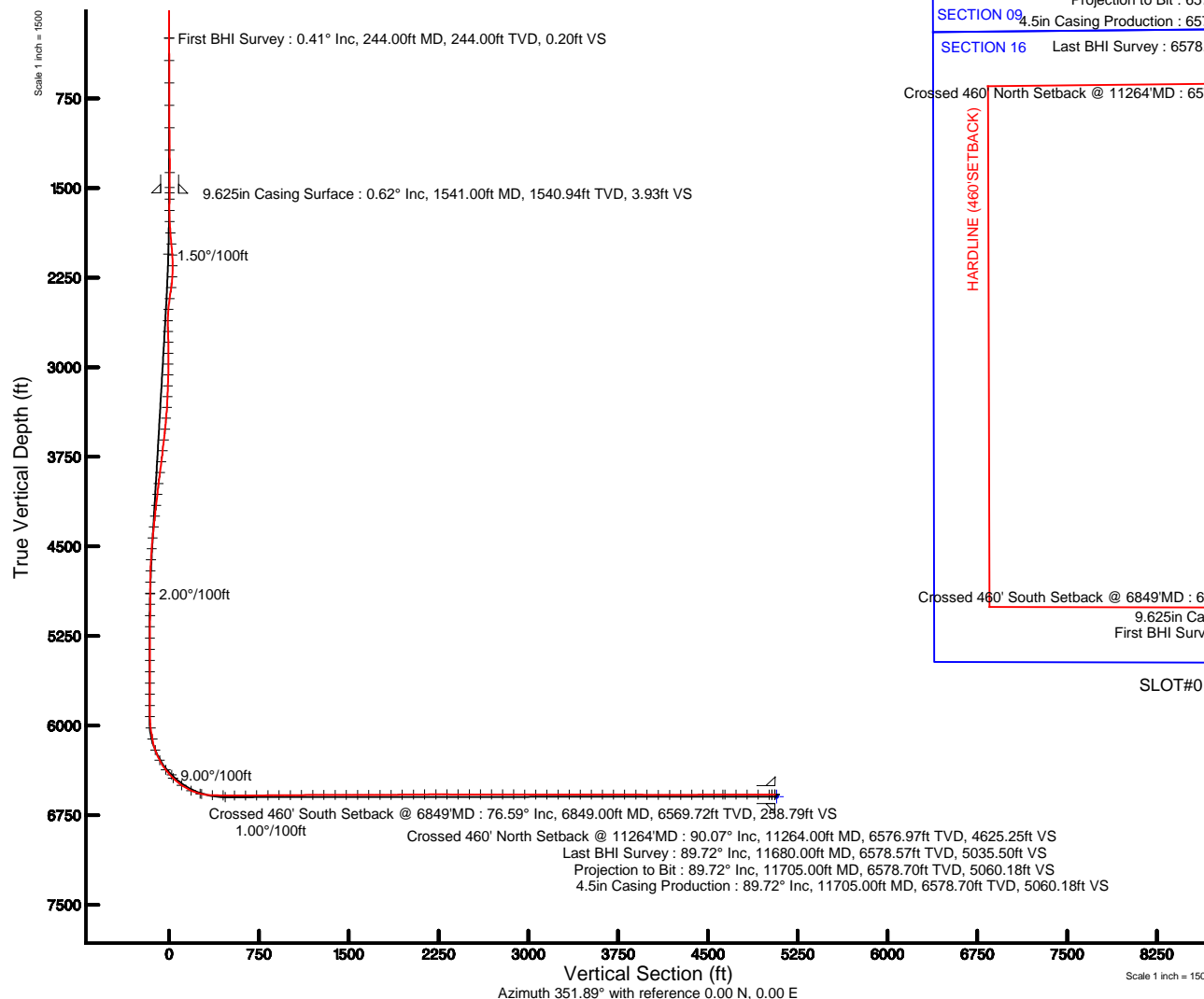


# VERDAD OIL & GAS CORPORATION

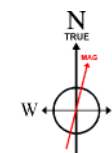
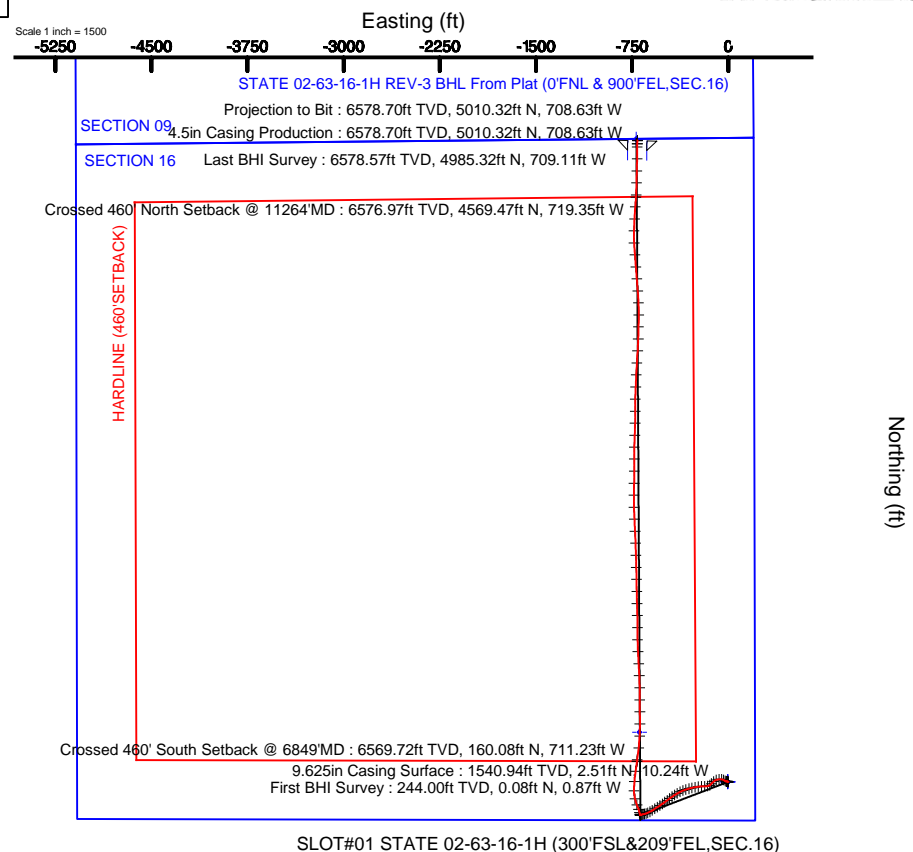
Location: COLORADO Slot: SLOT#01 STATE 02-63-16-1H (300'FSL&209'FEL,SEC.16)  
Field: WELD COUNTY (NAD83/TN) Well: STATE 02-63-16-1H  
Facility: SEC.16-T02N-R63W Wellbore: STATE 02-63-16-1H PWB

Plot reference wellpath is STATE 02-63-16-1H (REV-D.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to Extreme 22 (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to Extreme 22 (RKB)	North Reference: True north
Extreme 22 (RKB) to Mean Sea Level: 4779 feet	Scale: True distance
Mean Sea Level to Ground level (At Slot: SLOT#01 STATE 02-63-16-1H (300'FSL&209'FEL,SEC.16)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: guenaler on 2016-09-19
	Database: WA_DEN_Danver_Defn



## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.16-T02N-R63W			3298145.308	1292713.015	40°07'55.092"N	104°26'01.284"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 STATE 02-63-16-1H (300'FSL&209'FEL,SEC.16)	0.00	2.80	3298148.104	1292713.049	40°07'55.092"N	104°26'01.248"W
Extreme 22 (RKB) to Ground level (At Slot: SLOT#01 STATE 02-63-16-1H (300'FSL&209'FEL,SEC.16))					4779ft	
Mean Sea Level to Ground level (At Slot: SLOT#01 STATE 02-63-16-1H (300'FSL&209'FEL,SEC.16))					0ft	
Extreme 22 (RKB) to Mean Sea Level					4779ft	



