

# BAYSWATER E&P, LLC

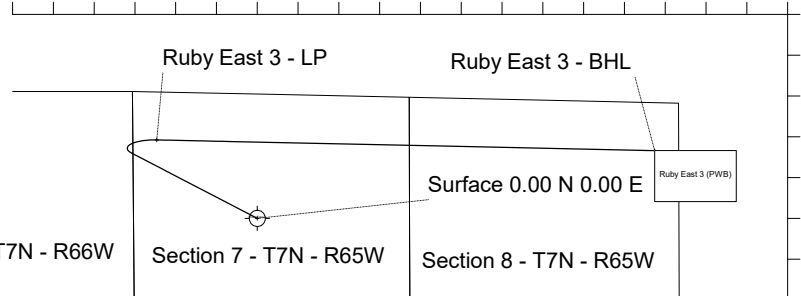
<b>Location</b> Weld County, CO	<b>Slot</b> Ruby East 3
<b>Field</b> WATTENBERG	<b>Well</b> Ruby East 3
<b>Installation</b> Ruby 7-J Pad	<b>Wellbore</b> Ruby East 3 (PWB)

Created by sean.dolfinger  
 Date plotted 28-Sep-2021  
 Plot reference is Ruby East 3 (PWB).  
 Ref wellpath is Ruby East 3 (PWP#1).  
 Coordinates are in Feet reference Ruby East 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: 4947.00 ft.  
 Plot North is aligned to GRID North.

Scale 1 cm = 800 ft

East (Feet) ->

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



Scale 1 cm = 800 ft  
 North (Feet)  
 3200  
 1600  
 0  
 -1600

Sep-27-2021  
 EMM-2017 Dip: 66.82 deg Field: 51949.2 nT  
 Lat: N40 35 22.7508 Long: W104 42 35.5996 Elev: 4923.00 ft  
 Magnetic North is 7.83 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 7.32 deg

