

# VERDAD OIL & GAS CORPORATION

Location: COLORADO Slot: SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)  
Field: WELD COUNTY (NAD83/TN) Well: BRNAK 01N-64W-10-3H  
Facility: SEC.10-T1N-R64W Wellbore: BRNAK 01N-64W-10-3H PWB

## Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.10-T1N-R64W			3268153.230	1270722.362	40°04'21.166"N	104°32'30.469"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)	0.04	20.15	3268173.378	1270722.620	40°04'21.166"N	104°32'30.210"W
RIG (GL5104' + RKB:25') (RKB) to Mud line (At Slot: SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10))						5129ft
Mean Sea Level to Mud line (At Slot: SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10))						0ft
RIG (GL5104' + RKB:25') (RKB) to Mean Sea Level						5129ft

## 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
17439.88	90.096	150.408	7244.00	-10002.72	-283.87	3267997.63	1260717.82	40°02'42.317"N	104°32'33.860"W

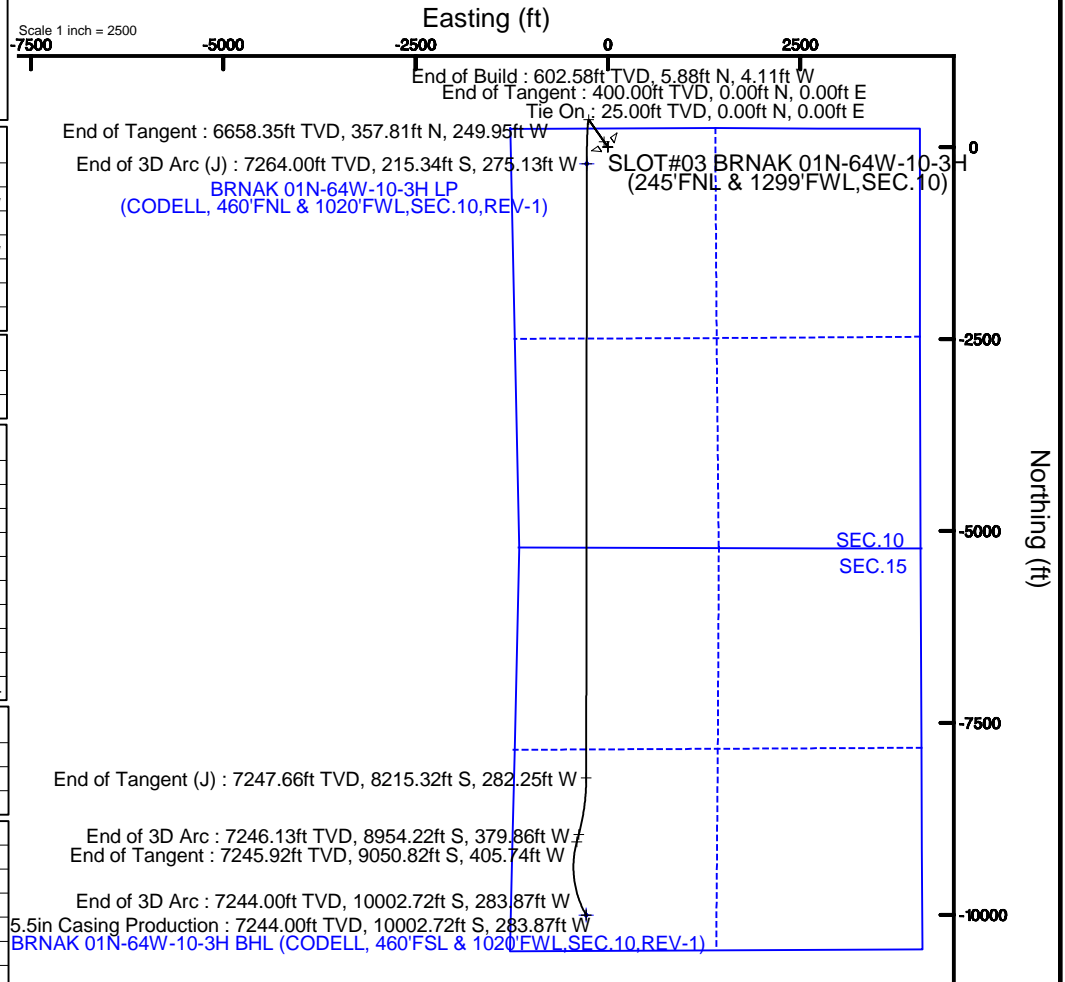
## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	25.00	0.000	325.064	25.00	0.00	0.00	0.00	0.00
End of Tangent	400.00	0.000	325.064	400.00	0.00	0.00	0.00	0.00
End of Build	602.74	4.055	325.064	602.58	5.88	-4.11	2.00	-5.76
End of Tangent	6673.72	4.055	325.064	6658.35	357.81	-249.95	0.00	-350.57
End of 3D Arc (J)	7608.10	90.117	180.051	7264.00	-215.34	-275.13	10.00	223.05
End of Tangent (J)	15608.10	90.117	180.051	7247.66	-8215.32	-282.25	0.00	8220.02
End of 3D Arc	16355.55	90.117	195.000	7246.13	-8954.22	-379.86	2.00	8961.40
End of Tangent	16455.55	90.117	195.000	7245.92	-9050.82	-405.74	0.00	9058.68
End of 3D Arc	17439.88	90.096	150.408	7244.00	-10002.72	-283.87	4.53	10006.74

## Survey Program

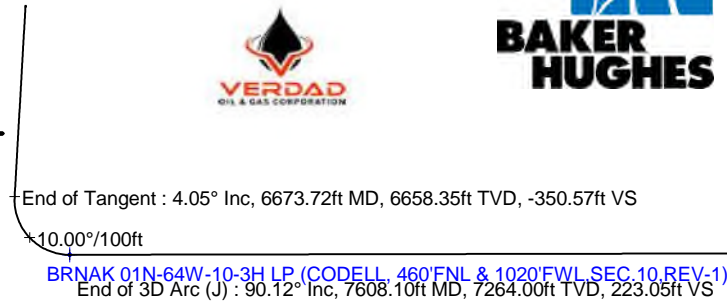
Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
25.00	1700.00	BHI NavTrak	Custom BHI NavTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		BRNAK 01N-64W-10-3H PWB
1700.00	17439.88	BHI AutoTrak Curve	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		BRNAK 01N-64W-10-3H PWB

Plot reference wellpath is BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
True vertical depths are referenced to RIG (GL5104' + RKB:25') (RKB)	* = Wellpath was transformed from a different geodetic datum
Measured depths are referenced to RIG (GL5104' + RKB:25') (RKB)	North Reference: True north
RIG (GL5104' + RKB:25') (RKB) to Mean Sea Level: 5129 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cookdanm on 2017-04-17
	Database: WA_Denver



True Vertical Depth (ft)  
Scale 1 inch = 2000

6000  
8000

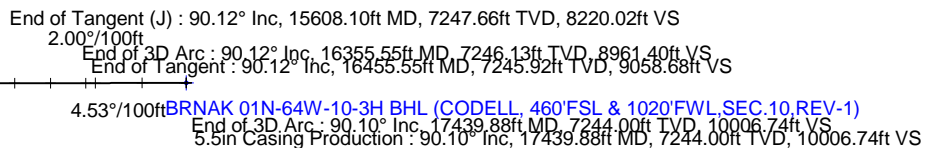


Vertical Section (ft)  
Azimuth 181.63° with reference 0.00 N, 0.00 E



BGGM (1900.0 to 2018.0) Dip: 66.67° Field: 52272.8 nT  
Magnetic North is 8.25 degrees East of True North (at 12-Apr-17)

To correct azimuth from Magnetic to True add 8.25 degrees



Scale 1 inch = 2000



# Planned Wellpath Report

BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP  
Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION			
Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)
Area	COLORADO	Well	BRNAK 01N-64W-10-3H
Field	WELD COUNTY (NAD83/TN)	Wellbore	BRNAK 01N-64W-10-3H PWB
Facility	SEC.10-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	0.999962	Report Generated	17-Apr-17 at 12:27:27 PM
Convergence at slot	0.62° East	Database/Source file	WA_Denver/BRNAK_01N-64W-10-3H_CODELL_REV-B.0_PWP.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.04	20.15	3268173.38	1270722.62	40°04'21.166"N	104°32'30.210"W
Facility Reference Pt			3268153.23	1270722.36	40°04'21.166"N	104°32'30.469"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 (GL:5104' + RKB:25') (RKB) to Facility Vertical Datum	5129.00ft
Horizontal Reference Pt	Slot	RIG (GL:5104' + RKB:25') (RKB) to Mean Sea Level	5129.00ft
Vertical Reference Pt	RIG (GL:5104' + RKB:25') (RKB)	RIG (GL:5104' + RKB:25') (RKB) to Mud Line at Slot (SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10))	5129.00ft
MD Reference Pt	RIG (GL:5104' + RKB:25') (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	181.63°



# Planned Wellpath Report

BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

Page 2 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)
Area	COLORADO	Well	BRNAK 01N-64W-10-3H
Field	WELD COUNTY (NAD83/TN)	Wellbore	BRNAK 01N-64W-10-3H PWB
Facility	SEC.10-T1N-R64W		

## WELLPATH DATA (184 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	325.064	0.00	0.00	0.00	0.00	40°04'21.166"N	104°32'30.210"W	0.00	
25.00	0.000	325.064	25.00	0.00	0.00	0.00	40°04'21.166"N	104°32'30.210"W	0.00	Tie On
125.00†	0.000	325.064	125.00	0.00	0.00	0.00	40°04'21.166"N	104°32'30.210"W	0.00	
225.00†	0.000	325.064	225.00	0.00	0.00	0.00	40°04'21.166"N	104°32'30.210"W	0.00	
325.00†	0.000	325.064	325.00	0.00	0.00	0.00	40°04'21.166"N	104°32'30.210"W	0.00	
400.00	0.000	325.064	400.00	0.00	0.00	0.00	40°04'21.166"N	104°32'30.210"W	0.00	End of Tangent
425.00†	0.500	325.064	425.00	-0.09	0.09	-0.06	40°04'21.167"N	104°32'30.211"W	2.00	
525.00†	2.500	325.064	524.96	-2.19	2.24	-1.56	40°04'21.188"N	104°32'30.230"W	2.00	
602.74	4.055	325.064	602.58	-5.76	5.88	-4.11	40°04'21.224"N	104°32'30.263"W	2.00	End of Build
625.00†	4.055	325.064	624.78	-7.02	7.17	-5.01	40°04'21.237"N	104°32'30.274"W	0.00	
725.00†	4.055	325.064	724.52	-12.70	12.97	-9.06	40°04'21.294"N	104°32'30.327"W	0.00	
825.00†	4.055	325.064	824.27	-18.38	18.76	-13.11	40°04'21.351"N	104°32'30.379"W	0.00	
925.00†	4.055	325.064	924.02	-24.06	24.56	-17.16	40°04'21.409"N	104°32'30.431"W	0.00	
1025.00†	4.055	325.064	1023.77	-29.74	30.36	-21.21	40°04'21.466"N	104°32'30.483"W	0.00	
1125.00†	4.055	325.064	1123.52	-35.42	36.15	-25.26	40°04'21.523"N	104°32'30.535"W	0.00	
1225.00†	4.055	325.064	1223.27	-41.10	41.95	-29.30	40°04'21.581"N	104°32'30.587"W	0.00	
1325.00†	4.055	325.064	1323.02	-46.78	47.75	-33.35	40°04'21.638"N	104°32'30.639"W	0.00	
1425.00†	4.055	325.064	1422.77	-52.46	53.54	-37.40	40°04'21.695"N	104°32'30.691"W	0.00	
1525.00†	4.055	325.064	1522.52	-58.14	59.34	-41.45	40°04'21.752"N	104°32'30.743"W	0.00	
1625.00†	4.055	325.064	1622.27	-63.82	65.14	-45.50	40°04'21.810"N	104°32'30.795"W	0.00	
1725.00†	4.055	325.064	1722.02	-69.50	70.93	-49.55	40°04'21.867"N	104°32'30.847"W	0.00	
1825.00†	4.055	325.064	1821.77	-75.18	76.73	-53.60	40°04'21.924"N	104°32'30.899"W	0.00	
1925.00†	4.055	325.064	1921.52	-80.86	82.53	-57.65	40°04'21.982"N	104°32'30.952"W	0.00	
2025.00†	4.055	325.064	2021.27	-86.54	88.33	-61.70	40°04'22.039"N	104°32'31.004"W	0.00	
2125.00†	4.055	325.064	2121.02	-92.22	94.12	-65.75	40°04'22.096"N	104°32'31.056"W	0.00	
2225.00†	4.055	325.064	2220.77	-97.90	99.92	-69.80	40°04'22.153"N	104°32'31.108"W	0.00	
2325.00†	4.055	325.064	2320.52	-103.58	105.72	-73.85	40°04'22.211"N	104°32'31.160"W	0.00	
2425.00†	4.055	325.064	2420.27	-109.26	111.51	-77.90	40°04'22.268"N	104°32'31.212"W	0.00	
2525.00†	4.055	325.064	2520.02	-114.94	117.31	-81.95	40°04'22.325"N	104°32'31.264"W	0.00	
2625.00†	4.055	325.064	2619.77	-120.62	123.11	-86.00	40°04'22.383"N	104°32'31.316"W	0.00	
2725.00†	4.055	325.064	2719.52	-126.30	128.90	-90.05	40°04'22.440"N	104°32'31.368"W	0.00	
2825.00†	4.055	325.064	2819.27	-131.98	134.70	-94.10	40°04'22.497"N	104°32'31.420"W	0.00	
2925.00†	4.055	325.064	2919.02	-137.66	140.50	-98.15	40°04'22.554"N	104°32'31.472"W	0.00	
3025.00†	4.055	325.064	3018.77	-143.34	146.29	-102.19	40°04'22.612"N	104°32'31.525"W	0.00	
3125.00†	4.055	325.064	3118.52	-149.02	152.09	-106.24	40°04'22.669"N	104°32'31.577"W	0.00	
3225.00†	4.055	325.064	3218.27	-154.70	157.89	-110.29	40°04'22.726"N	104°32'31.629"W	0.00	
3325.00†	4.055	325.064	3318.02	-160.38	163.69	-114.34	40°04'22.784"N	104°32'31.681"W	0.00	
3425.00†	4.055	325.064	3417.77	-166.06	169.48	-118.39	40°04'22.841"N	104°32'31.733"W	0.00	
3525.00†	4.055	325.064	3517.52	-171.74	175.28	-122.44	40°04'22.898"N	104°32'31.785"W	0.00	
3625.00†	4.055	325.064	3617.27	-177.41	181.08	-126.49	40°04'22.955"N	104°32'31.837"W	0.00	
3725.00†	4.055	325.064	3717.02	-183.09	186.87	-130.54	40°04'23.013"N	104°32'31.889"W	0.00	
3825.00†	4.055	325.064	3816.76	-188.77	192.67	-134.59	40°04'23.070"N	104°32'31.941"W	0.00	
3925.00†	4.055	325.064	3916.51	-194.45	198.47	-138.64	40°04'23.127"N	104°32'31.993"W	0.00	
4025.00†	4.055	325.064	4016.26	-200.13	204.26	-142.69	40°04'23.185"N	104°32'32.045"W	0.00	
4125.00†	4.055	325.064	4116.01	-205.81	210.06	-146.74	40°04'23.242"N	104°32'32.098"W	0.00	



# Planned Wellpath Report

BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

Page 3 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)
Area	COLORADO	Well	BRNAK 01N-64W-10-3H
Field	WELD COUNTY (NAD83/TN)	Wellbore	BRNAK 01N-64W-10-3H PWB
Facility	SEC.10-T1N-R64W		

## WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4225.00†	4.055	325.064	4215.76	-211.49	215.86	-150.79	40°04'23.299"N	104°32'32.150"W	0.00	
4325.00†	4.055	325.064	4315.51	-217.17	221.65	-154.84	40°04'23.356"N	104°32'32.202"W	0.00	
4425.00†	4.055	325.064	4415.26	-222.85	227.45	-158.89	40°04'23.414"N	104°32'32.254"W	0.00	
4525.00†	4.055	325.064	4515.01	-228.53	233.25	-162.94	40°04'23.471"N	104°32'32.306"W	0.00	
4625.00†	4.055	325.064	4614.76	-234.21	239.05	-166.99	40°04'23.528"N	104°32'32.358"W	0.00	
4725.00†	4.055	325.064	4714.51	-239.89	244.84	-171.04	40°04'23.586"N	104°32'32.410"W	0.00	
4825.00†	4.055	325.064	4814.26	-245.57	250.64	-175.09	40°04'23.643"N	104°32'32.462"W	0.00	
4925.00†	4.055	325.064	4914.01	-251.25	256.44	-179.13	40°04'23.700"N	104°32'32.514"W	0.00	
5025.00†	4.055	325.064	5013.76	-256.93	262.23	-183.18	40°04'23.757"N	104°32'32.566"W	0.00	
5125.00†	4.055	325.064	5113.51	-262.61	268.03	-187.23	40°04'23.815"N	104°32'32.618"W	0.00	
5225.00†	4.055	325.064	5213.26	-268.29	273.83	-191.28	40°04'23.872"N	104°32'32.671"W	0.00	
5325.00†	4.055	325.064	5313.01	-273.97	279.62	-195.33	40°04'23.929"N	104°32'32.723"W	0.00	
5425.00†	4.055	325.064	5412.76	-279.65	285.42	-199.38	40°04'23.987"N	104°32'32.775"W	0.00	
5525.00†	4.055	325.064	5512.51	-285.33	291.22	-203.43	40°04'24.044"N	104°32'32.827"W	0.00	
5625.00†	4.055	325.064	5612.26	-291.01	297.01	-207.48	40°04'24.101"N	104°32'32.879"W	0.00	
5725.00†	4.055	325.064	5712.01	-296.69	302.81	-211.53	40°04'24.158"N	104°32'32.931"W	0.00	
5825.00†	4.055	325.064	5811.76	-302.37	308.61	-215.58	40°04'24.216"N	104°32'32.983"W	0.00	
5925.00†	4.055	325.064	5911.51	-308.05	314.40	-219.63	40°04'24.273"N	104°32'33.035"W	0.00	
6025.00†	4.055	325.064	6011.26	-313.73	320.20	-223.68	40°04'24.330"N	104°32'33.087"W	0.00	
6125.00†	4.055	325.064	6111.01	-319.41	326.00	-227.73	40°04'24.388"N	104°32'33.139"W	0.00	
6225.00†	4.055	325.064	6210.76	-325.09	331.80	-231.78	40°04'24.445"N	104°32'33.191"W	0.00	
6325.00†	4.055	325.064	6310.51	-330.77	337.59	-235.83	40°04'24.502"N	104°32'33.244"W	0.00	
6425.00†	4.055	325.064	6410.26	-336.45	343.39	-239.88	40°04'24.559"N	104°32'33.296"W	0.00	
6525.00†	4.055	325.064	6510.01	-342.13	349.19	-243.93	40°04'24.617"N	104°32'33.348"W	0.00	
6625.00†	4.055	325.064	6609.76	-347.81	354.98	-247.98	40°04'24.674"N	104°32'33.400"W	0.00	
6673.72	4.055	325.064	6658.35	-350.57	357.81	-249.95	40°04'24.702"N	104°32'33.425"W	0.00	End of Tangent
6725.00†	2.947	232.217	6709.57	-351.19	358.49	-252.03	40°04'24.709"N	104°32'33.452"W	10.00	
6825.00†	12.031	191.052	6808.66	-339.25	346.65	-256.07	40°04'24.592"N	104°32'33.504"W	10.00	
6925.00†	21.925	185.852	6904.19	-310.28	317.78	-259.98	40°04'24.306"N	104°32'33.554"W	10.00	
7025.00†	31.883	183.803	6993.25	-265.15	272.74	-263.65	40°04'23.861"N	104°32'33.601"W	10.00	
7125.00†	41.860	182.656	7073.15	-205.25	212.91	-266.95	40°04'23.270"N	104°32'33.644"W	10.00	
7225.00†	51.844	181.886	7141.45	-132.39	140.10	-269.80	40°04'22.550"N	104°32'33.681"W	10.00	
7325.00†	61.832	181.303	7196.08	-48.78	56.52	-272.10	40°04'21.725"N	104°32'33.710"W	10.00	
7425.00†	71.823	180.821	7235.38	43.03	-35.28	-273.79	40°04'20.817"N	104°32'33.732"W	10.00	
7525.00†	81.814	180.391	7258.16	140.26	-132.51	-274.81	40°04'19.856"N	104°32'33.745"W	10.00	
7608.10	90.117	180.051	7264.00†	223.05	-215.34	-275.13	40°04'19.038"N	104°32'33.749"W	10.00	End of 3D Arc (J)
7625.00†	90.117	180.051	7263.97	239.95	-232.24	-275.14	40°04'18.871"N	104°32'33.749"W	0.00	
7725.00†	90.117	180.051	7263.76	339.91	-332.24	-275.23	40°04'17.883"N	104°32'33.750"W	0.00	
7825.00†	90.117	180.051	7263.56	439.87	-432.24	-275.32	40°04'16.895"N	104°32'33.751"W	0.00	
7925.00†	90.117	180.051	7263.35	539.83	-532.23	-275.41	40°04'15.906"N	104°32'33.753"W	0.00	
8025.00†	90.117	180.051	7263.15	639.80	-632.23	-275.50	40°04'14.918"N	104°32'33.754"W	0.00	
8125.00†	90.117	180.051	7262.94	739.76	-732.23	-275.59	40°04'13.930"N	104°32'33.755"W	0.00	
8225.00†	90.117	180.051	7262.74	839.72	-832.23	-275.68	40°04'12.942"N	104°32'33.756"W	0.00	
8325.00†	90.117	180.051	7262.54	939.68	-932.23	-275.77	40°04'11.953"N	104°32'33.757"W	0.00	
8425.00†	90.117	180.051	7262.33	1039.64	-1032.23	-275.85	40°04'10.965"N	104°32'33.758"W	0.00	



# Planned Wellpath Report

BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

Page 4 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)
Area	COLORADO	Well	BRNAK 01N-64W-10-3H
Field	WELD COUNTY (NAD83/TN)	Wellbore	BRNAK 01N-64W-10-3H PWB
Facility	SEC.10-T1N-R64W		

## WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8525.00†	90.117	180.051	7262.13	1139.61	-1132.23	-275.94	40°04'09.977"N	104°32'33.759"W	0.00	
8625.00†	90.117	180.051	7261.92	1239.57	-1232.23	-276.03	40°04'08.989"N	104°32'33.760"W	0.00	
8725.00†	90.117	180.051	7261.72	1339.53	-1332.23	-276.12	40°04'08.001"N	104°32'33.762"W	0.00	
8825.00†	90.117	180.051	7261.52	1439.49	-1432.23	-276.21	40°04'07.012"N	104°32'33.763"W	0.00	
8925.00†	90.117	180.051	7261.31	1539.45	-1532.23	-276.30	40°04'06.024"N	104°32'33.764"W	0.00	
9025.00†	90.117	180.051	7261.11	1639.42	-1632.23	-276.39	40°04'05.036"N	104°32'33.765"W	0.00	
9125.00†	90.117	180.051	7260.90	1739.38	-1732.23	-276.48	40°04'04.048"N	104°32'33.766"W	0.00	
9225.00†	90.117	180.051	7260.70	1839.34	-1832.23	-276.57	40°04'03.060"N	104°32'33.767"W	0.00	
9325.00†	90.117	180.051	7260.49	1939.30	-1932.23	-276.66	40°04'02.071"N	104°32'33.768"W	0.00	
9425.00†	90.117	180.051	7260.29	2039.26	-2032.23	-276.74	40°04'01.083"N	104°32'33.770"W	0.00	
9525.00†	90.117	180.051	7260.09	2139.23	-2132.23	-276.83	40°04'00.095"N	104°32'33.771"W	0.00	
9625.00†	90.117	180.051	7259.88	2239.19	-2232.23	-276.92	40°03'59.107"N	104°32'33.772"W	0.00	
9725.00†	90.117	180.051	7259.68	2339.15	-2332.23	-277.01	40°03'58.118"N	104°32'33.773"W	0.00	
9825.00†	90.117	180.051	7259.47	2439.11	-2432.23	-277.10	40°03'57.130"N	104°32'33.774"W	0.00	
9925.00†	90.117	180.051	7259.27	2539.07	-2532.23	-277.19	40°03'56.142"N	104°32'33.775"W	0.00	
10025.00†	90.117	180.051	7259.06	2639.04	-2632.23	-277.28	40°03'55.154"N	104°32'33.776"W	0.00	
10125.00†	90.117	180.051	7258.86	2739.00	-2732.23	-277.37	40°03'54.166"N	104°32'33.777"W	0.00	
10225.00†	90.117	180.051	7258.66	2838.96	-2832.23	-277.46	40°03'53.177"N	104°32'33.779"W	0.00	
10325.00†	90.117	180.051	7258.45	2938.92	-2932.23	-277.55	40°03'52.189"N	104°32'33.780"W	0.00	
10425.00†	90.117	180.051	7258.25	3038.88	-3032.23	-277.63	40°03'51.201"N	104°32'33.781"W	0.00	
10525.00†	90.117	180.051	7258.04	3138.85	-3132.23	-277.72	40°03'50.213"N	104°32'33.782"W	0.00	
10625.00†	90.117	180.051	7257.84	3238.81	-3232.23	-277.81	40°03'49.224"N	104°32'33.783"W	0.00	
10725.00†	90.117	180.051	7257.64	3338.77	-3332.23	-277.90	40°03'48.236"N	104°32'33.784"W	0.00	
10825.00†	90.117	180.051	7257.43	3438.73	-3432.23	-277.99	40°03'47.248"N	104°32'33.785"W	0.00	
10925.00†	90.117	180.051	7257.23	3538.69	-3532.23	-278.08	40°03'46.260"N	104°32'33.786"W	0.00	
11025.00†	90.117	180.051	7257.02	3638.66	-3632.23	-278.17	40°03'45.272"N	104°32'33.788"W	0.00	
11125.00†	90.117	180.051	7256.82	3738.62	-3732.23	-278.26	40°03'44.283"N	104°32'33.789"W	0.00	
11225.00†	90.117	180.051	7256.61	3838.58	-3832.23	-278.35	40°03'43.295"N	104°32'33.790"W	0.00	
11325.00†	90.117	180.051	7256.41	3938.54	-3932.23	-278.44	40°03'42.307"N	104°32'33.791"W	0.00	
11425.00†	90.117	180.051	7256.21	4038.50	-4032.23	-278.52	40°03'41.319"N	104°32'33.792"W	0.00	
11525.00†	90.117	180.051	7256.00	4138.47	-4132.23	-278.61	40°03'40.330"N	104°32'33.793"W	0.00	
11625.00†	90.117	180.051	7255.80	4238.43	-4232.23	-278.70	40°03'39.342"N	104°32'33.794"W	0.00	
11725.00†	90.117	180.051	7255.59	4338.39	-4332.23	-278.79	40°03'38.354"N	104°32'33.796"W	0.00	
11825.00†	90.117	180.051	7255.39	4438.35	-4432.23	-278.88	40°03'37.366"N	104°32'33.797"W	0.00	
11925.00†	90.117	180.051	7255.18	4538.31	-4532.22	-278.97	40°03'36.378"N	104°32'33.798"W	0.00	
12025.00†	90.117	180.051	7254.98	4638.28	-4632.22	-279.06	40°03'35.389"N	104°32'33.799"W	0.00	
12125.00†	90.117	180.051	7254.78	4738.24	-4732.22	-279.15	40°03'34.401"N	104°32'33.800"W	0.00	
12225.00†	90.117	180.051	7254.57	4838.20	-4832.22	-279.24	40°03'33.413"N	104°32'33.801"W	0.00	
12325.00†	90.117	180.051	7254.37	4938.16	-4932.22	-279.33	40°03'32.425"N	104°32'33.802"W	0.00	
12425.00†	90.117	180.051	7254.16	5038.12	-5032.22	-279.41	40°03'31.437"N	104°32'33.803"W	0.00	
12525.00†	90.117	180.051	7253.96	5138.09	-5132.22	-279.50	40°03'30.448"N	104°32'33.805"W	0.00	
12625.00†	90.117	180.051	7253.76	5238.05	-5232.22	-279.59	40°03'29.460"N	104°32'33.806"W	0.00	
12725.00†	90.117	180.051	7253.55	5338.01	-5332.22	-279.68	40°03'28.472"N	104°32'33.807"W	0.00	
12825.00†	90.117	180.051	7253.35	5437.97	-5432.22	-279.77	40°03'27.484"N	104°32'33.808"W	0.00	
12925.00†	90.117	180.051	7253.14	5537.94	-5532.22	-279.86	40°03'26.495"N	104°32'33.809"W	0.00	





# Planned Wellpath Report

BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

Page 5 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL, SEC.10)
Area	COLORADO	Well	BRNAK 01N-64W-10-3H
Field	WELD COUNTY (NAD83/TN)	Wellbore	BRNAK 01N-64W-10-3H PWB
Facility	SEC.10-T1N-R64W		

## WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
13025.00†	90.117	180.051	7252.94	5637.90	-5632.22	-279.95	40°03'25.507"N	104°32'33.810"W	0.00	
13125.00†	90.117	180.051	7252.73	5737.86	-5732.22	-280.04	40°03'24.519"N	104°32'33.811"W	0.00	
13225.00†	90.117	180.051	7252.53	5837.82	-5832.22	-280.13	40°03'23.531"N	104°32'33.812"W	0.00	
13325.00†	90.117	180.051	7252.33	5937.78	-5932.22	-280.22	40°03'22.543"N	104°32'33.814"W	0.00	
13425.00†	90.117	180.051	7252.12	6037.75	-6032.22	-280.30	40°03'21.554"N	104°32'33.815"W	0.00	
13525.00†	90.117	180.051	7251.92	6137.71	-6132.22	-280.39	40°03'20.566"N	104°32'33.816"W	0.00	
13625.00†	90.117	180.051	7251.71	6237.67	-6232.22	-280.48	40°03'19.578"N	104°32'33.817"W	0.00	
13725.00†	90.117	180.051	7251.51	6337.63	-6332.22	-280.57	40°03'18.590"N	104°32'33.818"W	0.00	
13825.00†	90.117	180.051	7251.30	6437.59	-6432.22	-280.66	40°03'17.601"N	104°32'33.819"W	0.00	
13925.00†	90.117	180.051	7251.10	6537.56	-6532.22	-280.75	40°03'16.613"N	104°32'33.820"W	0.00	
14025.00†	90.117	180.051	7250.90	6637.52	-6632.22	-280.84	40°03'15.625"N	104°32'33.822"W	0.00	
14125.00†	90.117	180.051	7250.69	6737.48	-6732.22	-280.93	40°03'14.637"N	104°32'33.823"W	0.00	
14225.00†	90.117	180.051	7250.49	6837.44	-6832.22	-281.02	40°03'13.649"N	104°32'33.824"W	0.00	
14325.00†	90.117	180.051	7250.28	6937.40	-6932.22	-281.11	40°03'12.660"N	104°32'33.825"W	0.00	
14425.00†	90.117	180.051	7250.08	7037.37	-7032.22	-281.19	40°03'11.672"N	104°32'33.826"W	0.00	
14525.00†	90.117	180.051	7249.88	7137.33	-7132.22	-281.28	40°03'10.684"N	104°32'33.827"W	0.00	
14625.00†	90.117	180.051	7249.67	7237.29	-7232.22	-281.37	40°03'09.696"N	104°32'33.828"W	0.00	
14725.00†	90.117	180.051	7249.47	7337.25	-7332.22	-281.46	40°03'08.707"N	104°32'33.829"W	0.00	
14825.00†	90.117	180.051	7249.26	7437.21	-7432.22	-281.55	40°03'07.719"N	104°32'33.831"W	0.00	
14925.00†	90.117	180.051	7249.06	7537.18	-7532.22	-281.64	40°03'06.731"N	104°32'33.832"W	0.00	
15025.00†	90.117	180.051	7248.85	7637.14	-7632.22	-281.73	40°03'05.743"N	104°32'33.833"W	0.00	
15125.00†	90.117	180.051	7248.65	7737.10	-7732.22	-281.82	40°03'04.755"N	104°32'33.834"W	0.00	
15225.00†	90.117	180.051	7248.45	7837.06	-7832.22	-281.91	40°03'03.766"N	104°32'33.835"W	0.00	
15325.00†	90.117	180.051	7248.24	7937.02	-7932.22	-282.00	40°03'02.778"N	104°32'33.836"W	0.00	
15425.00†	90.117	180.051	7248.04	8036.99	-8032.22	-282.09	40°03'01.790"N	104°32'33.837"W	0.00	
15525.00†	90.117	180.051	7247.83	8136.95	-8132.22	-282.17	40°03'00.802"N	104°32'33.838"W	0.00	
15608.10	90.117	180.051	7247.66	8220.02	-8215.32	-282.25	40°02'59.981"N	104°32'33.839"W	0.00	End of Tangent (J)
15625.00†	90.117	180.389	7247.63	8236.91	-8232.22	-282.31	40°02'59.813"N	104°32'33.840"W	2.00	
15725.00†	90.118	182.389	7247.42	8336.91	-8332.18	-284.74	40°02'58.826"N	104°32'33.871"W	2.00	
15825.00†	90.118	184.389	7247.22	8436.85	-8432.00	-290.65	40°02'57.839"N	104°32'33.947"W	2.00	
15925.00†	90.118	186.389	7247.01	8536.63	-8531.55	-300.04	40°02'56.855"N	104°32'34.068"W	2.00	
16025.00†	90.118	188.389	7246.81	8636.12	-8630.72	-312.90	40°02'55.875"N	104°32'34.234"W	2.00	
16125.00†	90.118	190.389	7246.60	8735.20	-8729.37	-329.21	40°02'54.900"N	104°32'34.443"W	2.00	
16225.00†	90.118	192.389	7246.40	8833.75	-8827.40	-348.96	40°02'53.932"N	104°32'34.697"W	2.00	
16325.00†	90.117	194.389	7246.19	8931.64	-8924.68	-372.11	40°02'52.970"N	104°32'34.995"W	2.00	
16355.55	90.117	195.000	7246.13	8961.40	-8954.22	-379.86	40°02'52.678"N	104°32'35.094"W	2.00	End of 3D Arc
16425.00†	90.117	195.000	7245.99	9028.96	-9021.31	-397.84	40°02'52.015"N	104°32'35.326"W	0.00	
16455.55	90.117	195.000	7245.92	9058.68	-9050.82	-405.74	40°02'51.724"N	104°32'35.427"W	0.00	End of Tangent
16525.00†	90.118	191.854	7245.78	9126.66	-9118.36	-421.87	40°02'51.056"N	104°32'35.635"W	4.53	
16625.00†	90.118	187.323	7245.58	9225.67	-9216.94	-438.52	40°02'50.082"N	104°32'35.849"W	4.53	
16725.00†	90.118	182.793	7245.37	9325.46	-9316.52	-447.34	40°02'49.098"N	104°32'35.962"W	4.53	
16825.00†	90.117	178.263	7245.16	9425.42	-9416.49	-448.26	40°02'48.110"N	104°32'35.974"W	4.53	
16925.00†	90.115	173.733	7244.96	9524.91	-9516.22	-441.28	40°02'47.125"N	104°32'35.884"W	4.53	
17025.00†	90.113	169.203	7244.76	9623.32	-9615.09	-426.45	40°02'46.148"N	104°32'35.693"W	4.53	
17125.00†	90.110	164.672	7244.57	9720.02	-9712.48	-403.85	40°02'45.185"N	104°32'35.403"W	4.53	



# Planned Wellpath Report

BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

Page 6 of 6



## REFERENCE WELLPATH IDENTIFICATION

Operator	VERDAD OIL & GAS CORPORATION	Slot	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)
Area	COLORADO	Well	BRNAK 01N-64W-10-3H
Field	WELD COUNTY (NAD83/TN)	Wellbore	BRNAK 01N-64W-10-3H PWB
Facility	SEC.10-T1N-R64W		

## WELLPATH DATA (184 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
17225.00†	90.106	160.142	7244.38	9814.43	-9807.77	-373.63	40°02'44.243"N	104°32'35.014"W	4.53	
17325.00†	90.102	155.612	7244.20	9905.93	-9900.39	-335.99	40°02'43.328"N	104°32'34.530"W	4.53	
17425.00†	90.096	151.082	7244.02	9993.98	-9989.74	-291.14	40°02'42.445"N	104°32'33.953"W	4.53	
17439.88	90.096	150.408	7244.00 <sup>2</sup>	10006.74	-10002.72	-283.87	40°02'42.317"N	104°32'33.860"W	4.53	End of 3D Arc

## HOLE & CASING SECTIONS

- Ref Wellbore: BRNAK 01N-64W-10-3H PWB      Ref Wellpath: BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

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	25.00	1700.00	1675.00	25.00	1697.08	0.00	0.00	69.49	-48.54
9.625in Casing Surface	25.00	1700.00	1675.00	25.00	1697.08	0.00	0.00	69.49	-48.54
8.5in Open Hole	1700.00	17439.88	15739.88	1697.08	7244.00	69.49	-48.54	-10002.72	-283.87
5.5in Casing Production	25.00	17439.88	17414.88	25.00	7244.00	0.00	0.00	-10002.72	-283.87

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
2) BRNAK 01N-64W-10-3H BHL (CODELL, 460'FSL & 1020'FWL,SEC.10,REV-1)	17439.88	7244.00	-10002.72	-283.87	3267997.63	1260717.82	40°02'42.317"N	104°32'33.860"W	point
1) BRNAK 01N-64W-10-3H LP (CODELL, 460'FNL & 1020'FWL,SEC.10,REV-1)	7608.10	7264.00	-215.34	-275.13	3267900.61	1270504.33	40°04'19.038"N	104°32'33.749"W	point

## SURVEY PROGRAM -

Ref Wellbore: BRNAK 01N-64W-10-3H PWB      Ref Wellpath: BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
25.00	1700.00	Custom BHI NaviTrak (Standard Rotating+Axial Corr) (Rockies 0.03Gt model)		BRNAK 01N-64W-10-3H PWB
1700.00	17439.88	Custom BHI AutoTrak Curve (Axial Corr, Short spacing) (Rockies 0.03Gt model)		BRNAK 01N-64W-10-3H 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	17439.88	:STOP MD
STEP	.ft	0.0	:STEP (non-uniform increment)
NULL	.	-999.99	:NULL
COMP	.	VERDAD OIL & GAS CORPORATION	:OPERATOR
WELL	.	BRNAK 01N-64W-10-3H	: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	.	04/12/2017	: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.10-T1N-R64W	:FACILITY
SLOT	.	SLOT#03 BRNAK 01N-64W-10-3H (245'FNL & 1299'FWL,SEC.10)	:SLOT
WELLBORE	.	BRNAK 01N-64W-10-3H PWB	:WELLBORE
WELLPATH	.	BRNAK 01N-64W-10-3H (CODELL, REV-B.0) PWP	:WELLPATH
MDREFPT	.	RIG (GL:5104' + RKB:25') (RKB)	:MD REFERENCE POINT
TVDREFPT	.	RIG (GL:5104' + RKB:25') (RKB)	:TVD REFERENCE POINT
LCLREFPT	.	SLOT	:LOCAL COORDINATE REFERENCE PT
VSAZIMUTH	.deg	181.63	: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\_BRNAK\_01N-64W-10-3H\_\_CODELL\_\_REV-B.0\_\_PWP\_04-17-17.1as

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

~ASCII DATA

0.00	0.00	325.06	0.00	0.00	0.00	0.00	40.0725461	-104.5417250	0.00
25.00	0.00	325.06	25.00	0.00	0.00	0.00	40.0725461	-104.5417250	0.00
125.00	0.00	325.06	125.00	0.00	0.00	0.00	40.0725461	-104.5417250	0.00
225.00	0.00	325.06	225.00	0.00	0.00	0.00	40.0725461	-104.5417250	0.00
325.00	0.00	325.06	325.00	0.00	0.00	0.00	40.0725461	-104.5417250	0.00
400.00	0.00	325.06	400.00	0.00	0.00	0.00	40.0725461	-104.5417250	0.00
425.00	0.50	325.06	425.00	-0.09	0.09	-0.06	40.0725464	-104.5417252	2.00
525.00	2.50	325.06	524.96	-2.19	2.24	-1.56	40.0725522	-104.5417306	2.00
602.74	4.06	325.06	602.58	-5.76	5.88	-4.11	40.0725622	-104.5417397	2.00
625.00	4.06	325.06	624.78	-7.02	7.17	-5.01	40.0725658	-104.5417429	0.00
725.00	4.06	325.06	724.52	-12.70	12.97	-9.06	40.0725817	-104.5417574	0.00
825.00	4.06	325.06	824.27	-18.38	18.76	-13.11	40.0725976	-104.5417718	0.00
925.00	4.06	325.06	924.02	-24.06	24.56	-17.16	40.0726135	-104.5417863	0.00
1025.00	4.06	325.06	1023.77	-29.74	30.36	-21.21	40.0726294	-104.5418008	0.00
1125.00	4.06	325.06	1123.52	-35.42	36.15	-25.26	40.0726454	-104.5418152	0.00
1225.00	4.06	325.06	1223.27	-41.10	41.95	-29.30	40.0726613	-104.5418297	0.00
1325.00	4.06	325.06	1323.02	-46.78	47.75	-33.35	40.0726772	-104.5418442	0.00
1425.00	4.06	325.06	1422.77	-52.46	53.54	-37.40	40.0726931	-104.5418586	0.00
1525.00	4.06	325.06	1522.52	-58.14	59.34	-41.45	40.0727090	-104.5418731	0.00
1625.00	4.06	325.06	1622.27	-63.82	65.14	-45.50	40.0727249	-104.5418876	0.00
1725.00	4.06	325.06	1722.02	-69.50	70.93	-49.55	40.0727408	-104.5419021	0.00
1825.00	4.06	325.06	1821.77	-75.18	76.73	-53.60	40.0727567	-104.5419165	0.00
1925.00	4.06	325.06	1921.52	-80.86	82.53	-57.65	40.0727727	-104.5419310	0.00
2025.00	4.06	325.06	2021.27	-86.54	88.33	-61.70	40.0727886	-104.5419455	0.00
2125.00	4.06	325.06	2121.02	-92.22	94.12	-65.75	40.0728045	-104.5419599	0.00
2225.00	4.06	325.06	2220.77	-97.90	99.92	-69.80	40.0728204	-104.5419744	0.00
2325.00	4.06	325.06	2320.52	-103.58	105.72	-73.85	40.0728363	-104.5419889	0.00
2425.00	4.06	325.06	2420.27	-109.26	111.51	-77.90	40.0728522	-104.5420033	0.00
2525.00	4.06	325.06	2520.02	-114.94	117.31	-81.95	40.0728681	-104.5420178	0.00
2625.00	4.06	325.06	2619.77	-120.62	123.11	-86.00	40.0728840	-104.5420323	0.00
2725.00	4.06	325.06	2719.52	-126.30	128.90	-90.05	40.0729000	-104.5420467	0.00
2825.00	4.06	325.06	2819.27	-131.98	134.70	-94.10	40.0729159	-104.5420612	0.00
2925.00	4.06	325.06	2919.02	-137.66	140.50	-98.15	40.0729318	-104.5420757	0.00
3025.00	4.06	325.06	3018.77	-143.34	146.29	-102.19	40.0729477	-104.5420902	0.00
3125.00	4.06	325.06	3118.52	-149.02	152.09	-106.24	40.0729636	-104.5421046	0.00
3225.00	4.06	325.06	3218.27	-154.70	157.89	-110.29	40.0729795	-104.5421191	0.00
3325.00	4.06	325.06	3318.02	-160.38	163.69	-114.34	40.0729954	-104.5421336	0.00
3425.00	4.06	325.06	3417.77	-166.06	169.48	-118.39	40.0730113	-104.5421480	0.00
3525.00	4.06	325.06	3517.52	-171.74	175.28	-122.44	40.0730273	-104.5421625	0.00
3625.00	4.06	325.06	3617.27	-177.41	181.08	-126.49	40.0730432	-104.5421770	0.00
3725.00	4.06	325.06	3717.02	-183.09	186.87	-130.54	40.0730591	-104.5421914	0.00
3825.00	4.06	325.06	3816.76	-188.77	192.67	-134.59	40.0730750	-104.5422059	0.00
3925.00	4.06	325.06	3916.51	-194.45	198.47	-138.64	40.0730909	-104.5422204	0.00

VERDAD_BRNAK_01N-64W-10-3H_CODELL_REV-B.0_PWP_04-17-17.1as									
4025.00	4.06	325.06	4016.26	-200.13	204.26	-142.69	40.0731068	-104.5422349	0.00
4125.00	4.06	325.06	4116.01	-205.81	210.06	-146.74	40.0731227	-104.5422493	0.00
4225.00	4.06	325.06	4215.76	-211.49	215.86	-150.79	40.0731387	-104.5422638	0.00
4325.00	4.06	325.06	4315.51	-217.17	221.65	-154.84	40.0731546	-104.5422783	0.00
4425.00	4.06	325.06	4415.26	-222.85	227.45	-158.89	40.0731705	-104.5422927	0.00
4525.00	4.06	325.06	4515.01	-228.53	233.25	-162.94	40.0731864	-104.5423072	0.00
4625.00	4.06	325.06	4614.76	-234.21	239.05	-166.99	40.0732023	-104.5423217	0.00
4725.00	4.06	325.06	4714.51	-239.89	244.84	-171.04	40.0732182	-104.5423361	0.00
4825.00	4.06	325.06	4814.26	-245.57	250.64	-175.09	40.0732341	-104.5423506	0.00
4925.00	4.06	325.06	4914.01	-251.25	256.44	-179.13	40.0732500	-104.5423651	0.00
5025.00	4.06	325.06	5013.76	-256.93	262.23	-183.18	40.0732660	-104.5423795	0.00
5125.00	4.06	325.06	5113.51	-262.61	268.03	-187.23	40.0732819	-104.5423940	0.00
5225.00	4.06	325.06	5213.26	-268.29	273.83	-191.28	40.0732978	-104.5424085	0.00
5325.00	4.06	325.06	5313.01	-273.97	279.62	-195.33	40.0733137	-104.5424230	0.00
5425.00	4.06	325.06	5412.76	-279.65	285.42	-199.38	40.0733296	-104.5424374	0.00
5525.00	4.06	325.06	5512.51	-285.33	291.22	-203.43	40.0733455	-104.5424519	0.00
5625.00	4.06	325.06	5612.26	-291.01	297.01	-207.48	40.0733614	-104.5424664	0.00
5725.00	4.06	325.06	5712.01	-296.69	302.81	-211.53	40.0733773	-104.5424808	0.00
5825.00	4.06	325.06	5811.76	-302.37	308.61	-215.58	40.0733933	-104.5424953	0.00
5925.00	4.06	325.06	5911.51	-308.05	314.40	-219.63	40.0734092	-104.5425098	0.00
6025.00	4.06	325.06	6011.26	-313.73	320.20	-223.68	40.0734251	-104.5425242	0.00
6125.00	4.06	325.06	6111.01	-319.41	326.00	-227.73	40.0734410	-104.5425387	0.00
6225.00	4.06	325.06	6210.76	-325.09	331.80	-231.78	40.0734569	-104.5425532	0.00
6325.00	4.06	325.06	6310.51	-330.77	337.59	-235.83	40.0734728	-104.5425677	0.00
6425.00	4.06	325.06	6410.26	-336.45	343.39	-239.88	40.0734887	-104.5425821	0.00
6525.00	4.06	325.06	6510.01	-342.13	349.19	-243.93	40.0735046	-104.5425966	0.00
6625.00	4.06	325.06	6609.76	-347.81	354.98	-247.98	40.0735206	-104.5426111	0.00
6673.72	4.06	325.06	6658.35	-350.57	357.81	-249.95	40.0735283	-104.5426181	0.00
6725.00	2.95	232.22	6709.57	-351.19	358.49	-252.03	40.0735302	-104.5426255	10.00
6825.00	12.03	191.05	6808.66	-339.25	346.65	-256.07	40.0734977	-104.5426400	10.00
6925.00	21.93	185.85	6904.19	-310.28	317.78	-259.98	40.0734184	-104.5426540	10.00
7025.00	31.88	183.80	6993.25	-265.15	272.74	-263.65	40.0732948	-104.5426670	10.00
7125.00	41.86	182.66	7073.15	-205.25	212.91	-266.95	40.0731305	-104.5426789	10.00
7225.00	51.84	181.89	7141.45	-132.39	140.10	-269.80	40.0729307	-104.5426890	10.00
7325.00	61.83	181.30	7196.08	-48.78	56.52	-272.10	40.0727013	-104.5426973	10.00
7425.00	71.82	180.82	7235.38	43.03	-35.28	-273.79	40.0724493	-104.5427033	10.00
7525.00	81.81	180.39	7258.16	140.26	-132.51	-274.81	40.0721823	-104.5427069	10.00
7608.10	90.12	180.05	7264.00	223.05	-215.34	-275.13	40.0719550	-104.5427081	10.00
7625.00	90.12	180.05	7263.97	239.95	-232.24	-275.14	40.0719086	-104.5427081	0.00
7725.00	90.12	180.05	7263.76	339.91	-332.24	-275.23	40.0716341	-104.5427084	0.00
7825.00	90.12	180.05	7263.56	439.87	-432.24	-275.32	40.0713596	-104.5427087	0.00
7925.00	90.12	180.05	7263.35	539.83	-532.23	-275.41	40.0710851	-104.5427091	0.00
8025.00	90.12	180.05	7263.15	639.80	-632.23	-275.50	40.0708106	-104.5427094	0.00
8125.00	90.12	180.05	7262.94	739.76	-732.23	-275.59	40.0705361	-104.5427097	0.00
8225.00	90.12	180.05	7262.74	839.72	-832.23	-275.68	40.0702616	-104.5427100	0.00
8325.00	90.12	180.05	7262.54	939.68	-932.23	-275.77	40.0699871	-104.5427103	0.00
8425.00	90.12	180.05	7262.33	1039.64	-1032.23	-275.85	40.0697126	-104.5427106	0.00
8525.00	90.12	180.05	7262.13	1139.61	-1132.23	-275.94	40.0694381	-104.5427109	0.00

VERDAD\_BRNAK\_01N-64W-10-3H\_CODELL\_REV-B.0\_PWP\_04-17-17.1as

8625.00	90.12	180.05	7261.92	1239.57	-1232.23	-276.03	40.0691636	-104.5427112	0.00
8725.00	90.12	180.05	7261.72	1339.53	-1332.23	-276.12	40.0688891	-104.5427116	0.00
8825.00	90.12	180.05	7261.52	1439.49	-1432.23	-276.21	40.0686145	-104.5427119	0.00
8925.00	90.12	180.05	7261.31	1539.45	-1532.23	-276.30	40.0683400	-104.5427122	0.00
9025.00	90.12	180.05	7261.11	1639.42	-1632.23	-276.39	40.0680655	-104.5427125	0.00
9125.00	90.12	180.05	7260.90	1739.38	-1732.23	-276.48	40.0677910	-104.5427128	0.00
9225.00	90.12	180.05	7260.70	1839.34	-1832.23	-276.57	40.0675165	-104.5427131	0.00
9325.00	90.12	180.05	7260.49	1939.30	-1932.23	-276.66	40.0672420	-104.5427134	0.00
9425.00	90.12	180.05	7260.29	2039.26	-2032.23	-276.74	40.0669675	-104.5427138	0.00
9525.00	90.12	180.05	7260.09	2139.23	-2132.23	-276.83	40.0666930	-104.5427141	0.00
9625.00	90.12	180.05	7259.88	2239.19	-2232.23	-276.92	40.0664185	-104.5427144	0.00
9725.00	90.12	180.05	7259.68	2339.15	-2332.23	-277.01	40.0661440	-104.5427147	0.00
9825.00	90.12	180.05	7259.47	2439.11	-2432.23	-277.10	40.0658695	-104.5427150	0.00
9925.00	90.12	180.05	7259.27	2539.07	-2532.23	-277.19	40.0655950	-104.5427153	0.00
10025.00	90.12	180.05	7259.06	2639.04	-2632.23	-277.28	40.0653205	-104.5427156	0.00
10125.00	90.12	180.05	7258.86	2739.00	-2732.23	-277.37	40.0650460	-104.5427160	0.00
10225.00	90.12	180.05	7258.66	2838.96	-2832.23	-277.46	40.0647715	-104.5427163	0.00
10325.00	90.12	180.05	7258.45	2938.92	-2932.23	-277.55	40.0644970	-104.5427166	0.00
10425.00	90.12	180.05	7258.25	3038.88	-3032.23	-277.63	40.0642225	-104.5427169	0.00
10525.00	90.12	180.05	7258.04	3138.85	-3132.23	-277.72	40.0639480	-104.5427172	0.00
10625.00	90.12	180.05	7257.84	3238.81	-3232.23	-277.81	40.0636735	-104.5427175	0.00
10725.00	90.12	180.05	7257.64	3338.77	-3332.23	-277.90	40.0633990	-104.5427178	0.00
10825.00	90.12	180.05	7257.43	3438.73	-3432.23	-277.99	40.0631244	-104.5427182	0.00
10925.00	90.12	180.05	7257.23	3538.69	-3532.23	-278.08	40.0628499	-104.5427185	0.00
11025.00	90.12	180.05	7257.02	3638.66	-3632.23	-278.17	40.0625754	-104.5427188	0.00
11125.00	90.12	180.05	7256.82	3738.62	-3732.23	-278.26	40.0623009	-104.5427191	0.00
11225.00	90.12	180.05	7256.61	3838.58	-3832.23	-278.35	40.0620264	-104.5427194	0.00
11325.00	90.12	180.05	7256.41	3938.54	-3932.23	-278.44	40.0617519	-104.5427197	0.00
11425.00	90.12	180.05	7256.21	4038.50	-4032.23	-278.52	40.0614774	-104.5427200	0.00
11525.00	90.12	180.05	7256.00	4138.47	-4132.23	-278.61	40.0612029	-104.5427204	0.00
11625.00	90.12	180.05	7255.80	4238.43	-4232.23	-278.70	40.0609284	-104.5427207	0.00
11725.00	90.12	180.05	7255.59	4338.39	-4332.23	-278.79	40.0606539	-104.5427210	0.00
11825.00	90.12	180.05	7255.39	4438.35	-4432.23	-278.88	40.0603794	-104.5427213	0.00
11925.00	90.12	180.05	7255.18	4538.31	-4532.22	-278.97	40.0601049	-104.5427216	0.00
12025.00	90.12	180.05	7254.98	4638.28	-4632.22	-279.06	40.0598304	-104.5427219	0.00
12125.00	90.12	180.05	7254.78	4738.24	-4732.22	-279.15	40.0595559	-104.5427222	0.00
12225.00	90.12	180.05	7254.57	4838.20	-4832.22	-279.24	40.0592814	-104.5427226	0.00
12325.00	90.12	180.05	7254.37	4938.16	-4932.22	-279.33	40.0590069	-104.5427229	0.00
12425.00	90.12	180.05	7254.16	5038.12	-5032.22	-279.41	40.0587324	-104.5427232	0.00
12525.00	90.12	180.05	7253.96	5138.09	-5132.22	-279.50	40.0584579	-104.5427235	0.00
12625.00	90.12	180.05	7253.76	5238.05	-5232.22	-279.59	40.0581834	-104.5427238	0.00
12725.00	90.12	180.05	7253.55	5338.01	-5332.22	-279.68	40.0579088	-104.5427241	0.00
12825.00	90.12	180.05	7253.35	5437.97	-5432.22	-279.77	40.0576343	-104.5427244	0.00
12925.00	90.12	180.05	7253.14	5537.94	-5532.22	-279.86	40.0573598	-104.5427248	0.00
13025.00	90.12	180.05	7252.94	5637.90	-5632.22	-279.95	40.0570853	-104.5427251	0.00
13125.00	90.12	180.05	7252.73	5737.86	-5732.22	-280.04	40.0568108	-104.5427254	0.00
13225.00	90.12	180.05	7252.53	5837.82	-5832.22	-280.13	40.0565363	-104.5427257	0.00
13325.00	90.12	180.05	7252.33	5937.78	-5932.22	-280.22	40.0562618	-104.5427260	0.00

VERDAD_BRNAK_01N-64W-10-3H_CODELL_REV-B.0_PWP_04-17-17.1as									
13425.00	90.12	180.05	7252.12	6037.75	-6032.22	-280.30	40.0559873	-104.5427263	0.00
13525.00	90.12	180.05	7251.92	6137.71	-6132.22	-280.39	40.0557128	-104.5427266	0.00
13625.00	90.12	180.05	7251.71	6237.67	-6232.22	-280.48	40.0554383	-104.5427269	0.00
13725.00	90.12	180.05	7251.51	6337.63	-6332.22	-280.57	40.0551638	-104.5427273	0.00
13825.00	90.12	180.05	7251.30	6437.59	-6432.22	-280.66	40.0548893	-104.5427276	0.00
13925.00	90.12	180.05	7251.10	6537.56	-6532.22	-280.75	40.0546148	-104.5427279	0.00
14025.00	90.12	180.05	7250.90	6637.52	-6632.22	-280.84	40.0543403	-104.5427282	0.00
14125.00	90.12	180.05	7250.69	6737.48	-6732.22	-280.93	40.0540658	-104.5427285	0.00
14225.00	90.12	180.05	7250.49	6837.44	-6832.22	-281.02	40.0537913	-104.5427288	0.00
14325.00	90.12	180.05	7250.28	6937.40	-6932.22	-281.11	40.0535168	-104.5427291	0.00
14425.00	90.12	180.05	7250.08	7037.37	-7032.22	-281.19	40.0532423	-104.5427295	0.00
14525.00	90.12	180.05	7249.88	7137.33	-7132.22	-281.28	40.0529678	-104.5427298	0.00
14625.00	90.12	180.05	7249.67	7237.29	-7232.22	-281.37	40.0526932	-104.5427301	0.00
14725.00	90.12	180.05	7249.47	7337.25	-7332.22	-281.46	40.0524187	-104.5427304	0.00
14825.00	90.12	180.05	7249.26	7437.21	-7432.22	-281.55	40.0521442	-104.5427307	0.00
14925.00	90.12	180.05	7249.06	7537.18	-7532.22	-281.64	40.0518697	-104.5427310	0.00
15025.00	90.12	180.05	7248.85	7637.14	-7632.22	-281.73	40.0515952	-104.5427313	0.00
15125.00	90.12	180.05	7248.65	7737.10	-7732.22	-281.82	40.0513207	-104.5427317	0.00
15225.00	90.12	180.05	7248.45	7837.06	-7832.22	-281.91	40.0510462	-104.5427320	0.00
15325.00	90.12	180.05	7248.24	7937.02	-7932.22	-282.00	40.0507717	-104.5427323	0.00
15425.00	90.12	180.05	7248.04	8036.99	-8032.22	-282.09	40.0504972	-104.5427326	0.00
15525.00	90.12	180.05	7247.83	8136.95	-8132.22	-282.17	40.0502227	-104.5427329	0.00
15608.10	90.12	180.05	7247.66	8220.02	-8215.32	-282.25	40.0499946	-104.5427332	0.00
15625.00	90.12	180.39	7247.63	8236.91	-8232.22	-282.31	40.0499482	-104.5427334	2.00
15725.00	90.12	182.39	7247.42	8336.91	-8332.18	-284.74	40.0496738	-104.5427421	2.00
15825.00	90.12	184.39	7247.22	8436.85	-8432.00	-290.65	40.0493998	-104.5427632	2.00
15925.00	90.12	186.39	7247.01	8536.63	-8531.55	-300.04	40.0491265	-104.5427967	2.00
16025.00	90.12	188.39	7246.81	8636.12	-8630.72	-312.90	40.0488543	-104.5428426	2.00
16125.00	90.12	190.39	7246.60	8735.20	-8729.37	-329.21	40.0485835	-104.5429009	2.00
16225.00	90.12	192.39	7246.40	8833.75	-8827.40	-348.96	40.0483144	-104.5429714	2.00
16325.00	90.12	194.39	7246.19	8931.64	-8924.68	-372.11	40.0480473	-104.5430541	2.00
16355.55	90.12	195.00	7246.13	8961.40	-8954.22	-379.86	40.0479662	-104.5430818	2.00
16425.00	90.12	195.00	7245.99	9028.96	-9021.31	-397.84	40.0477821	-104.5431460	0.00
16455.55	90.12	195.00	7245.92	9058.68	-9050.82	-405.74	40.0477011	-104.5431742	0.00
16525.00	90.12	191.85	7245.78	9126.66	-9118.36	-421.87	40.0475157	-104.5432318	4.53
16625.00	90.12	187.32	7245.58	9225.67	-9216.94	-438.52	40.0472451	-104.5432913	4.53
16725.00	90.12	182.79	7245.37	9325.46	-9316.52	-447.34	40.0469717	-104.5433228	4.53
16825.00	90.12	178.26	7245.16	9425.42	-9416.49	-448.26	40.0466973	-104.5433261	4.53
16925.00	90.12	173.73	7244.96	9524.91	-9516.22	-441.28	40.0464235	-104.5433011	4.53
17025.00	90.11	169.20	7244.76	9623.32	-9615.09	-426.45	40.0461521	-104.5432482	4.53
17125.00	90.11	164.67	7244.57	9720.02	-9712.48	-403.85	40.0458848	-104.5431674	4.53
17225.00	90.11	160.14	7244.38	9814.43	-9807.77	-373.63	40.0456232	-104.5430595	4.53
17325.00	90.10	155.61	7244.20	9905.93	-9900.39	-335.99	40.0453690	-104.5429250	4.53
17425.00	90.10	151.08	7244.02	9993.98	-9989.74	-291.14	40.0451237	-104.5427649	4.53
17439.88	90.10	150.41	7244.00	10006.74	-10002.72	-283.87	40.0450881	-104.5427389	4.53