

VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL, SEC.34)
Field: WELD COUNTY (NAD83/TN) Well: HOMESTEAD 7
Facility: SEC.34-T1N-R66W Wellbore: HOMESTEAD 7 PWB

Plot reference wellpath is HOMESTEAD 7 (REV-A.0) PWP
Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to XTREME 20 (16'RKB+513'GL) (RKB) * - Wellpath was transformed from a different geodetic datum
Measured depths are referenced to XTREME 20 (16'RKB+513'GL) (RKB) North Reference: True north
XTREME 20 (16'RKB+513'GL) (RKB) to Mean Sea Level: 5153 feet Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL, SEC.34)): 0 feet Depths are in feet
Coordinates are in feet referenced to Slot Created by: guenaler on 2018-02-01
Database: WA, DEN, Denver, Deth

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.34-T1N-R66W	3207968.837	1246340.128	40°00'25.920"N	104°45'27.396"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL, SEC.34)	0.00	-372.58	3207968.835	1246337.012
XTREME 20 (16'RKB+513'GL) (RKB) to Mud line (At Slot: SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL, SEC.34))				5153ft
Mean Sea Level to Mud line (At Slot: SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL, SEC.34))				0ft
XTREME 20 (16'RKB+513'GL) (RKB) to Mean Sea Level				5153ft

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
20092.53	90.024	179.655	7482.00	-12221.75	-1824.57	3205963.98	1234100.88	39°58'25.140"N	104°45'55.620"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	280.150	16.00	0.00	0.00	0.00	0.00
End of Tangent	1625.00	0.000	280.150	1625.00	0.00	0.00	0.00	0.00
End of Build	2614.94	19.799	280.150	2595.35	29.84	-166.69	2.00	-4.90
End of Tangent	7204.46	19.799	280.150	6913.59	303.80	-1696.91	0.00	-49.92
End of 3D Arc	8140.06	90.024	179.655	7482.00	-269.50	-1896.53	10.00	546.57
End of Tangent	20092.53	90.024	179.655	7482.00	-12221.75	-1824.57	0.00	12357.20

Targets

Name	MD (ft)	Inc (")	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
HOMESTEAD 1 SEC.34-T1N-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	
HOMESTEAD 1 SEC.34-T1S-R66W	-2.00	-384	-92.35	3207961.08	1246333.07	-407023.887N	104°45'33.40W	



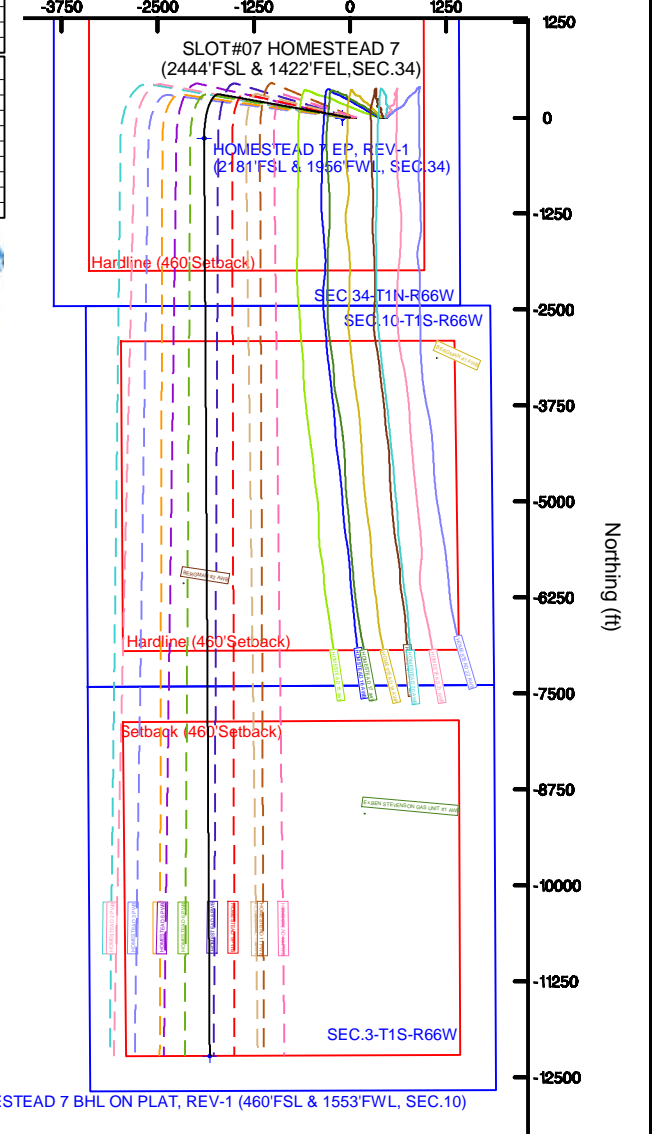
BGGM (1900.0 to 2019.0) Dip: 66.54° Field: 52093.4 nT
Magnetic North is 8.30 degrees East of True North (at 1/25/2018)

