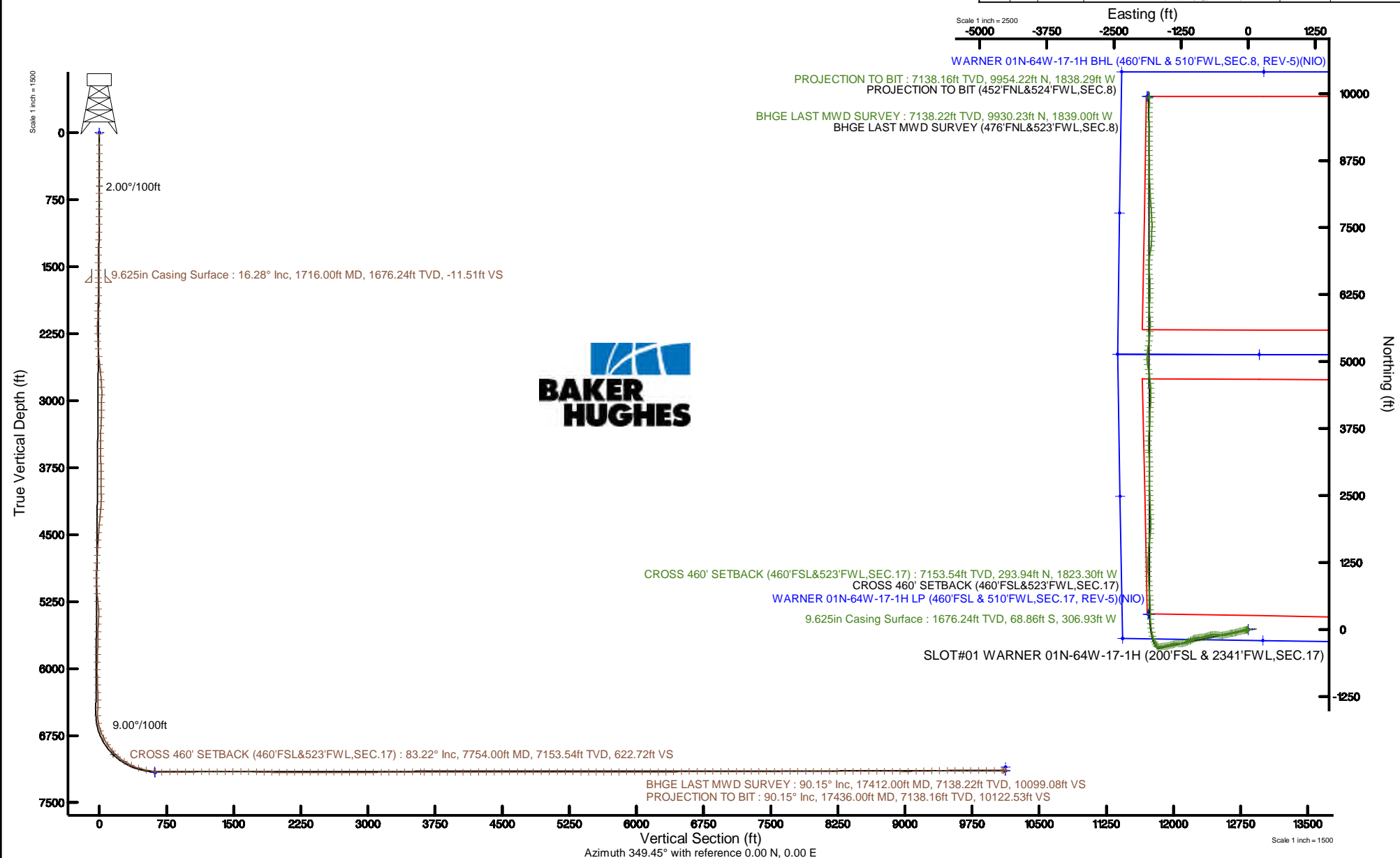


VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Field: WELD COUNTY (NAD83/TN) Well: WARNER 01N-64W-17-1H
Facility: SEC.17-T1N-R64W Wellbore: WARNER 01N-64W-17-1H PWB

The reference wellbore is WARNER 01N-64W-17-1H (REV.0-0) PWB (NIO)				Grid System: NAD83 / Lambert Colorado SP, Northern Zone (2011), US Feet			
True vertical depths are referenced to RIG (16'FSL&523'FWL) (NIO)				North Reference: True north			
Measured depths are referenced to RIG (16'FSL&523'FWL) (NIO)				Scale: True distance			
RIG (16'FSL&523'FWL) (NIO) to Mean Sea Level: 5083 feet				Depths are in feet			
Mean Sea Level to Mud line (in Slot) WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17): 0 feet				Created by: Insurgency on 2017-10-13			
Coordinates are in feet referenced to Slot				Database: Drawup			
Location Information							
Facility Name				Wellbore ID	Grid North (2011)	Latitude	Longitude
SEC 17-T1N-R64W				WARNER 01N-64W-17-1H	4988848.0	4010.0000	-107.0000
Site	Local N/E	Local S/W	Grid North (2011)	Grid North (US N)	Latitude	Longitude	
	458	458	4988848.0	4988848.0	4010.0000	-107.0000	
SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)				5083			
RIG (16'FSL&523'FWL) (NIO) to Mud line (in Slot) WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)				0			
Mean Sea Level to Mud line (in Slot) WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)				0			
RIG (16'FSL&523'FWL) (NIO) to Mean Sea Level				5083			
Survey Program							
Start MD (ft)	End MD (ft)	Total	Notes		Log Name/Comment	Wellbore	
1620	17000	15380	Cable Bit/Tool/Run (Shank/Head/Asst/Car) (Shank/0000 model)			WARNER 01N-64W-17-1H PWB	
17000	17000	0	Cable Bit/Tool/Run (Shank/Head/Asst/Car) (Shank/0000 model)			WARNER 01N-64W-17-1H PWB	



Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Bushjamh
Scale	0.999963	Report Generated	10/13/2017 at 3:10:05 PM
Convergence at slot	0.60° East	Database/Source file	Denver/WARNER_01N-64W-17-1H_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-9.88	-0.02	3258754.27	1260470.74	40°02'40.844"N	104°34'32.743"W
Facility Reference Pt			3258754.19	1260480.62	40°02'40.942"N	104°34'32.743"W
Field Reference Pt			3242930.13	1254608.21	40°01'44.490"N	104°37'56.946"W

WELLPATH DATUM

Calculation method	Minimum curvature	RIG (16'RKB+5067'GL) (RKB) to Facility Vertical Datum	5083.00ft
Horizontal Reference Pt	Slot	RIG (16'RKB+5067'GL) (RKB) to Mean Sea Level	5083.00ft
Vertical Reference Pt	RIG (16'RKB+5067'GL) (RKB)	RIG (16'RKB+5067'GL) (RKB) to Mud Line at Slot (SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17))	5083.00ft
MD Reference Pt	RIG (16'RKB+5067'GL) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	349.45°

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 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	125.900	0.00	0.00	0.00	0.00	40°02'40.844"N	104°34'32.743"W	0.00	
16.00	0.000	125.900	16.00	0.00	0.00	0.00	40°02'40.844"N	104°34'32.743"W	0.00	
142.00	0.060	125.900	142.00	-0.05	-0.04	0.05	40°02'40.844"N	104°34'32.743"W	0.05	
233.00	1.380	260.370	232.99	-0.06	-0.25	-0.99	40°02'40.842"N	104°34'32.756"W	1.56	
325.00	2.770	264.120	324.93	0.13	-0.66	-4.29	40°02'40.838"N	104°34'32.798"W	1.52	
416.00	4.720	253.590	415.73	-0.07	-1.95	-10.07	40°02'40.825"N	104°34'32.873"W	2.26	
505.00	5.610	255.690	504.37	-0.73	-4.06	-17.80	40°02'40.804"N	104°34'32.972"W	1.02	
594.00	7.150	256.860	592.82	-1.27	-6.39	-27.41	40°02'40.781"N	104°34'33.096"W	1.74	
683.00	9.210	256.790	680.90	-1.85	-9.28	-39.74	40°02'40.753"N	104°34'33.254"W	2.31	
772.00	11.270	259.650	768.48	-2.15	-12.47	-55.23	40°02'40.721"N	104°34'33.453"W	2.38	
862.00	13.730	260.280	856.34	-1.96	-15.85	-74.41	40°02'40.688"N	104°34'33.700"W	2.74	
951.00	16.380	257.990	942.28	-2.13	-20.25	-97.10	40°02'40.644"N	104°34'33.992"W	3.05	
1040.00	17.040	256.760	1027.52	-3.06	-25.84	-122.07	40°02'40.589"N	104°34'34.313"W	0.84	
1129.00	17.100	254.920	1112.60	-4.71	-32.24	-147.40	40°02'40.526"N	104°34'34.638"W	0.61	
1218.00	16.800	252.550	1197.74	-7.29	-39.50	-172.30	40°02'40.454"N	104°34'34.959"W	0.85	
1307.00	16.500	254.600	1283.01	-9.91	-46.71	-196.76	40°02'40.383"N	104°34'35.273"W	0.74	
1396.00	15.570	256.350	1368.54	-11.62	-52.89	-220.55	40°02'40.322"N	104°34'35.579"W	1.18	
1485.00	15.830	257.900	1454.22	-12.60	-58.25	-244.03	40°02'40.269"N	104°34'35.881"W	0.55	
1574.00	15.960	260.620	1539.82	-12.68	-62.79	-267.97	40°02'40.224"N	104°34'36.189"W	0.85	
1663.00	16.170	261.550	1625.35	-11.98	-66.60	-292.30	40°02'40.186"N	104°34'36.502"W	0.37	
1780.00	16.420	260.180	1737.65	-11.17	-71.82	-324.71	40°02'40.135"N	104°34'36.918"W	0.39	
1869.00	17.000	255.280	1822.89	-11.96	-77.27	-349.69	40°02'40.081"N	104°34'37.239"W	1.71	
1958.00	16.390	251.570	1908.14	-14.63	-84.55	-374.18	40°02'40.009"N	104°34'37.554"W	1.38	
2047.00	16.210	253.610	1993.57	-17.61	-92.02	-398.01	40°02'39.935"N	104°34'37.861"W	0.67	
2136.00	16.400	258.860	2078.99	-19.01	-97.95	-422.26	40°02'39.876"N	104°34'38.173"W	1.67	
2226.00	16.120	258.100	2165.39	-19.43	-102.98	-446.95	40°02'39.827"N	104°34'38.490"W	0.39	
2315.00	15.450	260.220	2251.04	-19.57	-107.55	-470.73	40°02'39.782"N	104°34'38.796"W	0.99	
2403.00	15.480	267.480	2335.86	-17.77	-110.05	-494.01	40°02'39.757"N	104°34'39.095"W	2.20	
2492.00	15.770	274.540	2421.58	-12.96	-109.62	-517.94	40°02'39.761"N	104°34'39.403"W	2.16	
2581.00	15.150	278.190	2507.36	-6.08	-107.00	-541.50	40°02'39.787"N	104°34'39.706"W	1.30	

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2671.00	15.710	281.850	2594.12	2.34	-102.83	-565.07	40°02'39.828"N	104°34'40.009"W	1.25	
2760.00	15.840	280.400	2679.76	11.28	-98.16	-588.81	40°02'39.874"N	104°34'40.314"W	0.47	
2849.00	16.580	275.540	2765.23	19.14	-94.74	-613.40	40°02'39.908"N	104°34'40.630"W	1.74	
2938.00	16.700	268.200	2850.51	24.60	-93.92	-638.82	40°02'39.916"N	104°34'40.957"W	2.36	
3027.00	15.840	257.070	2935.97	26.04	-97.04	-663.45	40°02'39.885"N	104°34'41.274"W	3.63	
3116.00	15.720	256.860	3021.61	24.99	-102.50	-687.03	40°02'39.831"N	104°34'41.577"W	0.15	
3205.00	15.840	256.210	3107.26	23.76	-108.13	-710.56	40°02'39.776"N	104°34'41.880"W	0.24	
3294.00	15.780	251.500	3192.90	21.40	-114.87	-733.84	40°02'39.709"N	104°34'42.179"W	1.44	
3383.00	15.590	249.320	3278.58	17.62	-122.93	-756.50	40°02'39.629"N	104°34'42.470"W	0.70	
3472.00	15.690	252.100	3364.29	13.97	-130.85	-779.14	40°02'39.551"N	104°34'42.761"W	0.85	
3560.00	16.080	258.150	3448.93	12.17	-137.01	-802.39	40°02'39.490"N	104°34'43.060"W	1.93	
3649.00	15.950	263.120	3534.48	12.67	-141.01	-826.60	40°02'39.451"N	104°34'43.372"W	1.55	
3738.00	15.910	263.640	3620.07	14.35	-143.83	-850.86	40°02'39.423"N	104°34'43.684"W	0.17	
3827.00	15.930	262.400	3705.65	15.87	-146.79	-875.09	40°02'39.394"N	104°34'43.995"W	0.38	
3916.00	15.990	264.870	3791.22	17.65	-149.50	-899.41	40°02'39.367"N	104°34'44.308"W	0.77	
4005.00	15.940	261.710	3876.79	19.29	-152.36	-923.71	40°02'39.339"N	104°34'44.620"W	0.98	
4094.00	15.900	259.440	3962.38	19.77	-156.36	-947.79	40°02'39.299"N	104°34'44.930"W	0.70	
4183.00	15.890	263.910	4047.98	20.71	-159.89	-971.89	40°02'39.264"N	104°34'45.240"W	1.38	
4272.00	16.130	252.400	4133.55	20.14	-164.92	-995.80	40°02'39.214"N	104°34'45.547"W	3.57	
4360.00	16.200	241.730	4218.09	14.90	-174.43	-1018.26	40°02'39.120"N	104°34'45.836"W	3.37	
4449.00	16.060	239.430	4303.59	6.91	-186.57	-1039.80	40°02'39.000"N	104°34'46.113"W	0.73	
4538.00	16.100	239.690	4389.10	-1.48	-199.06	-1061.05	40°02'38.877"N	104°34'46.386"W	0.09	
4627.00	15.420	245.370	4474.76	-8.53	-210.22	-1082.46	40°02'38.767"N	104°34'46.661"W	1.89	
4716.00	16.140	247.700	4560.41	-13.93	-219.85	-1104.66	40°02'38.672"N	104°34'46.947"W	1.08	
4805.00	16.160	246.020	4645.90	-19.33	-229.57	-1127.43	40°02'38.575"N	104°34'47.240"W	0.53	
4894.00	15.750	247.110	4731.47	-24.79	-239.31	-1149.87	40°02'38.479"N	104°34'47.528"W	0.57	
4983.00	16.170	250.200	4817.04	-29.36	-248.20	-1172.66	40°02'38.391"N	104°34'47.821"W	1.06	
5072.00	15.840	254.070	4902.59	-32.50	-255.73	-1196.00	40°02'38.317"N	104°34'48.121"W	1.25	
5161.00	15.830	260.210	4988.22	-33.47	-261.13	-1219.64	40°02'38.264"N	104°34'48.425"W	1.88	
5251.00	16.100	270.330	5074.77	-30.96	-263.15	-1244.22	40°02'38.244"N	104°34'48.741"W	3.10	

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5340.00	16.420	274.460	5160.21	-25.37	-262.10	-1269.11	40°02'38.254"N	104°34'49.061"W	1.35	
5429.00	16.170	280.040	5245.64	-17.76	-258.96	-1293.85	40°02'38.285"N	104°34'49.379"W	1.78	
5518.00	17.240	274.130	5330.89	-10.06	-255.85	-1319.21	40°02'38.316"N	104°34'49.705"W	2.25	
5607.00	16.930	251.340	5416.06	-8.54	-259.05	-1344.67	40°02'38.284"N	104°34'50.033"W	7.49	
5696.00	16.790	248.340	5501.23	-12.85	-267.94	-1368.90	40°02'38.196"N	104°34'50.344"W	0.99	
5785.00	16.390	253.890	5586.53	-16.54	-276.17	-1392.91	40°02'38.115"N	104°34'50.653"W	1.84	
5874.00	16.150	257.340	5671.97	-18.22	-282.37	-1417.05	40°02'38.054"N	104°34'50.963"W	1.12	
5963.00	15.580	257.790	5757.58	-19.02	-287.61	-1440.81	40°02'38.002"N	104°34'51.269"W	0.66	
6051.00	17.020	253.630	5842.04	-20.67	-293.74	-1464.72	40°02'37.941"N	104°34'51.576"W	2.11	
6140.00	16.590	252.320	5927.24	-23.57	-301.27	-1489.32	40°02'37.867"N	104°34'51.893"W	0.64	
6230.00	16.340	261.200	6013.57	-24.78	-307.11	-1514.08	40°02'37.809"N	104°34'52.211"W	2.81	
6318.00	16.860	264.260	6097.90	-23.33	-310.28	-1539.01	40°02'37.778"N	104°34'52.532"W	1.16	
6407.00	16.930	265.870	6183.06	-20.80	-312.50	-1564.77	40°02'37.756"N	104°34'52.863"W	0.53	
6496.00	16.920	263.780	6268.21	-18.38	-314.84	-1590.57	40°02'37.733"N	104°34'53.195"W	0.68	
6585.00	16.800	262.380	6353.38	-16.74	-317.95	-1616.20	40°02'37.702"N	104°34'53.524"W	0.48	
6674.00	15.610	249.700	6438.87	-18.11	-323.81	-1640.19	40°02'37.644"N	104°34'53.832"W	4.19	
6763.00	14.990	262.360	6524.74	-19.56	-329.49	-1662.83	40°02'37.588"N	104°34'54.124"W	3.81	
6852.00	16.460	302.690	6610.66	-10.31	-324.20	-1684.92	40°02'37.640"N	104°34'54.408"W	12.15	
6941.00	21.130	324.300	6694.99	12.89	-304.33	-1704.92	40°02'37.836"N	104°34'54.665"W	9.34	
7030.00	28.070	335.030	6775.90	47.75	-272.26	-1723.16	40°02'38.153"N	104°34'54.899"W	9.24	
7119.00	34.730	335.070	6851.82	92.63	-230.24	-1742.70	40°02'38.568"N	104°34'55.151"W	7.48	
7208.00	39.940	340.580	6922.58	145.47	-180.26	-1762.91	40°02'39.062"N	104°34'55.411"W	6.95	
7297.00	48.790	346.060	6986.17	207.26	-120.69	-1780.51	40°02'39.651"N	104°34'55.637"W	10.83	
7386.00	58.010	348.770	7039.18	278.58	-51.02	-1795.96	40°02'40.340"N	104°34'55.836"W	10.64	
7474.00	64.850	353.020	7081.26	355.77	25.24	-1808.09	40°02'41.093"N	104°34'55.992"W	8.85	
7563.00	72.010	355.510	7113.96	438.18	107.53	-1816.31	40°02'41.906"N	104°34'56.097"W	8.45	
7652.00	78.340	358.260	7136.73	523.44	193.39	-1820.95	40°02'42.755"N	104°34'56.157"W	7.71	
7742.00	82.100	358.970	7152.01	610.98	282.04	-1823.09	40°02'43.631"N	104°34'56.185"W	4.25	
7754.00†	83.219	359.011	7153.54	622.72	293.94	-1823.30	40°02'43.749"N	104°34'56.188"W	9.33	CROSS 460' SETBACK (460'FSL&523'FWL,SEC.17)
7831.00	90.400	359.270	7157.83	698.45	370.76	-1824.45	40°02'44.508"N	104°34'56.202"W	9.33	

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7920.00	90.550	358.360	7157.09	786.26	459.74	-1826.29	40°02'45.387"N	104°34'56.226"W	1.04	
8009.00	90.620	356.930	7156.18	874.35	548.66	-1829.95	40°02'46.266"N	104°34'56.273"W	1.61	
8098.00	90.310	355.760	7155.46	962.70	637.47	-1835.62	40°02'47.143"N	104°34'56.346"W	1.36	
8187.00	90.220	355.800	7155.05	1051.16	726.23	-1842.17	40°02'48.021"N	104°34'56.431"W	0.11	
8276.00	90.400	357.840	7154.56	1139.41	815.09	-1847.11	40°02'48.899"N	104°34'56.494"W	2.30	
8365.00	90.340	356.340	7153.99	1227.62	903.97	-1851.63	40°02'49.777"N	104°34'56.552"W	1.69	
8454.00	90.340	356.970	7153.46	1315.92	992.81	-1856.82	40°02'50.655"N	104°34'56.619"W	0.71	
8543.00	90.180	358.350	7153.06	1404.00	1081.74	-1860.45	40°02'51.534"N	104°34'56.666"W	1.56	
8632.00	90.370	359.680	7152.63	1491.76	1170.72	-1861.98	40°02'52.413"N	104°34'56.686"W	1.51	
8721.00	90.340	0.710	7152.08	1579.20	1259.72	-1861.68	40°02'53.293"N	104°34'56.682"W	1.16	
8810.00	88.430	1.650	7153.03	1666.33	1348.69	-1859.85	40°02'54.172"N	104°34'56.658"W	2.39	
8899.00	88.640	1.110	7155.31	1753.38	1437.63	-1857.71	40°02'55.051"N	104°34'56.631"W	0.65	
8988.00	88.460	5.100	7157.56	1839.82	1526.46	-1852.89	40°02'55.929"N	104°34'56.569"W	4.49	
9077.00	88.610	8.020	7159.84	1924.85	1614.84	-1842.73	40°02'56.802"N	104°34'56.439"W	3.28	
9166.00	89.910	6.890	7160.99	2009.48	1703.07	-1831.18	40°02'57.674"N	104°34'56.290"W	1.94	
9255.00	89.970	4.960	7161.08	2094.82	1791.59	-1821.99	40°02'58.549"N	104°34'56.172"W	2.17	
9344.00	90.030	1.770	7161.08	2181.20	1880.43	-1816.77	40°02'59.427"N	104°34'56.105"W	3.58	
9433.00	89.720	0.270	7161.28	2268.39	1969.41	-1815.18	40°03'00.306"N	104°34'56.085"W	1.72	
9522.00	89.970	358.350	7161.52	2356.07	2058.40	-1816.26	40°03'01.185"N	104°34'56.099"W	2.18	
9611.00	90.250	357.580	7161.35	2444.09	2147.34	-1819.42	40°03'02.064"N	104°34'56.139"W	0.92	
9700.00	89.910	358.240	7161.22	2532.12	2236.28	-1822.66	40°03'02.943"N	104°34'56.181"W	0.83	
9789.00	89.820	358.090	7161.43	2620.10	2325.24	-1825.51	40°03'03.822"N	104°34'56.218"W	0.20	
9878.00	90.030	357.570	7161.55	2708.15	2414.17	-1828.88	40°03'04.701"N	104°34'56.261"W	0.63	
9967.00	90.280	357.380	7161.31	2796.28	2503.09	-1832.80	40°03'05.580"N	104°34'56.312"W	0.35	
10056.00	90.250	357.400	7160.89	2884.42	2591.99	-1836.86	40°03'06.458"N	104°34'56.364"W	0.04	
10145.00	90.120	359.180	7160.61	2972.36	2680.95	-1839.51	40°03'07.338"N	104°34'56.398"W	2.01	
10234.00	90.280	0.250	7160.30	3059.94	2769.95	-1839.95	40°03'08.217"N	104°34'56.404"W	1.22	
10323.00	90.550	0.930	7159.65	3147.26	2858.94	-1839.04	40°03'09.096"N	104°34'56.392"W	0.82	
10412.00	90.400	0.520	7158.91	3234.54	2947.93	-1837.91	40°03'09.976"N	104°34'56.378"W	0.49	
10501.00	90.620	358.710	7158.12	3322.13	3036.92	-1838.51	40°03'10.855"N	104°34'56.386"W	2.05	

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10590.00	90.430	0.480	7157.31	3409.74	3125.91	-1839.14	40°03'11.735"N	104°34'56.394"W	2.00	
10679.00	90.180	356.150	7156.83	3497.65	3214.85	-1841.76	40°03'12.614"N	104°34'56.428"W	4.87	
10768.00	89.630	352.820	7156.98	3586.30	3303.42	-1850.31	40°03'13.489"N	104°34'56.538"W	3.79	
10810.00	89.780	354.050	7157.20	3628.19	3345.15	-1855.11	40°03'13.901"N	104°34'56.599"W	2.95	
10899.00	89.720	1.300	7157.59	3716.22	3434.01	-1858.72	40°03'14.779"N	104°34'56.646"W	8.15	
10988.00	89.880	1.460	7157.90	3803.30	3522.99	-1856.57	40°03'15.659"N	104°34'56.618"W	0.25	
11077.00	89.750	4.770	7158.18	3889.77	3611.84	-1851.74	40°03'16.537"N	104°34'56.556"W	3.72	
11167.00	90.090	5.480	7158.31	3976.42	3701.48	-1843.70	40°03'17.423"N	104°34'56.453"W	0.87	
11256.00	89.970	3.950	7158.26	4062.28	3790.18	-1836.38	40°03'18.299"N	104°34'56.359"W	1.72	
11345.00	90.150	2.060	7158.17	4148.80	3879.05	-1831.72	40°03'19.177"N	104°34'56.299"W	2.13	
11434.00	90.430	359.350	7157.72	4236.08	3968.03	-1830.62	40°03'20.057"N	104°34'56.285"W	3.06	
11523.00	90.120	2.030	7157.29	4323.36	4057.02	-1829.55	40°03'20.936"N	104°34'56.271"W	3.03	
11612.00	90.120	5.220	7157.10	4409.64	4145.83	-1823.92	40°03'21.814"N	104°34'56.199"W	3.58	
11702.00	90.000	3.610	7157.01	4496.59	4235.56	-1817.00	40°03'22.701"N	104°34'56.110"W	1.79	
11791.00	90.090	2.200	7156.94	4583.14	4324.44	-1812.49	40°03'23.579"N	104°34'56.052"W	1.59	
11880.00	89.820	359.120	7157.01	4670.43	4413.43	-1811.46	40°03'24.458"N	104°34'56.039"W	3.47	
11969.00	90.250	356.520	7156.96	4758.48	4502.35	-1814.85	40°03'25.337"N	104°34'56.083"W	2.96	
12058.00	90.030	353.770	7156.74	4847.03	4591.03	-1822.38	40°03'26.213"N	104°34'56.180"W	3.10	
12147.00	90.250	353.540	7156.52	4935.79	4679.48	-1832.21	40°03'27.087"N	104°34'56.306"W	0.36	
12236.00	89.850	352.740	7156.44	5024.61	4767.84	-1842.84	40°03'27.961"N	104°34'56.443"W	1.00	
12325.00	89.940	349.210	7156.61	5113.56	4855.73	-1856.80	40°03'28.829"N	104°34'56.623"W	3.97	
12415.00	89.820	349.200	7156.80	5203.56	4944.13	-1873.66	40°03'29.703"N	104°34'56.840"W	0.13	
12504.00	89.910	357.610	7157.01	5292.27	5032.46	-1883.87	40°03'30.576"N	104°34'56.971"W	9.45	
12593.00	89.780	4.910	7157.25	5379.33	5121.38	-1881.92	40°03'31.454"N	104°34'56.946"W	8.20	
12682.00	89.850	8.650	7157.53	5464.27	5209.74	-1871.41	40°03'32.328"N	104°34'56.811"W	4.20	
12771.00	90.120	9.410	7157.56	5548.13	5297.64	-1857.44	40°03'33.196"N	104°34'56.631"W	0.91	
12860.00	90.090	6.110	7157.39	5632.61	5385.81	-1845.43	40°03'34.068"N	104°34'56.477"W	3.71	
12949.00	89.970	5.600	7157.35	5717.99	5474.35	-1836.35	40°03'34.943"N	104°34'56.360"W	0.59	
13038.00	90.180	3.010	7157.23	5804.01	5563.09	-1829.67	40°03'35.820"N	104°34'56.274"W	2.92	
13127.00	90.180	2.250	7156.95	5890.66	5651.99	-1825.58	40°03'36.698"N	104°34'56.222"W	0.85	

