

# BAYSWATER E&P, LLC

Location Weld County, CO Slot TOPAZ WEST 1  
Field WATTENBERG Well TOPAZ WEST 1  
Installation Topaz 6-I Pad Wellbore TOPAZ WEST 1 (PWB)

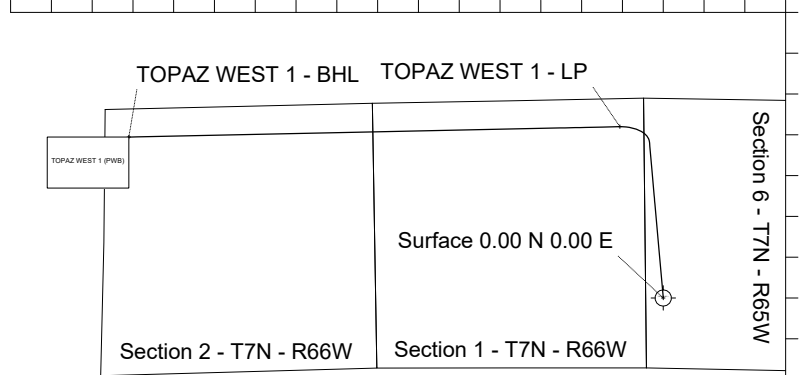
Created by sean.dolfinger  
Date plotted 8-Oct-2021  
Plot reference is TOPAZ WEST 1 (PWB).  
Ref wellpath is TOPAZ WEST 1 (PWP#1).  
Coordinates are in Feet reference TOPAZ WEST 1.  
True Vertical Depths are reference Rig Datum.  
Measured Depths are reference Rig Datum.  
Rig Datum: Planned Datum #1  
Rig Datum to Mean Sea Level: 4969.00 ft.  
Plot North is aligned to GRID North.

N  
GRID  
T M  
W E  
Oct-8-2021  
EMMA-2017 Dip: 66.33 deg Field: 51952.6 n T  
Lat: N40 36 3.7296 Long: W104 42 52.5816 Elev: 4945.00 ft  
Magnetic North is 7.85 deg East of True North  
GRID North is 0.51 deg East of True North  
To correct azimuth from True to GRID subtract 0.51 deg  
To correct azimuth from Magnetic to GRID add 7.34 deg

Scale 1 cm = 800 ft

East (Feet) ->

-12800 -11200 -9600 -8000 -6400 -4800 -3200 -1600 0 1600



<- North (Feet)  
Scale 1 cm = 800 ft

Tie on - 0.00 Inc, 23.00 MD, 23.00 TVD, 0.00 VS

## WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	23.00	0.00	0.00	23.00	S 0.00	W 0.00		0.00
KOP	1573.00	0.00	354.94	1573.00	S 0.00	W 0.00	0.00	0.00
End of Build	3303.27	34.61	354.94	3199.97	N 504.85	W 44.73	2.00	188.41
End of Hold	7816.94	34.61	354.94	6915.10	N 3058.25	W 270.98	0.00	1141.35
Target TOPAZ ...1 - LP	8695.04	90.00	268.79	7369.00	N 3358.62	W 849.97	10.00	1782.35
T.D. & Target TOP...BHL	18327.06	90.00	268.79	7369.00	N 3156.03	W 10479.86	0.00	10944.77

3DS Kick off Point - 0.00 Inc, 1573.00 MD, 1573.00 TVD, 0.00 VS

End of Build - 34.61 Inc, 3303.27 MD, 3199.97 TVD, 188.41 VS

End of Hold - 34.61 Inc, 7816.94 MD, 6915.10 TVD, 1141.35 VS

TOPAZ WEST 1 - LP

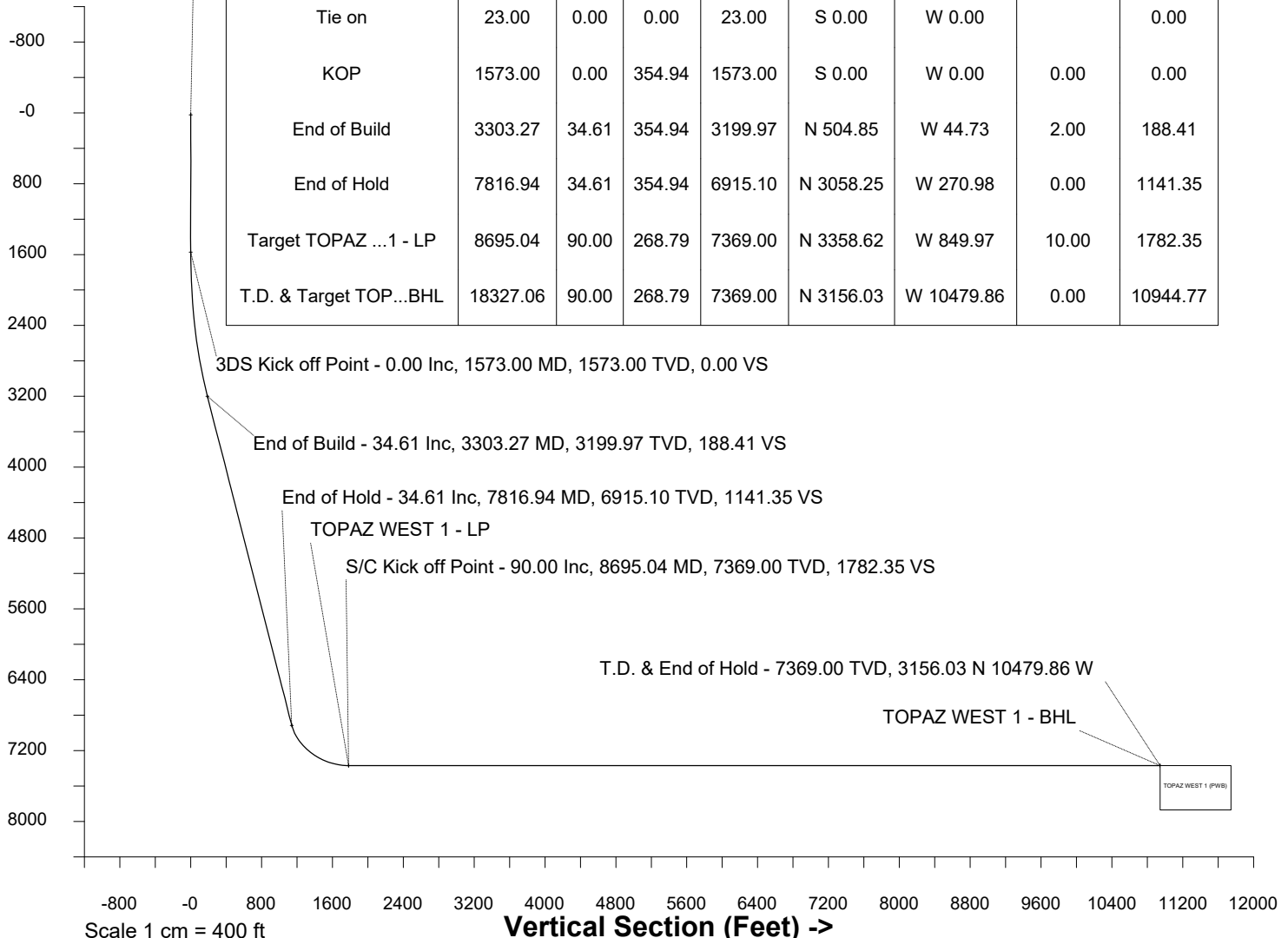
S/C Kick off Point - 90.00 Inc, 8695.04 MD, 7369.00 TVD, 1782.35 VS

T.D. & End of Hold - 7369.00 TVD, 3156.03 N 10479.86 W

TOPAZ WEST 1 - BHL

TOPAZ WEST 1 (PWB)

<- True Vertical Depth (Feet)  
Scale 1 cm = 400 ft



Scale 1 cm = 400 ft

Vertical Section (Feet) ->

Azimuth 286.76 with reference 0.00 N, 0.00 E from TOPAZ WEST 1



SYSDRILL  
Well Design Combined Report  
Wellbore: TOPAZ WEST 1 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
TOPAZ WEST 1	40.60103600	-104.71460600	1462764.7546	3218088.8367	0.00N	0.00E	0.00