BGGM (1900.0 to 2018.0) Dip: 66.75° Field: 52381.1 nT  
Magnetic North is 8.24 degrees East of True North (at 9/19/2016)

To correct azimuth from Magnetic to True add 8.24 degrees



# Actual Wellpath Report

STATE 02-63-16-1H AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

## 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	0.999959	Report Generated	9/19/2016 at 4:36:34 PM
Convergence at slot	0.69° East	Database/Source file	WA_DEN_Denver_Defn/STATE_02-63-16-1H_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	2.80	3298148.10	1292713.05	40°07'55.092"N	104°26'01.248"W
Facility Reference Pt			3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W
Field Reference Pt			3242930.13	1254608.21	40°01'44.490"N	104°37'56.946"W

## WELLPATH DATUM

Calculation method	Minimum curvature	Extreme 22 (RKB) to Facility Vertical Datum	4779.00ft
Horizontal Reference Pt	Slot	Extreme 22 (RKB) to Mean Sea Level	4779.00ft
Vertical Reference Pt	Extreme 22 (RKB)	Extreme 22 (RKB) to Ground Level at Slot (SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16))	4779.00ft
MD Reference Pt	Extreme 22 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	351.89°



# Actual Wellpath Report

STATE 02-63-16-1H AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

## WELLPATH DATA (121 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	275.250	0.00	0.00	0.00	0.00	40°07'55.092"N	104°26'01.248"W	0.00	
244.00	0.410	275.250	244.00	0.20	0.08	-0.87	40°07'55.093"N	104°26'01.259"W	0.17	First BHI Survey
432.00	0.460	276.110	431.99	0.54	0.22	-2.29	40°07'55.094"N	104°26'01.277"W	0.03	
620.00	0.240	281.070	619.99	0.86	0.38	-3.43	40°07'55.096"N	104°26'01.292"W	0.12	
808.00	0.390	307.690	807.99	1.45	0.84	-4.32	40°07'55.100"N	104°26'01.304"W	0.11	
996.00	0.610	314.750	995.98	2.70	1.94	-5.54	40°07'55.111"N	104°26'01.319"W	0.12	
1183.00	0.930	317.300	1182.96	4.74	3.76	-7.27	40°07'55.129"N	104°26'01.342"W	0.17	
1370.00	0.750	222.490	1369.95	5.22	3.97	-9.13	40°07'55.131"N	104°26'01.366"W	0.66	