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13216.00	90.000	357.760	7156.81	5978.14	5740.97	-1825.58	40°03'37.577"N	104°34'56.222"W	5.05	
13305.00	90.180	353.890	7156.67	6066.57	5829.72	-1832.05	40°03'38.454"N	104°34'56.305"W	4.35	
13394.00	89.720	357.500	7156.75	6155.03	5918.45	-1838.73	40°03'39.331"N	104°34'56.391"W	4.09	
13483.00	89.820	1.660	7157.11	6242.62	6007.43	-1839.39	40°03'40.211"N	104°34'56.400"W	4.68	
13572.00	89.970	3.280	7157.27	6329.33	6096.34	-1835.55	40°03'41.089"N	104°34'56.351"W	1.83	
13661.00	91.540	2.460	7156.10	6415.89	6185.22	-1831.10	40°03'41.968"N	104°34'56.293"W	1.99	
13750.00	91.480	0.970	7153.75	6502.83	6274.15	-1828.43	40°03'42.846"N	104°34'56.259"W	1.67	
13839.00	91.170	359.660	7151.69	6590.21	6363.12	-1827.94	40°03'43.726"N	104°34'56.253"W	1.51	
13928.00	90.310	357.260	7150.54	6678.09	6452.07	-1830.34	40°03'44.605"N	104°34'56.284"W	2.86	
14017.00	90.030	357.520	7150.28	6766.24	6540.98	-1834.39	40°03'45.483"N	104°34'56.336"W	0.43	
14106.00	89.880	355.360	7150.35	6854.58	6629.80	-1839.91	40°03'46.361"N	104°34'56.407"W	2.43	
14195.00	90.120	354.670	7150.35	6943.16	6718.47	-1847.65	40°03'47.237"N	104°34'56.507"W	0.82	
14283.00	89.820	1.300	7150.40	7030.13	6806.36	-1850.74	40°03'48.106"N	104°34'56.547"W	7.54	
14372.00	90.180	4.960	7150.40	7116.59	6895.21	-1845.88	40°03'48.984"N	104°34'56.484"W	4.13	
14461.00	90.120	10.790	7150.16	7201.00	6983.34	-1833.69	40°03'49.855"N	104°34'56.327"W	6.55	
14550.00	89.880	9.470	7150.16	7284.26	7070.95	-1818.04	40°03'50.721"N	104°34'56.126"W	1.51	
14638.00	89.970	5.740	7150.28	7367.87	7158.16	-1806.40	40°03'51.582"N	104°34'55.977"W	4.24	
14727.00	90.030	2.020	7150.28	7454.05	7246.94	-1800.37	40°03'52.460"N	104°34'55.899"W	4.18	
14816.00	90.150	2.040	7150.14	7540.91	7335.88	-1797.22	40°03'53.339"N	104°34'55.859"W	0.14	
14905.00	90.150	1.710	7149.91	7627.83	7424.83	-1794.31	40°03'54.218"N	104°34'55.821"W	0.37	
14994.00	90.030	0.580	7149.77	7714.98	7513.82	-1792.53	40°03'55.097"N	104°34'55.799"W	1.28	
15083.00	90.280	358.920	7149.52	7802.54	7602.81	-1792.92	40°03'55.977"N	104°34'55.804"W	1.89	
15171.00	90.030	356.970	7149.29	7889.57	7690.75	-1796.08	40°03'56.846"N	104°34'55.844"W	2.23	
15260.00	90.150	355.870	7149.15	7977.91	7779.57	-1801.63	40°03'57.723"N	104°34'55.916"W	1.24	
15349.00	90.220	355.900	7148.86	8066.35	7868.34	-1808.02	40°03'58.601"N	104°34'55.998"W	0.09	
15438.00	90.030	356.210	7148.67	8154.76	7957.13	-1814.14	40°03'59.478"N	104°34'56.077"W	0.41	
15527.00	90.220	356.550	7148.47	8243.11	8045.96	-1819.76	40°04'00.356"N	104°34'56.149"W	0.44	
15616.00	90.180	356.650	7148.16	8331.42	8134.80	-1825.04	40°04'01.234"N	104°34'56.217"W	0.12	
15705.00	89.850	357.270	7148.14	8419.66	8223.67	-1829.76	40°04'02.112"N	104°34'56.278"W	0.79	
15794.00	89.850	357.660	7148.37	8507.79	8312.58	-1833.70	40°04'02.991"N	104°34'56.329"W	0.44	

Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (200 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15883.00	89.660	357.840	7148.75	8595.86	8401.52	-1837.19	40°04'03.869"N	104°34'56.374"W	0.29	
15972.00	89.780	358.830	7149.19	8683.79	8490.48	-1839.78	40°04'04.749"N	104°34'56.407"W	1.12	
16061.00	90.000	359.830	7149.36	8771.47	8579.47	-1840.82	40°04'05.628"N	104°34'56.421"W	1.15	
16150.00	89.820	359.570	7149.50	8859.05	8668.47	-1841.28	40°04'06.508"N	104°34'56.427"W	0.36	
16239.00	89.690	359.390	7149.88	8946.69	8757.46	-1842.09	40°04'07.387"N	104°34'56.437"W	0.25	
16328.00	89.970	359.140	7150.14	9034.38	8846.45	-1843.23	40°04'08.266"N	104°34'56.452"W	0.42	
16417.00	91.140	359.120	7149.28	9122.11	8935.44	-1844.58	40°04'09.146"N	104°34'56.469"W	1.31	
16506.00	91.140	359.500	7147.51	9209.78	9024.41	-1845.65	40°04'10.025"N	104°34'56.483"W	0.43	
16595.00	91.720	0.730	7145.29	9297.21	9113.38	-1845.48	40°04'10.904"N	104°34'56.481"W	1.53	
16684.00	91.630	1.140	7142.69	9384.40	9202.33	-1844.02	40°04'11.783"N	104°34'56.462"W	0.47	
16773.00	91.570	0.430	7140.20	9471.63	9291.29	-1842.81	40°04'12.662"N	104°34'56.447"W	0.80	
16862.00	89.970	359.610	7139.00	9559.10	9380.28	-1842.77	40°04'13.542"N	104°34'56.447"W	2.02	
16951.00	90.250	359.920	7138.83	9646.67	9469.28	-1843.14	40°04'14.421"N	104°34'56.451"W	0.47	
17041.00	89.880	0.020	7138.73	9735.15	9559.28	-1843.19	40°04'15.311"N	104°34'56.452"W	0.43	
17130.00	90.120	0.040	7138.73	9822.64	9648.28	-1843.14	40°04'16.190"N	104°34'56.452"W	0.27	
17218.00	90.000	0.360	7138.64	9909.10	9736.28	-1842.83	40°04'17.060"N	104°34'56.448"W	0.39	
17307.00	90.150	1.010	7138.52	9996.39	9825.27	-1841.77	40°04'17.939"N	104°34'56.434"W	0.75	
17397.00	90.180	1.910	7138.26	10084.42	9915.24	-1839.48	40°04'18.828"N	104°34'56.405"W	1.00	
17412.00	90.150	1.700	7138.22	10099.08	9930.23	-1839.00	40°04'18.977"N	104°34'56.399"W	1.41	BHGE LAST MWD SURVEY (476'FNL&523'FWL,SEC.8)
17436.00	90.150	1.700	7138.16	10122.53	9954.22	-1838.29	40°04'19.214"N	104°34'56.389"W	0.00	PROJECTION TO BIT (452'FNL&524'FWL,SEC.8)

HOLE & CASING SECTIONS - Ref Wellbore: WARNER 01N-64W-17-1H AWB Ref Wellpath: WARNER 01N-64W-17-1H AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	16.00	1720.00	1704.00	16.00	1680.07	0.00	0.00	-69.04	-308.04
9.625in Casing Surface	16.00	1716.00	1700.00	16.00	1676.24	0.00	0.00	-68.86	-306.93
8.5in Open Hole	1720.00	17436.00	15716.00	1680.07	7138.16	-69.04	-308.04	9954.22	-1838.29

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWP
Facility	SEC.17-T1N-R64W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.08-T01N-R64W	0.00	-0.04	0.02	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
SEC.17-T01N-R64W	0.00	-0.04	0.02	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
SEC.08-T1N-R64W, E 1/4 COR.	5083.00	7762.85	2891.86	3261564.96	1268263.00	40°03'57.557"N	104°33'55.548"W	point
SEC.08-T1N-R64W, N 1/4 COR.	5083.00	10405.20	291.31	3258937.11	1270878.01	40°04'23.671"N	104°34'28.996"W	point
SEC.08-T1N-R64W, NE COR.	5083.00	10404.26	2937.73	3261583.29	1270904.65	40°04'23.660"N	104°33'54.954"W	point
SEC.08-T1N-R64W, NW COR.	5083.00	10406.43	-2355.04	3256291.00	1270851.65	40°04'23.682"N	104°35'03.037"W	point
SEC.08-T1N-R64W, S 1/4 COR.	5083.00	5129.97	206.85	3258907.64	1265602.39	40°03'31.540"N	104°34'30.083"W	point
SEC.08-T1N-R64W, SE COR.	5083.00	5121.74	2845.98	3261546.61	1265621.66	40°03'31.457"N	104°33'56.142"W	point
SEC.08-T1N-R64W, SW COR.	5083.00	5138.39	-2432.83	3256268.12	1265583.30	40°03'31.622"N	104°35'04.031"W	point
SEC.08-T1N-R64W, W 1/4 COR.	5083.00	7772.61	-2393.62	3256279.87	1268217.68	40°03'57.654"N	104°35'03.530"W	point
SEC.17-T1N-R64W, E 1/4 COR	5083.00	2439.45	2866.44	3261595.03	1262939.84	40°03'04.950"N	104°33'55.883"W	point
SEC.17-T1N-R64W, N 1/4 COR.	5083.00	5129.93	206.86	3258907.65	1265602.35	40°03'31.540"N	104°34'30.083"W	point