Declination		
Date	Source	Time
Oct-8-2021	EMM-2017	10:10

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Topaz 6-I Pad	40.60103600	-104.71460600	1462764.7546	3218088.8367	NAD83 Colorado State Planes, North Zone, US Foot	Grid

Summary Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	Vertical Depth SS	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
23.00	0.00	0.00	23.00	-4946.00	0.00N	0.00E		0.00
1573.00	0.00	354.94	1573.00	-3396.00	0.00N	0.00E	==>	0.00
3303.27	34.61	354.94	3199.97	-1769.03	504.85N	44.73W	2.00	188.41
7816.94	34.61	354.94	6915.10	1946.10	3058.25N	270.98W	==>	1141.35
8695.04	90.00	268.79	7369.00	2400.00	3358.62N	849.97W	10.00	1782.35
18327.06	90.00	268.79	7369.00	2400.00	3156.03N	10479.86W	==>	10944.77

Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
0.00	0.00	0.00	0.00	0.00N	0.00E		0.00	40.60103600	-104.71460600
23.00	0.00	0.00	23.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1573.00	0.00	354.94	1573.00	0.00N	0.00E	==>	0.00	40.60103600	-104.71460600
1673.00	2.00	354.94	1672.98	1.74N	0.15W	2.00	0.65	40.60104077	-104.71460650
1773.00	4.00	354.94	1772.84	6.95N	0.62W	2.00	2.59	40.60105509	-104.71460800
1873.00	6.00	354.94	1872.45	15.63N	1.39W	2.00	5.83	40.60107894	-104.71461049
1973.00	8.00	354.94	1971.70	27.77N	2.46W	2.00	10.36	40.60111228	-104.71461398
2073.00	10.00	354.94	2070.47	43.35N	3.84W	2.00	16.18	40.60115508	-104.71461845
2173.00	12.00	354.94	2168.62	62.36N	5.53W	2.00	23.27	40.60120729	-104.71462391
2273.00	14.00	354.94	2266.06	84.76N	7.51W	2.00	31.63	40.60126884	-104.71463034
2373.00	16.00	354.94	2362.64	110.54N	9.80W	2.00	41.26	40.60133965	-104.71463775
2473.00	18.00	354.94	2458.27	139.67N	12.38W	2.00	52.12	40.60141964	-104.71464611
2573.00	20.00	354.94	2552.82	172.09N	15.25W	2.00	64.23	40.60150872	-104.71465542
2673.00	22.00	354.94	2646.17	207.79N	18.41W	2.00	77.55	40.60160676	-104.71466567
2773.00	24.00	354.94	2738.21	246.71N	21.86W	2.00	92.07	40.60171367	-104.71467685
2873.00	26.00	354.94	2828.84	288.80N	25.59W	2.00	107.78	40.60182930	-104.71468894
2973.00	28.00	354.94	2917.94	334.02N	29.60W	2.00	124.66	40.60195351	-104.71470193

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4969.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 286.76 degrees  
Bottom hole distance is 10944.77 Feet on azimuth 286.76 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 8-Oct-2021