To correct azimuth from Magnetic to True add 8.30 degrees

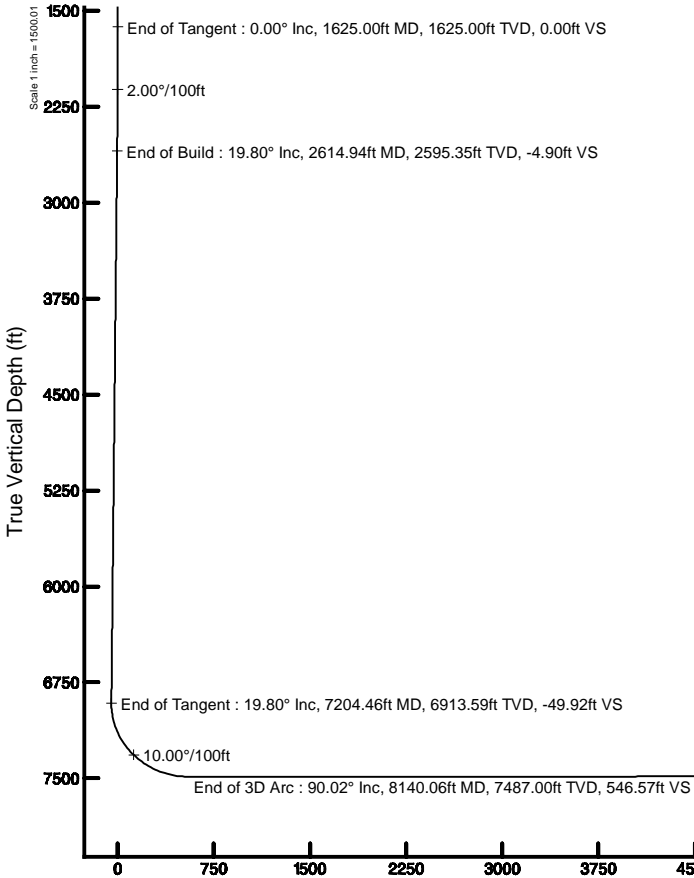
Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	20092.53	BH4 NavTrak	Rotating-Axial Cori		HOMESTEAD 7 PWB

Scale 1 inch = 2500



HOMESTEAD 7 BHL ON PLAT, REV-1 (460'FSL & 1553'FWL, SEC.10)



End of Tangent : 90.02° Inc, 20092.53ft MD, 7482.00ft TVD, 12357.20ft VS
HOMESTEAD 7 BHL ON PLAT, REV-1 (460'FSL & 1553'FWL, SEC.10)

Azimuth 188.49° with reference 0.00 N, 0.00 E

Scale 1 inch = 1500



Planned Wellpath Report

HOMESTEAD 7 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 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 5:08:43 PM
Convergence at slot	0.48° East	Database/Source file	WA_DEN_Denver_Defn/HOMESTEAD_7__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	-372.58	3207586.29	1246337.01	40°00'25.920"N	104°45'32.184"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+5137'GL) (RKB) to Facility Vertical Datum	5153.00ft
Horizontal Reference Pt	Slot	XTREME 20 (16'RKB+5137'GL) (RKB) to Mean Sea Level	5153.00ft
Vertical Reference Pt	XTREME 20 (16'RKB+5137'GL) (RKB)	XTREME 20 (16'RKB+5137'GL) (RKB) to Mud Line at Slot (SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34))	5153.00ft
MD Reference Pt	XTREME 20 (16'RKB+5137'GL) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	188.49°



Planned Wellpath Report

HOMESTEAD 7 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 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	280.150	0.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
16.00	0.000	280.150	16.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	Tie On
116.00†	0.000	280.150	116.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
216.00†	0.000	280.150	216.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
316.00†	0.000	280.150	316.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
416.00†	0.000	280.150	416.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
516.00†	0.000	280.150	516.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
616.00†	0.000	280.150	616.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
716.00†	0.000	280.150	716.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
816.00†	0.000	280.150	816.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
916.00†	0.000	280.150	916.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1016.00†	0.000	280.150	1016.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1116.00†	0.000	280.150	1116.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1216.00†	0.000	280.150	1216.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1316.00†	0.000	280.150	1316.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1416.00†	0.000	280.150	1416.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1516.00†	0.000	280.150	1516.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1616.00†	0.000	280.150	1616.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	
1625.00	0.000	280.150	1625.00	0.00	0.00	0.00	40°00'25.920"N	104°45'32.184"W	0.00	End of Tangent
1716.00†	1.820	280.150	1715.98	-0.04	0.25	-1.42	40°00'25.923"N	104°45'32.202"W	2.00	
1816.00†	3.820	280.150	1815.86	-0.18	1.12	-6.27	40°00'25.931"N	104°45'32.265"W	2.00	
1916.00†	5.820	280.150	1915.50	-0.43	2.60	-14.54	40°00'25.946"N	104°45'32.371"W	2.00	
2016.00†	7.820	280.150	2014.79	-0.77	4.70	-26.22	40°00'25.966"N	104°45'32.521"W	2.00	
2116.00†	9.820	280.150	2113.60	-1.22	7.40	-41.32	40°00'25.993"N	104°45'32.715"W	2.00	
2216.00†	11.820	280.150	2211.82	-1.76	10.71	-59.79	40°00'26.026"N	104°45'32.952"W	2.00	
2316.00†	13.820	280.150	2309.32	-2.40	14.62	-81.63	40°00'26.064"N	104°45'33.233"W	2.00	
2416.00†	15.820	280.150	2405.99	-3.14	19.12	-106.81	40°00'26.109"N	104°45'33.557"W	2.00	
2516.00†	17.820	280.150	2501.70	-3.98	24.22	-135.29	40°00'26.159"N	104°45'33.923"W	2.00	
2614.94	19.799	280.150	2595.35	-4.90	29.84	-166.69	40°00'26.215"N	104°45'34.326"W	2.00	End of Build
2616.00†	19.799	280.150	2596.35	-4.91	29.91	-167.05	40°00'26.216"N	104°45'34.331"W	0.00	



