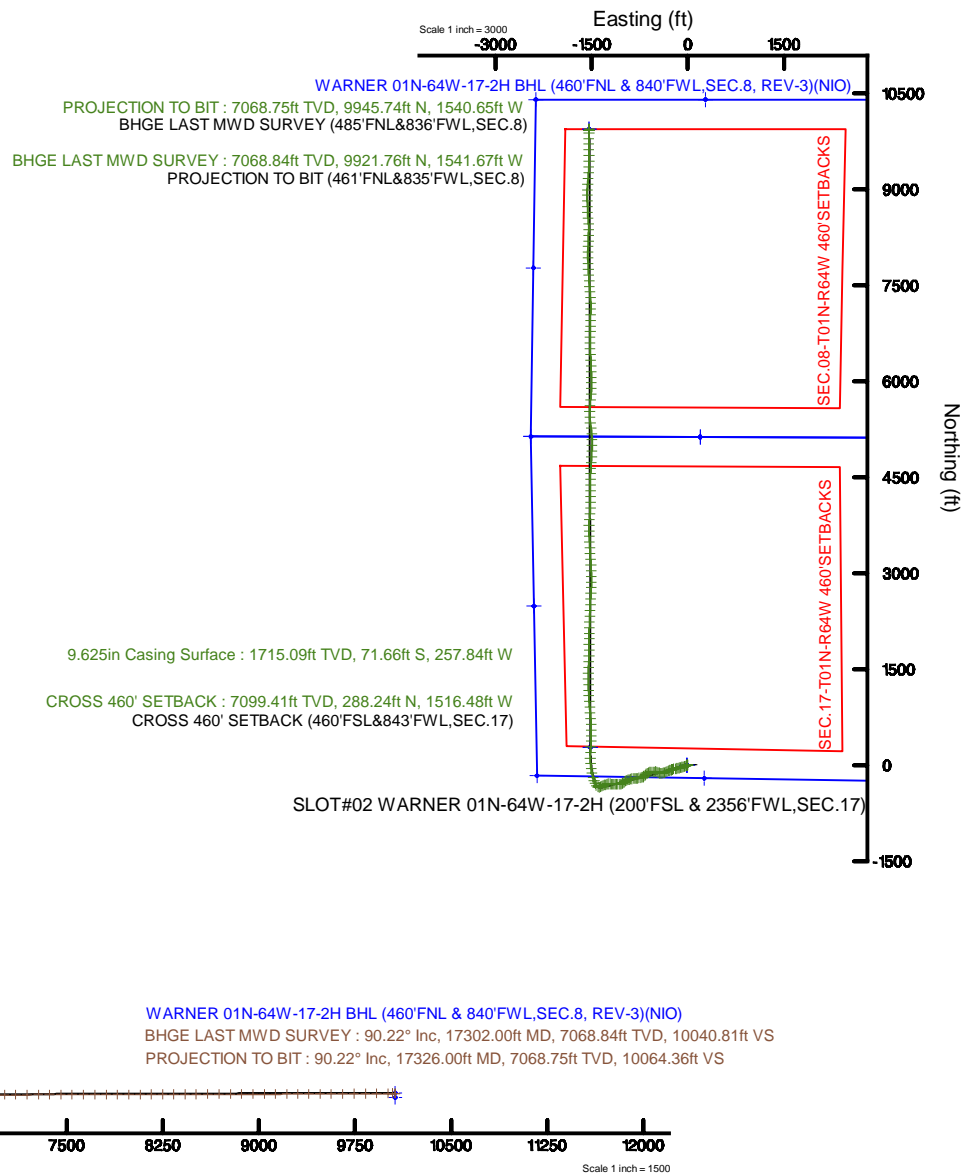
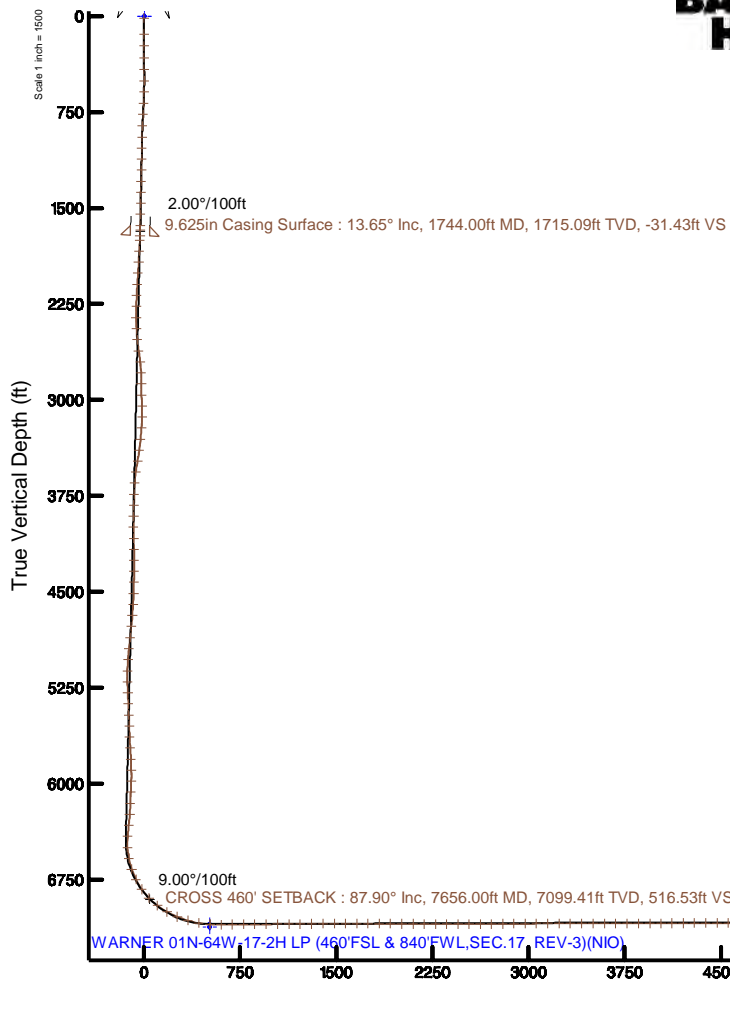


VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Field: WELD COUNTY (NAD83/TN) Well: WARNER 01N-64W-17-2H
Facility: SEC.17-T1N-R64W Wellbore: WARNER 01N-64W-17-2H PWB



File reference filepath is W:\WARNER_01N-64W-17-2H (REV-3) (NIO) (NIO)				Grid System: NAD83 / Lambert Colorado SP, Northern Zone (2011) US feet			
True vertical depths are referenced to RIG (167840-4507'GL) (RIG)				North Reference: True north			
Measured depths are referenced to RIG (167840-4507'GL) (RIG)				Scale: True distance			
RIG (167840-4507'GL) (RIG) to Mean Sea Level: 5083 feet				Depth are in feet			
Mean Sea Level to Mud line (ft) Slot: SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17), 0 feet				Created by: boudgamb on 2017-10-16			
Coordinates are in feet not rounded to 500				Checked by: boudgamb			
Location Information							
Facility Name				Grid East (US)	Grid North (US)	Latitude	Longitude
SEC 17-T1N-R64W				555754.02	108480.046	47102.43427N	1045102.7471W
Site		Local E (ft)	Local N (ft)	Grid East (US)	Grid North (US)		
SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)		-1522	1543	555755.024	108479.559	47102.43427N 1045102.7471W	
RIG (167840-4507'GL) (RIG) to Mudline (ft) Slot: SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)				Easting			
Mean Sea Level to Mudline (ft) Slot: SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)				Northing			
RIG (167840-4507'GL) (RIG) to Mean Sea Level				Easting			
Survey Program							
Survey No.	Survey Date	Tool	Notes	Log Name/Comment		Wellbore	
1688-01	1688-01-01	801 Spot/Tab	Custom Spot/Tab (Borehole Neighboring Data (Borehole 0.000 m))	Borehole (1688-01) (Borehole 0.000 m)		SLOT#02 WARNER 01N-64W-17-2H	
1688-02	1688-02-12	801 Spot/Tab Curve	Custom Spot/Tab Curve (Borehole Data: Borehole (Borehole 0.000 m))	Borehole (1688-02) (Borehole 0.000 m)		SLOT#02 WARNER 01N-64W-17-2H	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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	10/16/2017 at 8:33:08 AM
Convergence at slot	0.60° East	Database/Source file	Denver/WARNER_01N-64W-17-2H_awb_awp.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-10.22	15.63	3258769.92	1260470.56	40°02'40.841"N	104°34'32.542"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#02 WARNER 01N-64W-17-2H (200'FSL & 2356'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	351.21°

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 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	324.220	0.00	0.00	0.00	0.00	40°02'40.841"N	104°34'32.542"W	0.00	
16.00	0.000	324.220	16.00	0.00	0.00	0.00	40°02'40.841"N	104°34'32.542"W	0.00	
142.00	0.130	324.220	142.00	0.13	0.12	-0.08	40°02'40.842"N	104°34'32.543"W	0.10	
233.00	0.100	273.470	233.00	0.24	0.20	-0.22	40°02'40.843"N	104°34'32.545"W	0.11	
325.00	1.640	266.480	324.99	0.37	0.13	-1.62	40°02'40.842"N	104°34'32.563"W	1.67	
416.00	2.660	278.010	415.92	1.10	0.34	-5.01	40°02'40.844"N	104°34'32.606"W	1.21	
505.00	3.860	260.070	504.78	1.64	0.11	-10.00	40°02'40.842"N	104°34'32.671"W	1.75	
594.00	7.060	248.970	593.37	0.42	-2.37	-18.06	40°02'40.818"N	104°34'32.774"W	3.77	
