

Petro Operating Company

Location	Weld County, CO	Slot	FLASCHENRIEM 6
Field	Wattenberg	Well	W FLASCHENRIEM 6
Installation	Flaschenriem Pad	Wellbore	W FLASCHENRIEM 6 (PWB)

N
GRID

Scale 1 cm = 500 ft

East (Feet) ->

-2000 -1000 0 1000 2000 3000 4000 5000 6000 7000 8000

Apr-20-2018
EMM-2015 [2000.0-2020.0] 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

FLASCHENRIEM 6-LP

FLASCHENRIEM 6-BHL

W FLASCHENRIEM 6 (PWB)

Surface 0.00 N 0.00 E

WELL PROFILE DATA

Point	MD	Inc	Azi	TVD	North	East	deg/100ft	V. Sect
Tie on	0.00	0.00	0.00	0.00	S 0.00	W 0.00		0.00
KOP	1500.00	0.00	347.29	1500.00	S 0.00	W 0.00	0.00	0.00
End of Build	2848.41	32.36	347.29	2777.85	N 361.70	W 81.61	2.40	63.03
End of Hold	7024.35	32.36	347.29	6305.20	N 2542.12	W 573.55	0.00	443.00
Target FLASCH...M 6-LP	7991.19	90.00	89.85	6849.20	N 2880.13	W 5.40	10.00	1097.26
T.D. & Target FLA...BHL	14995.04	90.00	89.85	6849.20	N 2899.04	E 6998.42	0.00	7575.11

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

3DS Kick off Point - 0.00 Inc, 1500.00 MD, 1500.00 TVD, 0.00 VS

End of Build - 32.36 Inc, 2848.41 MD, 2777.85 TVD, 63.03 VS

End of Hold - 32.36 Inc, 7024.35 MD, 6305.20 TVD, 443.00 VS

S/C Kick off Point - 90.00 Inc, 7991.19 MD, 6849.20 TVD, 1097.26 VS

T.D. & End of Hold - 6849.20 TVD, 2899.04 N 6998.42 E

FLASCHENRIEM 6-LP

FLASCHENRIEM 6-BHL

W FLASCHENRIEM 6 (PWB)

Created by admin
Date plotted 14-May-2018
Plot reference is W FLASCHENRIEM 6 (PWB).
Ref wellpath is W FLASCHENRIEM 6 (PWP#1).
Coordinates are in Feet reference FLASCHENRIEM 6.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 5067.20 ft.
Plot North is aligned to GRID North.

Scale 1 cm = 250 ft

<- True Vertical Depth (Feet)

<- North (Feet)
Scale 1 cm = 500 ft

4000
3000
2000
1000
0
-1000

Scale 1 cm = 250 ft

Vertical Section (Feet) ->

Azimuth 67.50 with reference 0.00 N, 0.00 E from FLASCHENRIEM 6



SYSDRILL
Well Design Combined Report
Wellbore: W FLASCHENRIEM 6 (PWB)



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
FLASCHENRIEM 6	40.34413630	-104.99136220	1368616.1557	3141776.8498	14.07S	50.28E	0.00

Declination		
Date	Source	Time
Apr-20-2018	EMM-2015 [2000.0-2020.0]	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	CO83-NF on NORTH AMERICAN DATUM 1983 datum	Grid

Summary Wellpath								
MD[ft]	Inc[deg]	Azi[deg]	TVD[ft]	Vertical Depth SS	North[ft]	East[ft]	Dogleg [deg/100ft]	Vertical Section[ft]
0.00	0.00	0.000	0.00	-5067.20	0.00N	0.00E		0.00
1500.00	0.00	347.290	1500.00	-3567.20	0.00N	0.00E	==>	0.00
2848.41	32.36	347.290	2777.85	-2289.35	361.70N	81.61W	2.40	63.03
7024.35	32.36	347.290	6305.20	1238.00	2542.12N	573.55W	==>	443.00
7991.19	90.00	89.850	6849.20	1782.00	2880.13N	5.40W	10.00	1097.26
14995.04	90.00	89.850	6849.20	1782.00	2899.04N	6998.42E	==>	7575.11

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	0.000	0.00	0.00N	0.00E		0.00	40.34413630	-104.99136220
100.00	0.00	0.000	100.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
200.00	0.00	0.000	200.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
300.00	0.00	0.000	300.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
400.00	0.00	0.000	400.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
500.00	0.00	0.000	500.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
600.00	0.00	0.000	600.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
700.00	0.00	0.000	700.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
800.00	0.00	0.000	800.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
900.00	0.00	0.000	900.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1000.00	0.00	0.000	1000.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1100.00	0.00	0.000	1100.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1200.00	0.00	0.000	1200.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1300.00	0.00	0.000	1300.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1400.00	0.00	0.000	1400.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1500.00	0.00	347.290	1500.00	0.00N	0.00E	==>	0.00	40.34413630	-104.99136220
1600.00	2.40	347.290	1599.97	2.04N	0.46W	2.40	0.36	40.34414191	-104.99136381
1700.00	4.80	347.290	1699.77	8.17N	1.84W	2.40	1.42	40.34415875	-104.99136864
1800.00	7.20	347.290	1799.21	18.36N	4.14W	2.40	3.20	40.34418677	-104.99137668
1900.00	9.60	347.290	1898.13	32.61N	7.36W	2.40	5.68	40.34422593	-104.99138792
2000.00	12.00	347.290	1996.35	50.89N	11.48W	2.40	8.87	40.34427617	-104.99140234
2100.00	14.40	347.290	2093.70	73.16N	16.51W	2.40	12.75	40.34433738	-104.99141991
2200.00	16.80	347.290	2190.01	99.39N	22.43W	2.40	17.32	40.34440948	-104.99144060
2300.00	19.20	347.290	2285.11	129.54N	29.23W	2.40	22.57	40.34449232	-104.99146438
2400.00	21.60	347.290	2378.83	163.54N	36.90W	2.40	28.50	40.34458577	-104.99149120
2500.00	24.00	347.290	2471.01	201.33N	45.42W	2.40	35.09	40.34468965	-104.99152101
2600.00	26.40	347.290	2561.49	242.87N	54.80W	2.40	42.32	40.34480380	-104.99155377
2700.00	28.80	347.290	2650.10	288.06N	64.99W	2.40	50.20	40.34492800	-104.99158942
2800.00	31.20	347.290	2736.70	336.83N	75.99W	2.40	58.70	40.34506204	-104.99162789
2900.00	32.36	347.290	2821.43	388.63N	87.68W	==>	67.72	40.34520443	-104.99166876
3000.00	32.36	347.290	2905.90	440.85N	99.46W	==>	76.82	40.34534794	-104.99170995
3100.00	32.36	347.290	2990.36	493.06N	111.24W	==>	85.92	40.34549145	-104.99175114

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 5067.2ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 67.500 degrees
Bottom hole distance is 7575.11 Feet on azimuth 67.50 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 14-May-2018

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)
3200.00	32.36	347.290	3074.83	545.28N	123.02W	==>	95.02	40.34563495	-104.99179232
3300.00	32.36	347.290	3159.30	597.49N	134.81W	==>	104.12	40.34577846	-104.99183351
3400.00	32.36	347.290	3243.77	649.70N	146.59W	==>	113.22	40.34592197	-104.99187470
3500.00	32.36	347.290	3328.24	701.92N	158.37W	==>	122.32	40.34606547	-104.99191589
3600.00	32.36	347.290	3412.71	754.13N	170.15W	==>	131.42	40.34620898	-104.99195708
3700.00	32.36	347.290	3497.17	806.35N	181.93W	==>	140.52	40.34635249	-104.99199827
3800.00	32.36	347.290	3581.64	858.56N	193.71W	==>	149.62	40.34649599	-104.99203946
3900.00	32.36	347.290	3666.11	910.77N	205.49W	==>	158.71	40.34663950	-104.99208065
4000.00	32.36	347.290	3750.58	962.99N	217.27W	==>	167.81	40.34678300	-104.99212183
4100.00	32.36	347.290	3835.05	1015.20N	229.05W	==>	176.91	40.34692651	-104.99216302
4200.00	32.36	347.290	3919.52	1067.42N	240.83W	==>	186.01	40.34707002	-104.99220421
4300.00	32.36	347.290	4003.98	1119.63N	252.61W	==>	195.11	40.34721352	-104.99224540
4400.00	32.36	347.290	4088.45	1171.84N	264.39W	==>	204.21	40.34735703	-104.99228659
4500.00	32.36	347.290	4172.92	1224.06N	276.17W	==>	213.31	40.34750054	-104.99232779
4600.00	32.36	347.290	4257.39	1276.27N	287.95W	==>	222.41	40.34764404	-104.99236898
4700.00	32.36	347.290	4341.86	1328.49N	299.73W	==>	231.51	40.34778755	-104.99241017
4800.00	32.36	347.290	4426.33	1380.70N	311.51W	==>	240.61	40.34793105	-104.99245136
4900.00	32.36	347.290	4510.80	1432.91N	323.29W	==>	249.70	40.34807456	-104.99249255
5000.00	32.36	347.290	4595.26	1485.13N	335.07W	==>	258.80	40.34821807	-104.99253374
5100.00	32.36	347.290	4679.73	1537.34N	346.85W	==>	267.90	40.34836157	-104.99257493
5200.00	32.36	347.290	4764.20	1589.56N	358.63W	==>	277.00	40.34850508	-104.99261612
5300.00	32.36	347.290	4848.67	1641.77N	370.42W	==>	286.10	40.34864859	-104.99265731
5400.00	32.36	347.290	4933.14	1693.98N	382.20W	==>	295.20	40.34879209	-104.99269851
5500.00	32.36	347.290	5017.61	1746.20N	393.98W	==>	304.30	40.34893560	-104.99273970
5600.00	32.36	347.290	5102.07	1798.41N	405.76W	==>	313.40	40.34907910	-104.99278089
5700.00	32.36	347.290	5186.54	1850.63N	417.54W	==>	322.50	40.34922261	-104.99282208
5800.00	32.36	347.290	5271.01	1902.84N	429.32W	==>	331.60	40.34936612	-104.99286328
5900.00	32.36	347.290	5355.48	1955.05N	441.10W	==>	340.69	40.34950962	-104.99290447
6000.00	32.36	347.290	5439.95	2007.27N	452.88W	==>	349.79	40.34965313	-104.99294566
6100.00	32.36	347.290	5524.42	2059.48N	464.66W	==>	358.89	40.34979663	-104.99298686
6200.00	32.36	347.290	5608.89	2111.70N	476.44W	==>	367.99	40.34994014	-104.99302805
6300.00	32.36	347.290	5693.35	2163.91N	488.22W	==>	377.09	40.35008365	-104.99306924
6400.00	32.36	347.290	5777.82	2216.12N	500.00W	==>	386.19	40.35022715	-104.99311044
6500.00	32.36	347.290	5862.29	2268.34N	511.78W	==>	395.29	40.35037066	-104.99315163
6600.00	32.36	347.290	5946.76	2320.55N	523.56W	==>	404.39	40.35051416	-104.99319282
6700.00	32.36	347.290	6031.23	2372.77N	535.34W	==>	413.49	40.35065767	-104.99323402
6800.00	32.36	347.290	6115.70	2424.98N	547.12W	==>	422.59	40.35080117	-104.99327521
6900.00	32.36	347.290	6200.16	2477.19N	558.90W	==>	431.68	40.35094468	-104.99331641
7000.00	32.36	347.290	6284.63	2529.41N	570.68W	==>	440.78	40.35108819	-104.99335760
7100.00	31.75	1.520	6369.41	2581.83N	577.49W	10.00	454.56	40.35123217	-104.99338093
7200.00	33.37	19.920	6453.90	2634.11N	567.39W	10.00	483.89	40.35137554	-104.99334366
7300.00	37.38	35.790	6535.60	2684.72N	540.20W	10.00	528.38	40.35151402	-104.99324506
7400.00	43.12	48.510	6612.02	2732.10N	496.74W	10.00	586.67	40.35164340	-104.99308814
7500.00	49.98	58.560	6680.84	2774.83N	438.32W	10.00	657.00	40.35175976	-104.99287767
7600.00	57.55	66.680	6739.97	2811.59N	366.72W	10.00	737.22	40.35185955	-104.99262003
7700.00	65.55	73.510	6787.61	2841.29N	284.11W	10.00	824.89	40.35193976	-104.99232306
7800.00	73.83	79.510	6822.32	2863.00N	193.02W	10.00	917.36	40.35199793	-104.99199579
7900.00	82.25	85.020	6843.04	2876.08N	96.20W	10.00	1011.82	40.35203230	-104.99164814
8000.00	90.00	89.850	6849.20	2880.16N	3.41E	==>	1105.40	40.35204193	-104.99129070
8100.00	90.00	89.850	6849.20	2880.43N	103.41E	==>	1197.89	40.35204109	-104.99093192
8200.00	90.00	89.850	6849.20	2880.70N	203.41E	==>	1290.38	40.35204026	-104.99057314
8300.00	90.00	89.850	6849.20	2880.97N	303.41E	==>	1382.87	40.35203942	-104.99021436
8400.00	90.00	89.850	6849.20	2881.24N	403.41E	==>	1475.36	40.35203858	-104.98985557
8500.00	90.00	89.850	6849.20	2881.51N	503.41E	==>	1567.85	40.35203774	-104.98949679
8600.00	90.00	89.850	6849.20	2881.78N	603.41E	==>	1660.34	40.35203691	-104.98913801
8700.00	90.00	89.850	6849.20	2882.05N	703.41E	==>	1752.83	40.35203606	-104.98877923
8800.00	90.00	89.850	6849.20	2882.32N	803.40E	==>	1845.32	40.35203522	-104.98842045
8900.00	90.00	89.850	6849.20	2882.59N	903.40E	==>	1937.81	40.35203438	-104.98806166

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 5067.2ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 67.500 degrees
Bottom hole distance is 7575.11 Feet on azimuth 67.50 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 14-May-2018



SYSDRILL
Well Design Combined Report
Wellbore: W FLASCHENRIEM 6 (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)
9000.00	90.00	89.850	6849.20	2882.86N	1003.40E	==>	2030.30	40.35203354	-104.98770288
9100.00	90.00	89.850	6849.20	2883.13N	1103.40E	==>	2122.79	40.35203269	-104.98734410
9200.00	90.00	89.850	6849.20	2883.40N	1203.40E	==>	2215.28	40.35203184	-104.98698532
9300.00	90.00	89.850	6849.20	2883.67N	1303.40E	==>	2307.77	40.35203100	-104.98662654
9400.00	90.00	89.850	6849.20	2883.94N	1403.40E	==>	2400.26	40.35203015	-104.98626776
9500.00	90.00	89.850	6849.20	2884.21N	1503.40E	==>	2492.75	40.35202930	-104.98590897
9600.00	90.00	89.850	6849.20	2884.48N	1603.40E	==>	2585.24	40.35202845	-104.98555019
9700.00	90.00	89.850	6849.20	2884.75N	1703.40E	==>	2677.73	40.35202760	-104.98519141
9800.00	90.00	89.850	6849.20	2885.02N	1803.40E	==>	2770.22	40.35202674	-104.98483263
9900.00	90.00	89.850	6849.20	2885.29N	1903.40E	==>	2862.71	40.35202589	-104.98447385
10000.00	90.00	89.850	6849.20	2885.56N	2003.40E	==>	2955.20	40.35202503	-104.98411507
10100.00	90.00	89.850	6849.20	2885.83N	2103.40E	==>	3047.69	40.35202418	-104.98375628
10200.00	90.00	89.850	6849.20	2886.10N	2203.40E	==>	3140.18	40.35202332	-104.98339750
10300.00	90.00	89.850	6849.20	2886.37N	2303.40E	==>	3232.67	40.35202246	-104.98303872
10400.00	90.00	89.850	6849.20	2886.64N	2403.40E	==>	3325.16	40.35202160	-104.98267994
10500.00	90.00	89.850	6849.20	2886.91N	2503.40E	==>	3417.65	40.35202074	-104.98232116
10600.00	90.00	89.850	6849.20	2887.18N	2603.40E	==>	3510.14	40.35201988	-104.98196238
10700.00	90.00	89.850	6849.20	2887.45N	2703.40E	==>	3602.63	40.35201902	-104.98160359
10800.00	90.00	89.850	6849.20	2887.72N	2803.40E	==>	3695.12	40.35201815	-104.98124481
10900.00	90.00	89.850	6849.20	2887.99N	2903.40E	==>	3787.61	40.35201729	-104.98088603
11000.00	90.00	89.850	6849.20	2888.26N	3003.40E	==>	3880.10	40.35201642	-104.98052725
11100.00	90.00	89.850	6849.20	2888.53N	3103.40E	==>	3972.59	40.35201555	-104.98016847
11200.00	90.00	89.850	6849.20	2888.80N	3203.40E	==>	4065.08	40.35201468	-104.97980969
11300.00	90.00	89.850	6849.20	2889.07N	3303.40E	==>	4157.57	40.35201381	-104.97945090
11400.00	90.00	89.850	6849.20	2889.34N	3403.40E	==>	4250.06	40.35201294	-104.97909212
11500.00	90.00	89.850	6849.20	2889.61N	3503.39E	==>	4342.55	40.35201207	-104.97873334
11600.00	90.00	89.850	6849.20	2889.88N	3603.39E	==>	4435.04	40.35201120	-104.97837456
11700.00	90.00	89.850	6849.20	2890.15N	3703.39E	==>	4527.53	40.35201032	-104.97801578
11800.00	90.00	89.850	6849.20	2890.42N	3803.39E	==>	4620.02	40.35200945	-104.97765700
11900.00	90.00	89.850	6849.20	2890.69N	3903.39E	==>	4712.51	40.35200857	-104.97729821
12000.00	90.00	89.850	6849.20	2890.96N	4003.39E	==>	4805.00	40.35200769	-104.97693943
12100.00	90.00	89.850	6849.20	2891.23N	4103.39E	==>	4897.49	40.35200682	-104.97658065
12200.00	90.00	89.850	6849.20	2891.50N	4203.39E	==>	4989.98	40.35200594	-104.97622187
12300.00	90.00	89.850	6849.20	2891.77N	4303.39E	==>	5082.47	40.35200506	-104.97586309
12400.00	90.00	89.850	6849.20	2892.04N	4403.39E	==>	5174.96	40.35200417	-104.97550431
12500.00	90.00	89.850	6849.20	2892.31N	4503.39E	==>	5267.45	40.35200329	-104.97514553
12600.00	90.00	89.850	6849.20	2892.58N	4603.39E	==>	5359.94	40.35200241	-104.97478674
12700.00	90.00	89.850	6849.20	2892.85N	4703.39E	==>	5452.43	40.35200152	-104.97442796
12800.00	90.00	89.850	6849.20	2893.12N	4803.39E	==>	5544.92	40.35200064	-104.97406918
12900.00	90.00	89.850	6849.20	2893.39N	4903.39E	==>	5637.41	40.35199975	-104.97371040
13000.00	90.00	89.850	6849.20	2893.66N	5003.39E	==>	5729.90	40.35199886	-104.97335162
13100.00	90.00	89.850	6849.20	2893.93N	5103.39E	==>	5822.39	40.35199797	-104.97299284
13200.00	90.00	89.850	6849.20	2894.20N	5203.39E	==>	5914.88	40.35199708	-104.97263406
13300.00	90.00	89.850	6849.20	2894.47N	5303.39E	==>	6007.37	40.35199619	-104.97227527
13400.00	90.00	89.850	6849.20	2894.74N	5403.39E	==>	6099.86	40.35199529	-104.97191649
13500.00	90.00	89.850	6849.20	2895.01N	5503.39E	==>	6192.35	40.35199440	-104.97155771
13600.00	90.00	89.850	6849.20	2895.28N	5603.39E	==>	6284.84	40.35199350	-104.97119893
13700.00	90.00	89.850	6849.20	2895.55N	5703.39E	==>	6377.33	40.35199261	-104.97084015
13800.00	90.00	89.850	6849.20	2895.82N	5803.39E	==>	6469.82	40.35199171	-104.97048137
13900.00	90.00	89.850	6849.20	2896.09N	5903.39E	==>	6562.31	40.35199081	-104.97012259
14000.00	90.00	89.850	6849.20	2896.36N	6003.39E	==>	6654.80	40.35198991	-104.96976380
14100.00	90.00	89.850	6849.20	2896.63N	6103.39E	==>	6747.29	40.35198901	-104.96940502
14200.00	90.00	89.850	6849.20	2896.90N	6203.39E	==>	6839.78	40.35198811	-104.96904624
14300.00	90.00	89.850	6849.20	2897.17N	6303.38E	==>	6932.27	40.35198721	-104.96868746
14400.00	90.00	89.850	6849.20	2897.44N	6403.38E	==>	7024.76	40.35198630	-104.96832868
14500.00	90.00	89.850	6849.20	2897.71N	6503.38E	==>	7117.25	40.35198540	-104.96796990
14600.00	90.00	89.850	6849.20	2897.98N	6603.38E	==>	7209.74	40.35198449	-104.96761112
14700.00	90.00	89.850	6849.20	2898.25N	6703.38E	==>	7302.23	40.35198358	-104.96725234
14800.00	90.00	89.850	6849.20	2898.52N	6803.38E	==>	7394.72	40.35198268	-104.96689355

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 5067.2ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 67.500 degrees
Bottom hole distance is 7575.11 Feet on azimuth 67.50 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 14-May-2018



SYSDRILL
Well Design Combined Report
Wellbore: W FLASCHENRIEM 6 (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)
14900.00	90.00	89.850	6849.20	2898.79N	6903.38E	==>	7487.21	40.35198177	-104.96653477
14995.04	90.00	89.850	6849.20	2899.04N	6998.42E	==>	7575.11	40.35198090	-104.96619380

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 5067.2ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 67.500 degrees
Bottom hole distance is 7575.11 Feet on azimuth 67.50 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by IPT
Date Printed: 14-May-2018



SYSDRILL
Well Design Combined Report
Wellbore: W FLASCHENRIEM 6 (PWB)



Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
FLASCHENRIEM 6-BHL	2899.04N	6998.42E	6849.20	40.35198090	-104.96619380	1371515.07	3148774.96
FLASCHENRIEM 6-LP	2880.13N	5.40W	6849.20	40.35204200	-104.99132230	1371496.16	3141771.45

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
645459	Planned	1500.00	1500.00	WdW Rate Gyro	Standard
645460	Planned	14995.04	6849.20	ISCWSA MWD	Rev 4 + SAG + FLT

Notes