Section 12 - T7N - R66W

Section 7 - T7N - R65W

Section 8 - T7N - R65W

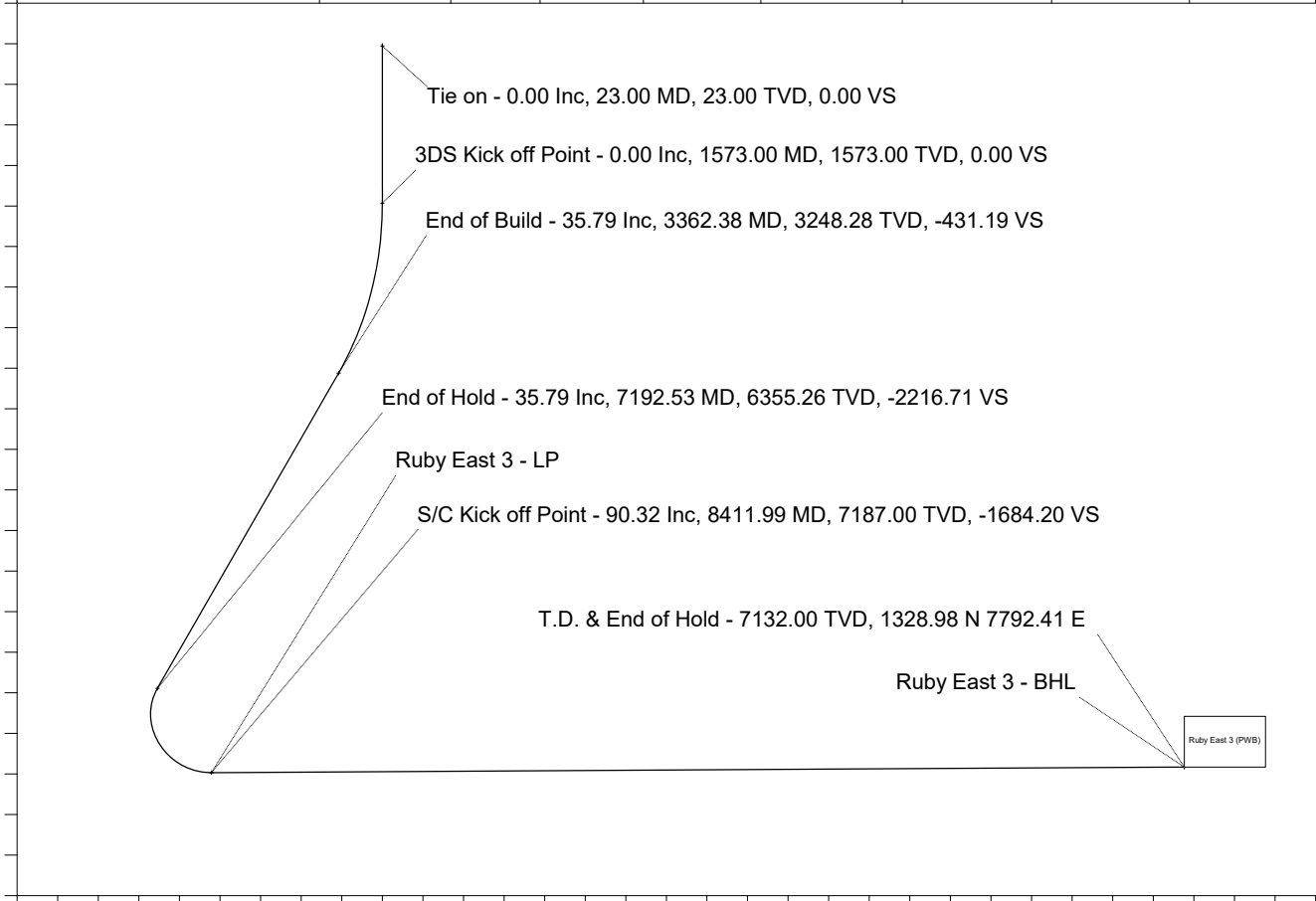
## WELL PROFILE DATA

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	297.46	1573.00	S 0.00	W 0.00	0.00	0.00
End of Build	3362.38	35.79	297.46	3248.28	N 249.43	W 479.96	2.00	-431.19
End of Hold	7192.53	35.79	297.46	6355.26	N 1282.28	W 2467.40	0.00	-2216.71
Target Ruby E...3 - LP	8411.99	90.32	91.23	7187.00	N 1538.55	W 1970.92	10.00	-1684.20
T.D. & Target Rub...BHL	18177.72	90.32	91.23	7132.00	N 1328.98	E 7792.41	0.00	7904.92

Scale 1 cm = 400 ft

True Vertical Depth (Feet)

-800  
 -0  
 800  
 1600  
 2400  
 3200  
 4000  
 4800  
 5600  
 6400  
 7200  
 8000



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

Scale 1 cm = 400 ft

Vertical Section (Feet) ->

Azimuth 80.32 with reference 0.00 N, 0.00 E from Ruby East 3



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Ground
Ruby East 3	40.59039400	-104.70710300	1458906.4146	3220206.8870	269.97N	0.19W	0.00

Declination		
Date	Source	Time
Sep-27-2021	EMM-2017	13:43

Installation Details						
Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment
Ruby 7-J Pad	40.58965300	-104.70711100	1458636.4488	3220207.0791	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	-4924.00	0.00N	0.00E		0.00
1573.00	0.00	297.46	1573.00	-3374.00	0.00N	0.00E	==>	0.00
3362.38	35.79	297.46	3248.28	-1698.72	249.43N	479.96W	2.00	-431.19
7192.53	35.79	297.46	6355.26	1408.26	1282.28N	2467.40W	==>	-2216.71
8411.99	90.32	91.23	7187.00	2240.00	1538.55N	1970.92W	10.00	-1684.20
18177.72	90.32	91.23	7132.00	2185.00	1328.98N	7792.41E	==>	7904.92

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	40.59039400	-104.70710300
23.00	0.00	0.00	23.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1000.00	0.00	0.00	1000.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1100.00	0.00	0.00	1100.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1200.00	0.00	0.00	1200.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1300.00	0.00	0.00	1300.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1400.00	0.00	0.00	1400.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1500.00	0.00	0.00	1500.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1573.00	0.00	297.46	1573.00	0.00N	0.00E	==>	0.00	40.59039400	-104.70710300
1673.00	2.00	297.46	1672.98	0.80N	1.55W	2.00	-1.39	40.59039625	-104.70710855
1773.00	4.00	297.46	1772.84	3.22N	6.19W	2.00	-5.56	40.59040298	-104.70712519
1873.00	6.00	297.46	1872.45	7.24N	13.93W	2.00	-12.51	40.59041420	-104.70715290
1973.00	8.00	297.46	1971.70	12.86N	24.74W	2.00	-22.23	40.59042989	-104.70719166
2073.00	10.00	297.46	2070.47	20.07N	38.62W	2.00	-34.70	40.59045003	-104.70724140
2173.00	12.00	297.46	2168.62	28.87N	55.55W	2.00	-49.91	40.59047460	-104.70730207
2273.00	14.00	297.46	2266.06	39.24N	75.51W	2.00	-67.84	40.59050356	-104.70737360
2373.00	16.00	297.46	2362.64	51.18N	98.47W	2.00	-88.47	40.59053688	-104.70745590
2473.00	18.00	297.46	2458.27	64.66N	124.42W	2.00	-111.77	40.59057452	-104.70754886
2573.00	20.00	297.46	2552.82	79.67N	153.30W	2.00	-137.73	40.59061643	-104.70765239
2673.00	22.00	297.46	2646.17	96.19N	185.10W	2.00	-166.29	40.59066256	-104.70776634
2773.00	24.00	297.46	2738.21	114.21N	219.77W	2.00	-197.44	40.59071287	-104.70789058
2873.00	26.00	297.46	2828.84	133.70N	257.27W	2.00	-231.13	40.59076727	-104.70802497
2973.00	28.00	297.46	2917.94	154.63N	297.55W	2.00	-267.32	40.59082572	-104.70816932

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 4947.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 80.32 degrees  
Bottom hole distance is 7904.92 Feet on azimuth 80.32 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 28-Sep-2021

SYSDRILL  
Well Design Combined Report  
Wellbore: Ruby East 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)
3073.00	30.00	297.46	3005.39	176.99N	340.57W	2.00	-305.96	40.59088813	-104.70832348
3173.00	32.00	297.46	3091.11	200.74N	386.26W	2.00	-347.02	40.59095443	-104.70848725
3273.00	34.00	297.46	3174.97	225.85N	434.59W	2.00	-390.43	40.59102455	-104.70866044
3362.38	35.79	297.46	3248.28	249.43N	479.96W	2.00	-431.19	40.59109037	-104.70882302
3373.00	35.79	297.46	3256.89	252.29N	485.47W	==>	-436.14	40.59109836	-104.70884277
3473.00	35.79	297.46	3338.01	279.26N	537.36W	==>	-482.76	40.59117365	-104.70902873
3573.00	35.79	297.46	3419.13	306.22N	589.25W	==>	-529.38	40.59124893	-104.70921469
3673.00	35.79	297.46	3500.25	333.19N	641.14W	==>	-575.99	40.59132422	-104.70940065
3773.00	35.79	297.46	3581.37	360.16N	693.03W	==>	-622.61	40.59139950	-104.70958661
3873.00	35.79	297.46	3662.49	387.12N	744.91W	==>	-669.23	40.59147479	-104.70977257
3973.00	35.79	297.46	3743.61	414.09N	796.80W	==>	-715.85	40.59155007	-104.70995853
4073.00	35.79	297.46	3824.73	441.05N	848.69W	==>	-762.46	40.59162535	-104.71014449
4173.00	35.79	297.46	3905.84	468.02N	900.58W	==>	-809.08	40.59170063	-104.71033045
4273.00	35.79	297.46	3986.96	494.99N	952.47W	==>	-855.70	40.59177592	-104.71051642
4373.00	35.79	297.46	4068.08	521.95N	1004.36W	==>	-902.32	40.59185120	-104.71070238
4473.00	35.79	297.46	4149.20	548.92N	1056.25W	==>	-948.93	40.59192648	-104.71088834
4573.00	35.79	297.46	4230.32	575.89N	1108.14W	==>	-995.55	40.59200176	-104.71107431
4673.00	35.79	297.46	4311.44	602.85N	1160.03W	==>	-1042.17	40.59207704	-104.71126027
4773.00	35.79	297.46	4392.56	629.82N	1211.92W	==>	-1088.79	40.59215232	-104.71144623
4873.00	35.79	297.46	4473.68	656.78N	1263.81W	==>	-1135.40	40.59222761	-104.71163220
4973.00	35.79	297.46	4554.80	683.75N	1315.70W	==>	-1182.02	40.59230289	-104.71181816
5073.00	35.79	297.46	4635.92	710.72N	1367.59W	==>	-1228.64	40.59237817	-104.71200413
5173.00	35.79	297.46	4717.04	737.68N	1419.48W	==>	-1275.25	40.59245345	-104.71219009
5273.00	35.79	297.46	4798.15	764.65N	1471.37W	==>	-1321.87	40.59252872	-104.71237606
5373.00	35.79	297.46	4879.27	791.62N	1523.26W	==>	-1368.49	40.59260400	-104.71256203
5473.00	35.79	297.46	4960.39	818.58N	1575.15W	==>	-1415.11	40.59267928	-104.71274799
5573.00	35.79	297.46	5041.51	845.55N	1627.04W	==>	-1461.72	40.59275456	-104.71293396
5673.00	35.79	297.46	5122.63	872.52N	1678.93W	==>	-1508.34	40.59282984	-104.71311993
5773.00	35.79	297.46	5203.75	899.48N	1730.82W	==>	-1554.96	40.59290512	-104.71330590
5873.00	35.79	297.46	5284.87	926.45N	1782.70W	==>	-1601.58	40.59298040	-104.71349187
5973.00	35.79	297.46	5365.99	953.41N	1834.59W	==>	-1648.19	40.59305567	-104.71367784
6073.00	35.79	297.46	5447.11	980.38N	1886.48W	==>	-1694.81	40.59313095	-104.71386381
6173.00	35.79	297.46	5528.23	1007.35N	1938.37W	==>	-1741.43	40.59320623	-104.71404978