683.00	9.260	244.510	681.46	-2.80	-7.41	-29.63	40°02'40.768"N	104°34'32.923"W	2.57	
772.00	9.220	240.910	769.31	-7.33	-13.96	-42.33	40°02'40.703"N	104°34'33.086"W	0.65	
862.00	11.530	248.100	857.83	-11.87	-20.82	-56.98	40°02'40.635"N	104°34'33.275"W	2.94	
951.00	13.590	254.630	944.70	-15.09	-26.91	-75.31	40°02'40.575"N	104°34'33.510"W	2.81	
1040.00	14.310	256.470	1031.08	-17.20	-32.26	-96.09	40°02'40.522"N	104°34'33.778"W	0.95	
1129.00	13.880	259.300	1117.40	-18.46	-36.81	-117.27	40°02'40.477"N	104°34'34.050"W	0.91	
1218.00	13.290	256.590	1203.91	-19.64	-41.17	-137.71	40°02'40.434"N	104°34'34.313"W	0.98	
1307.00	13.890	254.130	1290.42	-21.79	-46.46	-157.94	40°02'40.382"N	104°34'34.573"W	0.94	
1396.00	13.920	257.450	1376.81	-23.81	-51.71	-178.67	40°02'40.330"N	104°34'34.839"W	0.90	
1485.00	13.570	258.150	1463.26	-25.07	-56.18	-199.33	40°02'40.286"N	104°34'35.105"W	0.44	
1574.00	13.390	255.730	1549.81	-26.61	-60.86	-219.54	40°02'40.240"N	104°34'35.365"W	0.67	
1663.00	13.600	254.290	1636.35	-28.85	-66.23	-239.60	40°02'40.186"N	104°34'35.623"W	0.45	
1698.00	13.540	253.590	1670.38	-29.89	-68.51	-247.49	40°02'40.164"N	104°34'35.724"W	0.50	
1780.00	13.740	251.710	1750.06	-32.77	-74.27	-265.95	40°02'40.107"N	104°34'35.962"W	0.59	
1869.00	13.780	250.100	1836.51	-36.56	-81.20	-285.95	40°02'40.039"N	104°34'36.219"W	0.43	
1958.00	13.900	246.420	1922.93	-41.33	-89.08	-305.71	40°02'39.961"N	104°34'36.473"W	1.00	
2047.00	13.850	246.760	2009.33	-46.72	-97.56	-325.30	40°02'39.877"N	104°34'36.725"W	0.11	
2137.00	13.840	247.370	2096.72	-51.99	-105.96	-345.13	40°02'39.794"N	104°34'36.980"W	0.16	
2226.00	13.640	247.880	2183.17	-56.95	-114.00	-364.68	40°02'39.714"N	104°34'37.231"W	0.26	
2315.00	13.950	254.530	2269.61	-60.62	-120.82	-384.74	40°02'39.647"N	104°34'37.489"W	1.81	
2404.00	13.750	264.570	2356.03	-61.25	-124.68	-405.61	40°02'39.609"N	104°34'37.757"W	2.71	
2493.00	13.950	272.770	2442.45	-58.48	-125.16	-426.86	40°02'39.604"N	104°34'38.031"W	2.22	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
2582.00	12.930	285.390	2529.03	-52.25	-122.00	-447.18	40°02'39.635"N	104°34'38.292"W	3.48	
2671.00	13.810	296.630	2615.64	-42.02	-114.60	-466.28	40°02'39.708"N	104°34'38.537"W	3.08	
2760.00	13.930	293.060	2702.04	-30.21	-105.64	-485.63	40°02'39.797"N	104°34'38.786"W	0.97	
2849.00	13.900	272.490	2788.48	-22.46	-100.97	-506.18	40°02'39.843"N	104°34'39.050"W	5.53	
2938.00	13.600	255.630	2874.97	-21.39	-103.11	-527.01	40°02'39.822"N	104°34'39.318"W	4.50	
3027.00	14.440	274.160	2961.36	-19.92	-104.90	-548.22	40°02'39.804"N	104°34'39.591"W	5.11	
3116.00	14.710	270.280	3047.50	-15.65	-104.04	-570.59	40°02'39.813"N	104°34'39.879"W	1.14	
3205.00	14.640	256.360	3133.62	-14.82	-106.64	-592.83	40°02'39.787"N	104°34'40.165"W	3.95	
3294.00	14.660	244.980	3219.75	-18.92	-114.06	-613.97	40°02'39.714"N	104°34'40.436"W	3.23	
3383.00	14.650	237.320	3305.86	-26.63	-124.90	-633.65	40°02'39.607"N	104°34'40.689"W	2.18	
3472.00	14.690	229.090	3391.97	-37.19	-138.36	-651.65	40°02'39.474"N	104°34'40.921"W	2.34	
3561.00	13.700	219.500	3478.26	-50.20	-153.89	-666.89	40°02'39.320"N	104°34'41.117"W	2.86	
