

BAYSWATER E&P, LLC

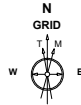
Location	Weld County, CO	Slot	TOPAZ EAST 14
Field	WATTENBERG	Well	TOPAZ EAST 14
Installation	Topaz 6-I Pad	Wellbore	TOPAZ EAST 14 (PWB)

Created by sean.dolfinger
Date plotted 8-Oct-2021
Plot reference is TOPAZ EAST 14 (PWB).
Ref wellpath is TOPAZ EAST 14 (PWP#1).
Coordinates are in Feet reference TOPAZ EAST 14.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 4968.00 ft.
Plot North is aligned to GRID North.

Scale 1 cm = 800 ft

East (Feet) ->

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



Oct-8-2021
EMM-2017 Dip: 66.83 deg Field: 51952.6 nT
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

Section 1 - T7N - R66W

Section 6 - T7N - R65W

Section 5 - T7N - R65W

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	344.00	1573.00	S 0.00	W 0.00	0.00	0.00
End of Build	2776.72	24.07	344.00	2741.62	N 239.54	W 68.69	2.00	-19.98
End of Hold	7120.89	24.07	344.00	6707.91	N 1942.98	W 557.15	0.00	-162.06
Target TOPAZ ...4 - LP	8092.62	90.26	91.21	7298.00	N 2184.02	E 19.25	10.00	450.61
T.D. & Target TOP...BHL	17883.87	90.26	91.21	7253.00	N 1977.97	E 9808.22	0.00	10005.68

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

End of Build - 24.07 Inc, 2776.72 MD, 2741.62 TVD, -19.98 VS

End of Hold - 24.07 Inc, 7120.89 MD, 6707.91 TVD, -162.06 VS

TOPAZ EAST 14 - LP

S/C Kick off Point - 90.26 Inc, 8092.62 MD, 7298.00 TVD, 450.61 VS

T.D. & End of Hold - 7253.00 TVD, 1977.97 N 9808.22 E

TOPAZ EAST 14 - BHL

TOPAZ EAST 14 (PWB)

Scale 1 cm = 400 ft

<- True Vertical Depth (Feet)

-800

-0

800

1600

2400

3200

4000

4800

5600

6400

7200

8000

-800 -0 800 1600 2400 3200 4000 4800 5600 6400 7200 8000 8800 9600 10400 11200

Scale 1 cm = 400 ft

Vertical Section (Feet) ->

Azimuth 78.60 with reference 0.00 N, 0.00 E from TOPAZ EAST 14

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

SYSDRILL
Well Design Combined Report
Wellbore: TOPAZ EAST 14 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
TOPAZ EAST 14	40.60107600	-104.71430800	1462780.0597	3218171.4543	15.31N	82.62E	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	-4945.00	0.00N	0.00E		0.00
1573.00	0.00	344.00	1573.00	-3395.00	0.00N	0.00E	==>	0.00
2776.72	24.07	344.00	2741.62	-2226.38	239.54N	68.69W	2.00	-19.98
7120.89	24.07	344.00	6707.91	1739.91	1942.98N	557.15W	==>	-162.06
8092.62	90.26	91.21	7298.00	2330.00	2184.02N	19.25E	10.00	450.61
17883.87	90.26	91.21	7253.00	2285.00	1977.97N	9808.22E	==>	10005.68

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	40.60107600	-104.71430800
23.00	0.00	0.00	23.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1573.00	0.00	344.00	1573.00	0.00N	0.00E	==>	0.00	40.60107600	-104.71430800
1673.00	2.00	344.00	1672.98	1.68N	0.48W	2.00	-0.14	40.60108062	-104.71430968
1773.00	4.00	344.00	1772.84	6.71N	1.92W	2.00	-0.56	40.60109446	-104.71431471
1873.00	6.00	344.00	1872.45	15.09N	4.33W	2.00	-1.26	40.60111751	-104.71432310
1973.00	8.00	344.00	1971.70	26.80N	7.68W	2.00	-2.24	40.60114974	-104.71433482
2073.00	10.00	344.00	2070.47	41.84N	12.00W	2.00	-3.49	40.60119112	-104.71434986
2173.00	12.00	344.00	2168.62	60.18N	17.26W	2.00	-5.02	40.60124159	-104.71436822
2273.00	14.00	344.00	2266.06	81.80N	23.46W	2.00	-6.82	40.60130109	-104.71438985
2373.00	16.00	344.00	2362.64	106.68N	30.59W	2.00	-8.90	40.60136954	-104.71441475
2473.00	18.00	344.00	2458.27	134.78N	38.65W	2.00	-11.24	40.60144687	-104.71444287
2573.00	20.00	344.00	2552.82	166.08N	47.62W	2.00	-13.85	40.60153298	-104.71447419
2673.00	22.00	344.00	2646.17	200.52N	57.50W	2.00	-16.72	40.60162777	-104.71450866
2773.00	24.00	344.00	2738.21	238.08N	68.27W	2.00	-19.86	40.60173112	-104.71454624
2776.72	24.07	344.00	2741.62	239.54N	68.69W	2.00	-19.98	40.60173513	-104.71454770
2873.00	24.07	344.00	2829.52	277.29N	79.51W	==>	-23.13	40.60183901	-104.71458548

