

# VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#01 WARNER 01N-64W-17-1H (210'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

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.17-T1N-R64W			3258754.187	1260480.616	40°02'40.942"N	104°34'32.743"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL,SEC.17)	0.00	0.00	3258754.187	1260480.616	40°02'40.942"N	104°34'32.743"W
RIG (16'RKB+5067'GL) (RKB) to Mud line (At Slot: SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL,SEC.17))					5083ft	
Mean Sea Level to Mud line (At Slot: SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL,SEC.17))					0ft	
RIG (16'RKB+5067'GL) (RKB) to Mean Sea Level					5083ft	

## 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
17410.29	90.119	359.905	7100.00	9936.39	-1881.88	3256768.92	1270396.47	40°04'19.135"N	104°34'56.950"W



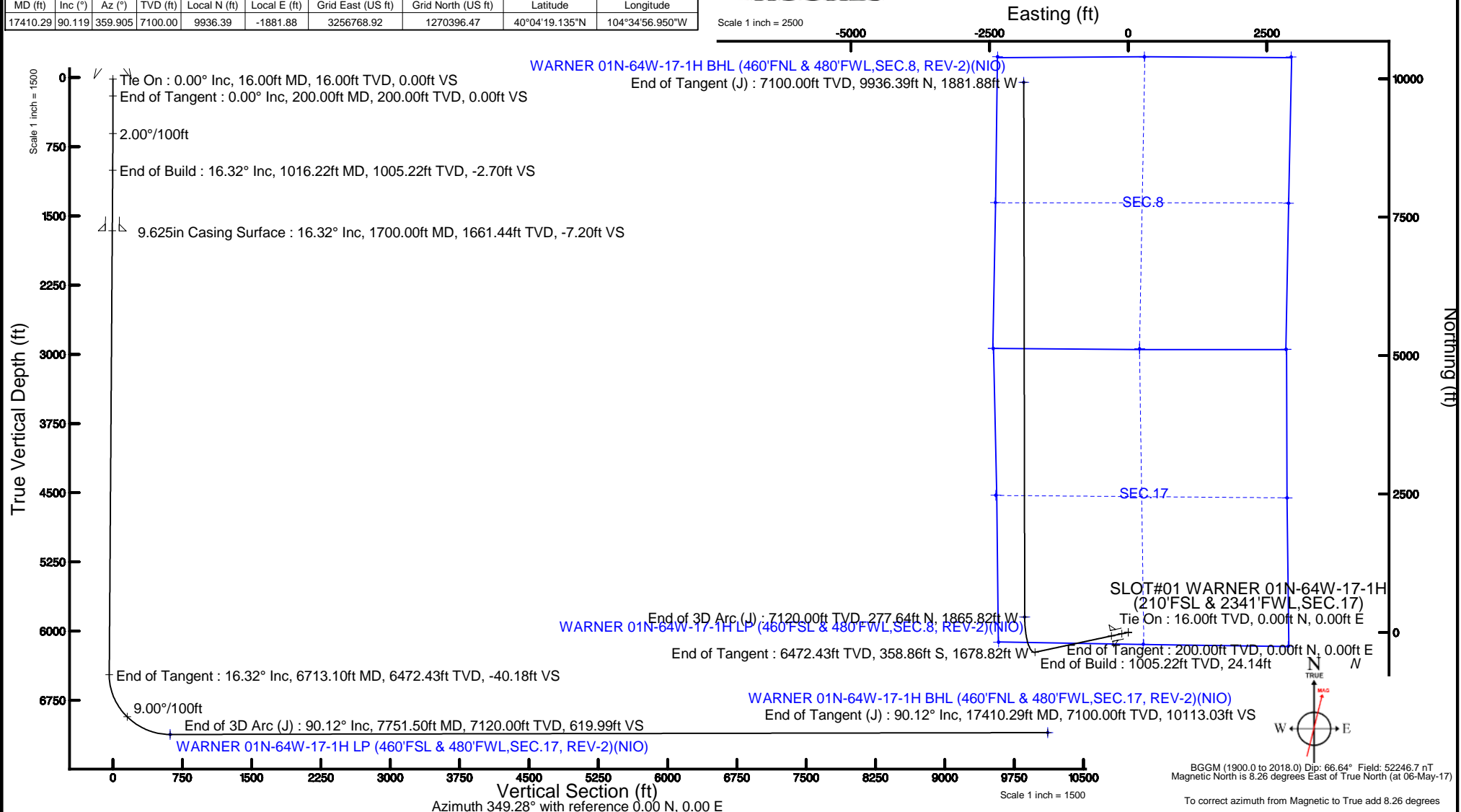
## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	16.00	0.000	257.934	16.00	0.00	0.00	0.00	0.00
End of Tangent	200.00	0.000	257.934	200.00	0.00	0.00	0.00	0.00
End of Build	1016.22	16.324	257.934	1005.22	-24.14	-112.94	2.00	-2.70
End of Tangent	6713.10	16.324	257.934	6472.43	-358.86	-1678.82	0.00	-40.18
End of 3D Arc (J)	7751.50	90.119	359.905	7120.00	277.64	-1865.82	9.00	619.99
End of Tangent (J)	17410.29	90.119	359.905	7100.00	9936.39	-1881.88	0.00	10113.03

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1700.00	BH NavTrak	Custom BH NavTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		WARNER 01N-64W-17-1H PWB
1700.00	17410.29	BH AutoTrak Curve	Custom BH AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		WARNER 01N-64W-17-1H PWB

Plot reference wellpath is WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)				Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (16'RKB+5067'GL) (RKB)				* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (16'RKB+5067'GL) (RKB)				North Reference: True north
RIG (16'RKB+5067'GL) (RKB) to Mean Sea Level: 5083 feet				Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL,SEC.17)): 0 feet				Depths are in feet
Coordinates are in feet referenced to Slot				Created by: cookdam on 2017-05-24
				Database: WA_Denver





# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.0
North Reference	True	User	Cookdanm
Scale	0.999963	Report Generated	24-May-17 at 1:49:22 PM
Convergence at slot	0.60° East	Database/Source file	WA_Denver/WARNER_01N-64W-17-1H_REV-B.0_PWP_NIO_.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	0.00	3258754.19	1260480.62	40°02'40.942"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 (210'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	349.28°



# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

## WELLPATH DATA (180 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	257.934	0.00	0.00	0.00	0.00	40°02'40.942"N	104°34'32.743"W	0.00	
16.00	0.000	257.934	16.00	0.00	0.00	0.00	40°02'40.942"N	104°34'32.743"W	0.00	Tie On
116.00†	0.000	257.934	116.00	0.00	0.00	0.00	40°02'40.942"N	104°34'32.743"W	0.00	
200.00	0.000	257.934	200.00	0.00	0.00	0.00	40°02'40.942"N	104°34'32.743"W	0.00	End of Tangent
216.00†	0.320	257.934	216.00	0.00	-0.01	-0.04	40°02'40.942"N	104°34'32.744"W	2.00	
316.00†	2.320	257.934	315.97	-0.05	-0.49	-2.30	40°02'40.937"N	104°34'32.773"W	2.00	
416.00†	4.320	257.934	415.80	-0.19	-1.70	-7.96	40°02'40.925"N	104°34'32.845"W	2.00	
516.00†	6.320	257.934	515.36	-0.41	-3.64	-17.03	40°02'40.906"N	104°34'32.962"W	2.00	
616.00†	8.320	257.934	614.54	-0.71	-6.30	-29.48	40°02'40.880"N	104°34'33.122"W	2.00	
716.00†	10.320	257.934	713.21	-1.08	-9.69	-45.32	40°02'40.846"N	104°34'33.326"W	2.00	
816.00†	12.320	257.934	811.26	-1.54	-13.79	-64.52	40°02'40.806"N	104°34'33.573"W	2.00	
916.00†	14.320	257.934	908.57	-2.08	-18.61	-87.04	40°02'40.758"N	104°34'33.862"W	2.00	
1016.00†	16.320	257.934	1005.01	-2.70	-24.13	-112.88	40°02'40.704"N	104°34'34.194"W	2.00	
1016.22	16.324	257.934	1005.22	-2.70	-24.14	-112.94	40°02'40.703"N	104°34'34.195"W	2.00	End of Build
1116.00†	16.324	257.934	1100.98	-3.36	-30.00	-140.37	40°02'40.645"N	104°34'34.548"W	0.00	
1216.00†	16.324	257.934	1196.95	-4.02	-35.88	-167.85	40°02'40.587"N	104°34'34.901"W	0.00	
1316.00†	16.324	257.934	1292.92	-4.68	-41.75	-195.34	40°02'40.529"N	104°34'35.255"W	0.00	
1416.00†	16.324	257.934	1388.88	-5.33	-47.63	-222.83	40°02'40.471"N	104°34'35.608"W	0.00	
1516.00†	16.324	257.934	1484.85	-5.99	-53.51	-250.31	40°02'40.413"N	104°34'35.962"W	0.00	
1616.00†	16.324	257.934	1580.82	-6.65	-59.38	-277.80	40°02'40.355"N	104°34'36.315"W	0.00	
1716.00†	16.324	257.934	1676.79	-7.31	-65.26	-305.29	40°02'40.297"N	104°34'36.668"W	0.00	
1816.00†	16.324	257.934	1772.76	-7.97	-71.13	-332.77	40°02'40.239"N	104°34'37.022"W	0.00	
1916.00†	16.324	257.934	1868.73	-8.62	-77.01	-360.26	40°02'40.181"N	104°34'37.375"W	0.00	
2016.00†	16.324	257.934	1964.70	-9.28	-82.88	-387.75	40°02'40.123"N	104°34'37.729"W	0.00	
2116.00†	16.324	257.934	2060.66	-9.94	-88.76	-415.23	40°02'40.065"N	104°34'38.082"W	0.00	
2216.00†	16.324	257.934	2156.63	-10.60	-94.63	-442.72	40°02'40.007"N	104°34'38.435"W	0.00	
2316.00†	16.324	257.934	2252.60	-11.25	-100.51	-470.21	40°02'39.949"N	104°34'38.789"W	0.00	
2416.00†	16.324	257.934	2348.57	-11.91	-106.38	-497.69	40°02'39.891"N	104°34'39.142"W	0.00	
2516.00†	16.324	257.934	2444.54	-12.57	-112.26	-525.18	40°02'39.833"N	104°34'39.496"W	0.00	
2616.00†	16.324	257.934	2540.51	-13.23	-118.13	-552.67	40°02'39.775"N	104°34'39.849"W	0.00	
2716.00†	16.324	257.934	2636.48	-13.89	-124.01	-580.15	40°02'39.716"N	104°34'40.203"W	0.00	
2816.00†	16.324	257.934	2732.44	-14.54	-129.89	-607.64	40°02'39.658"N	104°34'40.556"W	0.00	
2916.00†	16.324	257.934	2828.41	-15.20	-135.76	-635.13	40°02'39.600"N	104°34'40.909"W	0.00	
3016.00†	16.324	257.934	2924.38	-15.86	-141.64	-662.61	40°02'39.542"N	104°34'41.263"W	0.00	
3116.00†	16.324	257.934	3020.35	-16.52	-147.51	-690.10	40°02'39.484"N	104°34'41.616"W	0.00	
3216.00†	16.324	257.934	3116.32	-17.18	-153.39	-717.59	40°02'39.426"N	104°34'41.970"W	0.00	
3316.00†	16.324	257.934	3212.29	-17.83	-159.26	-745.07	40°02'39.368"N	104°34'42.323"W	0.00	
3416.00†	16.324	257.934	3308.26	-18.49	-165.14	-772.56	40°02'39.310"N	104°34'42.677"W	0.00	
3516.00†	16.324	257.934	3404.22	-19.15	-171.01	-800.05	40°02'39.252"N	104°34'43.030"W	0.00	
3616.00†	16.324	257.934	3500.19	-19.81	-176.89	-827.53	40°02'39.194"N	104°34'43.383"W	0.00	
3716.00†	16.324	257.934	3596.16	-20.47	-182.76	-855.02	40°02'39.136"N	104°34'43.737"W	0.00	
3816.00†	16.324	257.934	3692.13	-21.12	-188.64	-882.51	40°02'39.078"N	104°34'44.090"W	0.00	
3916.00†	16.324	257.934	3788.10	-21.78	-194.51	-909.99	40°02'39.020"N	104°34'44.444"W	0.00	
4016.00†	16.324	257.934	3884.07	-22.44	-200.39	-937.48	40°02'38.962"N	104°34'44.797"W	0.00	
4116.00†	16.324	257.934	3980.04	-23.10	-206.27	-964.97	40°02'38.903"N	104°34'45.150"W	0.00	



# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4216.00†	16.324	257.934	4076.00	-23.76	-212.14	-992.45	40°02'38.845"N	104°34'45.504"W	0.00	
4316.00†	16.324	257.934	4171.97	-24.41	-218.02	-1019.94	40°02'38.787"N	104°34'45.857"W	0.00	
4416.00†	16.324	257.934	4267.94	-25.07	-223.89	-1047.43	40°02'38.729"N	104°34'46.211"W	0.00	
4516.00†	16.324	257.934	4363.91	-25.73	-229.77	-1074.91	40°02'38.671"N	104°34'46.564"W	0.00	
4616.00†	16.324	257.934	4459.88	-26.39	-235.64	-1102.40	40°02'38.613"N	104°34'46.918"W	0.00	
4716.00†	16.324	257.934	4555.85	-27.04	-241.52	-1129.89	40°02'38.555"N	104°34'47.271"W	0.00	
4816.00†	16.324	257.934	4651.82	-27.70	-247.39	-1157.37	40°02'38.497"N	104°34'47.624"W	0.00	
4916.00†	16.324	257.934	4747.78	-28.36	-253.27	-1184.86	40°02'38.439"N	104°34'47.978"W	0.00	
5016.00†	16.324	257.934	4843.75	-29.02	-259.14	-1212.35	40°02'38.381"N	104°34'48.331"W	0.00	
5116.00†	16.324	257.934	4939.72	-29.68	-265.02	-1239.83	40°02'38.323"N	104°34'48.685"W	0.00	
5216.00†	16.324	257.934	5035.69	-30.33	-270.90	-1267.32	40°02'38.265"N	104°34'49.038"W	0.00	
5316.00†	16.324	257.934	5131.66	-30.99	-276.77	-1294.81	40°02'38.207"N	104°34'49.391"W	0.00	
5416.00†	16.324	257.934	5227.63	-31.65	-282.65	-1322.29	40°02'38.148"N	104°34'49.745"W	0.00	
5516.00†	16.324	257.934	5323.60	-32.31	-288.52	-1349.78	40°02'38.090"N	104°34'50.098"W	0.00	
5616.00†	16.324	257.934	5419.56	-32.97	-294.40	-1377.27	40°02'38.032"N	104°34'50.452"W	0.00	
5716.00†	16.324	257.934	5515.53	-33.62	-300.27	-1404.75	40°02'37.974"N	104°34'50.805"W	0.00	
5816.00†	16.324	257.934	5611.50	-34.28	-306.15	-1432.24	40°02'37.916"N	104°34'51.159"W	0.00	
5916.00†	16.324	257.934	5707.47	-34.94	-312.02	-1459.73	40°02'37.858"N	104°34'51.512"W	0.00	
6016.00†	16.324	257.934	5803.44	-35.60	-317.90	-1487.21	40°02'37.800"N	104°34'51.865"W	0.00	
6116.00†	16.324	257.934	5899.41	-36.26	-323.77	-1514.70	40°02'37.742"N	104°34'52.219"W	0.00	
6216.00†	16.324	257.934	5995.38	-36.91	-329.65	-1542.19	40°02'37.684"N	104°34'52.572"W	0.00	
6316.00†	16.324	257.934	6091.34	-37.57	-335.52	-1569.67	40°02'37.626"N	104°34'52.926"W	0.00	
6416.00†	16.324	257.934	6187.31	-38.23	-341.40	-1597.16	40°02'37.568"N	104°34'53.279"W	0.00	
6516.00†	16.324	257.934	6283.28	-38.89	-347.28	-1624.64	40°02'37.510"N	104°34'53.632"W	0.00	
6616.00†	16.324	257.934	6379.25	-39.55	-353.15	-1652.13	40°02'37.452"N	104°34'53.986"W	0.00	
6713.10	16.324	257.934	6472.43	-40.18	-358.86	-1678.82	40°02'37.395"N	104°34'54.329"W	0.00	End of Tangent
6716.00†	16.274	258.847	6475.22	-40.20	-359.02	-1679.62	40°02'37.394"N	104°34'54.339"W	9.00	
6816.00†	17.026	290.526	6571.22	-32.69	-356.59	-1707.13	40°02'37.417"N	104°34'54.693"W	9.00	
6916.00†	21.741	313.935	6665.67	-9.94	-338.57	-1734.24	40°02'37.596"N	104°34'55.042"W	9.00	
7016.00†	28.515	328.039	6756.23	27.49	-305.40	-1760.26	40°02'37.923"N	104°34'55.376"W	9.00	
7116.00†	36.208	336.829	6840.68	78.69	-257.90	-1784.57	40°02'38.393"N	104°34'55.689"W	9.00	
7216.00†	44.341	342.820	6916.94	142.39	-197.23	-1806.56	40°02'38.992"N	104°34'55.972"W	9.00	
7316.00†	52.706	347.265	6983.14	217.02	-124.90	-1825.69	40°02'39.707"N	104°34'56.218"W	9.00	
7416.00†	61.204	350.808	7037.63	300.74	-42.68	-1841.49	40°02'40.520"N	104°34'56.421"W	9.00	
7516.00†	69.780	353.812	7079.08	391.50	47.41	-1853.57	40°02'41.410"N	104°34'56.576"W	9.00	
7616.00†	78.402	356.499	7106.47	487.06	143.14	-1861.64	40°02'42.356"N	104°34'56.680"W	9.00	
7716.00†	87.047	359.024	7119.12	585.07	242.16	-1865.49	40°02'43.334"N	104°34'56.730"W	9.00	
7751.50	90.119	359.905	7120.00†	619.99	277.64	-1865.82	40°02'43.685"N	104°34'56.734"W	9.00	End of 3D Arc (J)
7816.00†	90.119	359.905	7119.87	683.38	342.14	-1865.93	40°02'44.322"N	104°34'56.735"W	0.00	
7916.00†	90.119	359.905	7119.66	781.67	442.14	-1866.09	40°02'45.311"N	104°34'56.738"W	0.00	
8016.00†	90.119	359.905	7119.45	879.95	542.14	-1866.26	40°02'46.299"N	104°34'56.740"W	0.00	
8116.00†	90.119	359.905	7119.25	978.24	642.14	-1866.42	40°02'47.287"N	104°34'56.742"W	0.00	
8216.00†	90.119	359.905	7119.04	1076.52	742.14	-1866.59	40°02'48.275"N	104°34'56.744"W	0.00	
8316.00†	90.119	359.905	7118.83	1174.80	842.14	-1866.76	40°02'49.264"N	104°34'56.747"W	0.00	
8416.00†	90.119	359.905	7118.62	1273.09	942.14	-1866.92	40°02'50.252"N	104°34'56.749"W	0.00	



# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8516.00†	90.119	359.905	7118.42	1371.37	1042.14	-1867.09	40°02'51.240"N	104°34'56.751"W	0.00	
8616.00†	90.119	359.905	7118.21	1469.66	1142.14	-1867.26	40°02'52.228"N	104°34'56.753"W	0.00	
8716.00†	90.119	359.905	7118.00	1567.94	1242.14	-1867.42	40°02'53.216"N	104°34'56.756"W	0.00	
8816.00†	90.119	359.905	7117.80	1666.22	1342.13	-1867.59	40°02'54.205"N	104°34'56.758"W	0.00	
8916.00†	90.119	359.905	7117.59	1764.51	1442.13	-1867.75	40°02'55.193"N	104°34'56.760"W	0.00	
9016.00†	90.119	359.905	7117.38	1862.79	1542.13	-1867.92	40°02'56.181"N	104°34'56.762"W	0.00	
9116.00†	90.119	359.905	7117.17	1961.07	1642.13	-1868.09	40°02'57.169"N	104°34'56.765"W	0.00	
9216.00†	90.119	359.905	7116.97	2059.36	1742.13	-1868.25	40°02'58.157"N	104°34'56.767"W	0.00	
9316.00†	90.119	359.905	7116.76	2157.64	1842.13	-1868.42	40°02'59.146"N	104°34'56.769"W	0.00	
9416.00†	90.119	359.905	7116.55	2255.93	1942.13	-1868.59	40°03'00.134"N	104°34'56.771"W	0.00	
9516.00†	90.119	359.905	7116.35	2354.21	2042.13	-1868.75	40°03'01.122"N	104°34'56.773"W	0.00	
9616.00†	90.119	359.905	7116.14	2452.49	2142.13	-1868.92	40°03'02.110"N	104°34'56.776"W	0.00	
9716.00†	90.119	359.905	7115.93	2550.78	2242.13	-1869.09	40°03'03.099"N	104°34'56.778"W	0.00	
9816.00†	90.119	359.905	7115.73	2649.06	2342.13	-1869.25	40°03'04.087"N	104°34'56.780"W	0.00	
9916.00†	90.119	359.905	7115.52	2747.35	2442.13	-1869.42	40°03'05.075"N	104°34'56.782"W	0.00	
10016.00†	90.119	359.905	7115.31	2845.63	2542.13	-1869.58	40°03'06.063"N	104°34'56.785"W	0.00	
10116.00†	90.119	359.905	7115.10	2943.91	2642.13	-1869.75	40°03'07.051"N	104°34'56.787"W	0.00	
10216.00†	90.119	359.905	7114.90	3042.20	2742.13	-1869.92	40°03'08.040"N	104°34'56.789"W	0.00	
10316.00†	90.119	359.905	7114.69	3140.48	2842.13	-1870.08	40°03'09.028"N	104°34'56.791"W	0.00	
10416.00†	90.119	359.905	7114.48	3238.77	2942.13	-1870.25	40°03'10.016"N	104°34'56.794"W	0.00	
10516.00†	90.119	359.905	7114.28	3337.05	3042.13	-1870.42	40°03'11.004"N	104°34'56.796"W	0.00	
10616.00†	90.119	359.905	7114.07	3435.33	3142.13	-1870.58	40°03'11.993"N	104°34'56.798"W	0.00	
10716.00†	90.119	359.905	7113.86	3533.62	3242.13	-1870.75	40°03'12.981"N	104°34'56.800"W	0.00	
10816.00†	90.119	359.905	7113.65	3631.90	3342.13	-1870.92	40°03'13.969"N	104°34'56.803"W	0.00	
10916.00†	90.119	359.905	7113.45	3730.19	3442.13	-1871.08	40°03'14.957"N	104°34'56.805"W	0.00	
11016.00†	90.119	359.905	7113.24	3828.47	3542.13	-1871.25	40°03'15.945"N	104°34'56.807"W	0.00	
11116.00†	90.119	359.905	7113.03	3926.75	3642.13	-1871.41	40°03'16.934"N	104°34'56.809"W	0.00	
11216.00†	90.119	359.905	7112.83	4025.04	3742.13	-1871.58	40°03'17.922"N	104°34'56.811"W	0.00	
11316.00†	90.119	359.905	7112.62	4123.32	3842.13	-1871.75	40°03'18.910"N	104°34'56.814"W	0.00	
11416.00†	90.119	359.905	7112.41	4221.61	3942.13	-1871.91	40°03'19.898"N	104°34'56.816"W	0.00	
11516.00†	90.119	359.905	7112.21	4319.89	4042.13	-1872.08	40°03'20.887"N	104°34'56.818"W	0.00	
11616.00†	90.119	359.905	7112.00	4418.17	4142.13	-1872.25	40°03'21.875"N	104°34'56.820"W	0.00	
11716.00†	90.119	359.905	7111.79	4516.46	4242.12	-1872.41	40°03'22.863"N	104°34'56.823"W	0.00	
11816.00†	90.119	359.905	7111.58	4614.74	4342.12	-1872.58	40°03'23.851"N	104°34'56.825"W	0.00	
11916.00†	90.119	359.905	7111.38	4713.03	4442.12	-1872.74	40°03'24.839"N	104°34'56.827"W	0.00	
12016.00†	90.119	359.905	7111.17	4811.31	4542.12	-1872.91	40°03'25.828"N	104°34'56.829"W	0.00	
12116.00†	90.119	359.905	7110.96	4909.59	4642.12	-1873.08	40°03'26.816"N	104°34'56.832"W	0.00	
12216.00†	90.119	359.905	7110.76	5007.88	4742.12	-1873.24	40°03'27.804"N	104°34'56.834"W	0.00	
12316.00†	90.119	359.905	7110.55	5106.16	4842.12	-1873.41	40°03'28.792"N	104°34'56.836"W	0.00	
12416.00†	90.119	359.905	7110.34	5204.45	4942.12	-1873.58	40°03'29.781"N	104°34'56.838"W	0.00	
12516.00†	90.119	359.905	7110.13	5302.73	5042.12	-1873.74	40°03'30.769"N	104°34'56.841"W	0.00	
12616.00†	90.119	359.905	7109.93	5401.01	5142.12	-1873.91	40°03'31.757"N	104°34'56.843"W	0.00	
12716.00†	90.119	359.905	7109.72	5499.30	5242.12	-1874.08	40°03'32.745"N	104°34'56.845"W	0.00	
12816.00†	90.119	359.905	7109.51	5597.58	5342.12	-1874.24	40°03'33.733"N	104°34'56.847"W	0.00	
12916.00†	90.119	359.905	7109.31	5695.87	5442.12	-1874.41	40°03'34.722"N	104°34'56.849"W	0.00	





# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13016.00†	90.119	359.905	7109.10	5794.15	5542.12	-1874.57	40°03'35.710"N	104°34'56.852"W	0.00	
13116.00†	90.119	359.905	7108.89	5892.43	5642.12	-1874.74	40°03'36.698"N	104°34'56.854"W	0.00	
13216.00†	90.119	359.905	7108.68	5990.72	5742.12	-1874.91	40°03'37.686"N	104°34'56.856"W	0.00	
13316.00†	90.119	359.905	7108.48	6089.00	5842.12	-1875.07	40°03'38.675"N	104°34'56.858"W	0.00	
13416.00†	90.119	359.905	7108.27	6187.29	5942.12	-1875.24	40°03'39.663"N	104°34'56.861"W	0.00	
13516.00†	90.119	359.905	7108.06	6285.57	6042.12	-1875.41	40°03'40.651"N	104°34'56.863"W	0.00	
13616.00†	90.119	359.905	7107.86	6383.85	6142.12	-1875.57	40°03'41.639"N	104°34'56.865"W	0.00	
13716.00†	90.119	359.905	7107.65	6482.14	6242.12	-1875.74	40°03'42.627"N	104°34'56.867"W	0.00	
13816.00†	90.119	359.905	7107.44	6580.42	6342.12	-1875.91	40°03'43.616"N	104°34'56.870"W	0.00	
13916.00†	90.119	359.905	7107.24	6678.71	6442.12	-1876.07	40°03'44.604"N	104°34'56.872"W	0.00	
14016.00†	90.119	359.905	7107.03	6776.99	6542.12	-1876.24	40°03'45.592"N	104°34'56.874"W	0.00	
14116.00†	90.119	359.905	7106.82	6875.27	6642.12	-1876.40	40°03'46.580"N	104°34'56.876"W	0.00	
14216.00†	90.119	359.905	7106.61	6973.56	6742.12	-1876.57	40°03'47.568"N	104°34'56.879"W	0.00	
14316.00†	90.119	359.905	7106.41	7071.84	6842.12	-1876.74	40°03'48.557"N	104°34'56.881"W	0.00	
14416.00†	90.119	359.905	7106.20	7170.13	6942.12	-1876.90	40°03'49.545"N	104°34'56.883"W	0.00	
14516.00†	90.119	359.905	7105.99	7268.41	7042.11	-1877.07	40°03'50.533"N	104°34'56.885"W	0.00	
14616.00†	90.119	359.905	7105.79	7366.69	7142.11	-1877.24	40°03'51.521"N	104°34'56.887"W	0.00	
14716.00†	90.119	359.905	7105.58	7464.98	7242.11	-1877.40	40°03'52.510"N	104°34'56.890"W	0.00	
14816.00†	90.119	359.905	7105.37	7563.26	7342.11	-1877.57	40°03'53.498"N	104°34'56.892"W	0.00	
14916.00†	90.119	359.905	7105.16	7661.55	7442.11	-1877.74	40°03'54.486"N	104°34'56.894"W	0.00	
15016.00†	90.119	359.905	7104.96	7759.83	7542.11	-1877.90	40°03'55.474"N	104°34'56.896"W	0.00	
15116.00†	90.119	359.905	7104.75	7858.11	7642.11	-1878.07	40°03'56.462"N	104°34'56.899"W	0.00	
15216.00†	90.119	359.905	7104.54	7956.40	7742.11	-1878.23	40°03'57.451"N	104°34'56.901"W	0.00	
15316.00†	90.119	359.905	7104.34	8054.68	7842.11	-1878.40	40°03'58.439"N	104°34'56.903"W	0.00	
15416.00†	90.119	359.905	7104.13	8152.97	7942.11	-1878.57	40°03'59.427"N	104°34'56.905"W	0.00	
15516.00†	90.119	359.905	7103.92	8251.25	8042.11	-1878.73	40°04'00.415"N	104°34'56.908"W	0.00	
15616.00†	90.119	359.905	7103.72	8349.53	8142.11	-1878.90	40°04'01.404"N	104°34'56.910"W	0.00	
15716.00†	90.119	359.905	7103.51	8447.82	8242.11	-1879.07	40°04'02.392"N	104°34'56.912"W	0.00	
15816.00†	90.119	359.905	7103.30	8546.10	8342.11	-1879.23	40°04'03.380"N	104°34'56.914"W	0.00	
15916.00†	90.119	359.905	7103.09	8644.38	8442.11	-1879.40	40°04'04.368"N	104°34'56.917"W	0.00	
16016.00†	90.119	359.905	7102.89	8742.67	8542.11	-1879.56	40°04'05.356"N	104°34'56.919"W	0.00	
16116.00†	90.119	359.905	7102.68	8840.95	8642.11	-1879.73	40°04'06.345"N	104°34'56.921"W	0.00	
16216.00†	90.119	359.905	7102.47	8939.24	8742.11	-1879.90	40°04'07.333"N	104°34'56.923"W	0.00	
16316.00†	90.119	359.905	7102.27	9037.52	8842.11	-1880.06	40°04'08.321"N	104°34'56.926"W	0.00	
16416.00†	90.119	359.905	7102.06	9135.80	8942.11	-1880.23	40°04'09.309"N	104°34'56.928"W	0.00	
16516.00†	90.119	359.905	7101.85	9234.09	9042.11	-1880.40	40°04'10.298"N	104°34'56.930"W	0.00	
16616.00†	90.119	359.905	7101.64	9332.37	9142.11	-1880.56	40°04'11.286"N	104°34'56.932"W	0.00	
16716.00†	90.119	359.905	7101.44	9430.66	9242.11	-1880.73	40°04'12.274"N	104°34'56.934"W	0.00	
16816.00†	90.119	359.905	7101.23	9528.94	9342.11	-1880.90	40°04'13.262"N	104°34'56.937"W	0.00	
16916.00†	90.119	359.905	7101.02	9627.22	9442.11	-1881.06	40°04'14.250"N	104°34'56.939"W	0.00	
17016.00†	90.119	359.905	7100.82	9725.51	9542.11	-1881.23	40°04'15.239"N	104°34'56.941"W	0.00	
17116.00†	90.119	359.905	7100.61	9823.79	9642.11	-1881.39	40°04'16.227"N	104°34'56.943"W	0.00	
17216.00†	90.119	359.905	7100.40	9922.08	9742.11	-1881.56	40°04'17.215"N	104°34'56.946"W	0.00	
17316.00†	90.119	359.905	7100.20	10020.36	9842.10	-1881.73	40°04'18.203"N	104°34'56.948"W	0.00	
17410.29	90.119	359.905	7100.00 <sup>2</sup>	10113.03	9936.39	-1881.88	40°04'19.135"N	104°34'56.950"W	0.00	End of Tangent (J)



# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL,SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

## HOLE & CASING SECTIONS

- Ref Wellbore: WARNER 01N-64W-17-1H PWB      Ref Wellpath: WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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	1700.00	1684.00	16.00	1661.44	0.00	0.00	-64.32	-300.89
9.625in Casing Surface	16.00	1700.00	1684.00	16.00	1661.44	0.00	0.00	-64.32	-300.89
8.5in Open Hole	1700.00	17410.29	15710.29	1661.44	7100.00	-64.32	-300.89	9936.39	-1881.88



# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.08-T1N-R64W, E 1/4 COR.		5083.00	7752.97	2891.84	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	10395.33	291.29	3258937.11	1270878.01	40°04'23.671"N	104°34'28.996"W	point
SEC.08-T1N-R64W, NE COR.		5083.00	10394.39	2937.71	3261583.29	1270904.65	40°04'23.660"N	104°33'54.954"W	point
SEC.08-T1N-R64W, NW COR.		5083.00	10396.55	-2355.05	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	5120.10	206.83	3258907.64	1265602.39	40°03'31.540"N	104°34'30.083"W	point
SEC.08-T1N-R64W, SE COR.		5083.00	5111.86	2845.96	3261546.61	1265621.66	40°03'31.457"N	104°33'56.142"W	point
SEC.08-T1N-R64W, SW COR.		5083.00	5128.51	-2432.84	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	7762.73	-2393.63	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	-253.05	2886.34	3261642.89	1260257.67	40°02'38.440"N	104°33'55.631"W	point
SEC.17-T1N-R64W, N 1/4 COR.		5083.00	5111.84	2845.96	3261546.61	1265621.64	40°03'31.457"N	104°33'56.142"W	point
SEC.17-T1N-R64W, NE COR.		5083.00	2429.57	2866.43	3261595.03	1262939.84	40°03'04.950"N	104°33'55.883"W	point
SEC.17-T1N-R64W, NW COR.		5083.00	5128.55	-2432.83	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	-175.52	-2337.59	3256418.64	1260280.75	40°02'39.206"N	104°35'02.800"W	point
SEC.17-T1N-R64W, SE COR.		5083.00	-213.88	273.25	3259029.64	1260269.61	40°02'38.828"N	104°34'29.230"W	point
SEC.17-T1N-R64W, SW COR. SEC. 17		5083.00	5120.06	206.85	3258907.65	1265602.35	40°03'31.540"N	104°34'30.083"W	point
SEC.17-T1N-R64W, W 1/4 COR.		5083.00	2476.88	-2384.93	3256343.66	1262932.41	40°03'05.418"N	104°35'03.412"W	point
2) WARNER 01N-64W-17-1H BHL (460'FNL & 480'FWL, SEC.17, REV-2)(NIO)	17410.29	7100.00	9936.39	-1881.88	3256768.92	1270396.47	40°04'19.135"N	104°34'56.950"W	point
1) WARNER 01N-64W-17-1H LP (460'FSL & 480'FWL, SEC.17, REV-2)(NIO)	7751.50	7120.00	277.64	-1865.82	3256885.65	1260738.78	40°02'43.685"N	104°34'56.734"W	point





# Planned Wellpath Report

WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

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## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-1H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-1H PWB
Facility	SEC.17-T1N-R64W		

## SURVEY PROGRAM -

Ref Wellbore: WARNER 01N-64W-17-1H PWB      Ref Wellpath: WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.00	1700.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		WARNER 01N-64W-17-1H PWB
1700.00	17410.29	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		WARNER 01N-64W-17-1H PWB

~VERSION INFORMATION

VERS. 2.0 : CWLS LOG ASCII STANDARD-VERSION 2.0

WRAP. NO : ASCII DATA SECTION CONTAINS ONE ROW PER WELLPATH STATION

~WELL INFORMATION

#MNE	UNITS	DATA	DESCRIPTION
STRT	.ft	0.00	:START MD
STOP	.ft	17410.29	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	VERDAD OIL & GAS CORPORATION	:OPERATOR
WELL	.	WARNER 01N-64W-17-1H	:WELL
FLD	.	WELD COUNTY (NAD83/TN)	:FIELD
LOC	.	COLORADO	:AREA (aka: Location)
CNTY	.	N/A	:COUNTY
STAT	.	N/A	:STATE
CTRY	.	N/A	:COUNTRY
SRVC	.	Baker Hughes	:CONTRACTOR
DATE	.	05/06/2017	:LOG REV DATE
API	.		:API NUMBER

~OTHER INFORMATION

#Software: wellArchitect(R) Version 5.0

#MNE	UNITS	DATA	DESCRIPTION
WPTYPE	.	PLANNED WELLPATH	:WELLPATH TYPE
FACILITY	.	SEC.17-T1N-R64W	:FACILITY
SLOT	.	SLOT#01 WARNER 01N-64W-17-1H (210'FSL & 2341'FWL,SEC.17)	:SLOT
WELLBORE	.	WARNER 01N-64W-17-1H PWB	:WELLBORE
WELLPATH	.	WARNER 01N-64W-17-1H (REV-B.0) PWP (NIO)	:WELLPATH
MDREFPT	.	RIG (16'RKB+5067'GL) (RKB)	:MD REFERENCE POINT
TVDREFPT	.	RIG (16'RKB+5067'GL) (RKB)	:TVD REFERENCE POINT
LCLREFPT	.	SLOT	:LOCAL COORDINATE REFERENCE PT
VSAZIMUTH	.deg	349.28	:VERTICAL SECTION AZIMUTH
VSORIGN	.ft	0.00	:VERTICAL SECTION ORIGIN NORTH
VSORIGE	.ft	0.00	:VERTICAL SECTION ORIGIN EAST

~CURVE (WELLPATH) INFORMATION

#MNE	UNITS	DESCRIPTION
DEPT	.ft	:MEASURED DEPTH
INC	.deg	:INCLINATION
AZI	.deg	:AZIMUTH
TVD	.ft	:TRUE VERTICAL DEPTH
SECT	.ft	:CROSS SECTION (CURTAIN/VERTICAL)
LOCALN	.ft	:LOCAL NORTH
LOCALE	.ft	:LOCAL EAST

VERDAD\_WARNER\_01N-64W-17-1H\_\_REV-B.0\_\_PWP\_\_NIO\_\_05-24-17.las

LAT .deg :LATITUDE  
LONG .deg :LONGITUDE  
DLS .deg/100ft :DOGLEG SEVERITY

~ASCII DATA

0.00	0.00	257.93	0.00	0.00	0.00	0.00	40.0447061	-104.5757619	0.00
16.00	0.00	257.93	16.00	0.00	0.00	0.00	40.0447061	-104.5757619	0.00
116.00	0.00	257.93	116.00	0.00	0.00	0.00	40.0447061	-104.5757619	0.00
200.00	0.00	257.93	200.00	0.00	0.00	0.00	40.0447061	-104.5757619	0.00
216.00	0.32	257.93	216.00	0.00	-0.01	-0.04	40.0447061	-104.5757621	2.00
316.00	2.32	257.93	315.97	-0.05	-0.49	-2.30	40.0447048	-104.5757701	2.00
416.00	4.32	257.93	415.80	-0.19	-1.70	-7.96	40.0447014	-104.5757904	2.00
516.00	6.32	257.93	515.36	-0.41	-3.64	-17.03	40.0446961	-104.5758228	2.00
616.00	8.32	257.93	614.54	-0.71	-6.30	-29.48	40.0446888	-104.5758673	2.00
716.00	10.32	257.93	713.21	-1.08	-9.69	-45.32	40.0446795	-104.5759238	2.00
816.00	12.32	257.93	811.26	-1.54	-13.79	-64.52	40.0446683	-104.5759924	2.00
916.00	14.32	257.93	908.57	-2.08	-18.61	-87.04	40.0446550	-104.5760728	2.00
1016.00	16.32	257.93	1005.01	-2.70	-24.13	-112.88	40.0446399	-104.5761651	2.00
1016.22	16.32	257.93	1005.22	-2.70	-24.14	-112.94	40.0446398	-104.5761653	2.00
1116.00	16.32	257.93	1100.98	-3.36	-30.00	-140.37	40.0446237	-104.5762633	0.00
1216.00	16.32	257.93	1196.95	-4.02	-35.88	-167.85	40.0446076	-104.5763615	0.00
1316.00	16.32	257.93	1292.92	-4.68	-41.75	-195.34	40.0445915	-104.5764596	0.00
1416.00	16.32	257.93	1388.88	-5.33	-47.63	-222.83	40.0445754	-104.5765578	0.00
1516.00	16.32	257.93	1484.85	-5.99	-53.51	-250.31	40.0445592	-104.5766560	0.00
1616.00	16.32	257.93	1580.82	-6.65	-59.38	-277.80	40.0445431	-104.5767542	0.00
1716.00	16.32	257.93	1676.79	-7.31	-65.26	-305.29	40.0445270	-104.5768523	0.00
1816.00	16.32	257.93	1772.76	-7.97	-71.13	-332.77	40.0445108	-104.5769505	0.00
1916.00	16.32	257.93	1868.73	-8.62	-77.01	-360.26	40.0444947	-104.5770487	0.00
2016.00	16.32	257.93	1964.70	-9.28	-82.88	-387.75	40.0444786	-104.5771468	0.00
2116.00	16.32	257.93	2060.66	-9.94	-88.76	-415.23	40.0444625	-104.5772450	0.00
2216.00	16.32	257.93	2156.63	-10.60	-94.63	-442.72	40.0444463	-104.5773432	0.00
2316.00	16.32	257.93	2252.60	-11.25	-100.51	-470.21	40.0444302	-104.5774414	0.00
2416.00	16.32	257.93	2348.57	-11.91	-106.38	-497.69	40.0444141	-104.5775395	0.00
2516.00	16.32	257.93	2444.54	-12.57	-112.26	-525.18	40.0443979	-104.5776377	0.00
2616.00	16.32	257.93	2540.51	-13.23	-118.13	-552.67	40.0443818	-104.5777359	0.00
2716.00	16.32	257.93	2636.48	-13.89	-124.01	-580.15	40.0443657	-104.5778341	0.00
2816.00	16.32	257.93	2732.44	-14.54	-129.89	-607.64	40.0443495	-104.5779322	0.00
2916.00	16.32	257.93	2828.41	-15.20	-135.76	-635.13	40.0443334	-104.5780304	0.00
3016.00	16.32	257.93	2924.38	-15.86	-141.64	-662.61	40.0443173	-104.5781286	0.00
3116.00	16.32	257.93	3020.35	-16.52	-147.51	-690.10	40.0443012	-104.5782267	0.00
3216.00	16.32	257.93	3116.32	-17.18	-153.39	-717.59	40.0442850	-104.5783249	0.00
3316.00	16.32	257.93	3212.29	-17.83	-159.26	-745.07	40.0442689	-104.5784231	0.00
3416.00	16.32	257.93	3308.26	-18.49	-165.14	-772.56	40.0442528	-104.5785213	0.00
3516.00	16.32	257.93	3404.22	-19.15	-171.01	-800.05	40.0442366	-104.5786194	0.00
3616.00	16.32	257.93	3500.19	-19.81	-176.89	-827.53	40.0442205	-104.5787176	0.00
3716.00	16.32	257.93	3596.16	-20.47	-182.76	-855.02	40.0442044	-104.5788158	0.00
3816.00	16.32	257.93	3692.13	-21.12	-188.64	-882.51	40.0441882	-104.5789139	0.00
3916.00	16.32	257.93	3788.10	-21.78	-194.51	-909.99	40.0441721	-104.5790121	0.00

VERDAD_WARNER_01N-64W-17-1H_REV-B.0_PWP_NIO_05-24-17.las									
4016.00	16.32	257.93	3884.07	-22.44	-200.39	-937.48	40.0441560	-104.5791103	0.00
4116.00	16.32	257.93	3980.04	-23.10	-206.27	-964.97	40.0441398	-104.5792085	0.00
4216.00	16.32	257.93	4076.00	-23.76	-212.14	-992.45	40.0441237	-104.5793066	0.00
4316.00	16.32	257.93	4171.97	-24.41	-218.02	-1019.94	40.0441076	-104.5794048	0.00
4416.00	16.32	257.93	4267.94	-25.07	-223.89	-1047.43	40.0440915	-104.5795030	0.00
4516.00	16.32	257.93	4363.91	-25.73	-229.77	-1074.91	40.0440753	-104.5796011	0.00
4616.00	16.32	257.93	4459.88	-26.39	-235.64	-1102.40	40.0440592	-104.5796993	0.00
4716.00	16.32	257.93	4555.85	-27.04	-241.52	-1129.89	40.0440431	-104.5797975	0.00
4816.00	16.32	257.93	4651.82	-27.70	-247.39	-1157.37	40.0440269	-104.5798957	0.00
4916.00	16.32	257.93	4747.78	-28.36	-253.27	-1184.86	40.0440108	-104.5799938	0.00
5016.00	16.32	257.93	4843.75	-29.02	-259.14	-1212.35	40.0439947	-104.5800920	0.00
5116.00	16.32	257.93	4939.72	-29.68	-265.02	-1239.83	40.0439785	-104.5801902	0.00
5216.00	16.32	257.93	5035.69	-30.33	-270.90	-1267.32	40.0439624	-104.5802883	0.00
5316.00	16.32	257.93	5131.66	-30.99	-276.77	-1294.81	40.0439463	-104.5803865	0.00
5416.00	16.32	257.93	5227.63	-31.65	-282.65	-1322.29	40.0439301	-104.5804847	0.00
5516.00	16.32	257.93	5323.60	-32.31	-288.52	-1349.78	40.0439140	-104.5805829	0.00
5616.00	16.32	257.93	5419.56	-32.97	-294.40	-1377.27	40.0438979	-104.5806810	0.00
5716.00	16.32	257.93	5515.53	-33.62	-300.27	-1404.75	40.0438817	-104.5807792	0.00
5816.00	16.32	257.93	5611.50	-34.28	-306.15	-1432.24	40.0438656	-104.5808774	0.00
5916.00	16.32	257.93	5707.47	-34.94	-312.02	-1459.73	40.0438495	-104.5809755	0.00
6016.00	16.32	257.93	5803.44	-35.60	-317.90	-1487.21	40.0438333	-104.5810737	0.00
6116.00	16.32	257.93	5899.41	-36.26	-323.77	-1514.70	40.0438172	-104.5811719	0.00
6216.00	16.32	257.93	5995.38	-36.91	-329.65	-1542.19	40.0438011	-104.5812701	0.00
6316.00	16.32	257.93	6091.34	-37.57	-335.52	-1569.67	40.0437849	-104.5813682	0.00
6416.00	16.32	257.93	6187.31	-38.23	-341.40	-1597.16	40.0437688	-104.5814664	0.00
6516.00	16.32	257.93	6283.28	-38.89	-347.28	-1624.64	40.0437527	-104.5815646	0.00
6616.00	16.32	257.93	6379.25	-39.55	-353.15	-1652.13	40.0437365	-104.5816627	0.00
6713.10	16.32	257.93	6472.43	-40.18	-358.86	-1678.82	40.0437209	-104.5817581	0.00
6716.00	16.27	258.85	6475.22	-40.20	-359.02	-1679.62	40.0437204	-104.5817609	9.00
6816.00	17.03	290.53	6571.22	-32.69	-356.59	-1707.13	40.0437271	-104.5818592	9.00
6916.00	21.74	313.94	6665.67	-9.94	-338.57	-1734.24	40.0437765	-104.5819560	9.00
7016.00	28.52	328.04	6756.23	27.49	-305.40	-1760.26	40.0438676	-104.5820490	9.00
7116.00	36.21	336.83	6840.68	78.69	-257.90	-1784.57	40.0439980	-104.5821358	9.00
7216.00	44.34	342.82	6916.94	142.39	-197.23	-1806.56	40.0441645	-104.5822143	9.00
7316.00	52.71	347.27	6983.14	217.02	-124.90	-1825.69	40.0443631	-104.5822827	9.00
7416.00	61.20	350.81	7037.63	300.74	-42.68	-1841.49	40.0445888	-104.5823391	9.00
7516.00	69.78	353.81	7079.08	391.50	47.41	-1853.57	40.0448361	-104.5823823	9.00
7616.00	78.40	356.50	7106.47	487.06	143.14	-1861.64	40.0450988	-104.5824111	9.00
7716.00	87.05	359.02	7119.12	585.07	242.16	-1865.49	40.0453707	-104.5824249	9.00
7751.50	90.12	359.91	7120.00	619.99	277.64	-1865.82	40.0454681	-104.5824261	9.00
7816.00	90.12	359.91	7119.87	683.38	342.14	-1865.93	40.0456451	-104.5824265	0.00
7916.00	90.12	359.91	7119.66	781.67	442.14	-1866.09	40.0459196	-104.5824271	0.00
8016.00	90.12	359.91	7119.45	879.95	542.14	-1866.26	40.0461941	-104.5824278	0.00
8116.00	90.12	359.91	7119.25	978.24	642.14	-1866.42	40.0464686	-104.5824284	0.00
8216.00	90.12	359.91	7119.04	1076.52	742.14	-1866.59	40.0467431	-104.5824290	0.00
8316.00	90.12	359.91	7118.83	1174.80	842.14	-1866.76	40.0470176	-104.5824296	0.00
8416.00	90.12	359.91	7118.62	1273.09	942.14	-1866.92	40.0472921	-104.5824302	0.00
8516.00	90.12	359.91	7118.42	1371.37	1042.14	-1867.09	40.0475667	-104.5824309	0.00

VERDAD_WARNER_01N-64W-17-1H_REV-B.0_PWP_NIO_05-24-17.las									
8616.00	90.12	359.91	7118.21	1469.66	1142.14	-1867.26	40.0478412	-104.5824315	0.00
8716.00	90.12	359.91	7118.00	1567.94	1242.14	-1867.42	40.0481157	-104.5824321	0.00
8816.00	90.12	359.91	7117.80	1666.22	1342.13	-1867.59	40.0483902	-104.5824327	0.00
8916.00	90.12	359.91	7117.59	1764.51	1442.13	-1867.75	40.0486647	-104.5824333	0.00
9016.00	90.12	359.91	7117.38	1862.79	1542.13	-1867.92	40.0489392	-104.5824340	0.00
9116.00	90.12	359.91	7117.17	1961.07	1642.13	-1868.09	40.0492137	-104.5824346	0.00
9216.00	90.12	359.91	7116.97	2059.36	1742.13	-1868.25	40.0494882	-104.5824352	0.00
9316.00	90.12	359.91	7116.76	2157.64	1842.13	-1868.42	40.0497627	-104.5824358	0.00
9416.00	90.12	359.91	7116.55	2255.93	1942.13	-1868.59	40.0500372	-104.5824364	0.00
9516.00	90.12	359.91	7116.35	2354.21	2042.13	-1868.75	40.0503117	-104.5824371	0.00
9616.00	90.12	359.91	7116.14	2452.49	2142.13	-1868.92	40.0505862	-104.5824377	0.00
9716.00	90.12	359.91	7115.93	2550.78	2242.13	-1869.09	40.0508607	-104.5824383	0.00
9816.00	90.12	359.91	7115.73	2649.06	2342.13	-1869.25	40.0511352	-104.5824389	0.00
9916.00	90.12	359.91	7115.52	2747.35	2442.13	-1869.42	40.0514097	-104.5824396	0.00
10016.00	90.12	359.91	7115.31	2845.63	2542.13	-1869.58	40.0516842	-104.5824402	0.00
10116.00	90.12	359.91	7115.10	2943.91	2642.13	-1869.75	40.0519587	-104.5824408	0.00
10216.00	90.12	359.91	7114.90	3042.20	2742.13	-1869.92	40.0522332	-104.5824414	0.00
10316.00	90.12	359.91	7114.69	3140.48	2842.13	-1870.08	40.0525078	-104.5824420	0.00
10416.00	90.12	359.91	7114.48	3238.77	2942.13	-1870.25	40.0527823	-104.5824427	0.00
10516.00	90.12	359.91	7114.28	3337.05	3042.13	-1870.42	40.0530568	-104.5824433	0.00
10616.00	90.12	359.91	7114.07	3435.33	3142.13	-1870.58	40.0533313	-104.5824439	0.00
10716.00	90.12	359.91	7113.86	3533.62	3242.13	-1870.75	40.0536058	-104.5824445	0.00
10816.00	90.12	359.91	7113.65	3631.90	3342.13	-1870.92	40.0538803	-104.5824451	0.00
10916.00	90.12	359.91	7113.45	3730.19	3442.13	-1871.08	40.0541548	-104.5824458	0.00
11016.00	90.12	359.91	7113.24	3828.47	3542.13	-1871.25	40.0544293	-104.5824464	0.00
11116.00	90.12	359.91	7113.03	3926.75	3642.13	-1871.41	40.0547038	-104.5824470	0.00
11216.00	90.12	359.91	7112.83	4025.04	3742.13	-1871.58	40.0549783	-104.5824476	0.00
11316.00	90.12	359.91	7112.62	4123.32	3842.13	-1871.75	40.0552528	-104.5824482	0.00
11416.00	90.12	359.91	7112.41	4221.61	3942.13	-1871.91	40.0555273	-104.5824489	0.00
11516.00	90.12	359.91	7112.21	4319.89	4042.13	-1872.08	40.0558018	-104.5824495	0.00
11616.00	90.12	359.91	7112.00	4418.17	4142.13	-1872.25	40.0560763	-104.5824501	0.00
11716.00	90.12	359.91	7111.79	4516.46	4242.12	-1872.41	40.0563508	-104.5824507	0.00
11816.00	90.12	359.91	7111.58	4614.74	4342.12	-1872.58	40.0566253	-104.5824514	0.00
11916.00	90.12	359.91	7111.38	4713.03	4442.12	-1872.74	40.0568998	-104.5824520	0.00
12016.00	90.12	359.91	7111.17	4811.31	4542.12	-1872.91	40.0571743	-104.5824526	0.00
12116.00	90.12	359.91	7110.96	4909.59	4642.12	-1873.08	40.0574489	-104.5824532	0.00
12216.00	90.12	359.91	7110.76	5007.88	4742.12	-1873.24	40.0577234	-104.5824538	0.00
12316.00	90.12	359.91	7110.55	5106.16	4842.12	-1873.41	40.0579979	-104.5824545	0.00
12416.00	90.12	359.91	7110.34	5204.45	4942.12	-1873.58	40.0582724	-104.5824551	0.00
12516.00	90.12	359.91	7110.13	5302.73	5042.12	-1873.74	40.0585469	-104.5824557	0.00
12616.00	90.12	359.91	7109.93	5401.01	5142.12	-1873.91	40.0588214	-104.5824563	0.00
12716.00	90.12	359.91	7109.72	5499.30	5242.12	-1874.08	40.0590959	-104.5824569	0.00
12816.00	90.12	359.91	7109.51	5597.58	5342.12	-1874.24	40.0593704	-104.5824576	0.00
12916.00	90.12	359.91	7109.31	5695.87	5442.12	-1874.41	40.0596449	-104.5824582	0.00
13016.00	90.12	359.91	7109.10	5794.15	5542.12	-1874.57	40.0599194	-104.5824588	0.00
13116.00	90.12	359.91	7108.89	5892.43	5642.12	-1874.74	40.0601939	-104.5824594	0.00
13216.00	90.12	359.91	7108.68	5990.72	5742.12	-1874.91	40.0604684	-104.5824601	0.00
13316.00	90.12	359.91	7108.48	6089.00	5842.12	-1875.07	40.0607429	-104.5824607	0.00



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13416.00	90.12	359.91	7108.27	6187.29	5942.12	-1875.24	40.0610174	-104.5824613	0.00
13516.00	90.12	359.91	7108.06	6285.57	6042.12	-1875.41	40.0612919	-104.5824619	0.00
13616.00	90.12	359.91	7107.86	6383.85	6142.12	-1875.57	40.0615664	-104.5824625	0.00
13716.00	90.12	359.91	7107.65	6482.14	6242.12	-1875.74	40.0618409	-104.5824632	0.00
13816.00	90.12	359.91	7107.44	6580.42	6342.12	-1875.91	40.0621154	-104.5824638	0.00
13916.00	90.12	359.91	7107.24	6678.71	6442.12	-1876.07	40.0623899	-104.5824644	0.00
14016.00	90.12	359.91	7107.03	6776.99	6542.12	-1876.24	40.0626645	-104.5824650	0.00
14116.00	90.12	359.91	7106.82	6875.27	6642.12	-1876.40	40.0629390	-104.5824656	0.00
14216.00	90.12	359.91	7106.61	6973.56	6742.12	-1876.57	40.0632135	-104.5824663	0.00
14316.00	90.12	359.91	7106.41	7071.84	6842.12	-1876.74	40.0634880	-104.5824669	0.00
14416.00	90.12	359.91	7106.20	7170.13	6942.12	-1876.90	40.0637625	-104.5824675	0.00
14516.00	90.12	359.91	7105.99	7268.41	7042.11	-1877.07	40.0640370	-104.5824681	0.00
14616.00	90.12	359.91	7105.79	7366.69	7142.11	-1877.24	40.0643115	-104.5824687	0.00
14716.00	90.12	359.91	7105.58	7464.98	7242.11	-1877.40	40.0645860	-104.5824694	0.00
14816.00	90.12	359.91	7105.37	7563.26	7342.11	-1877.57	40.0648605	-104.5824700	0.00
14916.00	90.12	359.91	7105.16	7661.55	7442.11	-1877.74	40.0651350	-104.5824706	0.00
15016.00	90.12	359.91	7104.96	7759.83	7542.11	-1877.90	40.0654095	-104.5824712	0.00
15116.00	90.12	359.91	7104.75	7858.11	7642.11	-1878.07	40.0656840	-104.5824719	0.00
15216.00	90.12	359.91	7104.54	7956.40	7742.11	-1878.23	40.0659585	-104.5824725	0.00
15316.00	90.12	359.91	7104.34	8054.68	7842.11	-1878.40	40.0662330	-104.5824731	0.00
15416.00	90.12	359.91	7104.13	8152.97	7942.11	-1878.57	40.0665075	-104.5824737	0.00
15516.00	90.12	359.91	7103.92	8251.25	8042.11	-1878.73	40.0667820	-104.5824743	0.00
15616.00	90.12	359.91	7103.72	8349.53	8142.11	-1878.90	40.0670565	-104.5824750	0.00
15716.00	90.12	359.91	7103.51	8447.82	8242.11	-1879.07	40.0673310	-104.5824756	0.00
15816.00	90.12	359.91	7103.30	8546.10	8342.11	-1879.23	40.0676055	-104.5824762	0.00
15916.00	90.12	359.91	7103.09	8644.38	8442.11	-1879.40	40.0678801	-104.5824768	0.00
16016.00	90.12	359.91	7102.89	8742.67	8542.11	-1879.56	40.0681546	-104.5824774	0.00
16116.00	90.12	359.91	7102.68	8840.95	8642.11	-1879.73	40.0684291	-104.5824781	0.00
16216.00	90.12	359.91	7102.47	8939.24	8742.11	-1879.90	40.0687036	-104.5824787	0.00
16316.00	90.12	359.91	7102.27	9037.52	8842.11	-1880.06	40.0689781	-104.5824793	0.00
16416.00	90.12	359.91	7102.06	9135.80	8942.11	-1880.23	40.0692526	-104.5824799	0.00
16516.00	90.12	359.91	7101.85	9234.09	9042.11	-1880.40	40.0695271	-104.5824806	0.00
16616.00	90.12	359.91	7101.64	9332.37	9142.11	-1880.56	40.0698016	-104.5824812	0.00
16716.00	90.12	359.91	7101.44	9430.66	9242.11	-1880.73	40.0700761	-104.5824818	0.00
16816.00	90.12	359.91	7101.23	9528.94	9342.11	-1880.90	40.0703506	-104.5824824	0.00
16916.00	90.12	359.91	7101.02	9627.22	9442.11	-1881.06	40.0706251	-104.5824830	0.00
17016.00	90.12	359.91	7100.82	9725.51	9542.11	-1881.23	40.0708996	-104.5824837	0.00
17116.00	90.12	359.91	7100.61	9823.79	9642.11	-1881.39	40.0711741	-104.5824843	0.00
17216.00	90.12	359.91	7100.40	9922.08	9742.11	-1881.56	40.0714486	-104.5824849	0.00
17316.00	90.12	359.91	7100.20	10020.36	9842.10	-1881.73	40.0717231	-104.5824855	0.00
17410.29	90.12	359.91	7100.00	10113.03	9936.39	-1881.88	40.0719819	-104.5824861	0.00