3649.00	14.000	222.380	3563.70	-63.81	-169.79	-680.69	40°02'39.163"N	104°34'41.294"W	0.85	
3738.00	12.490	243.620	3650.38	-73.48	-182.03	-696.58	40°02'39.042"N	104°34'41.499"W	5.69	
3827.00	14.570	257.600	3736.93	-77.09	-188.71	-716.14	40°02'38.976"N	104°34'41.750"W	4.34	
3916.00	14.560	255.410	3823.07	-78.93	-193.94	-737.90	40°02'38.924"N	104°34'42.030"W	0.62	
4005.00	14.520	255.130	3909.22	-81.24	-199.62	-759.51	40°02'38.868"N	104°34'42.308"W	0.09	
4094.00	14.500	263.720	3995.39	-81.94	-203.70	-781.37	40°02'38.828"N	104°34'42.589"W	2.42	
4183.00	14.500	265.850	4081.56	-80.55	-205.72	-803.56	40°02'38.808"N	104°34'42.874"W	0.60	
4272.00	14.550	267.670	4167.72	-78.39	-206.98	-825.84	40°02'38.795"N	104°34'43.161"W	0.52	
4361.00	14.610	263.720	4253.85	-76.64	-208.67	-848.17	40°02'38.779"N	104°34'43.448"W	1.12	
4450.00	14.460	257.140	4340.01	-76.94	-212.37	-870.16	40°02'38.742"N	104°34'43.730"W	1.86	
4539.00	14.560	255.430	4426.17	-78.86	-217.66	-891.82	40°02'38.690"N	104°34'44.009"W	0.49	
4628.00	14.600	255.840	4512.30	-81.04	-223.21	-913.53	40°02'38.635"N	104°34'44.288"W	0.12	
4717.00	14.570	246.670	4598.45	-84.90	-230.39	-934.68	40°02'38.564"N	104°34'44.560"W	2.59	
4806.00	14.540	243.720	4684.59	-91.07	-239.77	-954.98	40°02'38.471"N	104°34'44.821"W	0.83	
4895.00	14.160	238.420	4770.82	-98.64	-250.42	-974.27	40°02'38.366"N	104°34'45.069"W	1.54	
4984.00	13.980	234.790	4857.15	-107.64	-262.32	-992.33	40°02'38.248"N	104°34'45.301"W	1.01	
5072.00	13.650	233.430	4942.61	-117.21	-274.64	-1009.36	40°02'38.127"N	104°34'45.520"W	0.53	
5162.00	13.670	243.040	5030.07	-125.48	-285.79	-1027.37	40°02'38.017"N	104°34'45.752"W	2.52	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5251.00	13.710	257.280	5116.57	-129.49	-292.88	-1047.03	40°02'37.946"N	104°34'46.005"W	3.78	
5340.00	13.940	266.370	5203.00	-129.25	-295.88	-1068.02	40°02'37.917"N	104°34'46.274"W	2.45	
5429.00	13.870	273.090	5289.40	-126.09	-295.98	-1089.37	40°02'37.916"N	104°34'46.549"W	1.82	
5518.00	14.030	271.630	5375.77	-121.94	-295.10	-1110.81	40°02'37.924"N	104°34'46.825"W	0.43	
5607.00	13.950	268.590	5462.13	-118.61	-295.06	-1132.32	40°02'37.925"N	104°34'47.101"W	0.83	
5696.00	14.020	271.790	5548.50	-115.26	-294.99	-1153.82	40°02'37.926"N	104°34'47.378"W	0.87	
5785.00	13.770	269.140	5634.89	-111.82	-294.81	-1175.19	40°02'37.927"N	104°34'47.652"W	0.77	
5874.00	13.860	277.430	5721.33	-107.38	-293.59	-1196.35	40°02'37.939"N	104°34'47.925"W	2.22	
5963.00	13.820	274.040	5807.75	-102.04	-291.46	-1217.52	40°02'37.960"N	104°34'48.197"W	0.91	
6052.00	14.520	266.140	5894.04	-98.72	-291.46	-1239.26	40°02'37.960"N	104°34'48.476"W	2.31	
6141.00	14.590	253.990	5980.21	-99.17	-295.31	-1261.17	40°02'37.922"N	104°34'48.758"W	3.43	
6230.00	14.210	246.080	6066.42	-103.43	-302.83	-1281.94	40°02'37.848"N	104°34'49.025"W	2.25	
6319.00	14.490	258.330	6152.66	-106.85	-309.51	-1302.83	40°02'37.782"N	104°34'49.294"W	3.42	
6408.00	14.670	242.540	6238.83	-111.02	-316.96	-1323.74	40°02'37.708"N	104°34'49.562"W	4.46	
6497.00	14.730	239.880	6324.92	-118.74	-327.84	-1343.53	40°02'37.601"N	104°34'49.817"W	0.76	
6586.00	14.400	240.060	6411.06	-126.85	-339.04	-1362.91	40°02'37.490"N	104°34'50.066"W	0.37	