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 4968.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 78.60 degrees
Bottom hole distance is 10005.68 Feet on azimuth 78.60 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 8-Oct-2021

SYSDRILL
Well Design Combined Report
Wellbore: TOPAZ EAST 14 (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)
2973.00	24.07	344.00	2920.82	316.50N	90.76W	==>	-26.40	40.60194691	-104.71462472
3073.00	24.07	344.00	3012.12	355.71N	102.00W	==>	-29.67	40.60205481	-104.71466396
3173.00	24.07	344.00	3103.42	394.93N	113.24W	==>	-32.94	40.60216270	-104.71470320
3273.00	24.07	344.00	3194.72	434.14N	124.49W	==>	-36.21	40.60227060	-104.71474244
3373.00	24.07	344.00	3286.03	473.35N	135.73W	==>	-39.48	40.60237850	-104.71478168
3473.00	24.07	344.00	3377.33	512.56N	146.98W	==>	-42.75	40.60248640	-104.71482092
3573.00	24.07	344.00	3468.63	551.77N	158.22W	==>	-46.02	40.60259430	-104.71486016
3673.00	24.07	344.00	3559.93	590.99N	169.46W	==>	-49.29	40.60270220	-104.71489940
3773.00	24.07	344.00	3651.23	630.20N	180.71W	==>	-52.56	40.60281010	-104.71493864
3873.00	24.07	344.00	3742.53	669.41N	191.95W	==>	-55.83	40.60291799	-104.71497788
3973.00	24.07	344.00	3833.83	708.62N	203.20W	==>	-59.10	40.60302589	-104.71501712
4073.00	24.07	344.00	3925.14	747.83N	214.44W	==>	-62.37	40.60313379	-104.71505636
4173.00	24.07	344.00	4016.44	787.05N	225.69W	==>	-65.64	40.60324169	-104.71509560
4273.00	24.07	344.00	4107.74	826.26N	236.93W	==>	-68.91	40.60334959	-104.71513484
4373.00	24.07	344.00	4199.04	865.47N	248.17W	==>	-72.19	40.60345749	-104.71517408
4473.00	24.07	344.00	4290.34	904.68N	259.42W	==>	-75.46	40.60356538	-104.71521332
4573.00	24.07	344.00	4381.64	943.90N	270.66W	==>	-78.73	40.60367328	-104.71525256
4673.00	24.07	344.00	4472.95	983.11N	281.91W	==>	-82.00	40.60378118	-104.71529181
4773.00	24.07	344.00	4564.25	1022.32N	293.15W	==>	-85.27	40.60388908	-104.71533105
4873.00	24.07	344.00	4655.55	1061.53N	304.39W	==>	-88.54	40.60399698	-104.71537029
4973.00	24.07	344.00	4746.85	1100.74N	315.64W	==>	-91.81	40.60410488	-104.71540953
5073.00	24.07	344.00	4838.15	1139.96N	326.88W	==>	-95.08	40.60421278	-104.71544877
5173.00	24.07	344.00	4929.45	1179.17N	338.13W	==>	-98.35	40.60432067	-104.71548801
5273.00	24.07	344.00	5020.76	1218.38N	349.37W	==>	-101.62	40.60442857	-104.71552726
5373.00	24.07	344.00	5112.06	1257.59N	360.61W	==>	-104.89	40.60453647	-104.71556650
5473.00	24.07	344.00	5203.36	1296.80N	371.86W	==>	-108.16	40.60464437	-104.71560574
5573.00	24.07	344.00	5294.66	1336.02N	383.10W	==>	-111.43	40.60475227	-104.71564498
5673.00	24.07	344.00	5385.96	1375.23N	394.35W	==>	-114.70	40.60486016	-104.71568423
5773.00	24.07	344.00	5477.26	1414.44N	405.59W	==>	-117.97	40.60496806	-104.71572347
5873.00	24.07	344.00	5568.57	1453.65N	416.83W	==>	-121.24	40.60507596	-104.71576271
5973.00	24.07	344.00	5659.87	1492.87N	428.08W	==>	-124.51	40.60518386	-104.71580196
6073.00	24.07	344.00	5751.17	1532.08N	439.32W	==>	-127.78	40.60529176	-104.71584120
6173.00	24.07	344.00	5842.47	1571.29N	450.57W	==>	-131.05	40.60539966	-104.71588044
6273.00	24.07	344.00	5933.77	1610.50N	461.81W	==>	-134.33	40.60550755	-104.71591969
6373.00	24.07	344.00	6025.07	1649.71N	473.05W	==>	-137.60	40.60561545	-104.71595893
6473.00	24.07	344.00	6116.37	1688.93N	484.30W	==>	-140.87	40.60572335	-104.71599817
6573.00	24.07	344.00	6207.68	1728.14N	495.54W	==>	-144.14	40.60583125	-104.71603742
6673.00	24.07	344.00	6298.98	1767.35N	506.79W	==>	-147.41	40.60593915	-104.71607666
6773.00	24.07	344.00	6390.28	1806.56N	518.03W	==>	-150.68	40.60604704	-104.71611591
6873.00	24.07	344.00	6481.58	1845.77N	529.27W	==>	-153.95	40.60615494	-104.71615515
6973.00	24.07	344.00	6572.88	1884.99N	540.52W	==>	-157.22	40.60626284	-104.71619439
7073.00	24.07	344.00	6664.18	1924.20N	551.76W	==>	-160.49	40.60637074	-104.71623364
7120.89	24.07	344.00	6707.91	1942.98N	557.15W	==>	-162.06	40.60642241	-104.71625243
7173.00	23.18	356.83	6755.68	1963.45N	560.65W	10.00	-161.44	40.60647868	-104.71626438
7273.00	24.50	21.53	6847.38	2002.49N	554.11W	10.00	-147.31	40.60658568	-104.71623959
7373.00	29.19	41.23	6936.75	2040.21N	530.37W	10.00	-116.58	40.60668864	-104.71615289
7473.00	35.95	55.01	7021.09	2075.47N	490.14W	10.00	-70.18	40.60678443	-104.71600691
7573.00	43.82	64.67	7097.84	2107.19N	434.66W	10.00	-9.52	40.60687015	-104.71580608
7673.00	52.30	71.82	7164.66	2134.41N	365.60W	10.00	63.56	40.60694319	-104.71555652
7773.00	61.12	77.47	7219.52	2156.31N	285.06W	10.00	146.83	40.60700133	-104.71526579
7873.00	70.14	82.22	7260.75	2172.21N	195.50W	10.00	237.77	40.60704280	-104.71494274
7973.00	79.27	86.45	7287.10	2181.64N	99.63W	10.00	333.61	40.60706635	-104.71459719
8073.00	88.46	90.44	7297.78	2184.30N	0.37W	10.00	431.44	40.60707125	-104.71423962
8092.62	90.26	91.21	7298.00	2184.02N	19.25E	10.00	450.61	40.60707000	-104.71416900
8173.00	90.26	91.21	7297.63	2182.33N	99.61E	==>	529.06	40.60706340	-104.71387963
8273.00	90.26	91.21	7297.17	2180.22N	199.59E	==>	626.65	40.60705519	-104.71351966
8373.00	90.26	91.21	7296.71	2178.12N	299.56E	==>	724.23	40.60704698	-104.71315968
8473.00	90.26	91.21	7296.25	2176.02N	399.54E	==>	821.82	40.60703877	-104.71279970

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 4968.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 78.60 degrees
Bottom hole distance is 10005.68 Feet on azimuth 78.60 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 8-Oct-2021