Planned Wellpath Report

HOMESTEAD 7 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 stations) † = interpolated/extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
2716.00†	19.799	280.150	2690.44	-5.90	35.88	-200.39	40°00'26.275"N	104°45'34.759"W	0.00		
2816.00†	19.799	280.150	2784.53	-6.88	41.85	-233.73	40°00'26.334"N	104°45'35.188"W	0.00		
2916.00†	19.799	280.150	2878.62	-7.86	47.81	-267.07	40°00'26.393"N	104°45'35.616"W	0.00		
3016.00†	19.799	280.150	2972.71	-8.84	53.78	-300.41	40°00'26.451"N	104°45'36.045"W	0.00		
3116.00†	19.799	280.150	3066.80	-9.82	59.75	-333.75	40°00'26.510"N	104°45'36.473"W	0.00		
3216.00†	19.799	280.150	3160.89	-10.80	65.72	-367.10	40°00'26.569"N	104°45'36.902"W	0.00		
3316.00†	19.799	280.150	3254.98	-11.78	71.69	-400.44	40°00'26.628"N	104°45'37.330"W	0.00		
3416.00†	19.799	280.150	3349.06	-12.76	77.66	-433.78	40°00'26.687"N	104°45'37.759"W	0.00		
3516.00†	19.799	280.150	3443.15	-13.74	83.63	-467.12	40°00'26.746"N	104°45'38.187"W	0.00		
3616.00†	19.799	280.150	3537.24	-14.72	89.60	-500.46	40°00'26.805"N	104°45'38.615"W	0.00		
3716.00†	19.799	280.150	3631.33	-15.70	95.57	-533.80	40°00'26.864"N	104°45'39.044"W	0.00		
3816.00†	19.799	280.150	3725.42	-16.68	101.54	-567.15	40°00'26.923"N	104°45'39.472"W	0.00		
3916.00†	19.799	280.150	3819.51	-17.67	107.51	-600.49	40°00'26.982"N	104°45'39.901"W	0.00		
4016.00†	19.799	280.150	3913.60	-18.65	113.48	-633.83	40°00'27.041"N	104°45'40.329"W	0.00		
4116.00†	19.799	280.150	4007.69	-19.63	119.45	-667.17	40°00'27.100"N	104°45'40.758"W	0.00		
4216.00†	19.799	280.150	4101.77	-20.61	125.42	-700.51	40°00'27.159"N	104°45'41.186"W	0.00		
4316.00†	19.799	280.150	4195.86	-21.59	131.38	-733.85	40°00'27.218"N	104°45'41.615"W	0.00		
4416.00†	19.799	280.150	4289.95	-22.57	137.35	-767.19	40°00'27.277"N	104°45'42.043"W	0.00		
4516.00†	19.799	280.150	4384.04	-23.55	143.32	-800.54	40°00'27.336"N	104°45'42.472"W	0.00		
4616.00†	19.799	280.150	4478.13	-24.53	149.29	-833.88	40°00'27.395"N	104°45'42.900"W	0.00		
4716.00†	19.799	280.150	4572.22	-25.51	155.26	-867.22	40°00'27.454"N	104°45'43.329"W	0.00		
4816.00†	19.799	280.150	4666.31	-26.49	161.23	-900.56	40°00'27.513"N	104°45'43.757"W	0.00		
4916.00†	19.799	280.150	4760.40	-27.47	167.20	-933.90	40°00'27.572"N	104°45'44.186"W	0.00		
5016.00†	19.799	280.150	4854.49	-28.46	173.17	-967.24	40°00'27.631"N	104°45'44.614"W	0.00		
5116.00†	19.799	280.150	4948.57	-29.44	179.14	-1000.59	40°00'27.690"N	104°45'45.043"W	0.00		
5216.00†	19.799	280.150	5042.66	-30.42	185.11	-1033.93	40°00'27.749"N	104°45'45.471"W	0.00		
5316.00†	19.799	280.150	5136.75	-31.40	191.08	-1067.27	40°00'27.808"N	104°45'45.900"W	0.00		
5416.00†	19.799	280.150	5230.84	-32.38	197.05	-1100.61	40°00'27.867"N	104°45'46.328"W	0.00		
5516.00†	19.799	280.150	5324.93	-33.36	203.02	-1133.95	40°00'27.926"N	104°45'46.757"W	0.00		
5616.00†	19.799	280.150	5419.02	-34.34	208.98	-1167.29	40°00'27.985"N	104°45'47.185"W	0.00		