SYSDRILL  
Well Design Combined Report  
Wellbore: TOPAZ WEST 1 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
3073.00	30.00	354.94	3005.39	382.31N	33.88W	2.00	142.68	40.60208615	-104.71471579
3173.00	32.00	354.94	3091.11	433.61N	38.42W	2.00	161.83	40.60222706	-104.71473053
3273.00	34.00	354.94	3174.97	487.86N	43.23W	2.00	182.07	40.60237608	-104.71474611
3303.27	34.61	354.94	3199.97	504.85N	44.73W	2.00	188.41	40.60242275	-104.71475099
3373.00	34.61	354.94	3257.37	544.30N	48.23W	==>	203.13	40.60253111	-104.71476231
3473.00	34.61	354.94	3339.68	600.87N	53.24W	==>	224.25	40.60268650	-104.71477856
3573.00	34.61	354.94	3421.99	657.44N	58.25W	==>	245.36	40.60284189	-104.71479481
3673.00	34.61	354.94	3504.29	714.01N	63.27W	==>	266.47	40.60299728	-104.71481105
3773.00	34.61	354.94	3586.60	770.58N	68.28W	==>	287.58	40.60315267	-104.71482730
3873.00	34.61	354.94	3668.91	827.15N	73.29W	==>	308.70	40.60330806	-104.71484355
3973.00	34.61	354.94	3751.22	883.72N	78.30W	==>	329.81	40.60346345	-104.71485980
4073.00	34.61	354.94	3833.53	940.29N	83.32W	==>	350.92	40.60361884	-104.71487604
4173.00	34.61	354.94	3915.84	996.86N	88.33W	==>	372.03	40.60377423	-104.71489229
4273.00	34.61	354.94	3998.14	1053.43N	93.34W	==>	393.14	40.60392962	-104.71490854
4373.00	34.61	354.94	4080.45	1110.00N	98.35W	==>	414.26	40.60408501	-104.71492478
4473.00	34.61	354.94	4162.76	1166.57N	103.37W	==>	435.37	40.60424040	-104.71494103
4573.00	34.61	354.94	4245.07	1223.14N	108.38W	==>	456.48	40.60439579	-104.71495728
4673.00	34.61	354.94	4327.38	1279.71N	113.39W	==>	477.59	40.60455118	-104.71497353
4773.00	34.61	354.94	4409.69	1336.28N	118.41W	==>	498.71	40.60470657	-104.71498977
4873.00	34.61	354.94	4491.99	1392.86N	123.42W	==>	519.82	40.60486196	-104.71500602
4973.00	34.61	354.94	4574.30	1449.43N	128.43W	==>	540.93	40.60501735	-104.71502227
5073.00	34.61	354.94	4656.61	1506.00N	133.44W	==>	562.04	40.60517274	-104.71503852
5173.00	34.61	354.94	4738.92	1562.57N	138.46W	==>	583.15	40.60532813	-104.71505477
5273.00	34.61	354.94	4821.23	1619.14N	143.47W	==>	604.27	40.60548352	-104.71507101
5373.00	34.61	354.94	4903.54	1675.71N	148.48W	==>	625.38	40.60563891	-104.71508726
5473.00	34.61	354.94	4985.84	1732.28N	153.49W	==>	646.49	40.60579430	-104.71510351
5573.00	34.61	354.94	5068.15	1788.85N	158.51W	==>	667.60	40.60594969	-104.71511976
5673.00	34.61	354.94	5150.46	1845.42N	163.52W	==>	688.72	40.60610508	-104.71513601
5773.00	34.61	354.94	5232.77	1901.99N	168.53W	==>	709.83	40.60626047	-104.71515225
5873.00	34.61	354.94	5315.08	1958.56N	173.54W	==>	730.94	40.60641586	-104.71516850
5973.00	34.61	354.94	5397.39	2015.13N	178.56W	==>	752.05	40.60657125	-104.71518475
6073.00	34.61	354.94	5479.69	2071.70N	183.57W	==>	773.16	40.60672664	-104.71520100
6173.00	34.61	354.94	5562.00	2128.27N	188.58W	==>	794.28	40.60688203	-104.71521725
6273.00	34.61	354.94	5644.31	2184.84N	193.59W	==>	815.39	40.60703742	-104.71523350
6373.00	34.61	354.94	5726.62	2241.41N	198.61W	==>	836.50	40.60719281	-104.71524975
6473.00	34.61	354.94	5808.93	2297.98N	203.62W	==>	857.61	40.60734820	-104.71526599
6573.00	34.61	354.94	5891.24	2354.55N	208.63W	==>	878.73	40.60750359	-104.71528224
6673.00	34.61	354.94	5973.54	2411.12N	213.64W	==>	899.84	40.60765898	-104.71529849
6773.00	34.61	354.94	6055.85	2467.69N	218.66W	==>	920.95	40.60781437	-104.71531474
6873.00	34.61	354.94	6138.16	2524.26N	223.67W	==>	942.06	40.60796976	-104.71533099
6973.00	34.61	354.94	6220.47	2580.83N	228.68W	==>	963.18	40.60812515	-104.71534724
7073.00	34.61	354.94	6302.78	2637.40N	233.69W	==>	984.29	40.60828054	-104.71536349
7173.00	34.61	354.94	6385.09	2693.97N	238.71W	==>	1005.40	40.60843593	-104.71537974
7273.00	34.61	354.94	6467.39	2750.54N	243.72W	==>	1026.51	40.60859132	-104.71539599
7373.00	34.61	354.94	6549.70	2807.12N	248.73W	==>	1047.62	40.60874671	-104.71541224
7473.00	34.61	354.94	6632.01	2863.69N	253.74W	==>	1068.74	40.60890210	-104.71542849
7573.00	34.61	354.94	6714.32	2920.26N	258.76W	==>	1089.85	40.60905749	-104.71544474
7673.00	34.61	354.94	6796.63	2976.83N	263.77W	==>	1110.96	40.60921288	-104.71546099
7773.00	34.61	354.94	6878.94	3033.40N	268.78W	==>	1132.07	40.60936827	-104.71547724
7816.94	34.61	354.94	6915.10	3058.25N	270.98W	==>	1141.35	40.60943655	-104.71548438
7873.00	35.31	345.22	6961.08	3089.80N	276.53W	10.00	1155.75	40.60952327	-104.71550333
7973.00	38.35	329.28	7041.30	3144.55N	299.80W	10.00	1193.83	40.60967410	-104.71558542
8073.00	43.23	315.88	7117.14	3195.93N	339.59W	10.00	1246.74	40.60981610	-104.71572707
8173.00	49.39	304.97	7186.29	3242.39N	394.68W	10.00	1312.89	40.60994495	-104.71592398
8273.00	56.40	296.01	7246.66	3282.51N	463.39W	10.00	1390.25	40.61005673	-104.71617017
8373.00	63.96	288.45	7296.40	3315.07N	543.64W	10.00	1476.48	40.61014805	-104.71645815
8473.00	71.86	281.83	7334.00	3339.09N	632.99W	10.00	1568.96	40.61021613	-104.71677918
8573.00	79.97	275.79	7358.34	3353.83N	728.73W	10.00	1664.88	40.61025891	-104.71712350