SYSDRILL
Well Design Combined Report
Wellbore: TOPAZ EAST 14 (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)
8573.00	90.26	91.21	7295.79	2173.91N	499.52E	==>	919.41	40.60703056	-104.71243972
8673.00	90.26	91.21	7295.33	2171.81N	599.49E	==>	1017.00	40.60702234	-104.71207974
8773.00	90.26	91.21	7294.87	2169.70N	699.47E	==>	1114.58	40.60701413	-104.71171976
8873.00	90.26	91.21	7294.41	2167.60N	799.45E	==>	1212.17	40.60700591	-104.71135979
8973.00	90.26	91.21	7293.95	2165.49N	899.43E	==>	1309.76	40.60699770	-104.71099981
9073.00	90.26	91.21	7293.49	2163.39N	999.40E	==>	1407.35	40.60698948	-104.71063983
9173.00	90.26	91.21	7293.03	2161.28N	1099.38E	==>	1504.94	40.60698126	-104.71027985
9273.00	90.26	91.21	7292.58	2159.18N	1199.36E	==>	1602.52	40.60697304	-104.70991987
9373.00	90.26	91.21	7292.12	2157.08N	1299.33E	==>	1700.11	40.60696482	-104.70955990
9473.00	90.26	91.21	7291.66	2154.97N	1399.31E	==>	1797.70	40.60695659	-104.70919992
9573.00	90.26	91.21	7291.20	2152.87N	1499.29E	==>	1895.29	40.60694837	-104.70883994
9673.00	90.26	91.21	7290.74	2150.76N	1599.26E	==>	1992.87	40.60694014	-104.70847996
9773.00	90.26	91.21	7290.28	2148.66N	1699.24E	==>	2090.46	40.60693192	-104.70811999
9873.00	90.26	91.21	7289.82	2146.55N	1799.22E	==>	2188.05	40.60692369	-104.70776001
9973.00	90.26	91.21	7289.36	2144.45N	1899.19E	==>	2285.64	40.60691546	-104.70740003
10073.00	90.26	91.21	7288.90	2142.34N	1999.17E	==>	2383.23	40.60690723	-104.70704006
10173.00	90.26	91.21	7288.44	2140.24N	2099.15E	==>	2480.81	40.60689900	-104.70668008
10273.00	90.26	91.21	7287.98	2138.14N	2199.12E	==>	2578.40	40.60689077	-104.70632010
10373.00	90.26	91.21	7287.52	2136.03N	2299.10E	==>	2675.99	40.60688254	-104.70596012
10473.00	90.26	91.21	7287.06	2133.93N	2399.08E	==>	2773.58	40.60687430	-104.70560015
10573.00	90.26	91.21	7286.60	2131.82N	2499.05E	==>	2871.17	40.60686607	-104.70524017
10673.00	90.26	91.21	7286.14	2129.72N	2599.03E	==>	2968.75	40.60685783	-104.70488019
10773.00	90.26	91.21	7285.68	2127.61N	2699.01E	==>	3066.34	40.60684960	-104.70452022
10873.00	90.26	91.21	7285.22	2125.51N	2798.98E	==>	3163.93	40.60684136	-104.70416024
10973.00	90.26	91.21	7284.76	2123.40N	2898.96E	==>	3261.52	40.60683312	-104.70380027
11073.00	90.26	91.21	7284.30	2121.30N	2998.94E	==>	3359.10	40.60682488	-104.70344029
11173.00	90.26	91.21	7283.84	2119.20N	3098.91E	==>	3456.69	40.60681664	-104.70308031
11273.00	90.26	91.21	7283.38	2117.09N	3198.89E	==>	3554.28	40.60680839	-104.70272034
11373.00	90.26	91.21	7282.92	2114.99N	3298.87E	==>	3651.87	40.60680015	-104.70236036
11473.00	90.26	91.21	7282.46	2112.88N	3398.85E	==>	3749.46	40.60679190	-104.70200039
11573.00	90.26	91.21	7282.00	2110.78N	3498.82E	==>	3847.04	40.60678366	-104.70164041
11673.00	90.26	91.21	7281.54	2108.67N	3598.80E	==>	3944.63	40.60677541	-104.70128043
11773.00	90.26	91.21	7281.09	2106.57N	3698.78E	==>	4042.22	40.60676716	-104.70092046
11873.00	90.26	91.21	7280.63	2104.46N	3798.75E	==>	4139.81	40.60675891	-104.70056048
11973.00	90.26	91.21	7280.17	2102.36N	3898.73E	==>	4237.39	40.60675066	-104.70020051
12073.00	90.26	91.21	7279.71	2100.26N	3998.71E	==>	4334.98	40.60674241	-104.69984053
12173.00	90.26	91.21	7279.25	2098.15N	4098.68E	==>	4432.57	40.60673416	-104.69948056
12273.00	90.26	91.21	7278.79	2096.05N	4198.66E	==>	4530.16	40.60672590	-104.69912058
12373.00	90.26	91.21	7278.33	2093.94N	4298.64E	==>	4627.75	40.60671765	-104.69876061
12473.00	90.26	91.21	7277.87	2091.84N	4398.61E	==>	4725.33	40.60670939	-104.69840063
12573.00	90.26	91.21	7277.41	2089.73N	4498.59E	==>	4822.92	40.60670113	-104.69804066
12673.00	90.26	91.21	7276.95	2087.63N	4598.57E	==>	4920.51	40.60669288	-104.69768068
12773.00	90.26	91.21	7276.49	2085.52N	4698.54E	==>	5018.10	40.60668462	-104.69732071
12873.00	90.26	91.21	7276.03	2083.42N	4798.52E	==>	5115.68	40.60667636	-104.69696073
12973.00	90.26	91.21	7275.57	2081.31N	4898.50E	==>	5213.27	40.60666809	-104.69660076
13073.00	90.26	91.21	7275.11	2079.21N	4998.47E	==>	5310.86	40.60665983	-104.69624078
13173.00	90.26	91.21	7274.65	2077.11N	5098.45E	==>	5408.45	40.60665157	-104.69588081
13273.00	90.26	91.21	7274.19	2075.00N	5198.43E	==>	5506.04	40.60664330	-104.69552084
13373.00	90.26	91.21	7273.73	2072.90N	5298.40E	==>	5603.62	40.60663504	-104.69516086
13473.00	90.26	91.21	7273.27	2070.79N	5398.38E	==>	5701.21	40.60662677	-104.69480089
13573.00	90.26	91.21	7272.81	2068.69N	5498.36E	==>	5798.80	40.60661850	-104.69444091
13673.00	90.26	91.21	7272.35	2066.58N	5598.33E	==>	5896.39	40.60661023	-104.69408094
13773.00	90.26	91.21	7271.89	2064.48N	5698.31E	==>	5993.97	40.60660196	-104.69372097
13873.00	90.26	91.21	7271.43	2062.37N	5798.29E	==>	6091.56	40.60659369	-104.69336099
13973.00	90.26	91.21	7270.97	2060.27N	5898.27E	==>	6189.15	40.60658542	-104.69300102
14073.00	90.26	91.21	7270.51	2058.17N	5998.24E	==>	6286.74	40.60657714	-104.69264104
14173.00	90.26	91.21	7270.05	2056.06N	6098.22E	==>	6384.33	40.60656887	-104.69228107
14273.00	90.26	91.21	7269.60	2053.96N	6198.20E	==>	6481.91	40.60656059	-104.69192110
14373.00	90.26	91.21	7269.14	2051.85N	6298.17E	==>	6579.50	40.60655231	-104.69156112

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Vertical Section is from 0.00N 0.00E on azimuth 78.60 degrees
Bottom hole distance is 10005.68 Feet on azimuth 78.60 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 8-Oct-2021

SYSDRILL
Well Design Combined Report
Wellbore: TOPAZ EAST 14 (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	90.26	91.21	7268.68	2049.75N	6398.15E	==>	6677.09	40.60654403	-104.69120115
14573.00	90.26	91.21	7268.22	2047.64N	6498.13E	==>	6774.68	40.60653575	-104.69084118
14673.00	90.26	91.21	7267.76	2045.54N	6598.10E	==>	6872.27	40.60652747	-104.69048121
14773.00	90.26	91.21	7267.30	2043.43N	6698.08E	==>	6969.85	40.60651919	-104.69012123
14873.00	90.26	91.21	7266.84	2041.33N	6798.06E	==>	7067.44	40.60651091	-104.68976126
14973.00	90.26	91.21	7266.38	2039.23N	6898.03E	==>	7165.03	40.60650263	-104.68940129
15073.00	90.26	91.21	7265.92	2037.12N	6998.01E	==>	7262.62	40.60649434	-104.68904131
15173.00	90.26	91.21	7265.46	2035.02N	7097.99E	==>	7360.20	40.60648605	-104.68868134
15273.00	90.26	91.21	7265.00	2032.91N	7197.96E	==>	7457.79	40.60647777	-104.68832137
15373.00	90.26	91.21	7264.54	2030.81N	7297.94E	==>	7555.38	40.60646948	-104.68796140
15473.00	90.26	91.21	7264.08	2028.70N	7397.92E	==>	7652.97	40.60646119	-104.68760142
15573.00	90.26	91.21	7263.62	2026.60N	7497.89E	==>	7750.56	40.60645290	-104.68724145
15673.00	90.26	91.21	7263.16	2024.49N	7597.87E	==>	7848.14	40.60644461	-104.68688148
15773.00	90.26	91.21	7262.70	2022.39N	7697.85E	==>	7945.73	40.60643631	-104.68652151
15873.00	90.26	91.21	7262.24	2020.29N	7797.82E	==>	8043.32	40.60642802	-104.68616154
15973.00	90.26	91.21	7261.78	2018.18N	7897.80E	==>	8140.91	40.60641972	-104.68580156
16073.00	90.26	91.21	7261.32	2016.08N	7997.78E	==>	8238.49	40.60641143	-104.68544159
16173.00	90.26	91.21	7260.86	2013.97N	8097.75E	==>	8336.08	40.60640313	-104.68508162
16273.00	90.26	91.21	7260.40	2011.87N	8197.73E	==>	8433.67	40.60639483	-104.68472165
16373.00	90.26	91.21	7259.94	2009.76N	8297.71E	==>	8531.26	40.60638653	-104.68436168
16473.00	90.26	91.21	7259.48	2007.66N	8397.69E	==>	8628.85	40.60637823	-104.68400171
16573.00	90.26	91.21	7259.02	2005.55N	8497.66E	==>	8726.43	40.60636993	-104.68364173
16673.00	90.26	91.21	7258.57	2003.45N	8597.64E	==>	8824.02	40.60636163	-104.68328176
16773.00	90.26	91.21	7258.11	2001.34N	8697.62E	==>	8921.61	40.60635332	-104.68292179
16873.00	90.26	91.21	7257.65	1999.24N	8797.59E	==>	9019.20	40.60634502	-104.68256182
16973.00	90.26	91.21	7257.19	1997.14N	8897.57E	==>	9116.78	40.60633671	-104.68220185
17073.00	90.26	91.21	7256.73	1995.03N	8997.55E	==>	9214.37	40.60632840	-104.68184188
17173.00	90.26	91.21	7256.27	1992.93N	9097.52E	==>	9311.96	40.60632009	-104.68148191
17273.00	90.26	91.21	7255.81	1990.82N	9197.50E	==>	9409.55	40.60631179	-104.68112194
17373.00	90.26	91.21	7255.35	1988.72N	9297.48E	==>	9507.14	40.60630347	-104.68076197
17473.00	90.26	91.21	7254.89	1986.61N	9397.45E	==>	9604.72	40.60629516	-104.68040200
17573.00	90.26	91.21	7254.43	1984.51N	9497.43E	==>	9702.31	40.60628685	-104.68004203
17673.00	90.26	91.21	7253.97	1982.40N	9597.41E	==>	9799.90	40.60627854	-104.67968206
17773.00	90.26	91.21	7253.51	1980.30N	9697.38E	==>	9897.49	40.60627022	-104.67932209
17873.00	90.26	91.21	7253.05	1978.20N	9797.36E	==>	9995.07	40.60626190	-104.67896211
17883.87	90.26	91.21	7253.00	1977.97N	9808.22E	==>	10005.68	40.60626100	-104.67892300

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SYS DRILL
Well Design Combined Report
Wellbore: TOPAZ EAST 14 (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
TOPAZ EAST 14 - LP	2184.02N	19.25E	7298.00	40.60707000	-104.71416900	1464964.02	3218190.70
TOPAZ EAST 14 - BHL	1977.97N	9808.22E	7253.00	40.60626100	-104.67892300	1464757.97	3227979.42

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
1031657	Planned	1573.00	1573.00	WdW Rate Gyro	Standard
1031656	Planned	17883.87	7253.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes