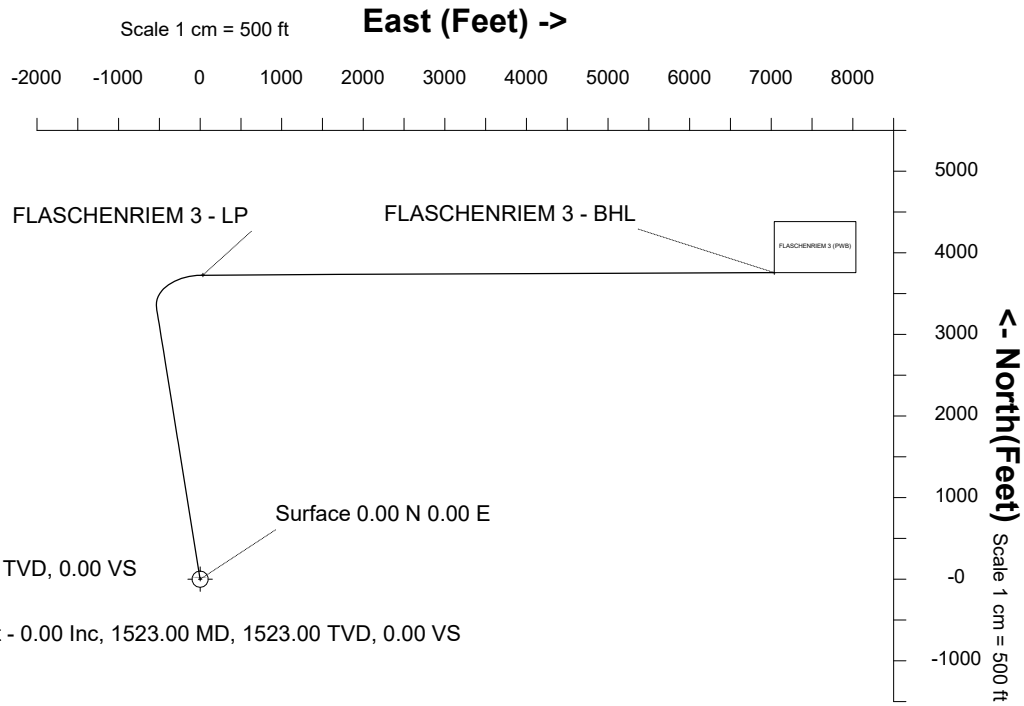
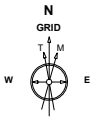
Petro Operating Company

Location	Weld County, CO	Slot	FLASCHENRIEM 3
Field	Wattenberg	Well	FLASCHENRIEM 3
Installation	Flaschenriem Pad	Wellbore	FLASCHENRIEM 3 (PWB)

Created by sean.dolfinger
Date plotted 11-Mar-2019

Plot reference is FLASCHENRIEM 3 (PWB).
Ref wellpath is FLASCHENRIEM 3 (PWP#1).
Coordinates are in Feet reference FLASCHENRIEM 3.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 5092.00 ft.
Plot North is aligned to GRID North.





