06.103"W	0.00	
9716.00†	90.024	180.852	7555.47	2073.57	-1548.32	-2576.62	40°00'10.618"N	104°46'06.122"W	0.00	
9816.00†	90.024	180.852	7555.42	2171.47	-1648.31	-2578.11	40°00'09.630"N	104°46'06.141"W	0.00	
9916.00†	90.024	180.852	7555.38	2269.37	-1748.30	-2579.60	40°00'08.641"N	104°46'06.160"W	0.00	
10016.00†	90.024	180.852	7555.34	2367.28	-1848.28	-2581.09	40°00'07.653"N	104°46'06.179"W	0.00	
10116.00†	90.024	180.852	7555.30	2465.18	-1948.27	-2582.57	40°00'06.665"N	104°46'06.198"W	0.00	
10216.00†	90.024	180.852	7555.26	2563.08	-2048.26	-2584.06	40°00'05.677"N	104°46'06.217"W	0.00	
10316.00†	90.024	180.852	7555.22	2660.98	-2148.25	-2585.55	40°00'04.689"N	104°46'06.236"W	0.00	
10416.00†	90.024	180.852	7555.17	2758.88	-2248.24	-2587.04	40°00'03.701"N	104°46'06.255"W	0.00	
10516.00†	90.024	180.852	7555.13	2856.78	-2348.23	-2588.52	40°00'02.713"N	104°46'06.274"W	0.00	
10616.00†	90.024	180.852	7555.09	2954.68	-2448.22	-2590.01	40°00'01.725"N	104°46'06.293"W	0.00	
10716.00†	90.024	180.852	7555.05	3052.58	-2548.21	-2591.50	40°00'00.736"N	104°46'06.312"W	0.00	
10816.00†	90.024	180.852	7555.01	3150.48	-2648.20	-2592.99	39°59'59.748"N	104°46'06.331"W	0.00	
10916.00†	90.024	180.852	7554.96	3248.38	-2748.18	-2594.47	39°59'58.760"N	104°46'06.350"W	0.00	
11016.00†	90.024	180.852	7554.92	3346.28	-2848.17	-2595.96	39°59'57.772"N	104°46'06.369"W	0.00	
11116.00†	90.024	180.852	7554.88	3444.19	-2948.16	-2597.45	39°59'56.784"N	104°46'06.388"W	0.00	
11216.00†	90.024	180.852	7554.84	3542.09	-3048.15	-2598.93	39°59'55.796"N	104°46'06.407"W	0.00	
11316.00†	90.024	180.852	7554.80	3639.99	-3148.14	-2600.42	39°59'54.808"N	104°46'06.426"W	0.00	
11416.00†	90.024	180.852	7554.76	3737.89	-3248.13	-2601.91	39°59'53.820"N	104°46'06.445"W	0.00	



Planned Wellpath Report

HOMESTEAD 3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (210 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11516.00†	90.024	180.852	7554.71	3835.79	-3348.12	-2603.40	39°59'52.831"N	104°46'06.464"W	0.00	
11616.00†	90.024	180.852	7554.67	3933.69	-3448.11	-2604.88	39°59'51.843"N	104°46'06.483"W	0.00	
11716.00†	90.024	180.852	7554.63	4031.59	-3548.10	-2606.37	39°59'50.855"N	104°46'06.502"W	0.00	
11816.00†	90.024	180.852	7554.59	4129.49	-3648.09	-2607.86	39°59'49.867"N	104°46'06.521"W	0.00	
11916.00†	90.024	180.852	7554.55	4227.39	-3748.07	-2609.35	39°59'48.879"N	104°46'06.540"W	0.00	
12016.00†	90.024	180.852	7554.50	4325.29	-3848.06	-2610.83	39°59'47.891"N	104°46'06.559"W	0.00	
12116.00†	90.024	180.852	7554.46	4423.20	-3948.05	-2612.32	39°59'46.903"N	104°46'06.578"W	0.00	
12216.00†	90.024	180.852	7554.42	4521.10	-4048.04	-2613.81	39°59'45.915"N	104°46'06.597"W	0.00	
12316.00†	90.024	180.852	7554.38	4619.00	-4148.03	-2615.30	39°59'44.926"N	104°46'06.616"W	0.00	
12416.00†	90.024	180.852	7554.34	4716.90	-4248.02	-2616.78	39°59'43.938"N	104°46'06.635"W	0.00	
12516.00†	90.024	180.852	7554.30	4814.80	-4348.01	-2618.27	39°59'42.950"N	104°46'06.653"W	0.00	
12616.00†	90.024	180.852	7554.25	4912.70	-4448.00	-2619.76	39°59'41.962"N	104°46'06.672"W	0.00	
12716.00†	90.024	180.852	7554.21	5010.60	-4547.99	-2621.25	39°59'40.974"N	104°46'06.691"W	0.00	
12816.00†	90.024	180.852	7554.17	5108.50	-4647.97	-2622.73	39°59'39.986"N	104°46'06.710"W	0.00	
12916.00†	90.024	180.852	7554.13	5206.40	-4747.96	-2624.22	39°59'38.998"N	104°46'06.729"W	0.00	
13016.00†	90.024	180.852	7554.09	5304.30	-4847.95	-2625.71	39°59'38.010"N	104°46'06.748"W	0.00	
13116.00†	90.024	180.852	7554.04	5402.20	-4947.94	-2627.20	39°59'37.022"N	104°46'06.767"W	0.00	
13216.00†	90.024	180.852	7554.00	5500.11	-5047.93	-2628.68	39°59'36.033"N	104°46'06.786"W	0.00	
13316.00†	90.024	180.852	7553.96	5598.01	-5147.92	-2630.17	39°59'35.045"N	104°46'06.805"W	0.00	
13416.00†	90.024	180.852	7553.92	5695.91	-5247.91	-2631.66	39°59'34.057"N	104°46'06.824"W	0.00	
13516.00†	90.024	180.852	7553.88	5793.81	-5347.90	-2633.15	39°59'33.069"N	104°46'06.843"W	0.00	
13616.00†	90.024	180.852	7553.84	5891.71	-5447.89	-2634.63	39°59'32.081"N	104°46'06.862"W	0.00	
13716.00†	90.024	180.852	7553.79	5989.61	-5547.87	-2636.12	39°59'31.093"N	104°46'06.881"W	0.00	
13816.00†	90.024	180.852	7553.75	6087.51	-5647.86	-2637.61	39°59'30.105"N	104°46'06.900"W	0.00	
13916.00†	90.024	180.852	7553.71	6185.41	-5747.85	-2639.10	39°59'29.117"N	104°46'06.919"W	0.00	
14016.00†	90.024	180.852	7553.67	6283.31	-5847.84	-2640.58	39°59'28.128"N	104°46'06.938"W	0.00	
14116.00†	90.024	180.852	7553.63	6381.21	-5947.83	-2642.07	39°59'27.140"N	104°46'06.957"W	0.00	
14216.00†	90.024	180.852	7553.58	6479.12	-6047.82	-2643.56	39°59'26.152"N	104°46'06.976"W	0.00	
14316.00†	90.024	180.852	7553.54	6577.02	-6147.81	-2645.05	39°59'25.164"N	104°46'06.995"W	0.00	
14416.00†	90.024	180.852	7553.50	6674.92	-6247.80	-2646.53	39°59'24.176"N	104°46'07.014"W	0.00	



Planned Wellpath Report

HOMESTEAD 3 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (210 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
14516.00†	90.024	180.852	7553.46	6772.82	-6347.79	-2648.02	39°59'23.188"N	104°46'07.033"W	0.00	
14616.00†	90.024	180.852	7553.42	6870.72	-6447.78	-2649.51	39°59'22.200"N	104°46'07.052"W	0.00	
14716.00†	90.024	180.852	7553.38	6968.62	-6547.76	-2651.00	39°59'21.212"N	104°46'07.071"W	0.00	
14816.00†	90.024	180.852	7553.33	7066.52	-6647.75	-2652.48	39°59'20.223"N	104°46'07.090"W	0.00	
14916.00†	90.024	180.852	7553.29	7164.42	-6747.74	-2653.97	39°59'19.235"N	104°46'07.109"W	0.00	
15016.00†	90.024	180.852	7553.25	7262.32	-6847.73	-2655.46	39°59'18.247"N	104°46'07.128"W	0.00	
15116.00†	90.024	180.852	7553.21	7360.22	-6947.72	-2656.95	39°59'17.259"N	104°46'07.147"W	0.00	
15216.00†	90.024	180.852	7553.17	7458.12	-7047.71	-2658.43	39°59'16.271"N	104°46'07.166"W	0.00	
15316.00†	90.024	180.852	7553.12	7556.03	-7147.70	-2659.92	39°59'15.283"N	104°46'07.185"W	0.00	
15416.00†	90.024	180.852	7553.08	7653.93	-7247.69	-2661.41	39°59'14.295"N	104°46'07.204"W	0.00	
15516.00†	90.024	180.852	7553.04	7751.83	-7347.68	-2662.89	39°59'13.307"N	104°46'07.223"W	0.00	
15616.00†	90.024	180.852	7553.00	7849.73	-7447.66	-2664.38	39°59'12.318"N	104°46'07.242"W	0.00	
15716.00†	90.024	180.852	7552.96	7947.63	-7547.65	-2665.87	39°59'11.330"N	104°46'07.261"W	0.00	
15816.00†	90.024	180.852	7552.91	8045.53	-7647.64	-2667.36	39°59'10.342"N	104°46'07.280"W	0.00	
15916.00†	90.024	180.852	7552.87	8143.43	-7747.63	-2668.84	39°59'09.354"N	104°46'07.299"W	0.00	
16016.00†	90.024	180.852	7552.83	8241.33	-7847.62	-2670.33	39°59'08.366"N	104°46'07.318"W	0.00	
16116.00†	90.024	180.852	7552.79	8339.23	-7947.61	-2671.82	39°59'07.378"N	104°46'07.337"W	0.00	
16216.00†	90.024	180.852	7552.75	8437.13	-8047.60	-2673.31	39°59'06.390"N	104°46'07.356"W	0.00	
16316.00†	90.024	180.852	7552.71	8535.03	-8147.59	-2674.79	39°59'05.402"N	104°46'07.374"W	0.00	
16416.00†	90.024	180.852	7552.66	8632.94	-8247.58	-2676.28	39°59'04.413"N	104°46'07.393"W	0.00	
16516.00†	90.024	180.852	7552.62	8730.84	-8347.56	-2677.77	39°59'03.425"N	104°46'07.412"W	0.00	
16616.00†	90.024	180.852	7552.58	8828.74	-8447.55	-2679.26	39°59'02.437"N	104°46'07.431"W	0.00	
16716.00†	90.024	180.852	7552.54	8926.64	-8547.54	-2680.74	39°59'01.449"N	104°46'07.450"W	0.00	
16816.00†	90.024	180.852	7552.50	9024.54	-8647.53	-2682.23	39°59'00.461"N	104°46'07.469"W	0.00	
16916.00†	90.024	180.852	7552.45	9122.44	-8747.52	-2683.72	39°58'59.473"N	104°46'07.488"W	0.00	
17016.00†	90.024	180.852	7552.41	9220.34	-8847.51	-2685.21	39°58'58.485"N	104°46'07.507"W	0.00	
17116.00†	90.024	180.852	7552.37	9318.24	-8947.50	-2686.69	39°58'57.497"N	104°46'07.526"W	0.00	
17216.00†	90.024	180.852	7552.33	9416.14	-9047.49	-2688.18	39°58'56.508"N	104°46'07.545"W	0.00	
17316.00†	90.024	180.852	7552.29	9514.04	-9147.48	-2689.67	39°58'55.520"N	104°46'07.564"W	0.00	
17416.00†	90.024	180.852	7552.25	9611.95	-9247.47	-2691.16	39°58'54.532"N	104°46'07.583"W	0.00	

[illegible]

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
HOMESTEAD 1 SEC.3-T1S-R66W Setback (460'Setback)		7599.00	-3.64	-30.81	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon

SURVEY PROGRAM - Ref Wellbore: HOMESTEAD 3 PWB Ref Wellpath: HOMESTEAD 3 (REV-A.0) PWP									
Start MD [ft]	End MD [ft]	Positional Uncertainty Model				Log Name/Comment		Wellbore	
16.00	20394.18	BHI NaviTrak (Rotating+Axial Corr)						HOMESTEAD 3 PWB	



Planned Wellpath Report

HOMESTEAD 3 (REV-A.0) PWP



REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 HOMESTEAD 3 (2444'FSL & 1486'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 3
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 3 PWB
Facility	SEC.34-T1N-R66W		

DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	277.345	16.00	Tie On
1500.00	0.000	277.345	1500.00	End of Tangent
2770.30	25.406	277.345	2729.08	End of Build
7512.60	25.406	277.345	7012.75	End of Tangent
8440.62	90.024	180.852	7556.00	End of 3D Arc
20394.18	90.024	180.852	7551.00	End of Tangent