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Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5716.00†	19.799	280.150	5513.11	-35.32	214.95	-1200.64	40°00'28.044"N	104°45'47.613"W	0.00	
5816.00†	19.799	280.150	5607.20	-36.30	220.92	-1233.98	40°00'28.103"N	104°45'48.042"W	0.00	
5916.00†	19.799	280.150	5701.28	-37.28	226.89	-1267.32	40°00'28.162"N	104°45'48.470"W	0.00	
6016.00†	19.799	280.150	5795.37	-38.26	232.86	-1300.66	40°00'28.221"N	104°45'48.899"W	0.00	
6116.00†	19.799	280.150	5889.46	-39.24	238.83	-1334.00	40°00'28.280"N	104°45'49.327"W	0.00	
6216.00†	19.799	280.150	5983.55	-40.23	244.80	-1367.34	40°00'28.339"N	104°45'49.756"W	0.00	
6316.00†	19.799	280.150	6077.64	-41.21	250.77	-1400.68	40°00'28.398"N	104°45'50.184"W	0.00	
6416.00†	19.799	280.150	6171.73	-42.19	256.74	-1434.03	40°00'28.457"N	104°45'50.613"W	0.00	
6516.00†	19.799	280.150	6265.82	-43.17	262.71	-1467.37	40°00'28.516"N	104°45'51.041"W	0.00	
6616.00†	19.799	280.150	6359.91	-44.15	268.68	-1500.71	40°00'28.575"N	104°45'51.470"W	0.00	
6716.00†	19.799	280.150	6454.00	-45.13	274.65	-1534.05	40°00'28.634"N	104°45'51.898"W	0.00	
6816.00†	19.799	280.150	6548.08	-46.11	280.62	-1567.39	40°00'28.693"N	104°45'52.327"W	0.00	
6916.00†	19.799	280.150	6642.17	-47.09	286.58	-1600.73	40°00'28.752"N	104°45'52.755"W	0.00	
7016.00†	19.799	280.150	6736.26	-48.07	292.55	-1634.08	40°00'28.811"N	104°45'53.184"W	0.00	
7116.00†	19.799	280.150	6830.35	-49.05	298.52	-1667.42	40°00'28.870"N	104°45'53.612"W	0.00	
7204.46	19.799	280.150	6913.59	-49.92	303.80	-1696.91	40°00'28.922"N	104°45'53.991"W	0.00	End of Tangent
7216.00†	19.632	276.766	6924.45	-49.92	304.38	-1700.76	40°00'28.927"N	104°45'54.041"W	10.00	
7316.00†	20.875	247.819	7018.50	-40.30	299.62	-1734.03	40°00'28.880"N	104°45'54.468"W	10.00	
7416.00†	26.044	226.080	7110.37	-13.75	277.61	-1766.42	40°00'28.663"N	104°45'54.884"W	10.00	
7516.00†	33.357	212.192	7197.28	28.93	239.02	-1796.96	40°00'28.281"N	104°45'55.277"W	10.00	
7616.00†	41.696	203.077	7276.58	86.44	185.02	-1824.71	40°00'27.748"N	104°45'55.633"W	10.00	
7716.00†	50.549	196.599	7345.86	157.02	117.25	-1848.84	40°00'27.078"N	104°45'55.943"W	10.00	
7816.00†	59.679	191.612	7403.02	238.55	37.77	-1868.60	40°00'26.293"N	104°45'56.197"W	10.00	
7916.00†	68.965	187.487	7446.31	328.54	-51.00	-1883.41	40°00'25.415"N	104°45'56.388"W	10.00	
8016.00†	78.339	183.853	7474.44	424.25	-146.37	-1892.81	40°00'24.473"N	104°45'56.508"W	10.00	
8116.00†	87.756	180.458	7486.53	522.78	-245.44	-1896.50	40°00'23.494"N	104°45'56.556"W	10.00	
8140.06	90.024	179.655	7487.00 [†]	546.57	-269.50	-1896.53	40°00'23.256"N	104°45'56.556"W	10.00	End of 3D Arc
8216.00†	90.024	179.655	7486.97	621.61	-345.44	-1896.07	40°00'22.506"N	104°45'56.550"W	0.00	
8316.00†	90.024	179.655	7486.93	720.42	-445.43	-1895.47	40°00'21.517"N	104°45'56.542"W	0.00	
8416.00†	90.024	179.655	7486.88	819.24	-545.43	-1894.87	40°00'20.529"N	104°45'56.534"W	0.00	



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HOMESTEAD 7 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 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	179.655	7486.84	918.05	-645.43	-1894.27	40°00'19.541"N	104°45'56.527"W	0.00	
8616.00†	90.024	179.655	7486.80	1016.86	-745.43	-1893.66	40°00'18.553"N	104°45'56.519"W	0.00	
8716.00†	90.024	179.655	7486.76	1115.68	-845.43	-1893.06	40°00'17.565"N	104°45'56.511"W	0.00	
8816.00†	90.024	179.655	7486.72	1214.49	-945.42	-1892.46	40°00'16.576"N	104°45'56.503"W	0.00	
8916.00†	90.024	179.655	7486.68	1313.30	-1045.42	-1891.86	40°00'15.588"N	104°45'56.495"W	0.00	
9016.00†	90.024	179.655	7486.63	1412.12	-1145.42	-1891.26	40°00'14.600"N	104°45'56.487"W	0.00	
9116.00†	90.024	179.655	7486.59	1510.93	-1245.42	-1890.65	40°00'13.612"N	104°45'56.480"W	0.00	
9216.00†	90.024	179.655	7486.55	1609.74	-1345.42	-1890.05	40°00'12.623"N	104°45'56.472"W	0.00	
9316.00†	90.024	179.655	7486.51	1708.55	-1445.42	-1889.45	40°00'11.635"N	104°45'56.464"W	0.00	
9416.00†	90.024	179.655	7486.47	1807.37	-1545.41	-1888.85	40°00'10.647"N	104°45'56.456"W	0.00	
9516.00†	90.024	179.655	7486.42	1906.18	-1645.41	-1888.25	40°00'09.659"N	104°45'56.448"W	0.00	
9616.00†	90.024	179.655	7486.38	2004.99	-1745.41	-1887.64	40°00'08.671"N	104°45'56.440"W	0.00	
9716.00†	90.024	179.655	7486.34	2103.81	-1845.41	-1887.04	40°00'07.682"N	104°45'56.433"W	0.00	
9816.00†	90.024	179.655	7486.30	2202.62	-1945.41	-1886.44	40°00'06.694"N	104°45'56.425"W	0.00	
9916.00†	90.024	179.655	7486.26	2301.43	-2045.40	-1885.84	40°00'05.706"N	104°45'56.417"W	0.00	
10016.00†	90.024	179.655	7486.22	2400.25	-2145.40	-1885.23	40°00'04.718"N	104°45'56.409"W	0.00	
10116.00†	90.024	179.655	7486.17	2499.06	-2245.40	-1884.63	40°00'03.730"N	104°45'56.401"W	0.00	
10216.00†	90.024	179.655	7486.13	2597.87	-2345.40	-1884.03	40°00'02.741"N	104°45'56.393"W	0.00	
10316.00†	90.024	179.655	7486.09	2696.69	-2445.40	-1883.43	40°00'01.753"N	104°45'56.386"W	0.00	
10416.00†	90.024	179.655	7486.05	2795.50	-2545.40	-1882.83	40°00'00.765"N	104°45'56.378"W	0.00	
10516.00†	90.024	179.655	7486.01	2894.31	-2645.39	-1882.22	39°59'59.777"N	104°45'56.370"W	0.00	
10616.00†	90.024	179.655	7485.96	2993.13	-2745.39	-1881.62	39°59'58.788"N	104°45'56.362"W	0.00	
10716.00†	90.024	179.655	7485.92	3091.94	-2845.39	-1881.02	39°59'57.800"N	104°45'56.354"W	0.00	
10816.00†	90.024	179.655	7485.88	3190.75	-2945.39	-1880.42	39°59'56.812"N	104°45'56.346"W	0.00	
10916.00†	90.024	179.655	7485.84	3289.57	-3045.39	-1879.82	39°59'55.824"N	104°45'56.339"W	0.00	
11016.00†	90.024	179.655	7485.80	3388.38	-3145.38	-1879.21	39°59'54.836"N	104°45'56.331"W	0.00	
11116.00†	90.024	179.655	7485.76	3487.19	-3245.38	-1878.61	39°59'53.847"N	104°45'56.323"W	0.00	
11216.00†	90.024	179.655	7485.71	3586.01	-3345.38	-1878.01	39°59'52.859"N	104°45'56.315"W	0.00	
11316.00†	90.024	179.655	7485.67	3684.82	-3445.38	-1877.41	39°59'51.871"N	104°45'56.307"W	0.00	
11416.00†	90.024	179.655	7485.63	3783.63	-3545.38	-1876.81	39°59'50.883"N	104°45'56.299"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 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	179.655	7485.59	3882.45	-3645.38	-1876.20	39°59'49.895"N	104°45'56.292"W	0.00	
11616.00†	90.024	179.655	7485.55	3981.26	-3745.37	-1875.60	39°59'48.906"N	104°45'56.284"W	0.00	
11716.00†	90.024	179.655	7485.50	4080.07	-3845.37	-1875.00	39°59'47.918"N	104°45'56.276"W	0.00	
11816.00†	90.024	179.655	7485.46	4178.89	-3945.37	-1874.40	39°59'46.930"N	104°45'56.268"W	0.00	
11916.00†	90.024	179.655	7485.42	4277.70	-4045.37	-1873.80	39°59'45.942"N	104°45'56.260"W	0.00	
12016.00†	90.024	179.655	7485.38	4376.51	-4145.37	-1873.19	39°59'44.953"N	104°45'56.252"W	0.00	
12116.00†	90.024	179.655	7485.34	4475.33	-4245.36	-1872.59	39°59'43.965"N	104°45'56.245"W	0.00	
12216.00†	90.024	179.655	7485.29	4574.14	-4345.36	-1871.99	39°59'42.977"N	104°45'56.237"W	0.00	
12316.00†	90.024	179.655	7485.25	4672.95	-4445.36	-1871.39	39°59'41.989"N	104°45'56.229"W	0.00	
12416.00†	90.024	179.655	7485.21	4771.77	-4545.36	-1870.79	39°59'41.001"N	104°45'56.221"W	0.00	
12516.00†	90.024	179.655	7485.17	4870.58	-4645.36	-1870.18	39°59'40.012"N	104°45'56.213"W	0.00	
12616.00†	90.024	179.655	7485.13	4969.39	-4745.36	-1869.58	39°59'39.024"N	104°45'56.205"W	0.00	
12716.00†	90.024	179.655	7485.09	5068.20	-4845.35	-1868.98	39°59'38.036"N	104°45'56.198"W	0.00	
12816.00†	90.024	179.655	7485.04	5167.02	-4945.35	-1868.38	39°59'37.048"N	104°45'56.190"W	0.00	
12916.00†	90.024	179.655	7485.00	5265.83	-5045.35	-1867.78	39°59'36.060"N	104°45'56.182"W	0.00	
13016.00†	90.024	179.655	7484.96	5364.64	-5145.35	-1867.17	39°59'35.071"N	104°45'56.174"W	0.00	
13116.00†	90.024	179.655	7484.92	5463.46	-5245.35	-1866.57	39°59'34.083"N	104°45'56.166"W	0.00	
13216.00†	90.024	179.655	7484.88	5562.27	-5345.34	-1865.97	39°59'33.095"N	104°45'56.158"W	0.00	
13316.00†	90.024	179.655	7484.83	5661.08	-5445.34	-1865.37	39°59'32.107"N	104°45'56.151"W	0.00	
13416.00†	90.024	179.655	7484.79	5759.90	-5545.34	-1864.77	39°59'31.118"N	104°45'56.143"W	0.00	
13516.00†	90.024	179.655	7484.75	5858.71	-5645.34	-1864.16	39°59'30.130"N	104°45'56.135"W	0.00	
13616.00†	90.024	179.655	7484.71	5957.52	-5745.34	-1863.56	39°59'29.142"N	104°45'56.127"W	0.00	
13716.00†	90.024	179.655	7484.67	6056.34	-5845.34	-1862.96	39°59'28.154"N	104°45'56.119"W	0.00	
13816.00†	90.024	179.655	7484.63	6155.15	-5945.33	-1862.36	39°59'27.166"N	104°45'56.111"W	0.00	
13916.00†	90.024	179.655	7484.58	6253.96	-6045.33	-1861.76	39°59'26.177"N	104°45'56.104"W	0.00	
14016.00†	90.024	179.655	7484.54	6352.78	-6145.33	-1861.15	39°59'25.189"N	104°45'56.096"W	0.00	
14116.00†	90.024	179.655	7484.50	6451.59	-6245.33	-1860.55	39°59'24.201"N	104°45'56.088"W	0.00	
14216.00†	90.024	179.655	7484.46	6550.40	-6345.33	-1859.95	39°59'23.213"N	104°45'56.080"W	0.00	
14316.00†	90.024	179.655	7484.42	6649.22	-6445.32	-1859.35	39°59'22.225"N	104°45'56.072"W	0.00	
14416.00†	90.024	179.655	7484.37	6748.03	-6545.32	-1858.75	39°59'21.236"N	104°45'56.064"W	0.00	



Planned Wellpath Report

HOMESTEAD 7 (REV-A.0) PWP



REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 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	179.655	7484.33	6846.84	-6645.32	-1858.14	39°59'20.248"N	104°45'56.057"W	0.00	
14616.00†	90.024	179.655	7484.29	6945.66	-6745.32	-1857.54	39°59'19.260"N	104°45'56.049"W	0.00	
14716.00†	90.024	179.655	7484.25	7044.47	-6845.32	-1856.94	39°59'18.272"N	104°45'56.041"W	0.00	
14816.00†	90.024	179.655	7484.21	7143.28	-6945.32	-1856.34	39°59'17.283"N	104°45'56.033"W	0.00	
14916.00†	90.024	179.655	7484.17	7242.10	-7045.31	-1855.74	39°59'16.295"N	104°45'56.025"W	0.00	
15016.00†	90.024	179.655	7484.12	7340.91	-7145.31	-1855.13	39°59'15.307"N	104°45'56.017"W	0.00	
15116.00†	90.024	179.655	7484.08	7439.72	-7245.31	-1854.53	39°59'14.319"N	104°45'56.010"W	0.00	
15216.00†	90.024	179.655	7484.04	7538.54	-7345.31	-1853.93	39°59'13.331"N	104°45'56.002"W	0.00	
15316.00†	90.024	179.655	7484.00	7637.35	-7445.31	-1853.33	39°59'12.342"N	104°45'55.994"W	0.00	
15416.00†	90.024	179.655	7483.96	7736.16	-7545.30	-1852.72	39°59'11.354"N	104°45'55.986"W	0.00	
15516.00†	90.024	179.655	7483.91	7834.98	-7645.30	-1852.12	39°59'10.366"N	104°45'55.978"W	0.00	
15616.00†	90.024	179.655	7483.87	7933.79	-7745.30	-1851.52	39°59'09.378"N	104°45'55.970"W	0.00	
15716.00†	90.024	179.655	7483.83	8032.60	-7845.30	-1850.92	39°59'08.390"N	104°45'55.963"W	0.00	
15816.00†	90.024	179.655	7483.79	8131.42	-7945.30	-1850.32	39°59'07.401"N	104°45'55.955"W	0.00	
15916.00†	90.024	179.655	7483.75	8230.23	-8045.30	-1849.71	39°59'06.413"N	104°45'55.947"W	0.00	
16016.00†	90.024	179.655	7483.71	8329.04	-8145.29	-1849.11	39°59'05.425"N	104°45'55.939"W	0.00	
16116.00†	90.024	179.655	7483.66	8427.86	-8245.29	-1848.51	39°59'04.437"N	104°45'55.931"W	0.00	
16216.00†	90.024	179.655	7483.62	8526.67	-8345.29	-1847.91	39°59'03.448"N	104°45'55.923"W	0.00	
16316.00†	90.024	179.655	7483.58	8625.48	-8445.29	-1847.31	39°59'02.460"N	104°45'55.916"W	0.00	
16416.00†	90.024	179.655	7483.54	8724.29	-8545.29	-1846.70	39°59'01.472"N	104°45'55.908"W	0.00	
16516.00†	90.024	179.655	7483.50	8823.11	-8645.28	-1846.10	39°59'00.484"N	104°45'55.900"W	0.00	
16616.00†	90.024	179.655	7483.45	8921.92	-8745.28	-1845.50	39°58'59.496"N	104°45'55.892"W	0.00	
16716.00†	90.024	179.655	7483.41	9020.73	-8845.28	-1844.90	39°58'58.507"N	104°45'55.884"W	0.00	
16816.00†	90.024	179.655	7483.37	9119.55	-8945.28	-1844.30	39°58'57.519"N	104°45'55.876"W	0.00	
16916.00†	90.024	179.655	7483.33	9218.36	-9045.28	-1843.69	39°58'56.531"N	104°45'55.869"W	0.00	
17016.00†	90.024	179.655	7483.29	9317.17	-9145.28	-1843.09	39°58'55.543"N	104°45'55.861"W	0.00	
17116.00†	90.024	179.655	7483.25	9415.99	-9245.27	-1842.49	39°58'54.555"N	104°45'55.853"W	0.00	
17216.00†	90.024	179.655	7483.20	9514.80	-9345.27	-1841.89	39°58'53.566"N	104°45'55.845"W	0.00	
17316.00†	90.024	179.655	7483.16	9613.61	-9445.27	-1841.29	39°58'52.578"N	104°45'55.837"W	0.00	
17416.00†	90.024	179.655	7483.12	9712.43	-9545.27	-1840.68	39°58'51.590"N	104°45'55.830"W	0.00	



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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

WELLPATH DATA (207 stations) † = interpolated/extrapolated station											
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments	
17516.00†	90.024	179.655	7483.08	9811.24	-9645.27	-1840.08	39°58'50.602"N	104°45'55.822"W	0.00		
17616.00†	90.024	179.655	7483.04	9910.05	-9745.26	-1839.48	39°58'49.613"N	104°45'55.814"W	0.00		
17716.00†	90.024	179.655	7482.99	10008.87	-9845.26	-1838.88	39°58'48.625"N	104°45'55.806"W	0.00		
17816.00†	90.024	179.655	7482.95	10107.68	-9945.26	-1838.28	39°58'47.637"N	104°45'55.798"W	0.00		
17916.00†	90.024	179.655	7482.91	10206.49	-10045.26	-1837.67	39°58'46.649"N	104°45'55.790"W	0.00		
18016.00†	90.024	179.655	7482.87	10305.31	-10145.26	-1837.07	39°58'45.661"N	104°45'55.783"W	0.00		
18116.00†	90.024	179.655	7482.83	10404.12	-10245.26	-1836.47	39°58'44.672"N	104°45'55.775"W	0.00		
18216.00†	90.024	179.655	7482.78	10502.93	-10345.25	-1835.87	39°58'43.684"N	104°45'55.767"W	0.00		
18316.00†	90.024	179.655	7482.74	10601.75	-10445.25	-1835.27	39°58'42.696"N	104°45'55.759"W	0.00		
18416.00†	90.024	179.655	7482.70	10700.56	-10545.25	-1834.66	39°58'41.708"N	104°45'55.751"W	0.00		
18516.00†	90.024	179.655	7482.66	10799.37	-10645.25	-1834.06	39°58'40.720"N	104°45'55.743"W	0.00		
18616.00†	90.024	179.655	7482.62	10898.19	-10745.25	-1833.46	39°58'39.731"N	104°45'55.736"W	0.00		
18716.00†	90.024	179.655	7482.58	10997.00	-10845.24	-1832.86	39°58'38.743"N	104°45'55.728"W	0.00		
18816.00†	90.024	179.655	7482.53	11095.81	-10945.24	-1832.26	39°58'37.755"N	104°45'55.720"W	0.00		
18916.00†	90.024	179.655	7482.49	11194.63	-11045.24	-1831.65	39°58'36.767"N	104°45'55.712"W	0.00		
19016.00†	90.024	179.655	7482.45	11293.44	-11145.24	-1831.05	39°58'35.778"N	104°45'55.704"W	0.00		
19116.00†	90.024	179.655	7482.41	11392.25	-11245.24	-1830.45	39°58'34.790"N	104°45'55.696"W	0.00		
19216.00†	90.024	179.655	7482.37	11491.07	-11345.24	-1829.85	39°58'33.802"N	104°45'55.689"W	0.00		
19316.00†	90.024	179.655	7482.32	11589.88	-11445.23	-1829.25	39°58'32.814"N	104°45'55.681"W	0.00		
19416.00†	90.024	179.655	7482.28	11688.69	-11545.23	-1828.64	39°58'31.826"N	104°45'55.673"W	0.00		
19516.00†	90.024	179.655	7482.24	11787.51	-11645.23	-1828.04	39°58'30.837"N	104°45'55.665"W	0.00		
19616.00†	90.024	179.655	7482.20	11886.32	-11745.23	-1827.44	39°58'29.849"N	104°45'55.657"W	0.00		
19716.00†	90.024	179.655	7482.16	11985.13	-11845.23	-1826.84	39°58'28.861"N	104°45'55.649"W	0.00		
19816.00†	90.024	179.655	7482.12	12083.94	-11945.22	-1826.24	39°58'27.873"N	104°45'55.642"W	0.00		
19916.00†	90.024	179.655	7482.07	12182.76	-12045.22	-1825.63	39°58'26.885"N	104°45'55.634"W	0.00		
20016.00†	90.024	179.655	7482.03	12281.57	-12145.22	-1825.03	39°58'25.896"N	104°45'55.626"W	0.00		
20092.53	90.024	179.655	7482.00 ²	12357.20	-12221.75	-1824.57	39°58'25.140"N	104°45'55.620"W	0.00	End of Tangent	



Planned Wellpath Report

HOMESTEAD 7 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
HOMESTEAD 1 SEC 34-T1N-R66W		-2.00	-3.64	-95.25	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon
HOMESTEAD 1 SEC.10-T1S-R66W		-2.00	-3.64	-95.25	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon
HOMESTEAD 1 SEC.3-T1S-R66W		-2.00	-3.64	-95.25	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon
2) HOMESTEAD 7 BHL ON PLAT, REV-1 (460'FSL & 1553'FWL, SEC.10)	20092.53	7482.00	-12221.75	-1824.57	3205863.98	1234100.88	39°58'25.140"N	104°45'55.620"W	point
1) HOMESTEAD 7 EP, REV-1 (2181'FSL & 1956'FWL, SEC.34)	8140.06	7487.00	-269.50	-1896.53	3205692.14	1246051.68	40°00'23.256"N	104°45'56.556"W	point
HOMESTEAD 1 SEC 34-T1N-R66W Hardline (460'Setback)		7598.00	-3.64	-95.25	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon
HOMESTEAD 1 SEC.10-T1S-R66W Hardline (460'Setback)		7598.00	-3.64	-95.25	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon
HOMESTEAD 1 SEC.3-T1S-R66W Setback (460'Setback)		7598.00	-3.64	-95.25	3207491.08	1246332.57	40°00'25.884"N	104°45'33.408"W	polygon

SURVEY PROGRAM - Ref Wellbore: HOMESTEAD 7 PWB Ref Wellpath: HOMESTEAD 7 (REV-A.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	20092.53	BHI NaviTrak (Rotating+Axial Corr)		HOMESTEAD 7 PWB



Planned Wellpath Report

HOMESTEAD 7 (REV-A.0) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#07 HOMESTEAD 7 (2444'FSL & 1422'FEL,SEC.34)
Area	COLORADO	Well	HOMESTEAD 7
Field	WELD COUNTY (NAD83/TN)	Wellbore	HOMESTEAD 7 PWB
Facility	SEC.34-T1N-R66W		

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
16.00	0.000	280.150	16.00	Tie On
1625.00	0.000	280.150	1625.00	End of Tangent
2614.94	19.799	280.150	2595.35	End of Build
7204.46	19.799	280.150	6913.59	End of Tangent
8140.06	90.024	179.655	7487.00	End of 3D Arc
20092.53	90.024	179.655	7482.00	End of Tangent