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Vertical Section is from 0.00N 0.00E on azimuth 286.76 degrees  
Bottom hole distance is 10944.77 Feet on azimuth 286.76 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 8-Oct-2021



SYSDRILL  
Well Design Combined Report  
Wellbore: TOPAZ WEST 1 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
8673.00	88.19	270.04	7368.65	3358.84N	827.94W	10.00	1761.32	40.61027508	-104.71748065
8695.04	90.00	268.79	7369.00	3358.62N	849.97W	10.00	1782.35	40.61027500	-104.71756000
8773.00	90.00	268.79	7369.00	3356.98N	927.92W	==>	1856.52	40.61027239	-104.71784078
8873.00	90.00	268.79	7369.00	3354.88N	1027.90W	==>	1951.64	40.61026903	-104.71820091
8973.00	90.00	268.79	7369.00	3352.77N	1127.87W	==>	2046.77	40.61026568	-104.71856105
9073.00	90.00	268.79	7369.00	3350.67N	1227.85W	==>	2141.89	40.61026232	-104.71892118
9173.00	90.00	268.79	7369.00	3348.57N	1327.83W	==>	2237.02	40.61025897	-104.71928131
9273.00	90.00	268.79	7369.00	3346.46N	1427.81W	==>	2332.14	40.61025561	-104.71964145
9373.00	90.00	268.79	7369.00	3344.36N	1527.78W	==>	2427.26	40.61025225	-104.72000158
9473.00	90.00	268.79	7369.00	3342.26N	1627.76W	==>	2522.39	40.61024889	-104.72036171
9573.00	90.00	268.79	7369.00	3340.15N	1727.74W	==>	2617.51	40.61024553	-104.72072185
9673.00	90.00	268.79	7369.00	3338.05N	1827.72W	==>	2712.64	40.61024217	-104.72108198
9773.00	90.00	268.79	7369.00	3335.95N	1927.70W	==>	2807.76	40.61023881	-104.72144211
9873.00	90.00	268.79	7369.00	3333.84N	2027.67W	==>	2902.89	40.61023544	-104.72180225
9973.00	90.00	268.79	7369.00	3331.74N	2127.65W	==>	2998.01	40.61023208	-104.72216238
10073.00	90.00	268.79	7369.00	3329.64N	2227.63W	==>	3093.14	40.61022871	-104.72252251
10173.00	90.00	268.79	7369.00	3327.53N	2327.61W	==>	3188.26	40.61022534	-104.72288265
10273.00	90.00	268.79	7369.00	3325.43N	2427.59W	==>	3283.39	40.61022197	-104.72324278
10373.00	90.00	268.79	7369.00	3323.33N	2527.56W	==>	3378.51	40.61021860	-104.72360291
10473.00	90.00	268.79	7369.00	3321.22N	2627.54W	==>	3473.63	40.61021523	-104.72396305
10573.00	90.00	268.79	7369.00	3319.12N	2727.52W	==>	3568.76	40.61021186	-104.72432318
10673.00	90.00	268.79	7369.00	3317.02N	2827.50W	==>	3663.88	40.61020849	-104.72468331
10773.00	90.00	268.79	7369.00	3314.91N	2927.47W	==>	3759.01	40.61020511	-104.72504345
10873.00	90.00	268.79	7369.00	3312.81N	3027.45W	==>	3854.13	40.61020174	-104.72540358
10973.00	90.00	268.79	7369.00	3310.71N	3127.43W	==>	3949.26	40.61019836	-104.72576371
11073.00	90.00	268.79	7369.00	3308.60N	3227.41W	==>	4044.38	40.61019498	-104.72612385
11173.00	90.00	268.79	7369.00	3306.50N	3327.39W	==>	4139.51	40.61019161	-104.72648398