6675.00	14.780	272.000	6497.33	-128.72	-344.17	-1383.88	40°02'37.439"N	104°34'50.336"W	8.94	
6764.00	17.200	299.870	6583.00	-118.36	-337.21	-1406.67	40°02'37.508"N	104°34'50.629"W	8.95	
6853.00	20.910	323.290	6667.23	-96.07	-317.89	-1427.61	40°02'37.699"N	104°34'50.898"W	9.47	
6942.00	26.970	335.320	6748.59	-62.57	-286.77	-1445.56	40°02'38.007"N	104°34'51.129"W	8.71	
7031.00	35.420	340.760	6824.67	-17.71	-244.00	-1462.52	40°02'38.429"N	104°34'51.347"W	10.00	
7120.00	44.350	343.830	6892.90	38.62	-189.66	-1479.72	40°02'38.966"N	104°34'51.568"W	10.27	
7209.00	52.760	347.960	6951.77	104.98	-125.00	-1495.80	40°02'39.605"N	104°34'51.775"W	10.07	
7298.00	60.480	352.100	7000.71	179.20	-51.87	-1508.54	40°02'40.328"N	104°34'51.939"W	9.50	
7387.00	67.750	355.090	7039.55	259.13	27.65	-1517.40	40°02'41.114"N	104°34'52.053"W	8.71	
7476.00	73.780	358.480	7068.86	342.71	111.49	-1522.06	40°02'41.942"N	104°34'52.113"W	7.67	
7564.00	79.320	2.220	7089.33	427.15	197.03	-1521.51	40°02'42.788"N	104°34'52.106"W	7.53	
7653.00	87.810	4.020	7099.30	513.61	285.25	-1516.69	40°02'43.659"N	104°34'52.044"W	9.75	
7656.00†	87.900	3.978	7099.41	516.53	288.24	-1516.48	40°02'43.689"N	104°34'52.041"W	3.32	CROSS 460' SETBACK
7742.00	90.490	2.770	7100.62	600.58	374.08	-1511.42	40°02'44.537"N	104°34'51.976"W	3.32	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7831.00	90.460	0.940	7099.88	688.04	463.02	-1508.54	40°02'45.416"N	104°34'51.939"W	2.06	
7920.00	90.430	359.020	7099.19	776.00	552.02	-1508.57	40°02'46.296"N	104°34'51.940"W	2.16	
8009.00	90.520	357.140	7098.45	864.35	640.96	-1511.55	40°02'47.175"N	104°34'51.978"W	2.11	
8098.00	90.400	355.760	7097.73	952.98	729.78	-1517.06	40°02'48.052"N	104°34'52.049"W	1.56	
8187.00	90.460	355.240	7097.07	1041.72	818.51	-1524.04	40°02'48.929"N	104°34'52.139"W	0.59	
8276.00	90.370	355.490	7096.42	1130.49	907.21	-1531.24	40°02'49.806"N	104°34'52.231"W	0.30	
8365.00	90.490	355.580	7095.75	1219.23	995.94	-1538.16	40°02'50.683"N	104°34'52.321"W	0.17	
8454.00	90.400	356.760	7095.06	1307.90	1084.74	-1544.11	40°02'51.560"N	104°34'52.397"W	1.33	
8543.00	90.340	357.660	7094.49	1396.41	1173.63	-1548.44	40°02'52.439"N	104°34'52.453"W	1.01	
8632.00	90.490	358.510	7093.84	1484.76	1262.58	-1551.41	40°02'53.318"N	104°34'52.491"W	0.97	
8721.00	89.850	359.900	7093.58	1572.90	1351.56	-1552.65	40°02'54.197"N	104°34'52.507"W	1.72	
8810.00	89.880	1.440	7093.79	1660.68	1440.56	-1551.61	40°02'55.076"N	104°34'52.494"W	1.73	
8899.00	89.880	2.250	7093.97	1748.15	1529.51	-1548.74	40°02'55.955"N	104°34'52.457"W	0.91	
8988.00	89.880	2.700	7094.16	1835.44	1618.43	-1544.90	40°02'56.834"N	104°34'52.408"W	0.51	
9077.00	89.720	1.360	7094.47	1922.86	1707.37	-1541.75	40°02'57.713"N	104°34'52.367"W	1.52	
9166.00	89.750	359.130	7094.88	2010.75	1796.36	-1541.37	40°02'58.593"N	104°34'52.362"W	2.51	
9255.00	89.850	0.440	7095.19	2098.75	1885.36	-1541.70	40°02'59.472"N	104°34'52.367"W	1.48	
9344.00	89.880	0.800	7095.40	2186.55	1974.35	-1540.74	40°03'00.352"N	104°34'52.354"W	0.41	
9433.00	89.690	1.280	7095.74	2274.24	2063.33	-1539.12	40°03'01.231"N	104°34'52.334"W	0.58	