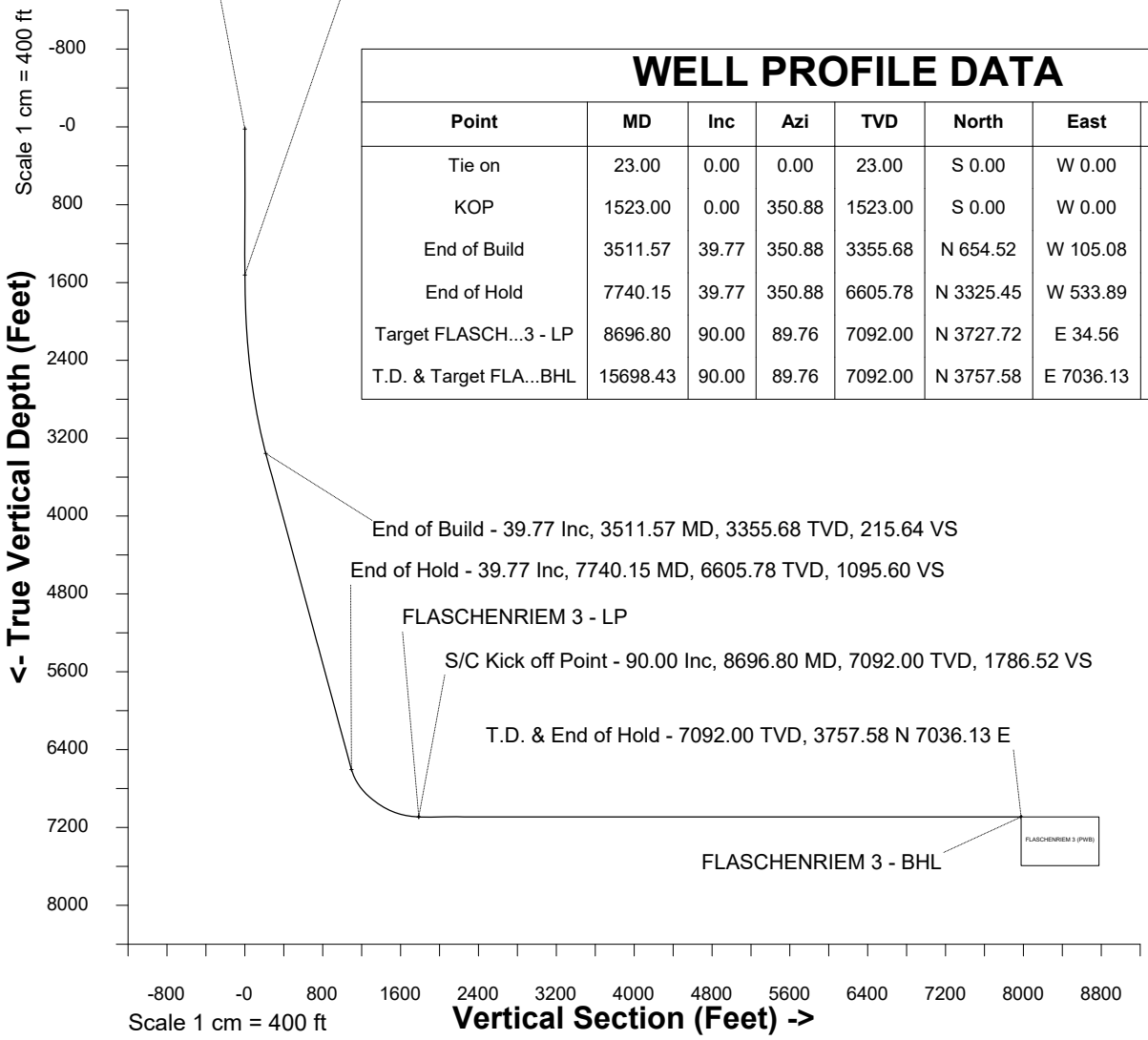
Apr-20-2018
EMM-2015 Dip: 66.69 deg Field: 52216.1 nT
Lat: N40 20 39.0325 Long: W104 59 29.5523 Elev: 5068.00 ft
Magnetic North is 8.49 deg East of True North
GRID North is 0.33 deg East of True North
To correct azimuth from True to GRID subtract 0.33 deg
To correct azimuth from Magnetic to GRID add 8.16 deg

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

3DS Kick off Point - 0.00 Inc, 1523.00 MD, 1523.00 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	1523.00	0.00	350.88	1523.00	S 0.00	W 0.00	0.00	0.00
End of Build	3511.57	39.77	350.88	3355.68	N 654.52	W 105.08	2.00	215.64
End of Hold	7740.15	39.77	350.88	6605.78	N 3325.45	W 533.89	0.00	1095.60
Target FLASCH...3 - LP	8696.80	90.00	89.76	7092.00	N 3727.72	E 34.56	10.00	1786.52
T.D. & Target FLA...BHL	15698.43	90.00	89.76	7092.00	N 3757.58	E 7036.13	0.00	7976.63



Azimuth 61.90 with reference 0.00 N, 0.00 E from FLASCHENRIEM 3

SYSDRILL
Well Design Combined Report
Wellbore: FLASCHENRIEM 3 (PWB)

Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
FLASCHENRIEM 3	40.34405210	-104.99154010	1368585.1984	3141727.4387	45.02S	0.87E	0.00

Declination

Date	Source	Time
Apr-20-2018	EMM-2015	11:01

Installation Details

Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Flaschenriem Pad	40.34417570	-104.99154230	1368630.2207	3141726.5673	NAD83 Based Colorado State Planes, Northern Zone, US Feet	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	-5069.00	0.00N	0.00E		0.00
1523.00	0.00	350.88	1523.00	-3569.00	0.00N	0.00E	==>	0.00
3511.57	39.77	350.88	3355.68	-1736.32	654.52N	105.08W	2.00	215.64
7740.15	39.77	350.88	6605.78	1513.78	3325.45N	533.89W	==>	1095.60
8696.80	90.00	89.76	7092.00	2000.00	3727.72N	34.56E	10.00	1786.52
15698.43	90.00	89.76	7092.00	2000.00	3757.58N	7036.13E	==>	7976.63

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	40.34405210	-104.99154010
23.00	0.00	0.00	23.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1523.00	0.00	350.88	1523.00	0.00N	0.00E	==>	0.00	40.34405210	-104.99154010
1623.00	2.00	350.88	1622.98	1.72N	0.28W	2.00	0.57	40.34405683	-104.99154106
1723.00	4.00	350.88	1722.84	6.89N	1.11W	2.00	2.27	40.34407103	-104.99154393
1823.00	6.00	350.88	1822.45	15.50N	2.49W	2.00	5.11	40.34409467	-104.99154871
1923.00	8.00	350.88	1921.70	27.53N	4.42W	2.00	9.07	40.34412773	-104.99155539
2023.00	10.00	350.88	2020.47	42.97N	6.90W	2.00	14.16	40.34417016	-104.99156397
2123.00	12.00	350.88	2118.62	61.81N	9.92W	2.00	20.36	40.34422192	-104.99157443
2223.00	14.00	350.88	2216.06	84.02N	13.49W	2.00	27.68	40.34428294	-104.99158676
2323.00	16.00	350.88	2312.64	109.57N	17.59W	2.00	36.10	40.34435314	-104.99160095
2423.00	18.00	350.88	2408.27	138.44N	22.23W	2.00	45.61	40.34443245	-104.99161698
2523.00	20.00	350.88	2502.82	170.58N	27.39W	2.00	56.20	40.34452076	-104.99163484
2623.00	22.00	350.88	2596.17	205.97N	33.07W	2.00	67.86	40.34461797	-104.99165449
2723.00	24.00	350.88	2688.21	244.54N	39.26W	2.00	80.57	40.34472396	-104.99167591
2823.00	26.00	350.88	2778.84	286.27N	45.96W	2.00	94.31	40.34483859	-104.99169908
2923.00	28.00	350.88	2867.94	331.09N	53.16W	2.00	109.08	40.34496174	-104.99172398

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 5092.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 61.90 degrees
Bottom hole distance is 7976.63 Feet on azimuth 61.90 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 11-Mar-2019

SYSDRILL
Well Design Combined Report
Wellbore: FLASCHENRIEM 3 (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)
3023.00	30.00	350.88	2955.39	378.96N	60.84W	2.00	124.85	40.34509325	-104.99175056
3123.00	32.00	350.88	3041.11	429.81N	69.00W	2.00	141.60	40.34523295	-104.99177880
3223.00	34.00	350.88	3124.97	483.58N	77.64W	2.00	159.32	40.34538069	-104.99180867
3323.00	36.00	350.88	3206.88	540.21N	86.73W	2.00	177.98	40.34553627	-104.99184012
3423.00	38.00	350.88	3286.74	599.63N	96.27W	2.00	197.55	40.34569952	-104.99187312
3511.57	39.77	350.88	3355.68	654.52N	105.08W	2.00	215.64	40.34585034	-104.99190361
3523.00	39.77	350.88	3364.47	661.74N	106.24W	==>	218.02	40.34587017	-104.99190762
3623.00	39.77	350.88	3441.33	724.91N	116.38W	==>	238.83	40.34604371	-104.99194270
3723.00	39.77	350.88	3518.19	788.07N	126.52W	==>	259.64	40.34621725	-104.99197778
3823.00	39.77	350.88	3595.05	851.23N	136.66W	==>	280.45	40.34639078	-104.99201286
3923.00	39.77	350.88	3671.91	914.40N	146.80W	==>	301.26	40.34656432	-104.99204794
4023.00	39.77	350.88	3748.77	977.56N	156.94W	==>	322.07	40.34673786	-104.99208302
4123.00	39.77	350.88	3825.63	1040.72N	167.08W	==>	342.87	40.34691139	-104.99211810
4223.00	39.77	350.88	3902.49	1103.89N	177.22W	==>	363.68	40.34708493	-104.99215319
4323.00	39.77	350.88	3979.35	1167.05N	187.36W	==>	384.49	40.34725846	-104.99218827
4423.00	39.77	350.88	4056.21	1230.22N	197.51W	==>	405.30	40.34743200	-104.99222335
4523.00	39.77	350.88	4133.07	1293.38N	207.65W	==>	426.11	40.34760554	-104.99225843
4623.00	39.77	350.88	4209.93	1356.54N	217.79W	==>	446.92	40.34777907	-104.99229352
4723.00	39.77	350.88	4286.79	1419.71N	227.93W	==>	467.73	40.34795261	-104.99232860
4823.00	39.77	350.88	4363.65	1482.87N	238.07W	==>	488.54	40.34812614	-104.99236368
4923.00	39.77	350.88	4440.51	1546.03N	248.21W	==>	509.35	40.34829968	-104.99239876
5023.00	39.77	350.88	4517.37	1609.20N	258.35W	==>	530.16	40.34847322	-104.99243385
5123.00	39.77	350.88	4594.23	1672.36N	268.49W	==>	550.97	40.34864675	-104.99246893
5223.00	39.77	350.88	4671.09	1735.53N	278.63W	==>	571.78	40.34882029	-104.99250402
5323.00	39.77	350.88	4747.95	1798.69N	288.77W	==>	592.59	40.34899382	-104.99253910
5423.00	39.77	350.88	4824.81	1861.85N	298.91W	==>	613.40	40.34916736	-104.99257418
5523.00	39.77	350.88	4901.67	1925.02N	309.05W	==>	634.21	40.34934090	-104.99260927
5623.00	39.77	350.88	4978.53	1988.18N	319.19W	==>	655.02	40.34951443	-104.99264435
5723.00	39.77	350.88	5055.39	2051.34N	329.33W	==>	675.83	40.34968797	-104.99267944
5823.00	39.77	350.88	5132.25	2114.51N	339.47W	==>	696.64	40.34986150	-104.99271452
5923.00	39.77	350.88	5209.11	2177.67N	349.62W	==>	717.45	40.35003504	-104.99274961
6023.00	39.77	350.88	5285.97	2240.83N	359.76W	==>	738.26	40.35020858	-104.99278469
6123.00	39.77	350.88	5362.83	2304.00N	369.90W	==>	759.07	40.35038211	-104.99281978
6223.00	39.77	350.88	5439.69	2367.16N	380.04W	==>	779.88	40.35055565	-104.99285486
6323.00	39.77	350.88	5516.55	2430.33N	390.18W	==>	800.69	40.35072918	-104.99288995
6423.00	39.77	350.88	5593.42	2493.49N	400.32W	==>	821.50	40.35090272	-104.99292503
6523.00	39.77	350.88	5670.28	2556.65N	410.46W	==>	842.31	40.35107626	-104.99296012
6623.00	39.77	350.88	5747.14	2619.82N	420.60W	==>	863.12	40.35124979	-104.99299521
6723.00	39.77	350.88	5824.00	2682.98N	430.74W	==>	883.93	40.35142333	-104.99303029
6823.00	39.77	350.88	5900.86	2746.14N	440.88W	==>	904.74	40.35159686	-104.99306538
6923.00	39.77	350.88	5977.72	2809.31N	451.02W	==>	925.55	40.35177040	-104.99310047
7023.00	39.77	350.88	6054.58	2872.47N	461.16W	==>	946.36	40.35194393	-104.99313555
7123.00	39.77	350.88	6131.44	2935.64N	471.30W	==>	967.17	40.35211747	-104.99317064
7223.00	39.77	350.88	6208.30	2998.80N	481.44W	==>	987.98	40.35229101	-104.99320573
7323.00	39.77	350.88	6285.16	3061.96N	491.58W	==>	1008.79	40.35246454	-104.99324081
7423.00	39.77	350.88	6362.02	3125.13N	501.73W	==>	1029.60	40.35263808	-104.99327590
7523.00	39.77	350.88	6438.88	3188.29N	511.87W	==>	1050.41	40.35281161	-104.99331099
7623.00	39.77	350.88	6515.74	3251.45N	522.01W	==>	1071.22	40.35298515	-104.99334608
7723.00	39.77	350.88	6592.60	3314.62N	532.15W	==>	1092.03	40.35315868	-104.99338117
7740.15	39.77	350.88	6605.78	3325.45N	533.89W	==>	1095.60	40.35318844	-104.99338718
7823.00	39.51	3.88	6669.69	3378.00N	536.31W	10.00	1118.21	40.35333273	-104.99339480
7923.00	41.09	19.17	6746.15	3440.93N	523.33W	10.00	1159.31	40.35350526	-104.99334695
8023.00	44.52	33.02	6819.67	3501.52N	493.36W	10.00	1214.29	40.35367110	-104.99323817
8123.00	49.42	44.97	6888.02	3557.92N	447.30W	10.00	1281.49	40.35382520	-104.99307174
8223.00	55.36	55.14	6949.12	3608.43N	386.55W	10.00	1358.87	40.35396287	-104.99285274
8323.00	62.04	63.87	7001.12	3651.50N	312.95W	10.00	1444.07	40.35407995	-104.99258782
8423.00	69.19	71.55	7042.43	3685.83N	228.75W	10.00	1534.52	40.35417286	-104.99228501
8523.00	76.66	78.51	7071.80	3710.38N	136.51W	10.00	1627.45	40.35423879	-104.99195354

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 5092.0ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 61.90 degrees
Bottom hole distance is 7976.63 Feet on azimuth 61.90 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 11-Mar-2019

SYSDRILL
Well Design Combined Report
Wellbore: FLASCHENRIEM 3 (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)
8623.00	84.31	85.05	7088.33	3724.39N	39.01W	10.00	1720.05	40.35427572	-104.99160346
8696.80	90.00	89.76	7092.00	3727.72N	34.56E	10.00	1786.52	40.35428370	-104.99133940
8723.00	90.00	89.76	7092.00	3727.83N	60.77E	==>	1809.69	40.35428359	-104.99124538
8823.00	90.00	89.76	7092.00	3728.26N	160.77E	==>	1898.10	40.35428319	-104.99088658
8923.00	90.00	89.76	7092.00	3728.69N	260.77E	==>	1986.51	40.35428278	-104.99052779
9023.00	90.00	89.76	7092.00	3729.11N	360.76E	==>	2074.92	40.35428238	-104.99016899
9123.00	90.00	89.76	7092.00	3729.54N	460.76E	==>	2163.33	40.35428197	-104.98981020
9223.00	90.00	89.76	7092.00	3729.97N	560.76E	==>	2251.74	40.35428156	-104.98945140
9323.00	90.00	89.76	7092.00	3730.39N	660.76E	==>	2340.15	40.35428115	-104.98909261
9423.00	90.00	89.76	7092.00	3730.82N	760.76E	==>	2428.56	40.35428074	-104.98873381
9523.00	90.00	89.76	7092.00	3731.25N	860.76E	==>	2516.97	40.35428033	-104.98837502
9623.00	90.00	89.76	7092.00	3731.67N	960.76E	==>	2605.37	40.35427991	-104.98801622
9723.00	90.00	89.76	7092.00	3732.10N	1060.76E	==>	2693.78	40.35427950	-104.98765743
9823.00	90.00	89.76	7092.00	3732.53N	1160.76E	==>	2782.19	40.35427908	-104.98729863
9923.00	90.00	89.76	7092.00	3732.95N	1260.76E	==>	2870.60	40.35427866	-104.98693984
10023.00	90.00	89.76	7092.00	3733.38N	1360.76E	==>	2959.01	40.35427825	-104.98658104
10123.00	90.00	89.76	7092.00	3733.81N	1460.75E	==>	3047.42	40.35427783	-104.98622225
10223.00	90.00	89.76	7092.00	3734.23N	1560.75E	==>	3135.83	40.35427741	-104.98586345
10323.00	90.00	89.76	7092.00	3734.66N	1660.75E	==>	3224.24	40.35427699	-104.98550466
10423.00	90.00	89.76	7092.00	3735.09N	1760.75E	==>	3312.65	40.35427656	-104.98514586
10523.00	90.00	89.76	7092.00	3735.51N	1860.75E	==>	3401.06	40.35427614	-104.98478707
10623.00	90.00	89.76	7092.00	3735.94N	1960.75E	==>	3489.47	40.35427571	-104.98442828
10723.00	90.00	89.76	7092.00	3736.36N	2060.75E	==>	3577.88	40.35427529	-104.98406948
10823.00	90.00	89.76	7092.00	3736.79N	2160.75E	==>	3666.29	40.35427486	-104.98371069
10923.00	90.00	89.76	7092.00	3737.22N	2260.75E	==>	3754.70	40.35427443	-104.98335189
11023.00	90.00	89.76	7092.00	3737.64N	2360.75E	==>	3843.11	40.35427400	-104.98299310
11123.00	90.00	89.76	7092.00	3738.07N	2460.75E	==>	3931.52	40.35427357	-104.98263430
11223.00	90.00	89.76	7092.00	3738.50N	2560.74E	==>	4019.93	40.35427314	-104.98227551
11323.00	90.00	89.76	7092.00	3738.92N	2660.74E	==>	4108.34	40.35427271	-104.98191671
11423.00	90.00	89.76	7092.00	3739.35N	2760.74E	==>	4196.74	40.35427228	-104.98155792
11523.00	90.00	89.76	7092.00	3739.78N	2860.74E	==>	4285.15	40.35427184	-104.98119912
11623.00	90.00	89.76	7092.00	3740.20N	2960.74E	==>	4373.56	40.35427141	-104.98084033
11723.00	90.00	89.76	7092.00	3740.63N	3060.74E	==>	4461.97	40.35427097	-104.98048153
11823.00	90.00	89.76	7092.00	3741.06N	3160.74E	==>	4550.38	40.35427053	-104.98012274
11923.00	90.00	89.76	7092.00	3741.48N	3260.74E	==>	4638.79	40.35427009	-104.97976394
12023.00	90.00	89.76	7092.00	3741.91N	3360.74E	==>	4727.20	40.35426965	-104.97940515
12123.00	90.00	89.76	7092.00	3742.34N	3460.74E	==>	4815.61	40.35426921	-104.97904635
12223.00	90.00	89.76	7092.00	3742.76N	3560.74E	==>	4904.02	40.35426877	-104.97868756
12323.00	90.00	89.76	7092.00	3743.19N	3660.73E	==>	4992.43	40.35426832	-104.97832876
12423.00	90.00	89.76	7092.00	3743.61N	3760.73E	==>	5080.84	40.35426788	-104.97796997
12523.00	90.00	89.76	7092.00	3744.04N	3860.73E	==>	5169.25	40.35426743	-104.97761117
12623.00	90.00	89.76	7092.00	3744.47N	3960.73E	==>	5257.66	40.35426699	-104.97725238
12723.00	90.00	89.76	7092.00	3744.89N	4060.73E	==>	5346.07	40.35426654	-104.97689358
12823.00	90.00	89.76	7092.00	3745.32N	4160.73E	==>	5434.48	40.35426609	-104.97653479
12923.00	90.00	89.76	7092.00	3745.75N	4260.73E	==>	5522.89	40.35426564	-104.97617599
13023.00	90.00	89.76	7092.00	3746.17N	4360.73E	==>	5611.30	40.35426519	-104.97581720
13123.00	90.00	89.76	7092.00	3746.60N	4460.73E	==>	5699.71	40.35426474	-104.97545840
13223.00	90.00	89.76	7092.00	3747.03N	4560.73E	==>	5788.12	40.35426428	-104.97509961
13323.00	90.00	89.76	7092.00	3747.45N	4660.73E	==>	5876.52	40.35426383	-104.97474081
13423.00	90.00	89.76	7092.00	3747.88N	4760.72E	==>	5964.93	40.35426337	-104.97438202
13523.00	90.00	89.76	7092.00	3748.31N	4860.72E	==>	6053.34	40.35426291	-104.97402322
13623.00	90.00	89.76	7092.00	3748.73N	4960.72E	==>	6141.75	40.35426246	-104.97366443
13723.00	90.00	89.76	7092.00	3749.16N	5060.72E	==>	6230.16	40.35426200	-104.97330564
13823.00	90.00	89.76	7092.00	3749.59N	5160.72E	==>	6318.57	40.35426154	-104.97294684
13923.00	90.00	89.76	7092.00	3750.01N	5260.72E	==>	6406.98	40.35426108	-104.97258805
14023.00	90.00	89.76	7092.00	3750.44N	5360.72E	==>	6495.39	40.35426061	-104.97222925
14123.00	90.00	89.76	7092.00	3750.87N	5460.72E	==>	6583.80	40.35426015	-104.97187046
14223.00	90.00	89.76	7092.00	3751.29N	5560.72E	==>	6672.21	40.35425969	-104.97151166
14323.00	90.00	89.76	7092.00	3751.72N	5660.72E	==>	6760.62	40.35425922	-104.97115287

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Vertical Section is from 0.00N 0.00E on azimuth 61.90 degrees
Bottom hole distance is 7976.63 Feet on azimuth 61.90 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 11-Mar-2019

SYSDRILL
Well Design Combined Report
Wellbore: FLASCHENRIEM 3 (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)
14423.00	90.00	89.76	7092.00	3752.14N	5760.72E	==>	6849.03	40.35425875	-104.97079407
14523.00	90.00	89.76	7092.00	3752.57N	5860.71E	==>	6937.44	40.35425828	-104.97043528
14623.00	90.00	89.76	7092.00	3753.00N	5960.71E	==>	7025.85	40.35425782	-104.97007648
14723.00	90.00	89.76	7092.00	3753.42N	6060.71E	==>	7114.26	40.35425735	-104.96971769
14823.00	90.00	89.76	7092.00	3753.85N	6160.71E	==>	7202.67	40.35425687	-104.96935889
14923.00	90.00	89.76	7092.00	3754.28N	6260.71E	==>	7291.08	40.35425640	-104.96900010
15023.00	90.00	89.76	7092.00	3754.70N	6360.71E	==>	7379.49	40.35425593	-104.96864130
15123.00	90.00	89.76	7092.00	3755.13N	6460.71E	==>	7467.90	40.35425545	-104.96828251
15223.00	90.00	89.76	7092.00	3755.56N	6560.71E	==>	7556.30	40.35425498	-104.96792371
15323.00	90.00	89.76	7092.00	3755.98N	6660.71E	==>	7644.71	40.35425450	-104.96756492
15423.00	90.00	89.76	7092.00	3756.41N	6760.71E	==>	7733.12	40.35425402	-104.96720612
15523.00	90.00	89.76	7092.00	3756.84N	6860.71E	==>	7821.53	40.35425354	-104.96684733
15623.00	90.00	89.76	7092.00	3757.26N	6960.70E	==>	7909.94	40.35425306	-104.96648854
15698.43	90.00	89.76	7092.00	3757.58N	7036.13E	==>	7976.63	40.35425270	-104.96621790

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SYSDRILL
Well Design Combined Report
Wellbore: FLASCHENRIEM 3 (PWB)

Targets

Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
FLASCHENRIEM 3 - BHL	3757.58N	7036.13E	7092.00	40.35425270	-104.96621790	1372342.62	3148763.26
FLASCHENRIEM 3 - LP	3727.72N	34.56E	7092.00	40.35428370	-104.99133940	1372312.76	3141762.00

Survey Tool Program

Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
782193	Planned	1523.00	1523.00	WdW Rate Gyro	Standard
782194	Planned	15698.43	7092.00	ISCWSA MWD	Rev 4 + SAG + FLT

Notes

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