1496.00	0.530	218.900	1495.94	4.30	2.91	-10.05	40°07'55.121"N	104°26'01.377"W	0.18	
1593.00	0.810	176.330	1592.93	3.31	1.87	-10.29	40°07'55.111"N	104°26'01.380"W	0.57	
1687.00	1.650	271.100	1686.92	2.86	1.24	-11.60	40°07'55.104"N	104°26'01.397"W	2.02	
1781.00	4.220	295.490	1780.79	4.99	2.75	-16.08	40°07'55.119"N	104°26'01.455"W	2.98	
1875.00	6.810	302.910	1874.35	10.56	7.27	-23.88	40°07'55.164"N	104°26'01.555"W	2.85	
1969.00	9.510	296.490	1967.39	18.63	13.76	-35.51	40°07'55.228"N	104°26'01.705"W	3.03	
2063.00	11.820	281.690	2059.78	26.31	19.18	-51.89	40°07'55.282"N	104°26'01.916"W	3.79	
2157.00	13.140	263.140	2151.59	29.80	19.85	-71.94	40°07'55.288"N	104°26'02.174"W	4.47	
2251.00	15.000	248.230	2242.80	27.16	14.06	-93.85	40°07'55.231"N	104°26'02.456"W	4.32	
2345.00	15.020	228.670	2333.65	17.61	1.50	-114.31	40°07'55.107"N	104°26'02.720"W	5.36	
2439.00	12.800	221.120	2424.89	4.13	-14.39	-130.30	40°07'54.950"N	104°26'02.926"W	3.05	
2533.00	10.800	236.810	2516.93	-6.41	-27.06	-144.53	40°07'54.825"N	104°26'03.109"W	4.00	
2628.00	12.640	258.980	2609.99	-10.71	-33.93	-162.19	40°07'54.757"N	104°26'03.336"W	5.08	
2722.00	15.250	270.960	2701.23	-9.28	-35.69	-184.65	40°07'54.739"N	104°26'03.625"W	4.13	
2816.00	15.290	266.280	2791.92	-6.39	-36.28	-209.38	40°07'54.733"N	104°26'03.944"W	1.31	
2910.00	15.200	262.700	2882.61	-5.26	-38.65	-233.98	40°07'54.710"N	104°26'04.260"W	1.01	
3004.00	15.260	260.410	2973.31	-5.41	-42.28	-258.40	40°07'54.674"N	104°26'04.575"W	0.64	
3098.00	15.250	255.810	3064.00	-7.04	-47.37	-282.58	40°07'54.624"N	104°26'04.886"W	1.29	
3193.00	15.300	253.640	3155.64	-10.16	-53.96	-306.72	40°07'54.559"N	104°26'05.197"W	0.60	
3287.00	15.170	253.610	3246.34	-13.71	-60.93	-330.42	40°07'54.490"N	104°26'05.502"W	0.14	
3381.00	15.120	249.313	3337.08	-18.16	-68.73	-353.69	40°07'54.413"N	104°26'05.802"W	1.20	
3474.00	15.160	241.340	3426.86	-25.07	-78.85	-375.71	40°07'54.313"N	104°26'06.085"W	2.24	



# Actual Wellpath Report

STATE 02-63-16-1H AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

## WELLPATH DATA (121 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3569.00	15.190	239.780	3518.55	-34.11	-91.07	-397.36	40°07'54.192"N	104°26'06.364"W	0.43	
3662.00	14.820	237.000	3608.38	-43.70	-103.68	-417.87	40°07'54.067"N	104°26'06.628"W	0.87	
3756.00	15.090	235.930	3699.20	-54.12	-117.08	-438.08	40°07'53.935"N	104°26'06.888"W	0.41	
3850.00	14.390	233.420	3790.10	-65.05	-130.90	-457.60	40°07'53.798"N	104°26'07.139"W	1.01	
3945.00	14.350	232.480	3882.13	-76.46	-145.10	-476.42	40°07'53.658"N	104°26'07.382"W	0.25	
4039.00	14.260	233.730	3973.22	-87.64	-159.05	-494.99	40°07'53.520"N	104°26'07.621"W	0.34	
4133.00	14.420	235.120	4064.29	-98.38	-172.59	-513.93	40°07'53.386"N	104°26'07.864"W	0.40	
4227.00	14.260	235.700	4155.36	-108.76	-185.81	-533.09	40°07'53.256"N	104°26'08.111"W	0.23	
4321.00	14.310	237.440	4246.45	-118.68	-198.58	-552.45	40°07'53.130"N	104°26'08.360"W	0.46	
4415.00	14.380	237.120	4337.52	-128.38	-211.17	-572.04	40°07'53.005"N	104°26'08.613"W	0.11	
4509.00	14.320	239.190	4428.59	-137.75	-223.46	-591.83	40°07'52.884"N	104°26'08.867"W	0.55	
4603.00	12.220	242.060	4520.08	-145.62	-234.08	-610.60	40°07'52.779"N	104°26'09.109"W	2.34	
4697.00	10.470	244.410	4612.24	-151.56	-242.43	-627.10	40°07'52.696"N	104°26'09.321"W	1.93	
4791.00	8.630	250.240	4704.93	-155.55	-248.50	-641.44	40°07'52.636"N	104°26'09.506"W	2.21	
4885.00	6.690	259.690	4798.09	-157.18	-251.87	-653.46	40°07'52.603"N	104°26'09.661"W	2.45	
4979.00	5.270	259.370	4891.58	-157.58	-253.64	-663.09	40°07'52.585"N	104°26'09.785"W	1.51	
5073.00	4.420	253.390	4985.24	-158.31	-255.48	-670.81	40°07'52.567"N	104°26'09.884"W	1.05	
5167.00	3.480	255.200	5079.02	-159.18	-257.24	-677.04	40°07'52.550"N	104°26'09.964"W	1.01	
5261.00	3.060	248.760	5172.86	-160.08	-258.88	-682.13	40°07'52.534"N	104°26'10.030"W	0.59	
5355.00	1.420	285.050	5266.79	-160.19	-259.48	-685.60	40°07'52.528"N	104°26'10.075"W	2.23	
5449.00	0.150	83.480	5360.78	-159.74	-259.17	-686.60	40°07'52.531"N	104°26'10.088"W	1.66	
5543.00	0.090	131.450	5454.78	-159.79	-259.20	-686.42	40°07'52.530"N	104°26'10.085"W	0.12	
5637.00	0.030	70.910	5548.78	-159.85	-259.24	-686.34	40°07'52.530"N	104°26'10.084"W	0.08	
5732.00	0.090	52.310	5643.78	-159.80	-259.19	-686.26	40°07'52.531"N	104°26'10.083"W	0.07	
5826.00	0.040	91.800	5737.78	-159.77	-259.15	-686.17	40°07'52.531"N	104°26'10.082"W	0.07	
5920.00	0.040	219.600	5831.78	-159.80	-259.17	-686.16	40°07'52.531"N	104°26'10.082"W	0.08	
6014.00	0.030	11.620	5925.78	-159.80	-259.17	-686.17	40°07'52.531"N	104°26'10.082"W	0.07	
6108.00	7.150	341.530	6019.54	-154.02	-253.59	-688.02	40°07'52.586"N	104°26'10.106"W	7.58	
6203.00	10.450	345.510	6113.41	-139.63	-239.64	-692.05	40°07'52.724"N	104°26'10.158"W	3.53	
6297.00	18.960	342.440	6204.25	-116.05	-216.79	-698.81	40°07'52.950"N	104°26'10.245"W	9.09	



# Actual Wellpath Report

STATE 02-63-16-1H AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

## WELLPATH DATA (121 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
6391.00	28.250	338.150	6290.29	-79.30	-181.50	-711.72	40°07'53.298"N	104°26'10.411"W	10.04	
6485.00	37.710	345.930	6369.09	-28.96	-132.83	-727.03	40°07'53.779"N	104°26'10.608"W	11.01	
6579.00	45.640	358.850	6439.38	33.20	-71.14	-734.72	40°07'54.389"N	104°26'10.707"W	12.40	
6673.00	55.620	5.820	6498.97	104.44	1.28	-731.45	40°07'55.105"N	104°26'10.665"W	12.05	
6767.00	66.930	7.710	6544.08	183.96	83.00	-721.69	40°07'55.912"N	104°26'10.539"W	12.16	
6849.00†	76.587	7.736	6569.72	258.79	160.08	-711.23	40°07'56.674"N	104°26'10.405"W	11.78	Crossed 460' South Setback @ 6849'MD
6861.00	78.000	7.740	6572.36	270.05	171.68	-709.66	40°07'56.788"N	104°26'10.384"W	11.78	
6955.00	88.920	5.980	6583.05	360.14	264.25	-698.53	40°07'57.703"N	104°26'10.241"W	11.76	
7049.00	89.820	3.030	6584.08	451.85	357.95	-691.15	40°07'58.629"N	104°26'10.146"W	3.28	
7144.00	89.820	359.870	6584.38	545.52	452.90	-688.75	40°07'59.568"N	104°26'10.115"W	3.33	
7238.00	90.340	359.340	6584.25	638.67	546.90	-689.40	40°08'00.496"N	104°26'10.124"W	0.79	
7332.00	90.030	0.360	6583.95	731.76	640.90	-689.64	40°08'01.425"N	104°26'10.127"W	1.13	
7426.00	90.280	358.120	6583.69	824.98	734.88	-690.89	40°08'02.354"N	104°26'10.143"W	2.40	
7520.00	90.310	358.060	6583.21	918.43	828.83	-694.02	40°08'03.282"N	104°26'10.183"W	0.07	
7614.00	90.310	356.280	6582.70	1012.03	922.71	-698.66	40°08'04.210"N	104°26'10.243"W	1.89	
7708.00	91.110	357.320	6581.53	1105.68	1016.55	-703.91	40°08'05.138"N	104°26'10.311"W	1.40	
7802.00	90.620	358.940	6580.12	1199.11	1110.49	-706.98	40°08'06.066"N	104°26'10.350"W	1.80	
7897.00	90.030	0.110	6579.58	1293.26	1205.48	-707.76	40°08'07.005"N	104°26'10.361"W	1.38	
7991.00	89.910	358.470	6579.63	1386.47	1299.47	-708.93	40°08'07.933"N	104°26'10.376"W	1.75	
8085.00	89.910	358.460	6579.77	1479.86	1393.44	-711.45	40°08'08.862"N	104°26'10.408"W	0.01	
8179.00	89.910	358.890	6579.92	1573.20	1487.41	-713.62	40°08'09.791"N	104°26'10.436"W	0.46	
8274.00	90.250	359.060	6579.79	1667.47	1582.40	-715.32	40°08'10.729"N	104°26'10.458"W	0.40	
8368.00	90.280	358.940	6579.35	1760.75	1676.38	-716.96	40°08'11.658"N	104°26'10.479"W	0.13	
8462.00	90.030	357.990	6579.10	1854.13	1770.35	-719.48	40°08'12.587"N	104°26'10.512"W	1.05	
8556.00	90.830	358.020	6578.39	1947.59	1864.29	-722.75	40°08'13.515"N	104°26'10.554"W	0.85	
8650.00	90.620	357.100	6577.20	2041.12	1958.19	-726.75	40°08'14.443"N	104°26'10.605"W	1.00	
8744.00	90.370	357.320	6576.39	2134.72	2052.08	-731.33	40°08'15.371"N	104°26'10.664"W	0.35	
8838.00	89.970	358.610	6576.11	2228.18	2146.02	-734.67	40°08'16.299"N	104°26'10.707"W	1.44	
8932.00	89.910	0.910	6576.21	2321.29	2240.01	-735.06	40°08'17.228"N	104°26'10.712"W	2.45	
9026.00	89.880	0.410	6576.38	2414.19	2334.00	-733.98	40°08'18.157"N	104°26'10.698"W	0.53	



# Actual Wellpath Report

STATE 02-63-16-1H AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

## WELLPATH DATA (121 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
9120.00	90.030	0.220	6576.46	2507.18	2428.00	-733.46	40°08'19.086"N	104°26'10.692"W	0.26	
9214.00	89.970	0.170	6576.46	2600.20	2522.00	-733.14	40°08'20.015"N	104°26'10.688"W	0.08	
9308.00	90.060	1.330	6576.43	2693.07	2615.99	-731.91	40°08'20.943"N	104°26'10.672"W	1.24	
9401.00	90.090	2.150	6576.31	2784.70	2708.95	-729.09	40°08'21.862"N	104°26'10.636"W	0.88	
9496.00	89.880	1.030	6576.34	2878.34	2803.91	-726.45	40°08'22.800"N	104°26'10.602"W	1.20	
9589.00	89.780	0.070	6576.61	2970.28	2896.90	-725.56	40°08'23.719"N	104°26'10.590"W	1.04	
9683.00	89.780	1.080	6576.97	3063.20	2990.90	-724.61	40°08'24.648"N	104°26'10.578"W	1.07	
9777.00	89.750	2.570	6577.36	3155.79	3084.85	-721.62	40°08'25.577"N	104°26'10.540"W	1.59	
9872.00	89.820	2.780	6577.72	3249.11	3179.74	-717.19	40°08'26.514"N	104°26'10.483"W	0.23	
9966.00	89.850	3.190	6577.99	3341.35	3273.61	-712.29	40°08'27.442"N	104°26'10.420"W	0.44	
10060.00	89.970	3.920	6578.13	3433.41	3367.43	-706.46	40°08'28.369"N	104°26'10.345"W	0.79	
10154.00	90.770	1.700	6577.53	3525.70	3461.31	-701.86	40°08'29.297"N	104°26'10.285"W	2.51	
10248.00	90.090	1.100	6576.82	3618.41	3555.28	-699.56	40°08'30.225"N	104°26'10.256"W	0.96	
10342.00	89.880	0.850	6576.85	3711.23	3649.26	-697.96	40°08'31.154"N	104°26'10.235"W	0.35	
10436.00	89.630	356.900	6577.25	3804.51	3743.23	-699.80	40°08'32.083"N	104°26'10.259"W	4.21	
10530.00	89.290	355.390	6578.13	3898.24	3837.01	-706.12	40°08'33.010"N	104°26'10.340"W	1.65	
10624.00	89.570	356.110	6579.07	3992.03	3930.74	-713.09	40°08'33.936"N	104°26'10.430"W	0.82	
10718.00	89.850	355.580	6579.54	4085.80	4024.49	-719.90	40°08'34.862"N	104°26'10.518"W	0.64	
10812.00	90.090	355.230	6579.59	4179.62	4118.19	-727.43	40°08'35.788"N	104°26'10.615"W	0.45	
10906.00	90.180	357.180	6579.37	4273.35	4211.98	-733.65	40°08'36.715"N	104°26'10.695"W	2.08	
11000.00	90.280	1.710	6579.00	4366.51	4305.95	-734.56	40°08'37.644"N	104°26'10.707"W	4.82	
11094.00	90.340	2.750	6578.49	4458.98	4399.88	-730.90	40°08'38.572"N	104°26'10.660"W	1.11	
11188.00	90.800	4.910	6577.55	4550.94	4493.66	-724.63	40°08'39.499"N	104°26'10.579"W	2.35	
11264.00†	90.073	3.055	6576.97	4625.25	4569.47	-719.35	40°08'40.248"N	104°26'10.511"W	2.62	Crossed 460' North Setback @ 11264'MD
11281.00	89.910	2.640	6576.97	4641.94	4586.45	-718.50	40°08'40.416"N	104°26'10.500"W	2.62	
11375.00	89.850	1.200	6577.17	4734.50	4680.39	-715.35	40°08'41.344"N	104°26'10.460"W	1.53	
11469.00	89.750	1.630	6577.50	4827.20	4774.36	-713.03	40°08'42.273"N	104°26'10.430"W	0.47	
11563.00	89.660	0.850	6577.98	4919.95	4868.34	-711.00	40°08'43.201"N	104°26'10.404"W	0.84	
11657.00	89.750	0.950	6578.47	5012.79	4962.33	-709.52	40°08'44.130"N	104°26'10.385"W	0.14	
11680.00	89.720	1.100	6578.57	5035.50	4985.32	-709.11	40°08'44.357"N	104°26'10.379"W	0.67	Last BHI Survey



# Actual Wellpath Report

STATE 02-63-16-1H AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

## WELLPATH DATA (121 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11705.00	89.720	1.100	6578.70	5060.18	5010.32	-708.63	40°08'44.604"N	104°26'10.373"W	0.00	Projection to Bit

## HOLE & CASING SECTIONS - Ref Wellbore: STATE 02-63-16-1H AWB Ref Wellpath: STATE 02-63-16-1H 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	1541.00	1525.00	16.00	1540.94	0.00	0.00	2.51	-10.24
9.625in Casing Surface	16.00	1541.00	1525.00	16.00	1540.94	0.00	0.00	2.51	-10.24
8.75in Open Hole	1541.00	11705.00	10164.00	1540.94	6578.70	2.51	-10.24	5010.32	-708.63
4.5in Casing Production	16.00	11705.00	11689.00	16.00	6578.70	0.00	0.00	5010.32	-708.63

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SECTION 09	4.00	0.00	-2.80	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
SECTION 16	4.00	0.00	-2.80	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
STATE 02-63-16-1H REV-1 BHL From Plat (2138'FSL&900'FEL,SEC.09)	6544.00	7165.71	-718.42	3297343.60	1299869.29	40°09'05.904"N	104°26'10.500"W	point
HARDLINE (460'FSL/FWL&460'FROM 1/2 SECTION 9 LINE	6564.00	0.00	-2.80	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
HARDLINE (460'SETBACK)	6564.00	0.00	-2.80	3298145.31	1292713.02	40°07'55.092"N	104°26'01.284"W	polygon
STATE 02-63-16-1H Landing from plan (688'FSL&900'FEL,SEC.16)	6564.00	388.30	-692.10	3297451.42	1293092.98	40°07'58.929"N	104°26'10.159"W	point
STATE 02-63-16-1H REV-3 BHL From Plat (0'FNL & 900'FEL,SEC.16)	6594.00	5023.00	-718.43	3297369.36	1297726.83	40°08'44.730"N	104°26'10.499"W	point
From Subject Received Size Categories	6595.00	7165.71	-718.42	3297343.60	1299869.29	40°09'05.904"N	104°26'10.500"W	point
Ex.UPV #9-7K3 (200'R)	7294.00	8582.49	-1450.46	3296594.61	1301277.10	40°09'19.904"N	104°26'19.928"W	circle
Ex.UPV #9-15K3 (200'R)	7306.00	6615.29	-1461.76	3296606.97	1299310.00	40°09'00.464"N	104°26'20.072"W	circle
Ex.STATE #26 (200'R)	7311.00	3660.83	-1112.46	3296991.76	1296360.08	40°08'31.268"N	104°26'15.572"W	circle
STATE #15 (200'R)	7349.00	1060.02	-3771.68	3294364.11	1293727.60	40°08'05.564"N	104°26'49.808"W	circle

## TARGETS

Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
CHAMPLIN 542 AMOCO A #1 (200')	7382.00	6637.44	-4083.93	3293984.84	1299300.62	40°09'00.680"N	104°26'53.840"W	circle
UPV #9-5K3 (200'R)	7393.00	8619.94	-4096.74	3293948.19	1301282.74	40°09'20.272"N	104°26'54.010"W	circle

## WELLPATH COMPOSITION - Ref Wellbore: STATE 02-63-16-1H AWB Ref Wellpath: STATE 02-63-16-1H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	1496.00	Custom BHI AutoTrak Curve (Short) (Rockies 0.03Gt model)	BHI/ATC Standard 13.5" Hole <16'-1496">	STATE 02-63-16-1H AWB
1496.00	11680.00	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)	BHI/ATC MagCorr 8.75" Hole <1593'-11680">	STATE 02-63-16-1H AWB
11680.00	11705.00	Blind Drilling (std)	Projection to bit	STATE 02-63-16-1H AWB





# Actual Wellpath Report

STATE 02-63-16-1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 STATE 02-63-16-1H (300'FSL&212'FEL,SEC.16)
Area	COLORADO	Well	STATE 02-63-16-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	STATE 02-63-16-1H AWB
Facility	SEC.16-T02N-R63W		

WELLPATH COMMENTS					
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment	
244.00	0.410	275.250	244.00	First BHI Survey	
6849.00	76.587	7.736	6569.72	Crossed 460' South Setback @ 6849'MD	
11264.00	90.073	3.055	6576.97	Crossed 460' North Setback @ 11264'MD	
11680.00	89.720	1.100	6578.57	Last BHI Survey	
11705.00	89.720	1.100	6578.70	Projection to Bit	