9522.00	89.750	1.330	7096.17	2361.87	2152.31	-1537.10	40°03'02.110"N	104°34'52.308"W	0.09	
9612.00	89.780	1.950	7096.54	2450.38	2242.27	-1534.52	40°03'02.999"N	104°34'52.275"W	0.69	
9700.00	89.780	3.250	7096.88	2536.64	2330.18	-1530.53	40°03'03.868"N	104°34'52.223"W	1.48	
9789.00	90.650	3.750	7096.55	2623.60	2419.01	-1525.09	40°03'04.746"N	104°34'52.154"W	1.13	
9878.00	90.460	2.140	7095.68	2710.74	2507.89	-1520.52	40°03'05.624"N	104°34'52.095"W	1.82	
9967.00	90.550	1.860	7094.90	2798.16	2596.83	-1517.42	40°03'06.503"N	104°34'52.055"W	0.33	
10056.00	90.650	4.520	7093.97	2885.21	2685.68	-1512.46	40°03'07.381"N	104°34'51.991"W	2.99	
10146.00	90.490	2.270	7093.07	2973.17	2775.51	-1507.14	40°03'08.269"N	104°34'51.923"W	2.51	
10235.00	90.520	359.840	7092.29	3060.85	2864.49	-1505.50	40°03'09.148"N	104°34'51.902"W	2.73	
10324.00	90.120	359.290	7091.79	3148.91	2953.48	-1506.17	40°03'10.028"N	104°34'51.911"W	0.76	
10413.00	90.090	357.920	7091.63	3237.17	3042.45	-1508.34	40°03'10.907"N	104°34'51.939"W	1.54	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10502.00	90.090	357.210	7091.49	3325.62	3131.37	-1512.12	40°03'11.786"N	104°34'51.987"W	0.80	
10591.00	90.180	355.610	7091.28	3414.25	3220.19	-1517.69	40°03'12.663"N	104°34'52.059"W	1.80	
10680.00	90.060	356.510	7091.09	3502.93	3308.98	-1523.81	40°03'13.541"N	104°34'52.138"W	1.02	
10769.00	90.000	357.260	7091.04	3591.49	3397.85	-1528.64	40°03'14.419"N	104°34'52.200"W	0.85	
10858.00	90.090	357.020	7090.97	3680.02	3486.74	-1533.09	40°03'15.297"N	104°34'52.257"W	0.29	
10947.00	89.970	356.930	7090.93	3768.57	3575.61	-1537.78	40°03'16.176"N	104°34'52.318"W	0.17	
11036.00	90.120	358.160	7090.86	3857.02	3664.53	-1541.59	40°03'17.054"N	104°34'52.367"W	1.39	
11126.00	90.150	1.400	7090.65	3946.01	3754.52	-1541.94	40°03'17.944"N	104°34'52.371"W	3.60	
11215.00	90.120	5.760	7090.44	4032.92	3843.32	-1536.38	40°03'18.821"N	104°34'52.300"W	4.90	
11304.00	90.280	5.670	7090.13	4119.08	3931.88	-1527.52	40°03'19.696"N	104°34'52.186"W	0.21	
11393.00	90.150	2.940	7089.79	4205.76	4020.62	-1520.84	40°03'20.573"N	104°34'52.100"W	3.07	
11482.00	90.250	0.230	7089.48	4293.30	4109.58	-1518.38	40°03'21.452"N	104°34'52.069"W	3.05	
11571.00	90.030	358.560	7089.26	4381.39	4198.57	-1519.32	40°03'22.332"N	104°34'52.081"W	1.89	
11661.00	90.310	359.580	7089.00	4470.54	4288.55	-1520.78	40°03'23.221"N	104°34'52.100"W	1.18	
11750.00	90.280	359.910	7088.54	4558.56	4377.55	-1521.18	40°03'24.101"N	104°34'52.105"W	0.37	
11839.00	90.280	0.570	7088.10	4646.45	4466.55	-1520.80	40°03'24.980"N	104°34'52.100"W	0.74	
11928.00	90.220	2.620	7087.71	4733.99	4555.51	-1518.33	40°03'25.859"N	104°34'52.068"W	2.30	
12017.00	90.400	2.940	7087.23	4821.18	4644.40	-1514.01	40°03'26.738"N	104°34'52.013"W	0.41	
12106.00	90.340	4.150	7086.66	4908.12	4733.23	-1508.51	40°03'27.615"N	104°34'51.942"W	1.36	
12195.00	90.370	4.250	7086.11	4994.85	4821.99	-1501.99	40°03'28.493"N	104°34'51.858"W	0.12	
12284.00	90.280	1.330	7085.60	5082.02	4910.87	-1497.66	40°03'29.371"N	104°34'51.803"W	3.28	
12373.00	90.250	0.960	7085.19	5169.69	4999.85	-1495.88	40°03'30.250"N	104°34'51.780"W	0.42	
12463.00	90.280	359.040	7084.77	5258.63	5089.85	-1495.88	40°03'31.140"N	104°34'51.780"W	2.13	
12552.00	90.250	355.170	7084.36	5347.14	5178.72	-1500.37	40°03'32.018"N	104°34'51.838"W	4.35	
12641.00	90.030	351.270	7084.14	5436.07	5267.08	-1510.88	40°03'32.891"N	104°34'51.973"W	4.39	
12730.00	90.120	353.430	7084.03	5525.04	5355.28	-1522.73	40°03'33.763"N	104°34'52.125"W	2.43	
12819.00	90.060	356.240	7083.89	5613.86	5443.91	-1530.74	40°03'34.639"N	104°34'52.229"W	3.16	
12908.00	89.910	2.590	7083.91	5701.90	5532.86	-1531.64	40°03'35.518"N	104°34'52.240"W	7.14	
12997.00	90.150	4.080	7083.87	5788.91	5621.71	-1526.47	40°03'36.396"N	104°34'52.174"W	1.70	
13086.00	90.090	6.310	7083.68	5875.27	5710.34	-1518.41	40°03'37.271"N	104°34'52.070"W	2.51	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13175.00	90.060	4.690	7083.56	5961.52	5798.92	-1509.88	40°03'38.147"N	104°34'51.961"W	1.82	
13264.00	90.030	0.270	7083.49	6048.78	5887.82	-1506.03	40°03'39.025"N	104°34'51.911"W	4.97	
13353.00	90.250	359.720	7083.27	6136.74	5976.82	-1506.04	40°03'39.905"N	104°34'51.911"W	0.67	
13442.00	90.280	359.340	7082.86	6224.80	6065.81	-1506.77	40°03'40.784"N	104°34'51.921"W	0.43	
13531.00	90.400	359.840	7082.34	6312.85	6154.81	-1507.40	40°03'41.664"N	104°34'51.929"W	0.58	
13620.00	90.280	358.410	7081.81	6401.00	6243.79	-1508.76	40°03'42.543"N	104°34'51.947"W	1.61	
13709.00	90.340	355.920	7081.33	6489.51	6332.68	-1513.16	40°03'43.422"N	104°34'52.003"W	2.80	
13798.00	90.250	355.460	7080.87	6578.23	6421.42	-1519.85	40°03'44.299"N	104°34'52.089"W	0.53	
13887.00	90.340	358.060	7080.41	6666.81	6510.27	-1524.88	40°03'45.177"N	104°34'52.154"W	2.92	
13976.00	90.310	0.680	7079.90	6754.90	6599.26	-1525.86	40°03'46.056"N	104°34'52.167"W	2.94	
14065.00	90.340	1.590	7079.40	6842.57	6688.24	-1524.10	40°03'46.935"N	104°34'52.144"W	1.02	
14154.00	90.280	1.240	7078.92	6930.16	6777.21	-1521.90	40°03'47.815"N	104°34'52.116"W	0.40	
14242.00	90.280	0.350	7078.49	7016.93	6865.20	-1520.68	40°03'48.684"N	104°34'52.100"W	1.01	
14331.00	90.310	1.170	7078.03	7104.69	6954.19	-1519.50	40°03'49.563"N	104°34'52.085"W	0.92	
14420.00	90.280	1.470	7077.57	7192.31	7043.16	-1517.45	40°03'50.443"N	104°34'52.059"W	0.34	
14509.00	90.280	359.950	7077.14	7280.09	7132.15	-1516.35	40°03'51.322"N	104°34'52.045"W	1.71	
14597.00	90.030	359.380	7076.90	7367.13	7220.15	-1516.86	40°03'52.192"N	104°34'52.051"W	0.71	
14686.00	90.090	356.950	7076.80	7455.47	7309.10	-1519.71	40°03'53.071"N	104°34'52.088"W	2.73	
14775.00	90.150	355.160	7076.62	7544.15	7397.88	-1525.83	40°03'53.948"N	104°34'52.167"W	2.01	
14864.00	90.030	355.190	7076.48	7632.93	7486.57	-1533.32	40°03'54.825"N	104°34'52.263"W	0.14	
14953.00	90.090	355.800	7076.39	7721.69	7575.29	-1540.31	40°03'55.701"N	104°34'52.353"W	0.69	
15042.00	90.180	356.230	7076.18	7810.37	7664.08	-1546.49	40°03'56.579"N	104°34'52.433"W	0.49	
15130.00	90.120	356.940	7075.95	7897.98	7751.92	-1551.74	40°03'57.447"N	104°34'52.500"W	0.81	
15219.00	90.180	357.970	7075.71	7986.46	7840.83	-1555.69	40°03'58.325"N	104°34'52.551"W	1.16	
15308.00	90.220	358.870	7075.40	8074.75	7929.80	-1558.14	40°03'59.205"N	104°34'52.583"W	1.01	
15397.00	90.150	1.170	7075.11	8162.70	8018.79	-1558.11	40°04'00.084"N	104°34'52.583"W	2.59	
15486.00	90.120	2.700	7074.90	8250.14	8107.74	-1555.11	40°04'00.963"N	104°34'52.544"W	1.72	
15575.00	90.090	2.510	7074.74	8337.38	8196.64	-1551.06	40°04'01.842"N	104°34'52.492"W	0.22	
15664.00	89.910	1.180	7074.74	8424.85	8285.60	-1548.20	40°04'02.721"N	104°34'52.455"W	1.51	
15753.00	90.180	0.990	7074.67	8512.54	8374.58	-1546.51	40°04'03.600"N	104°34'52.434"W	0.37	

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH DATA (199 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
15842.00	90.180	356.760	7074.39	8600.72	8463.54	-1548.26	40°04'04.479"N	104°34'52.456"W	4.75	
15931.00	90.120	353.360	7074.16	8689.51	8552.20	-1555.92	40°04'05.355"N	104°34'52.555"W	3.82	
16020.00	90.220	357.070	7073.89	8778.27	8640.87	-1563.34	40°04'06.232"N	104°34'52.650"W	4.17	
16109.00	90.180	359.590	7073.58	8866.58	8729.83	-1565.94	40°04'07.111"N	104°34'52.684"W	2.83	
16198.00	90.280	358.120	7073.23	8954.79	8818.81	-1567.72	40°04'07.990"N	104°34'52.707"W	1.66	
16287.00	90.150	359.660	7072.89	9042.99	8907.79	-1569.44	40°04'08.869"N	104°34'52.729"W	1.74	
16376.00	90.220	2.000	7072.61	9130.73	8996.77	-1568.15	40°04'09.749"N	104°34'52.713"W	2.63	
16465.00	90.180	4.780	7072.29	9217.72	9085.60	-1562.89	40°04'10.627"N	104°34'52.645"W	3.12	
16554.00	90.250	5.410	7071.96	9304.12	9174.25	-1554.98	40°04'11.503"N	104°34'52.543"W	0.71	
16643.00	90.150	3.970	7071.65	9390.66	9262.95	-1547.71	40°04'12.379"N	104°34'52.450"W	1.62	
16732.00	90.150	1.370	7071.42	9477.88	9351.85	-1543.56	40°04'13.258"N	104°34'52.397"W	2.92	
16821.00	90.310	0.340	7071.06	9565.62	9440.83	-1542.23	40°04'14.137"N	104°34'52.380"W	1.17	
16910.00	90.250	359.330	7070.62	9653.61	9529.83	-1542.49	40°04'15.017"N	104°34'52.383"W	1.14	
16999.00	90.250	358.870	7070.24	9741.77	9618.82	-1543.89	40°04'15.896"N	104°34'52.401"W	0.52	
17089.00	90.310	359.460	7069.80	9830.90	9708.81	-1545.20	40°04'16.785"N	104°34'52.418"W	0.66	
17177.00	90.220	0.910	7069.39	9917.82	9796.80	-1544.92	40°04'17.655"N	104°34'52.414"W	1.65	
17266.00	90.280	1.630	7069.00	10005.46	9885.78	-1542.94	40°04'18.534"N	104°34'52.389"W	0.81	
17302.00	90.220	2.430	7068.84	10040.81	9921.76	-1541.67	40°04'18.890"N	104°34'52.373"W	2.23	BHGE LAST MWD SURVEY
17326.00	90.220	2.430	7068.75	10064.36	9945.74	-1540.65	40°04'19.127"N	104°34'52.360"W	0.00	PROJECTION TO BIT

HOLE & CASING SECTIONS - Ref Wellbore: WARNER 01N-64W-17-2H awb Ref Wellpath: WARNER 01N-64W-17-2H awb_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	1754.00	1738.00	16.00	1724.80	0.00	0.00	-72.37	-260.09
9.625in Casing Surface	16.00	1744.00	1728.00	16.00	1715.09	0.00	0.00	-71.66	-257.84
8.5in Open Hole	1754.00	17326.00	15572.00	1724.80	7068.75	-72.37	-260.09	9945.74	-1540.65

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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
SEC.08-T01N-R64W	0.00	0.30	-15.63	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
SEC.17-T01N-R64W	0.00	0.30	-15.63	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	7763.19	2876.22	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	10405.55	275.67	3258937.11	1270878.01	40°04'23.671"N	104°34'28.996"W	point
SEC.08-T1N-R64W, NE COR.	5083.00	10404.61	2922.09	3261583.29	1270904.65	40°04'23.660"N	104°33'54.954"W	point
SEC.08-T1N-R64W, NW COR.	5083.00	10406.77	-2370.68	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	5130.32	191.20	3258907.64	1265602.39	40°03'31.540"N	104°34'30.083"W	point
SEC.08-T1N-R64W, SE COR.	5083.00	5122.08	2830.33	3261546.61	1265621.66	40°03'31.457"N	104°33'56.142"W	point
SEC.08-T1N-R64W, SW COR.	5083.00	5138.73	-2448.47	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	7772.95	-2409.26	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	2439.79	2850.80	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	5130.28	191.22	3258907.65	1265602.35	40°03'31.540"N	104°34'30.083"W	point

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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
SEC.17-T1N-R64W, NE COR.	5083.00	5122.06	2830.33	3261546.61	1265621.64	40°03'31.457"N	104°33'56.142"W	point
SEC.17-T1N-R64W, NW COR.	5083.00	5138.77	-2448.45	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	-203.66	257.62	3259029.64	1260269.61	40°02'38.828"N	104°34'29.230"W	point
SEC.17-T1N-R64W, SE COR.	5083.00	-242.84	2870.70	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	-165.30	-2353.22	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	2487.10	-2400.56	3256343.66	1262932.41	40°03'05.418"N	104°35'03.412"W	point
SEC.08-T01N-R64W 460'SETBACKS	7000.00	0.30	-15.63	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
SEC.17-T01N-R64W 460'SETBACKS	7000.00	0.30	-15.63	3258754.29	1260470.70	40°02'40.844"N	104°34'32.743"W	polygon
WARNER 01N-64W-17-2H BHL (460'FNL & 840'FWL,SEC.8, REV-3)(NIO)	7063.00	9946.59	-1537.57	3257128.83	1270400.20	40°04'19.135"N	104°34'52.320"W	point
WARNER 01N-64W-17-2H LP (460'FSL & 840'FWL,SEC.17, REV-3)(NIO)	7097.00	282.37	-1521.37	3257245.75	1260737.05	40°02'43.631"N	104°34'52.104"W	point
WARNER 01N-64W-17-2H BHL (460'FNL & 840'FWL,SEC.8, REV-2)(NIO)	7100.00	9946.59	-1537.57	3257128.83	1270400.20	40°04'19.135"N	104°34'52.320"W	point
WARNER 01N-64W-17-2H LP (460'FSL & 840'FWL,SEC.17, REV-2)(NIO)	7120.00	282.37	-1521.37	3257245.75	1260737.05	40°02'43.631"N	104°34'52.104"W	point

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH COMPOSITION - Ref Wellbore: WARNER 01N-64W-17-2H awb Ref Wellpath: WARNER 01N-64W-17-2H awb_awp				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1698.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)	BHI/NAVITRAK (AXIAL) MWD 13.5"-<142-1698>	WARNER 01N-64W-17-2H awb
1698.00	17302.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)	BHI/NAVITRAK (STANDARD,AXIAL) MWD 8.5"-<1780-17302>	WARNER 01N-64W-17-2H awb
17302.00	17326.00	Blind Drilling (std)	Projection to bit	WARNER 01N-64W-17-2H awb

Actual Wellpath Report

WARNER 01N-64W-17-2H awb_awp

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (200'FSL & 2356'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H awb
Facility	SEC.17-T1N-R64W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
7656.00	87.900	3.978	7099.41	CROSS 460' SETBACK
17302.00	90.220	2.430	7068.84	BHGE LAST MWD SURVEY
17326.00	90.220	2.430	7068.75	PROJECTION TO BIT