11273.00	90.00	268.79	7369.00	3304.40N	3427.36W	==>	4234.63	40.61018823	-104.72684411
11373.00	90.00	268.79	7369.00	3302.29N	3527.34W	==>	4329.76	40.61018484	-104.72720425
11473.00	90.00	268.79	7369.00	3300.19N	3627.32W	==>	4424.88	40.61018146	-104.72756438
11573.00	90.00	268.79	7369.00	3298.09N	3727.30W	==>	4520.00	40.61017808	-104.72792451
11673.00	90.00	268.79	7369.00	3295.98N	3827.28W	==>	4615.13	40.61017470	-104.72828464
11773.00	90.00	268.79	7369.00	3293.88N	3927.25W	==>	4710.25	40.61017131	-104.72864478
11873.00	90.00	268.79	7369.00	3291.78N	4027.23W	==>	4805.38	40.61016792	-104.72900491
11973.00	90.00	268.79	7369.00	3289.67N	4127.21W	==>	4900.50	40.61016454	-104.72936504
12073.00	90.00	268.79	7369.00	3287.57N	4227.19W	==>	4995.63	40.61016115	-104.72972517
12173.00	90.00	268.79	7369.00	3285.47N	4327.17W	==>	5090.75	40.61015776	-104.73008531
12273.00	90.00	268.79	7369.00	3283.36N	4427.14W	==>	5185.88	40.61015437	-104.73044544
12373.00	90.00	268.79	7369.00	3281.26N	4527.12W	==>	5281.00	40.61015097	-104.73080557
12473.00	90.00	268.79	7369.00	3279.16N	4627.10W	==>	5376.13	40.61014758	-104.73116570
12573.00	90.00	268.79	7369.00	3277.05N	4727.08W	==>	5471.25	40.61014419	-104.73152584
12673.00	90.00	268.79	7369.00	3274.95N	4827.05W	==>	5566.37	40.61014079	-104.73188597
12773.00	90.00	268.79	7369.00	3272.85N	4927.03W	==>	5661.50	40.61013740	-104.73224610
12873.00	90.00	268.79	7369.00	3270.74N	5027.01W	==>	5756.62	40.61013400	-104.73260623
12973.00	90.00	268.79	7369.00	3268.64N	5126.99W	==>	5851.75	40.61013060	-104.73296637
13073.00	90.00	268.79	7369.00	3266.54N	5226.97W	==>	5946.87	40.61012720	-104.73332650
13173.00	90.00	268.79	7369.00	3264.43N	5326.94W	==>	6042.00	40.61012380	-104.73368663
13273.00	90.00	268.79	7369.00	3262.33N	5426.92W	==>	6137.12	40.61012040	-104.73404676
13373.00	90.00	268.79	7369.00	3260.23N	5526.90W	==>	6232.25	40.61011699	-104.73440690
13473.00	90.00	268.79	7369.00	3258.12N	5626.88W	==>	6327.37	40.61011359	-104.73476703
13573.00	90.00	268.79	7369.00	3256.02N	5726.86W	==>	6422.50	40.61011018	-104.73512716
13673.00	90.00	268.79	7369.00	3253.92N	5826.83W	==>	6517.62	40.61010678	-104.73548729
13773.00	90.00	268.79	7369.00	3251.81N	5926.81W	==>	6612.74	40.61010337	-104.73584742
13873.00	90.00	268.79	7369.00	3249.71N	6026.79W	==>	6707.87	40.61009996	-104.73620756
13973.00	90.00	268.79	7369.00	3247.61N	6126.77W	==>	6802.99	40.61009655	-104.73656769
14073.00	90.00	268.79	7369.00	3245.50N	6226.74W	==>	6898.12	40.61009314	-104.73692782
14173.00	90.00	268.79	7369.00	3243.40N	6326.72W	==>	6993.24	40.61008973	-104.73728795
14273.00	90.00	268.79	7369.00	3241.30N	6426.70W	==>	7088.37	40.61008631	-104.73764808
14373.00	90.00	268.79	7369.00	3239.19N	6526.68W	==>	7183.49	40.61008290	-104.73800822

All data is in Feet unless otherwise stated  
Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4969.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 286.76 degrees  
Bottom hole distance is 10944.77 Feet on azimuth 286.76 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 8-Oct-2021



SYSDRILL  
Well Design Combined Report  
Wellbore: TOPAZ WEST 1 (PWB)



Interpolated Wellpath									
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]	Station Position (Latitude)	Station Position (Longitude)
14473.00	90.00	268.79	7369.00	3237.09N	6626.66W	==>	7278.62	40.61007948	-104.73836835
14573.00	90.00	268.79	7369.00	3234.99N	6726.63W	==>	7373.74	40.61007607	-104.73872848
14673.00	90.00	268.79	7369.00	3232.88N	6826.61W	==>	7468.86	40.61007265	-104.73908861
14773.00	90.00	268.79	7369.00	3230.78N	6926.59W	==>	7563.99	40.61006923	-104.73944874
14873.00	90.00	268.79	7369.00	3228.68N	7026.57W	==>	7659.11	40.61006581	-104.73980887
14973.00	90.00	268.79	7369.00	3226.57N	7126.55W	==>	7754.24	40.61006239	-104.74016901
15073.00	90.00	268.79	7369.00	3224.47N	7226.52W	==>	7849.36	40.61005897	-104.74052914
15173.00	90.00	268.79	7369.00	3222.37N	7326.50W	==>	7944.49	40.61005554	-104.74088927
15273.00	90.00	268.79	7369.00	3220.26N	7426.48W	==>	8039.61	40.61005212	-104.74124940
15373.00	90.00	268.79	7369.00	3218.16N	7526.46W	==>	8134.74	40.61004869	-104.74160953
15473.00	90.00	268.79	7369.00	3216.06N	7626.44W	==>	8229.86	40.61004527	-104.74196966
15573.00	90.00	268.79	7369.00	3213.95N	7726.41W	==>	8324.99	40.61004184	-104.74232979
15673.00	90.00	268.79	7369.00	3211.85N	7826.39W	==>	8420.11	40.61003841	-104.74268993
15773.00	90.00	268.79	7369.00	3209.75N	7926.37W	==>	8515.23	40.61003498	-104.74305006
15873.00	90.00	268.79	7369.00	3207.64N	8026.35W	==>	8610.36	40.61003155	-104.74341019
15973.00	90.00	268.79	7369.00	3205.54N	8126.32W	==>	8705.48	40.61002812	-104.74377032
16073.00	90.00	268.79	7369.00	3203.44N	8226.30W	==>	8800.61	40.61002468	-104.74413045
16173.00	90.00	268.79	7369.00	3201.33N	8326.28W	==>	8895.73	40.61002125	-104.74449058
16273.00	90.00	268.79	7369.00	3199.23N	8426.26W	==>	8990.86	40.61001781	-104.74485071
16373.00	90.00	268.79	7369.00	3197.13N	8526.24W	==>	9085.98	40.61001438	-104.74521084
16473.00	90.00	268.79	7369.00	3195.02N	8626.21W	==>	9181.11	40.61001094	-104.74557098
16573.00	90.00	268.79	7369.00	3192.92N	8726.19W	==>	9276.23	40.61000750	-104.74593111
16673.00	90.00	268.79	7369.00	3190.82N	8826.17W	==>	9371.36	40.61000406	-104.74629124
16773.00	90.00	268.79	7369.00	3188.71N	8926.15W	==>	9466.48	40.61000062	-104.74665137
16873.00	90.00	268.79	7369.00	3186.61N	9026.13W	==>	9561.60	40.60999718	-104.74701150
16973.00	90.00	268.79	7369.00	3184.51N	9126.10W	==>	9656.73	40.60999373	-104.74737163
17073.00	90.00	268.79	7369.00	3182.40N	9226.08W	==>	9751.85	40.60999029	-104.74773176
17173.00	90.00	268.79	7369.00	3180.30N	9326.06W	==>	9846.98	40.60998684	-104.74809189
17273.00	90.00	268.79	7369.00	3178.20N	9426.04W	==>	9942.10	40.60998340	-104.74845202
17373.00	90.00	268.79	7369.00	3176.09N	9526.01W	==>	10037.23	40.60997995	-104.74881215
17473.00	90.00	268.79	7369.00	3173.99N	9625.99W	==>	10132.35	40.60997650	-104.74917228
17573.00	90.00	268.79	7369.00	3171.89N	9725.97W	==>	10227.48	40.60997305	-104.74953241
17673.00	90.00	268.79	7369.00	3169.78N	9825.95W	==>	10322.60	40.60996960	-104.74989255
17773.00	90.00	268.79	7369.00	3167.68N	9925.93W	==>	10417.73	40.60996615	-104.75025268
17873.00	90.00	268.79	7369.00	3165.58N	10025.90W	==>	10512.85	40.60996269	-104.75061281
17973.00	90.00	268.79	7369.00	3163.47N	10125.88W	==>	10607.97	40.60995924	-104.75097294
18073.00	90.00	268.79	7369.00	3161.37N	10225.86W	==>	10703.10	40.60995578	-104.75133307
18173.00	90.00	268.79	7369.00	3159.27N	10325.84W	==>	10798.22	40.60995233	-104.75169320
18273.00	90.00	268.79	7369.00	3157.16N	10425.82W	==>	10893.35	40.60994887	-104.75205333
18327.06	90.00	268.79	7369.00	3156.03N	10479.86W	==>	10944.77	40.60994700	-104.75224800

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Bottom hole distance is 10944.77 Feet on azimuth 286.76 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 8-Oct-2021



SYS DRILL  
Well Design Combined Report  
Wellbore: TOPAZ WEST 1 (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
TOPAZ WEST 1 - LP	3358.62N	849.97W	7369.00	40.61027500	-104.71756000	1466123.28	3217238.89
TOPAZ WEST 1 - BHL	3156.03N	10479.86W	7369.00	40.60994700	-104.75224800	1465920.70	3207609.25

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
1031783	Planned	1573.00	1573.00	WdW Rate Gyro	Standard
1031782	Planned	18327.06	7369.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes