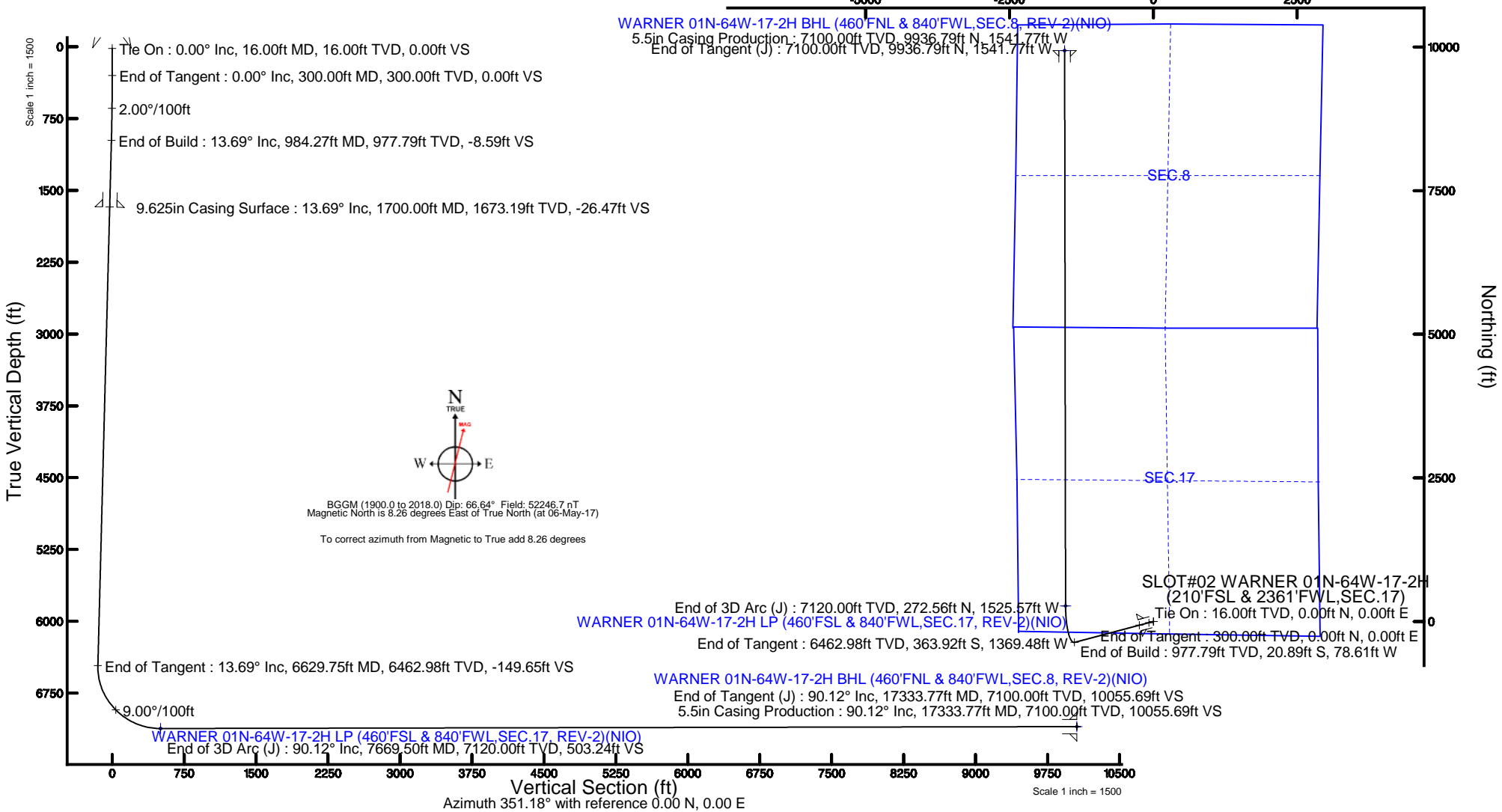


VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'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

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#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL,SEC.17)	-0.40	19.83	3258774.021	1260480.418	40°02'40.938"N	104°34'32.488"W	
RIG (16'RKB+5067'GL) (RKB) to Mud line (At Slot: SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL,SEC.17))						5083ft	
Mean Sea Level to Mud line (At Slot: SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'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
17333.77	90.119	359.904	7100.00	9936.79	-1541.77	3257128.83	1270400.22	40°04'19.135"N	104°34'52.320"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	255.118	16.00	0.00	0.00	0.00	0.00
End of Tangent	300.00	0.000	255.118	300.00	0.00	0.00	0.00	0.00
End of Build	984.27	13.685	255.118	977.79	-20.89	-78.61	2.00	-8.59
End of Tangent	6629.75	13.685	255.118	6462.98	-363.92	-1369.48	0.00	-149.65
End of 3D Arc (J)	7669.50	90.119	359.904	7120.00	272.56	-1525.57	9.00	503.24
End of Tangent (J)	17333.77	90.119	359.904	7100.00	9936.79	-1541.77	0.00	10055.69

Survey Program					
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
16.00	1700.00	BHI NavTrak	Custom BHI NavTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gi model)		WARNER 01N-64W-17-2H PWB
1700.00	17333.77	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gi model)		WARNER 01N-64W-17-2H PWB
Plot reference wellpath is WARNER 01N-64W-17-2H (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#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL,SEC.17)): 0 feet				Depths are in feet	
Coordinates are in feet referenced to Slot				Created by: cookdamm on 2017-05-24	
				Database: WA_Denver	



Planned Wellpath Report

WARNER 01N-64W-17-2H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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 1:33:14 PM
Convergence at slot	0.60° East	Database/Source file	WA_Denver/WARNER_01N-64W-17-2H_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	-0.40	19.83	3258774.02	1260480.42	40°02'40.938"N	104°34'32.488"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 (210'FSL & 2361'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	351.18°



Planned Wellpath Report

WARNER 01N-64W-17-2H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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	255.118	0.00	0.00	0.00	0.00	40°02'40.938"N	104°34'32.488"W	0.00	
16.00	0.000	255.118	16.00	0.00	0.00	0.00	40°02'40.938"N	104°34'32.488"W	0.00	Tie On
116.00†	0.000	255.118	116.00	0.00	0.00	0.00	40°02'40.938"N	104°34'32.488"W	0.00	
216.00†	0.000	255.118	216.00	0.00	0.00	0.00	40°02'40.938"N	104°34'32.488"W	0.00	
300.00	0.000	255.118	300.00	0.00	0.00	0.00	40°02'40.938"N	104°34'32.488"W	0.00	End of Tangent
316.00†	0.320	255.118	316.00	0.00	-0.01	-0.04	40°02'40.938"N	104°34'32.489"W	2.00	
416.00†	2.320	255.118	415.97	-0.25	-0.60	-2.27	40°02'40.932"N	104°34'32.517"W	2.00	
516.00†	4.320	255.118	515.80	-0.86	-2.09	-7.87	40°02'40.917"N	104°34'32.589"W	2.00	
616.00†	6.320	255.118	615.36	-1.84	-4.47	-16.83	40°02'40.894"N	104°34'32.704"W	2.00	
716.00†	8.320	255.118	714.54	-3.18	-7.74	-29.14	40°02'40.861"N	104°34'32.863"W	2.00	
816.00†	10.320	255.118	813.21	-4.89	-11.90	-44.79	40°02'40.820"N	104°34'33.064"W	2.00	
916.00†	12.320	255.118	911.26	-6.97	-16.94	-63.76	40°02'40.771"N	104°34'33.308"W	2.00	
984.27	13.685	255.118	977.79	-8.59	-20.89	-78.61	40°02'40.732"N	104°34'33.499"W	2.00	End of Build
1016.00†	13.685	255.118	1008.61	-9.38	-22.82	-85.86	40°02'40.713"N	104°34'33.592"W	0.00	
1116.00†	13.685	255.118	1105.77	-11.88	-28.89	-108.73	40°02'40.652"N	104°34'33.886"W	0.00	
1216.00†	13.685	255.118	1202.93	-14.38	-34.97	-131.59	40°02'40.592"N	104°34'34.180"W	0.00	
1316.00†	13.685	255.118	1300.09	-16.88	-41.05	-154.46	40°02'40.532"N	104°34'34.474"W	0.00	
1416.00†	13.685	255.118	1397.25	-19.38	-47.12	-177.32	40°02'40.472"N	104°34'34.768"W	0.00	
1516.00†	13.685	255.118	1494.42	-21.88	-53.20	-200.19	40°02'40.412"N	104°34'35.062"W	0.00	
1616.00†	13.685	255.118	1591.58	-24.37	-59.27	-223.05	40°02'40.352"N	104°34'35.356"W	0.00	
1716.00†	13.685	255.118	1688.74	-26.87	-65.35	-245.92	40°02'40.292"N	104°34'35.650"W	0.00	
1816.00†	13.685	255.118	1785.90	-29.37	-71.43	-268.79	40°02'40.232"N	104°34'35.944"W	0.00	
1916.00†	13.685	255.118	1883.06	-31.87	-77.50	-291.65	40°02'40.172"N	104°34'36.238"W	0.00	
2016.00†	13.685	255.118	1980.22	-34.37	-83.58	-314.52	40°02'40.112"N	104°34'36.532"W	0.00	
2116.00†	13.685	255.118	2077.38	-36.87	-89.66	-337.38	40°02'40.052"N	104°34'36.826"W	0.00	
2216.00†	13.685	255.118	2174.54	-39.37	-95.73	-360.25	40°02'39.992"N	104°34'37.120"W	0.00	
2316.00†	13.685	255.118	2271.70	-41.86	-101.81	-383.11	40°02'39.932"N	104°34'37.414"W	0.00	
2416.00†	13.685	255.118	2368.86	-44.36	-107.88	-405.98	40°02'39.872"N	104°34'37.708"W	0.00	
2516.00†	13.685	255.118	2466.02	-46.86	-113.96	-428.84	40°02'39.812"N	104°34'38.002"W	0.00	
2616.00†	13.685	255.118	2563.19	-49.36	-120.04	-451.71	40°02'39.752"N	104°34'38.296"W	0.00	
2716.00†	13.685	255.118	2660.35	-51.86	-126.11	-474.58	40°02'39.692"N	104°34'38.590"W	0.00	
2816.00†	13.685	255.118	2757.51	-54.36	-132.19	-497.44	40°02'39.632"N	104°34'38.884"W	0.00	
2916.00†	13.685	255.118	2854.67	-56.86	-138.27	-520.31	40°02'39.572"N	104°34'39.178"W	0.00	
3016.00†	13.685	255.118	2951.83	-59.35	-144.34	-543.17	40°02'39.512"N	104°34'39.472"W	0.00	
3116.00†	13.685	255.118	3048.99	-61.85	-150.42	-566.04	40°02'39.451"N	104°34'39.766"W	0.00	
3216.00†	13.685	255.118	3146.15	-64.35	-156.49	-588.90	40°02'39.391"N	104°34'40.060"W	0.00	
3316.00†	13.685	255.118	3243.31	-66.85	-162.57	-611.77	40°02'39.331"N	104°34'40.354"W	0.00	
3416.00†	13.685	255.118	3340.47	-69.35	-168.65	-634.64	40°02'39.271"N	104°34'40.648"W	0.00	
3516.00†	13.685	255.118	3437.63	-71.85	-174.72	-657.50	40°02'39.211"N	104°34'40.942"W	0.00	
3616.00†	13.685	255.118	3534.79	-74.35	-180.80	-680.37	40°02'39.151"N	104°34'41.236"W	0.00	
3716.00†	13.685	255.118	3631.96	-76.85	-186.88	-703.23	40°02'39.091"N	104°34'41.530"W	0.00	
3816.00†	13.685	255.118	3729.12	-79.34	-192.95	-726.10	40°02'39.031"N	104°34'41.824"W	0.00	
3916.00†	13.685	255.118	3826.28	-81.84	-199.03	-748.96	40°02'38.971"N	104°34'42.118"W	0.00	
4016.00†	13.685	255.118	3923.44	-84.34	-205.10	-771.83	40°02'38.911"N	104°34'42.412"W	0.00	
4116.00†	13.685	255.118	4020.60	-86.84	-211.18	-794.70	40°02'38.851"N	104°34'42.706"W	0.00	



Planned Wellpath Report

WARNER 01N-64W-17-2H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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†	13.685	255.118	4117.76	-89.34	-217.26	-817.56	40°02'38.791"N	104°34'43.000"W	0.00	
4316.00†	13.685	255.118	4214.92	-91.84	-223.33	-840.43	40°02'38.731"N	104°34'43.294"W	0.00	
4416.00†	13.685	255.118	4312.08	-94.34	-229.41	-863.29	40°02'38.671"N	104°34'43.588"W	0.00	
4516.00†	13.685	255.118	4409.24	-96.83	-235.49	-886.16	40°02'38.611"N	104°34'43.882"W	0.00	
4616.00†	13.685	255.118	4506.40	-99.33	-241.56	-909.02	40°02'38.551"N	104°34'44.176"W	0.00	
4716.00†	13.685	255.118	4603.56	-101.83	-247.64	-931.89	40°02'38.491"N	104°34'44.470"W	0.00	
4816.00†	13.685	255.118	4700.73	-104.33	-253.72	-954.75	40°02'38.431"N	104°34'44.764"W	0.00	
4916.00†	13.685	255.118	4797.89	-106.83	-259.79	-977.62	40°02'38.370"N	104°34'45.058"W	0.00	
5016.00†	13.685	255.118	4895.05	-109.33	-265.87	-1000.49	40°02'38.310"N	104°34'45.352"W	0.00	
5116.00†	13.685	255.118	4992.21	-111.83	-271.94	-1023.35	40°02'38.250"N	104°34'45.646"W	0.00	
5216.00†	13.685	255.118	5089.37	-114.32	-278.02	-1046.22	40°02'38.190"N	104°34'45.940"W	0.00	
5316.00†	13.685	255.118	5186.53	-116.82	-284.10	-1069.08	40°02'38.130"N	104°34'46.234"W	0.00	
5416.00†	13.685	255.118	5283.69	-119.32	-290.17	-1091.95	40°02'38.070"N	104°34'46.528"W	0.00	
5516.00†	13.685	255.118	5380.85	-121.82	-296.25	-1114.81	40°02'38.010"N	104°34'46.822"W	0.00	
5616.00†	13.685	255.118	5478.01	-124.32	-302.33	-1137.68	40°02'37.950"N	104°34'47.116"W	0.00	
5716.00†	13.685	255.118	5575.17	-126.82	-308.40	-1160.55	40°02'37.890"N	104°34'47.410"W	0.00	
5816.00†	13.685	255.118	5672.33	-129.32	-314.48	-1183.41	40°02'37.830"N	104°34'47.704"W	0.00	
5916.00†	13.685	255.118	5769.50	-131.81	-320.55	-1206.28	40°02'37.770"N	104°34'47.998"W	0.00	
6016.00†	13.685	255.118	5866.66	-134.31	-326.63	-1229.14	40°02'37.710"N	104°34'48.292"W	0.00	
6116.00†	13.685	255.118	5963.82	-136.81	-332.71	-1252.01	40°02'37.650"N	104°34'48.586"W	0.00	
6216.00†	13.685	255.118	6060.98	-139.31	-338.78	-1274.87	40°02'37.590"N	104°34'48.880"W	0.00	
6316.00†	13.685	255.118	6158.14	-141.81	-344.86	-1297.74	40°02'37.530"N	104°34'49.174"W	0.00	
6416.00†	13.685	255.118	6255.30	-144.31	-350.94	-1320.60	40°02'37.470"N	104°34'49.468"W	0.00	
6516.00†	13.685	255.118	6352.46	-146.81	-357.01	-1343.47	40°02'37.410"N	104°34'49.762"W	0.00	
6616.00†	13.685	255.118	6449.62	-149.30	-363.09	-1366.34	40°02'37.349"N	104°34'50.056"W	0.00	
6629.75	13.685	255.118	6462.98	-149.65	-363.92	-1369.48	40°02'37.341"N	104°34'50.097"W	0.00	End of Tangent
6716.00†	13.921	288.066	6546.87	-146.03	-363.33	-1389.23	40°02'37.347"N	104°34'50.351"W	9.00	
6816.00†	18.694	315.776	6642.96	-127.49	-348.08	-1411.89	40°02'37.498"N	104°34'50.642"W	9.00	
6916.00†	25.772	330.686	6735.54	-93.99	-317.58	-1433.76	40°02'37.799"N	104°34'50.923"W	9.00	
7016.00†	33.732	339.226	6822.33	-46.37	-272.57	-1454.29	40°02'38.244"N	104°34'51.187"W	9.00	
7116.00†	42.073	344.756	6901.19	14.21	-214.16	-1472.99	40°02'38.821"N	104°34'51.428"W	9.00	
7216.00†	50.606	348.726	6970.17	86.26	-143.80	-1489.39	40°02'39.517"N	104°34'51.638"W	9.00	
7316.00†	59.244	351.821	7027.59	168.00	-63.21	-1503.08	40°02'40.313"N	104°34'51.815"W	9.00	
7416.00†	67.944	354.401	7072.03	257.41	25.63	-1513.74	40°02'41.191"N	104°34'51.952"W	9.00	
7516.00†	76.678	356.680	7102.39	352.31	120.51	-1521.09	40°02'42.128"N	104°34'52.046"W	9.00	
7616.00†	85.432	358.798	7117.92	450.34	219.12	-1524.96	40°02'43.103"N	104°34'52.096"W	9.00	
7669.50	90.119	359.904	7120.00†	503.24	272.56	-1525.57	40°02'43.631"N	104°34'52.104"W	9.00	End of 3D Arc (J)
7716.00†	90.119	359.904	7119.90	549.20	319.06	-1525.65	40°02'44.091"N	104°34'52.105"W	0.00	
7816.00†	90.119	359.904	7119.70	648.05	419.06	-1525.81	40°02'45.079"N	104°34'52.107"W	0.00	
7916.00†	90.119	359.904	7119.49	746.89	519.06	-1525.98	40°02'46.067"N	104°34'52.110"W	0.00	
8016.00†	90.119	359.904	7119.28	845.73	619.06	-1526.15	40°02'47.055"N	104°34'52.112"W	0.00	
8116.00†	90.119	359.904	7119.08	944.57	719.06	-1526.32	40°02'48.043"N	104°34'52.114"W	0.00	
8216.00†	90.119	359.904	7118.87	1043.42	819.06	-1526.48	40°02'49.032"N	104°34'52.116"W	0.00	
8316.00†	90.119	359.904	7118.66	1142.26	919.06	-1526.65	40°02'50.020"N	104°34'52.118"W	0.00	
8416.00†	90.119	359.904	7118.46	1241.10	1019.06	-1526.82	40°02'51.008"N	104°34'52.121"W	0.00	



Planned Wellpath Report

WARNER 01N-64W-17-2H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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	359.904	7118.25	1339.95	1119.06	-1526.99	40°02'51.996"N	104°34'52.123"W	0.00	
8616.00†	90.119	359.904	7118.04	1438.79	1219.06	-1527.15	40°02'52.985"N	104°34'52.125"W	0.00	
8716.00†	90.119	359.904	7117.83	1537.63	1319.06	-1527.32	40°02'53.973"N	104°34'52.127"W	0.00	
8816.00†	90.119	359.904	7117.63	1636.48	1419.06	-1527.49	40°02'54.961"N	104°34'52.130"W	0.00	
8916.00†	90.119	359.904	7117.42	1735.32	1519.06	-1527.66	40°02'55.949"N	104°34'52.132"W	0.00	
9016.00†	90.119	359.904	7117.21	1834.16	1619.05	-1527.82	40°02'56.937"N	104°34'52.134"W	0.00	
9116.00†	90.119	359.904	7117.01	1933.00	1719.05	-1527.99	40°02'57.926"N	104°34'52.136"W	0.00	
9216.00†	90.119	359.904	7116.80	2031.85	1819.05	-1528.16	40°02'58.914"N	104°34'52.139"W	0.00	
9316.00†	90.119	359.904	7116.59	2130.69	1919.05	-1528.33	40°02'59.902"N	104°34'52.141"W	0.00	
9416.00†	90.119	359.904	7116.39	2229.53	2019.05	-1528.49	40°03'00.890"N	104°34'52.143"W	0.00	
9516.00†	90.119	359.904	7116.18	2328.38	2119.05	-1528.66	40°03'01.879"N	104°34'52.145"W	0.00	
9616.00†	90.119	359.904	7115.97	2427.22	2219.05	-1528.83	40°03'02.867"N	104°34'52.147"W	0.00	
9716.00†	90.119	359.904	7115.76	2526.06	2319.05	-1529.00	40°03'03.855"N	104°34'52.150"W	0.00	
9816.00†	90.119	359.904	7115.56	2624.91	2419.05	-1529.17	40°03'04.843"N	104°34'52.152"W	0.00	
9916.00†	90.119	359.904	7115.35	2723.75	2519.05	-1529.33	40°03'05.831"N	104°34'52.154"W	0.00	
10016.00†	90.119	359.904	7115.14	2822.59	2619.05	-1529.50	40°03'06.820"N	104°34'52.156"W	0.00	
10116.00†	90.119	359.904	7114.94	2921.43	2719.05	-1529.67	40°03'07.808"N	104°34'52.159"W	0.00	
10216.00†	90.119	359.904	7114.73	3020.28	2819.05	-1529.84	40°03'08.796"N	104°34'52.161"W	0.00	
10316.00†	90.119	359.904	7114.52	3119.12	2919.05	-1530.00	40°03'09.784"N	104°34'52.163"W	0.00	
10416.00†	90.119	359.904	7114.32	3217.96	3019.05	-1530.17	40°03'10.773"N	104°34'52.165"W	0.00	
10516.00†	90.119	359.904	7114.11	3316.81	3119.05	-1530.34	40°03'11.761"N	104°34'52.168"W	0.00	
10616.00†	90.119	359.904	7113.90	3415.65	3219.05	-1530.51	40°03'12.749"N	104°34'52.170"W	0.00	
10716.00†	90.119	359.904	7113.70	3514.49	3319.05	-1530.67	40°03'13.737"N	104°34'52.172"W	0.00	
10816.00†	90.119	359.904	7113.49	3613.33	3419.05	-1530.84	40°03'14.725"N	104°34'52.174"W	0.00	
10916.00†	90.119	359.904	7113.28	3712.18	3519.05	-1531.01	40°03'15.714"N	104°34'52.177"W	0.00	
11016.00†	90.119	359.904	7113.07	3811.02	3619.05	-1531.18	40°03'16.702"N	104°34'52.179"W	0.00	
11116.00†	90.119	359.904	7112.87	3909.86	3719.05	-1531.34	40°03'17.690"N	104°34'52.181"W	0.00	
11216.00†	90.119	359.904	7112.66	4008.71	3819.05	-1531.51	40°03'18.678"N	104°34'52.183"W	0.00	
11316.00†	90.119	359.904	7112.45	4107.55	3919.05	-1531.68	40°03'19.666"N	104°34'52.185"W	0.00	
11416.00†	90.119	359.904	7112.25	4206.39	4019.05	-1531.85	40°03'20.655"N	104°34'52.188"W	0.00	
11516.00†	90.119	359.904	7112.04	4305.24	4119.05	-1532.01	40°03'21.643"N	104°34'52.190"W	0.00	
11616.00†	90.119	359.904	7111.83	4404.08	4219.05	-1532.18	40°03'22.631"N	104°34'52.192"W	0.00	
11716.00†	90.119	359.904	7111.63	4502.92	4319.05	-1532.35	40°03'23.619"N	104°34'52.194"W	0.00	
11816.00†	90.119	359.904	7111.42	4601.76	4419.04	-1532.52	40°03'24.608"N	104°34'52.197"W	0.00	
11916.00†	90.119	359.904	7111.21	4700.61	4519.04	-1532.68	40°03'25.596"N	104°34'52.199"W	0.00	
12016.00†	90.119	359.904	7111.01	4799.45	4619.04	-1532.85	40°03'26.584"N	104°34'52.201"W	0.00	
12116.00†	90.119	359.904	7110.80	4898.29	4719.04	-1533.02	40°03'27.572"N	104°34'52.203"W	0.00	
12216.00†	90.119	359.904	7110.59	4997.14	4819.04	-1533.19	40°03'28.560"N	104°34'52.206"W	0.00	
12316.00†	90.119	359.904	7110.38	5095.98	4919.04	-1533.36	40°03'29.549"N	104°34'52.208"W	0.00	
12416.00†	90.119	359.904	7110.18	5194.82	5019.04	-1533.52	40°03'30.537"N	104°34'52.210"W	0.00	
12516.00†	90.119	359.904	7109.97	5293.67	5119.04	-1533.69	40°03'31.525"N	104°34'52.212"W	0.00	
12616.00†	90.119	359.904	7109.76	5392.51	5219.04	-1533.86	40°03'32.513"N	104°34'52.215"W	0.00	
12716.00†	90.119	359.904	7109.56	5491.35	5319.04	-1534.03	40°03'33.502"N	104°34'52.217"W	0.00	
12816.00†	90.119	359.904	7109.35	5590.19	5419.04	-1534.19	40°03'34.490"N	104°34'52.219"W	0.00	
12916.00†	90.119	359.904	7109.14	5689.04	5519.04	-1534.36	40°03'35.478"N	104°34'52.221"W	0.00	



Planned Wellpath Report

WARNER 01N-64W-17-2H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H 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	359.904	7108.94	5787.88	5619.04	-1534.53	40°03'36.466"N	104°34'52.223"W	0.00	
13116.00†	90.119	359.904	7108.73	5886.72	5719.04	-1534.70	40°03'37.454"N	104°34'52.226"W	0.00	
13216.00†	90.119	359.904	7108.52	5985.57	5819.04	-1534.86	40°03'38.443"N	104°34'52.228"W	0.00	
13316.00†	90.119	359.904	7108.31	6084.41	5919.04	-1535.03	40°03'39.431"N	104°34'52.230"W	0.00	
13416.00†	90.119	359.904	7108.11	6183.25	6019.04	-1535.20	40°03'40.419"N	104°34'52.232"W	0.00	
13516.00†	90.119	359.904	7107.90	6282.09	6119.04	-1535.37	40°03'41.407"N	104°34'52.235"W	0.00	
13616.00†	90.119	359.904	7107.69	6380.94	6219.04	-1535.53	40°03'42.396"N	104°34'52.237"W	0.00	
13716.00†	90.119	359.904	7107.49	6479.78	6319.04	-1535.70	40°03'43.384"N	104°34'52.239"W	0.00	
13816.00†	90.119	359.904	7107.28	6578.62	6419.04	-1535.87	40°03'44.372"N	104°34'52.241"W	0.00	
13916.00†	90.119	359.904	7107.07	6677.47	6519.04	-1536.04	40°03'45.360"N	104°34'52.244"W	0.00	
14016.00†	90.119	359.904	7106.87	6776.31	6619.04	-1536.20	40°03'46.348"N	104°34'52.246"W	0.00	
14116.00†	90.119	359.904	7106.66	6875.15	6719.04	-1536.37	40°03'47.337"N	104°34'52.248"W	0.00	
14216.00†	90.119	359.904	7106.45	6974.00	6819.04	-1536.54	40°03'48.325"N	104°34'52.250"W	0.00	
14316.00†	90.119	359.904	7106.25	7072.84	6919.04	-1536.71	40°03'49.313"N	104°34'52.253"W	0.00	
14416.00†	90.119	359.904	7106.04	7171.68	7019.04	-1536.88	40°03'50.301"N	104°34'52.255"W	0.00	
14516.00†	90.119	359.904	7105.83	7270.52	7119.04	-1537.04	40°03'51.290"N	104°34'52.257"W	0.00	
14616.00†	90.119	359.904	7105.62	7369.37	7219.03	-1537.21	40°03'52.278"N	104°34'52.259"W	0.00	
14716.00†	90.119	359.904	7105.42	7468.21	7319.03	-1537.38	40°03'53.266"N	104°34'52.261"W	0.00	
14816.00†	90.119	359.904	7105.21	7567.05	7419.03	-1537.55	40°03'54.254"N	104°34'52.264"W	0.00	
14916.00†	90.119	359.904	7105.00	7665.90	7519.03	-1537.71	40°03'55.242"N	104°34'52.266"W	0.00	
15016.00†	90.119	359.904	7104.80	7764.74	7619.03	-1537.88	40°03'56.231"N	104°34'52.268"W	0.00	
15116.00†	90.119	359.904	7104.59	7863.58	7719.03	-1538.05	40°03'57.219"N	104°34'52.270"W	0.00	
15216.00†	90.119	359.904	7104.38	7962.43	7819.03	-1538.22	40°03'58.207"N	104°34'52.273"W	0.00	
15316.00†	90.119	359.904	7104.18	8061.27	7919.03	-1538.38	40°03'59.195"N	104°34'52.275"W	0.00	
15416.00†	90.119	359.904	7103.97	8160.11	8019.03	-1538.55	40°04'00.183"N	104°34'52.277"W	0.00	
15516.00†	90.119	359.904	7103.76	8258.95	8119.03	-1538.72	40°04'01.172"N	104°34'52.279"W	0.00	
15616.00†	90.119	359.904	7103.55	8357.80	8219.03	-1538.89	40°04'02.160"N	104°34'52.282"W	0.00	
15716.00†	90.119	359.904	7103.35	8456.64	8319.03	-1539.05	40°04'03.148"N	104°34'52.284"W	0.00	
15816.00†	90.119	359.904	7103.14	8555.48	8419.03	-1539.22	40°04'04.136"N	104°34'52.286"W	0.00	
15916.00†	90.119	359.904	7102.93	8654.33	8519.03	-1539.39	40°04'05.125"N	104°34'52.288"W	0.00	
16016.00†	90.119	359.904	7102.73	8753.17	8619.03	-1539.56	40°04'06.113"N	104°34'52.291"W	0.00	
16116.00†	90.119	359.904	7102.52	8852.01	8719.03	-1539.72	40°04'07.101"N	104°34'52.293"W	0.00	
16216.00†	90.119	359.904	7102.31	8950.85	8819.03	-1539.89	40°04'08.089"N	104°34'52.295"W	0.00	
16316.00†	90.119	359.904	7102.11	9049.70	8919.03	-1540.06	40°04'09.077"N	104°34'52.297"W	0.00	
16416.00†	90.119	359.904	7101.90	9148.54	9019.03	-1540.23	40°04'10.066"N	104°34'52.299"W	0.00	
16516.00†	90.119	359.904	7101.69	9247.38	9119.03	-1540.40	40°04'11.054"N	104°34'52.302"W	0.00	
16616.00†	90.119	359.904	7101.49	9346.23	9219.03	-1540.56	40°04'12.042"N	104°34'52.304"W	0.00	
16716.00†	90.119	359.904	7101.28	9445.07	9319.03	-1540.73	40°04'13.030"N	104°34'52.306"W	0.00	
16816.00†	90.119	359.904	7101.07	9543.91	9419.03	-1540.90	40°04'14.019"N	104°34'52.308"W	0.00	
16916.00†	90.119	359.904	7100.86	9642.76	9519.03	-1541.07	40°04'15.007"N	104°34'52.311"W	0.00	
17016.00†	90.119	359.904	7100.66	9741.60	9619.03	-1541.23	40°04'15.995"N	104°34'52.313"W	0.00	
17116.00†	90.119	359.904	7100.45	9840.44	9719.03	-1541.40	40°04'16.983"N	104°34'52.315"W	0.00	
17216.00†	90.119	359.904	7100.24	9939.28	9819.03	-1541.57	40°04'17.971"N	104°34'52.317"W	0.00	
17316.00†	90.119	359.904	7100.04	10038.13	9919.03	-1541.74	40°04'18.960"N	104°34'52.320"W	0.00	
17333.77	90.119	359.904	7100.00 ²	10055.69	9936.79	-1541.77	40°04'19.135"N	104°34'52.320"W	0.00	End of Tangent (J)



Planned Wellpath Report

WARNER 01N-64W-17-2H (REV-B.0) PWP (NIO)

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REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)
Area	COLORADO	Well	WARNER 01N-64W-17-2H
Field	WELD COUNTY (NAD83/TN)	Wellbore	WARNER 01N-64W-17-2H PWB
Facility	SEC.17-T1N-R64W		

HOLE & CASING SECTIONS

- Ref Wellbore: WARNER 01N-64W-17-2H PWB Ref Wellpath: WARNER 01N-64W-17-2H (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	1673.19	0.00	0.00	-64.38	-242.26
9.625in Casing Surface	16.00	1700.00	1684.00	16.00	1673.19	0.00	0.00	-64.38	-242.26
8.5in Open Hole	1700.00	17333.77	15633.77	1673.19	7100.00	-64.38	-242.26	9936.79	-1541.77
5.5in Casing Production	16.00	17333.77	17317.77	16.00	7100.00	0.00	0.00	9936.79	-1541.77

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
2) WARNER 01N-64W-17-2H BHL (460'FNL & 840'FWL, SEC.17, REV-2)(NIO)		7100.00	9936.77	-1541.77	3257128.83	1270400.20	40°04'19.135"N	104°34'52.320"W	point
1) WARNER 01N-64W-17-2H LP (460'FSL & 840'FWL, SEC.17, REV-2)(NIO)	7669.50	7120.00	272.56	-1525.57	3257245.75	1260737.05	40°02'43.631"N	104°34'52.104"W	point

SURVEY PROGRAM -

Ref Wellbore: WARNER 01N-64W-17-2H PWB Ref Wellpath: WARNER 01N-64W-17-2H (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-17-2H PWB
1700.00	17333.77	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		WARNER 01N-64W-17-2H 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

#MNEM	.UNITS	DATA	:DESCRIPTION
#----	.-----	----	:-----
STRT	.ft	0.00	:START MD
STOP	.ft	17333.77	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	VERDAD OIL & GAS CORPORATION	:OPERATOR
WELL	.	WARNER 01N-64W-17-2H	: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

#MNEM	.UNITS	DATA	:DESCRIPTION
#----	.-----	----	:-----
WPTYPE	.	PLANNED WELLPATH	:WELLPATH TYPE
FACILITY	.	SEC.17-T1N-R64W	:FACILITY
SLOT	.	SLOT#02 WARNER 01N-64W-17-2H (210'FSL & 2361'FWL, SEC.17)	:SLOT
WELLBORE	.	WARNER 01N-64W-17-2H PWB	:WELLBORE
WELLPATH	.	WARNER 01N-64W-17-2H (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	351.18	:VERTICAL SECTION AZIMUTH
VSORIGN	.ft	0.00	:VERTICAL SECTION ORIGIN NORTH
VSORIGE	.ft	0.00	:VERTICAL SECTION ORIGIN EAST

~CURVE (WELLPATH) INFORMATION

#MNEM	.UNITS	:DESCRIPTION
#----	.-----	:-----
DEPT	.ft	:MEASURED DEPTH
INC	.deg	:INCLINATION
AZI	.deg	:AZIMUTH

VERDAD_WARNER_01N-64W-17-2H__REV-B.0__PWP__NIO__05-24-17.las

TVD .ft :TRUE VERTICAL DEPTH
 SECT .ft :CROSS SECTION (CURTAIN/VERTICAL)
 LOCALN .ft :LOCAL NORTH
 LOCALE .ft :LOCAL EAST
 LAT .deg :LATITUDE
 LONG .deg :LONGITUDE
 DLS .deg/100ft :DOGLEG SEVERITY

~ASCII DATA

0.00	0.00	255.12	0.00	0.00	0.00	0.00	40.0447050	-104.5756911	0.00
16.00	0.00	255.12	16.00	0.00	0.00	0.00	40.0447050	-104.5756911	0.00
116.00	0.00	255.12	116.00	0.00	0.00	0.00	40.0447050	-104.5756911	0.00
216.00	0.00	255.12	216.00	0.00	0.00	0.00	40.0447050	-104.5756911	0.00
300.00	0.00	255.12	300.00	0.00	0.00	0.00	40.0447050	-104.5756911	0.00
316.00	0.32	255.12	316.00	0.00	-0.01	-0.04	40.0447050	-104.5756913	2.00
416.00	2.32	255.12	415.97	-0.25	-0.60	-2.27	40.0447033	-104.5756992	2.00
516.00	4.32	255.12	515.80	-0.86	-2.09	-7.87	40.0446993	-104.5757192	2.00
616.00	6.32	255.12	615.36	-1.84	-4.47	-16.83	40.0446927	-104.5757512	2.00
716.00	8.32	255.12	714.54	-3.18	-7.74	-29.14	40.0446837	-104.5757952	2.00
816.00	10.32	255.12	813.21	-4.89	-11.90	-44.79	40.0446723	-104.5758511	2.00
916.00	12.32	255.12	911.26	-6.97	-16.94	-63.76	40.0446585	-104.5759188	2.00
984.27	13.69	255.12	977.79	-8.59	-20.89	-78.61	40.0446477	-104.5759719	2.00
1016.00	13.69	255.12	1008.61	-9.38	-22.82	-85.86	40.0446424	-104.5759978	0.00
1116.00	13.69	255.12	1105.77	-11.88	-28.89	-108.73	40.0446257	-104.5760794	0.00
1216.00	13.69	255.12	1202.93	-14.38	-34.97	-131.59	40.0446090	-104.5761611	0.00
1316.00	13.69	255.12	1300.09	-16.88	-41.05	-154.46	40.0445923	-104.5762428	0.00
1416.00	13.69	255.12	1397.25	-19.38	-47.12	-177.32	40.0445756	-104.5763244	0.00
1516.00	13.69	255.12	1494.42	-21.88	-53.20	-200.19	40.0445590	-104.5764061	0.00
1616.00	13.69	255.12	1591.58	-24.37	-59.27	-223.05	40.0445423	-104.5764878	0.00
1716.00	13.69	255.12	1688.74	-26.87	-65.35	-245.92	40.0445256	-104.5765695	0.00
1816.00	13.69	255.12	1785.90	-29.37	-71.43	-268.79	40.0445089	-104.5766511	0.00
1916.00	13.69	255.12	1883.06	-31.87	-77.50	-291.65	40.0444922	-104.5767328	0.00
2016.00	13.69	255.12	1980.22	-34.37	-83.58	-314.52	40.0444756	-104.5768145	0.00
2116.00	13.69	255.12	2077.38	-36.87	-89.66	-337.38	40.0444589	-104.5768961	0.00
2216.00	13.69	255.12	2174.54	-39.37	-95.73	-360.25	40.0444422	-104.5769778	0.00
2316.00	13.69	255.12	2271.70	-41.86	-101.81	-383.11	40.0444255	-104.5770595	0.00
2416.00	13.69	255.12	2368.86	-44.36	-107.88	-405.98	40.0444088	-104.5771411	0.00
2516.00	13.69	255.12	2466.02	-46.86	-113.96	-428.84	40.0443922	-104.5772228	0.00
2616.00	13.69	255.12	2563.19	-49.36	-120.04	-451.71	40.0443755	-104.5773045	0.00
2716.00	13.69	255.12	2660.35	-51.86	-126.11	-474.58	40.0443588	-104.5773861	0.00
2816.00	13.69	255.12	2757.51	-54.36	-132.19	-497.44	40.0443421	-104.5774678	0.00
2916.00	13.69	255.12	2854.67	-56.86	-138.27	-520.31	40.0443254	-104.5775495	0.00
3016.00	13.69	255.12	2951.83	-59.35	-144.34	-543.17	40.0443088	-104.5776311	0.00
3116.00	13.69	255.12	3048.99	-61.85	-150.42	-566.04	40.0442921	-104.5777128	0.00

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3216.00	13.69	255.12	3146.15	-64.35	-156.49	-588.90	40.0442754	-104.5777945	0.00
3316.00	13.69	255.12	3243.31	-66.85	-162.57	-611.77	40.0442587	-104.5778761	0.00
3416.00	13.69	255.12	3340.47	-69.35	-168.65	-634.64	40.0442420	-104.5779578	0.00
3516.00	13.69	255.12	3437.63	-71.85	-174.72	-657.50	40.0442253	-104.5780395	0.00
3616.00	13.69	255.12	3534.79	-74.35	-180.80	-680.37	40.0442087	-104.5781211	0.00
3716.00	13.69	255.12	3631.96	-76.85	-186.88	-703.23	40.0441920	-104.5782028	0.00
3816.00	13.69	255.12	3729.12	-79.34	-192.95	-726.10	40.0441753	-104.5782845	0.00
3916.00	13.69	255.12	3826.28	-81.84	-199.03	-748.96	40.0441586	-104.5783661	0.00
4016.00	13.69	255.12	3923.44	-84.34	-205.10	-771.83	40.0441419	-104.5784478	0.00
4116.00	13.69	255.12	4020.60	-86.84	-211.18	-794.70	40.0441253	-104.5785295	0.00
4216.00	13.69	255.12	4117.76	-89.34	-217.26	-817.56	40.0441086	-104.5786111	0.00
4316.00	13.69	255.12	4214.92	-91.84	-223.33	-840.43	40.0440919	-104.5786928	0.00
4416.00	13.69	255.12	4312.08	-94.34	-229.41	-863.29	40.0440752	-104.5787745	0.00
4516.00	13.69	255.12	4409.24	-96.83	-235.49	-886.16	40.0440585	-104.5788561	0.00
4616.00	13.69	255.12	4506.40	-99.33	-241.56	-909.02	40.0440418	-104.5789378	0.00
4716.00	13.69	255.12	4603.56	-101.83	-247.64	-931.89	40.0440252	-104.5790195	0.00
4816.00	13.69	255.12	4700.73	-104.33	-253.72	-954.75	40.0440085	-104.5791011	0.00
4916.00	13.69	255.12	4797.89	-106.83	-259.79	-977.62	40.0439918	-104.5791828	0.00
5016.00	13.69	255.12	4895.05	-109.33	-265.87	-1000.49	40.0439751	-104.5792645	0.00
5116.00	13.69	255.12	4992.21	-111.83	-271.94	-1023.35	40.0439584	-104.5793461	0.00
5216.00	13.69	255.12	5089.37	-114.32	-278.02	-1046.22	40.0439418	-104.5794278	0.00
5316.00	13.69	255.12	5186.53	-116.82	-284.10	-1069.08	40.0439251	-104.5795095	0.00
5416.00	13.69	255.12	5283.69	-119.32	-290.17	-1091.95	40.0439084	-104.5795911	0.00
5516.00	13.69	255.12	5380.85	-121.82	-296.25	-1114.81	40.0438917	-104.5796728	0.00
5616.00	13.69	255.12	5478.01	-124.32	-302.33	-1137.68	40.0438750	-104.5797545	0.00
5716.00	13.69	255.12	5575.17	-126.82	-308.40	-1160.55	40.0438583	-104.5798361	0.00
5816.00	13.69	255.12	5672.33	-129.32	-314.48	-1183.41	40.0438417	-104.5799178	0.00
5916.00	13.69	255.12	5769.50	-131.81	-320.55	-1206.28	40.0438250	-104.5799995	0.00
6016.00	13.69	255.12	5866.66	-134.31	-326.63	-1229.14	40.0438083	-104.5800811	0.00
6116.00	13.69	255.12	5963.82	-136.81	-332.71	-1252.01	40.0437916	-104.5801628	0.00
6216.00	13.69	255.12	6060.98	-139.31	-338.78	-1274.87	40.0437749	-104.5802445	0.00
6316.00	13.69	255.12	6158.14	-141.81	-344.86	-1297.74	40.0437582	-104.5803261	0.00
6416.00	13.69	255.12	6255.30	-144.31	-350.94	-1320.60	40.0437416	-104.5804078	0.00
6516.00	13.69	255.12	6352.46	-146.81	-357.01	-1343.47	40.0437249	-104.5804895	0.00
6616.00	13.69	255.12	6449.62	-149.30	-363.09	-1366.34	40.0437082	-104.5805711	0.00
6629.75	13.69	255.12	6462.98	-149.65	-363.92	-1369.48	40.0437059	-104.5805824	0.00
6716.00	13.92	288.07	6546.87	-146.03	-363.33	-1389.23	40.0437075	-104.5806529	9.00
6816.00	18.69	315.78	6642.96	-127.49	-348.08	-1411.89	40.0437494	-104.5807339	9.00
6916.00	25.77	330.69	6735.54	-93.99	-317.58	-1433.76	40.0438331	-104.5808120	9.00
7016.00	33.73	339.23	6822.33	-46.37	-272.57	-1454.29	40.0439567	-104.5808853	9.00
7116.00	42.07	344.76	6901.19	14.21	-214.16	-1472.99	40.0441170	-104.5809521	9.00
7216.00	50.61	348.73	6970.17	86.26	-143.80	-1489.39	40.0443101	-104.5810107	9.00
7316.00	59.24	351.82	7027.59	168.00	-63.21	-1503.08	40.0445314	-104.5810596	9.00
7416.00	67.94	354.40	7072.03	257.41	25.63	-1513.74	40.0447752	-104.5810977	9.00

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7516.00	76.68	356.68	7102.39	352.31	120.51	-1521.09	40.0450357	-104.5811240	9.00
7616.00	85.43	358.80	7117.92	450.34	219.12	-1524.96	40.0453064	-104.5811378	9.00
7669.50	90.12	359.90	7120.00	503.24	272.56	-1525.57	40.0454531	-104.5811400	9.00
7716.00	90.12	359.90	7119.90	549.20	319.06	-1525.65	40.0455807	-104.5811403	0.00
7816.00	90.12	359.90	7119.70	648.05	419.06	-1525.81	40.0458552	-104.5811409	0.00
7916.00	90.12	359.90	7119.49	746.89	519.06	-1525.98	40.0461297	-104.5811415	0.00
8016.00	90.12	359.90	7119.28	845.73	619.06	-1526.15	40.0464042	-104.5811422	0.00
8116.00	90.12	359.90	7119.08	944.57	719.06	-1526.32	40.0466787	-104.5811428	0.00
8216.00	90.12	359.90	7118.87	1043.42	819.06	-1526.48	40.0469532	-104.5811434	0.00
8316.00	90.12	359.90	7118.66	1142.26	919.06	-1526.65	40.0472277	-104.5811440	0.00
8416.00	90.12	359.90	7118.46	1241.10	1019.06	-1526.82	40.0475023	-104.5811446	0.00
8516.00	90.12	359.90	7118.25	1339.95	1119.06	-1526.99	40.0477768	-104.5811453	0.00
8616.00	90.12	359.90	7118.04	1438.79	1219.06	-1527.15	40.0480513	-104.5811459	0.00
8716.00	90.12	359.90	7117.83	1537.63	1319.06	-1527.32	40.0483258	-104.5811465	0.00
8816.00	90.12	359.90	7117.63	1636.48	1419.06	-1527.49	40.0486003	-104.5811471	0.00
8916.00	90.12	359.90	7117.42	1735.32	1519.06	-1527.66	40.0488748	-104.5811477	0.00
9016.00	90.12	359.90	7117.21	1834.16	1619.05	-1527.82	40.0491493	-104.5811484	0.00
9116.00	90.12	359.90	7117.01	1933.00	1719.05	-1527.99	40.0494238	-104.5811490	0.00
9216.00	90.12	359.90	7116.80	2031.85	1819.05	-1528.16	40.0496983	-104.5811496	0.00
9316.00	90.12	359.90	7116.59	2130.69	1919.05	-1528.33	40.0499728	-104.5811502	0.00
9416.00	90.12	359.90	7116.39	2229.53	2019.05	-1528.49	40.0502473	-104.5811508	0.00
9516.00	90.12	359.90	7116.18	2328.38	2119.05	-1528.66	40.0505218	-104.5811515	0.00
9616.00	90.12	359.90	7115.97	2427.22	2219.05	-1528.83	40.0507963	-104.5811521	0.00
9716.00	90.12	359.90	7115.76	2526.06	2319.05	-1529.00	40.0510708	-104.5811527	0.00
9816.00	90.12	359.90	7115.56	2624.91	2419.05	-1529.17	40.0513453	-104.5811533	0.00
9916.00	90.12	359.90	7115.35	2723.75	2519.05	-1529.33	40.0516198	-104.5811539	0.00
10016.00	90.12	359.90	7115.14	2822.59	2619.05	-1529.50	40.0518943	-104.5811546	0.00
10116.00	90.12	359.90	7114.94	2921.43	2719.05	-1529.67	40.0521688	-104.5811552	0.00
10216.00	90.12	359.90	7114.73	3020.28	2819.05	-1529.84	40.0524434	-104.5811558	0.00
10316.00	90.12	359.90	7114.52	3119.12	2919.05	-1530.00	40.0527179	-104.5811564	0.00
10416.00	90.12	359.90	7114.32	3217.96	3019.05	-1530.17	40.0529924	-104.5811570	0.00
10516.00	90.12	359.90	7114.11	3316.81	3119.05	-1530.34	40.0532669	-104.5811577	0.00
10616.00	90.12	359.90	7113.90	3415.65	3219.05	-1530.51	40.0535414	-104.5811583	0.00
10716.00	90.12	359.90	7113.70	3514.49	3319.05	-1530.67	40.0538159	-104.5811589	0.00
10816.00	90.12	359.90	7113.49	3613.33	3419.05	-1530.84	40.0540904	-104.5811595	0.00
10916.00	90.12	359.90	7113.28	3712.18	3519.05	-1531.01	40.0543649	-104.5811602	0.00
11016.00	90.12	359.90	7113.07	3811.02	3619.05	-1531.18	40.0546394	-104.5811608	0.00
11116.00	90.12	359.90	7112.87	3909.86	3719.05	-1531.34	40.0549139	-104.5811614	0.00
11216.00	90.12	359.90	7112.66	4008.71	3819.05	-1531.51	40.0551884	-104.5811620	0.00
11316.00	90.12	359.90	7112.45	4107.55	3919.05	-1531.68	40.0554629	-104.5811626	0.00
11416.00	90.12	359.90	7112.25	4206.39	4019.05	-1531.85	40.0557374	-104.5811633	0.00
11516.00	90.12	359.90	7112.04	4305.24	4119.05	-1532.01	40.0560119	-104.5811639	0.00
11616.00	90.12	359.90	7111.83	4404.08	4219.05	-1532.18	40.0562864	-104.5811645	0.00
11716.00	90.12	359.90	7111.63	4502.92	4319.05	-1532.35	40.0565609	-104.5811651	0.00

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11816.00	90.12	359.90	7111.42	4601.76	4419.04	-1532.52	40.0568354	-104.5811657	0.00
11916.00	90.12	359.90	7111.21	4700.61	4519.04	-1532.68	40.0571099	-104.5811664	0.00
12016.00	90.12	359.90	7111.01	4799.45	4619.04	-1532.85	40.0573845	-104.5811670	0.00
12116.00	90.12	359.90	7110.80	4898.29	4719.04	-1533.02	40.0576590	-104.5811676	0.00
12216.00	90.12	359.90	7110.59	4997.14	4819.04	-1533.19	40.0579335	-104.5811682	0.00
12316.00	90.12	359.90	7110.38	5095.98	4919.04	-1533.36	40.0582080	-104.5811688	0.00
12416.00	90.12	359.90	7110.18	5194.82	5019.04	-1533.52	40.0584825	-104.5811695	0.00
12516.00	90.12	359.90	7109.97	5293.67	5119.04	-1533.69	40.0587570	-104.5811701	0.00
12616.00	90.12	359.90	7109.76	5392.51	5219.04	-1533.86	40.0590315	-104.5811707	0.00
12716.00	90.12	359.90	7109.56	5491.35	5319.04	-1534.03	40.0593060	-104.5811713	0.00
12816.00	90.12	359.90	7109.35	5590.19	5419.04	-1534.19	40.0595805	-104.5811719	0.00
12916.00	90.12	359.90	7109.14	5689.04	5519.04	-1534.36	40.0598550	-104.5811726	0.00
13016.00	90.12	359.90	7108.94	5787.88	5619.04	-1534.53	40.0601295	-104.5811732	0.00
13116.00	90.12	359.90	7108.73	5886.72	5719.04	-1534.70	40.0604040	-104.5811738	0.00
13216.00	90.12	359.90	7108.52	5985.57	5819.04	-1534.86	40.0606785	-104.5811744	0.00
13316.00	90.12	359.90	7108.31	6084.41	5919.04	-1535.03	40.0609530	-104.5811751	0.00
13416.00	90.12	359.90	7108.11	6183.25	6019.04	-1535.20	40.0612275	-104.5811757	0.00
13516.00	90.12	359.90	7107.90	6282.09	6119.04	-1535.37	40.0615020	-104.5811763	0.00
13616.00	90.12	359.90	7107.69	6380.94	6219.04	-1535.53	40.0617765	-104.5811769	0.00
13716.00	90.12	359.90	7107.49	6479.78	6319.04	-1535.70	40.0620510	-104.5811775	0.00
13816.00	90.12	359.90	7107.28	6578.62	6419.04	-1535.87	40.0623255	-104.5811782	0.00
13916.00	90.12	359.90	7107.07	6677.47	6519.04	-1536.04	40.0626001	-104.5811788	0.00
14016.00	90.12	359.90	7106.87	6776.31	6619.04	-1536.20	40.0628746	-104.5811794	0.00
14116.00	90.12	359.90	7106.66	6875.15	6719.04	-1536.37	40.0631491	-104.5811800	0.00
14216.00	90.12	359.90	7106.45	6974.00	6819.04	-1536.54	40.0634236	-104.5811806	0.00
14316.00	90.12	359.90	7106.25	7072.84	6919.04	-1536.71	40.0636981	-104.5811813	0.00
14416.00	90.12	359.90	7106.04	7171.68	7019.04	-1536.88	40.0639726	-104.5811819	0.00
14516.00	90.12	359.90	7105.83	7270.52	7119.04	-1537.04	40.0642471	-104.5811825	0.00
14616.00	90.12	359.90	7105.62	7369.37	7219.03	-1537.21	40.0645216	-104.5811831	0.00
14716.00	90.12	359.90	7105.42	7468.21	7319.03	-1537.38	40.0647961	-104.5811837	0.00
14816.00	90.12	359.90	7105.21	7567.05	7419.03	-1537.55	40.0650706	-104.5811844	0.00
14916.00	90.12	359.90	7105.00	7665.90	7519.03	-1537.71	40.0653451	-104.5811850	0.00
15016.00	90.12	359.90	7104.80	7764.74	7619.03	-1537.88	40.0656196	-104.5811856	0.00
15116.00	90.12	359.90	7104.59	7863.58	7719.03	-1538.05	40.0658941	-104.5811862	0.00
15216.00	90.12	359.90	7104.38	7962.43	7819.03	-1538.22	40.0661686	-104.5811868	0.00
15316.00	90.12	359.90	7104.18	8061.27	7919.03	-1538.38	40.0664431	-104.5811875	0.00
15416.00	90.12	359.90	7103.97	8160.11	8019.03	-1538.55	40.0667176	-104.5811881	0.00
15516.00	90.12	359.90	7103.76	8258.95	8119.03	-1538.72	40.0669921	-104.5811887	0.00
15616.00	90.12	359.90	7103.55	8357.80	8219.03	-1538.89	40.0672666	-104.5811893	0.00
15716.00	90.12	359.90	7103.35	8456.64	8319.03	-1539.05	40.0675411	-104.5811900	0.00
15816.00	90.12	359.90	7103.14	8555.48	8419.03	-1539.22	40.0678157	-104.5811906	0.00
15916.00	90.12	359.90	7102.93	8654.33	8519.03	-1539.39	40.0680902	-104.5811912	0.00
16016.00	90.12	359.90	7102.73	8753.17	8619.03	-1539.56	40.0683647	-104.5811918	0.00
16116.00	90.12	359.90	7102.52	8852.01	8719.03	-1539.72	40.0686392	-104.5811924	0.00

			VERDAD_WARNER_01N-64W-17-2H__REV-B.0__PWP__NIO__05-24-17.las						
16216.00	90.12	359.90	7102.31	8950.85	8819.03	-1539.89	40.0689137	-104.5811931	0.00
16316.00	90.12	359.90	7102.11	9049.70	8919.03	-1540.06	40.0691882	-104.5811937	0.00
16416.00	90.12	359.90	7101.90	9148.54	9019.03	-1540.23	40.0694627	-104.5811943	0.00
16516.00	90.12	359.90	7101.69	9247.38	9119.03	-1540.40	40.0697372	-104.5811949	0.00
16616.00	90.12	359.90	7101.49	9346.23	9219.03	-1540.56	40.0700117	-104.5811955	0.00
16716.00	90.12	359.90	7101.28	9445.07	9319.03	-1540.73	40.0702862	-104.5811962	0.00
16816.00	90.12	359.90	7101.07	9543.91	9419.03	-1540.90	40.0705607	-104.5811968	0.00
16916.00	90.12	359.90	7100.86	9642.76	9519.03	-1541.07	40.0708352	-104.5811974	0.00
17016.00	90.12	359.90	7100.66	9741.60	9619.03	-1541.23	40.0711097	-104.5811980	0.00
17116.00	90.12	359.90	7100.45	9840.44	9719.03	-1541.40	40.0713842	-104.5811986	0.00
17216.00	90.12	359.90	7100.24	9939.28	9819.03	-1541.57	40.0716587	-104.5811993	0.00
17316.00	90.12	359.90	7100.04	10038.13	9919.03	-1541.74	40.0719332	-104.5811999	0.00
17333.77	90.12	359.90	7100.00	10055.69	9936.79	-1541.77	40.0719820	-104.5812000	0.00