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWP
Facility	SEC.17-T1N-R64W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.17-T1N-R64W, NE COR.	5083.00	5121.72	2845.98	3261546.61	1265621.64	40°03'31.457"N	104°33'56.142"W	point
SEC.17-T1N-R64W, NW COR.	5083.00	5138.43	-2432.81	3256268.14	1265583.34	40°03'31.622"N	104°35'04.031"W	point
SEC.17-T1N-R64W, S 1/4 COR.	5083.00	-204.00	273.26	3259029.64	1260269.61	40°02'38.828"N	104°34'29.230"W	point
SEC.17-T1N-R64W, SE COR.	5083.00	-243.18	2886.35	3261642.89	1260257.67	40°02'38.440"N	104°33'55.631"W	point
SEC.17-T1N-R64W, SW COR. SEC. 17	5083.00	-165.64	-2337.58	3256418.64	1260280.75	40°02'39.206"N	104°35'02.800"W	point
SEC.17-T1N-R64W, W 1/4 COR.	5083.00	2486.76	-2384.92	3256343.66	1262932.41	40°03'05.418"N	104°35'03.412"W	point
SEC.08-T01N-R64W 460'SETBACKS	7000.00	-0.04	0.02	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
SEC.17-T01N-R64W 460'SETBACKS	7000.00	-0.04	0.02	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
WARNER 01N-64W-17-1H BHL (460'FNL & 480'FWL,SEC.8, REV-2)(NIO)	7100.00	9946.27	-1881.87	3256768.92	1270396.47	40°04'19.135"N	104°34'56.950"W	point
WARNER 01N-64W-17-1H LP (460'FSL & 480'FWL,SEC.8, REV-2)(NIO)	7120.00	287.51	-1865.80	3256885.65	1260738.78	40°02'43.685"N	104°34'56.734"W	point
WARNER 01N-64W-17-1H BHL (460'FNL & 480'FWL,SEC.8, REV-3)(NIO)	7143.00	9946.29	-1881.84	3256768.95	1270396.49	40°04'19.135"N	104°34'56.950"W	point
WARNER 01N-64W-17-1H BHL (460'FNL & 510'FWL,SEC.8, REV-4)(NIO)	7143.00	9946.27	-1851.87	3256798.92	1270396.78	40°04'19.135"N	104°34'56.564"W	point

Actual Wellpath Report

WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
WARNER 01N-64W-17-1H BHL (460'FNL & 510'FWL,SEC.8, REV-5)(NIO)	7143.00	9946.27	-1851.87	3256798.92	1270396.78	40°04'19.135"N	104°34'56.564"W	point
WARNER 01N-64W-17-1H LP (460'FSL & 510'FWL,SEC.17, REV-5)(NIO)	7153.00	287.51	-1835.80	3256915.65	1260739.10	40°02'43.685"N	104°34'56.348"W	point
WARNER 01N-64W-17-1H LP (460'FSL & 480'FWL,SEC.8, REV-3)(NIO)	7163.00	287.49	-1865.77	3256885.68	1260738.76	40°02'43.685"N	104°34'56.734"W	point
WARNER 01N-64W-17-1H LP (460'FSL & 510'FWL,SEC.17, REV-4)(NIO)	7163.00	287.51	-1835.80	3256915.65	1260739.10	40°02'43.685"N	104°34'56.348"W	point

WELLPATH COMPOSITION - Ref Wellbore: WARNER 01N-64W-17-1H AWB				Ref Wellpath: WARNER 01N-64W-17-1H AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore	
16.00	1663.00	BHI NaviTrak (Standard)	BHI/NAVITRAK (AXIAL) MWD 13.5"-<142-1663>	WARNER 01N-64W-17-1H AWB	
1663.00	17412.00	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)	BHI/ATC (AXIAL) MWD 8.5"-<1780-17412>	WARNER 01N-64W-17-1H AWB	
17412.00	17436.00	Blind Drilling (std)	Projection to bit	WARNER 01N-64W-17-1H AWB	

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WARNER 01N-64W-17-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (200'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H AWB
Facility	SEC.17-T1N-R64W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7754.00	83.219	359.011	7153.54	CROSS 460' SETBACK (460'FSL&523'FWL,SEC.17)
17412.00	90.150	1.700	7138.22	BHGE LAST MWD SURVEY (476'FNL&523'FWL,SEC.8)
17436.00	90.150	1.700	7138.16	PROJECTION TO BIT (452'FNL&524'FWL,SEC.8)