6273.00	35.79	297.46	5609.35	1034.31N	1990.26W	==>	-1788.05	40.59328150	-104.71423575
6373.00	35.79	297.46	5690.46	1061.28N	2042.15W	==>	-1834.66	40.59335678	-104.71442172
6473.00	35.79	297.46	5771.58	1088.25N	2094.04W	==>	-1881.28	40.59343206	-104.71460769
6573.00	35.79	297.46	5852.70	1115.21N	2145.93W	==>	-1927.90	40.59350733	-104.71479366
6673.00	35.79	297.46	5933.82	1142.18N	2197.82W	==>	-1974.51	40.59358261	-104.71497963
6773.00	35.79	297.46	6014.94	1169.14N	2249.71W	==>	-2021.13	40.59365788	-104.71516560
6873.00	35.79	297.46	6096.06	1196.11N	2301.60W	==>	-2067.75	40.59373316	-104.71535158
6973.00	35.79	297.46	6177.18	1223.08N	2353.49W	==>	-2114.37	40.59380843	-104.71553755
7073.00	35.79	297.46	6258.30	1250.04N	2405.38W	==>	-2160.98	40.59388370	-104.71572352
7173.00	35.79	297.46	6339.42	1277.01N	2457.27W	==>	-2207.60	40.59395898	-104.71590950
7192.53	35.79	297.46	6355.26	1282.28N	2467.40W	==>	-2216.71	40.59397368	-104.71594582
7273.00	29.18	306.06	6423.14	1304.71N	2504.20W	10.00	-2249.21	40.59403615	-104.71607760
7373.00	22.19	322.75	6513.32	1334.17N	2535.42W	10.00	-2275.03	40.59411776	-104.71618906
7473.00	18.08	349.58	6607.38	1364.54N	2549.69W	10.00	-2283.99	40.59420146	-104.71623948
7573.00	18.83	21.46	6702.48	1394.89N	2546.58W	10.00	-2275.83	40.59428470	-104.71622733
7673.00	24.00	45.22	6795.72	1424.31N	2526.19W	10.00	-2250.78	40.59436496	-104.71615298
7773.00	31.48	59.64	6884.26	1451.91N	2489.14W	10.00	-2209.61	40.59443979	-104.71601868
7873.00	39.98	68.71	6965.43	1476.83N	2436.54W	10.00	-2153.58	40.59450693	-104.71582852
7973.00	48.98	74.97	7036.74	1498.33N	2370.01W	10.00	-2084.38	40.59456433	-104.71558827
8073.00	58.23	79.70	7096.04	1515.76N	2291.56W	10.00	-2004.11	40.59461024	-104.71530523
8173.00	67.62	83.56	7141.52	1528.57N	2203.57W	10.00	-1915.22	40.59464328	-104.71498801
8273.00	77.10	86.92	7171.80	1536.39N	2108.72W	10.00	-1820.40	40.59466244	-104.71464624
8373.00	86.61	90.04	7185.96	1538.98N	2009.89W	10.00	-1722.55	40.59466713	-104.71429030
8411.99	90.32	91.23	7187.00	1538.55N	1970.92W	10.00	-1684.20	40.59466500	-104.71415000
8473.00	90.32	91.23	7186.66	1537.24N	1909.93W	==>	-1624.30	40.59465992	-104.71393044

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 4947.0ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 80.32 degrees  
Bottom hole distance is 7904.92 Feet on azimuth 80.32 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 28-Sep-2021

SYSDRILL  
Well Design Combined Report  
Wellbore: Ruby East 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)
8573.00	90.32	91.23	7186.09	1535.09N	1809.95W	==>	-1526.11	40.59465160	-104.71357053
8673.00	90.32	91.23	7185.53	1532.94N	1709.97W	==>	-1427.92	40.59464328	-104.71321063
8773.00	90.32	91.23	7184.97	1530.80N	1610.00W	==>	-1329.73	40.59463495	-104.71285072
8873.00	90.32	91.23	7184.40	1528.65N	1510.02W	==>	-1231.53	40.59462662	-104.71249081
8973.00	90.32	91.23	7183.84	1526.51N	1410.05W	==>	-1133.34	40.59461830	-104.71213091
9073.00	90.32	91.23	7183.28	1524.36N	1310.07W	==>	-1035.15	40.59460997	-104.71177100
9173.00	90.32	91.23	7182.71	1522.21N	1210.10W	==>	-936.96	40.59460164	-104.71141110
9273.00	90.32	91.23	7182.15	1520.07N	1110.12W	==>	-838.77	40.59459331	-104.71105119
9373.00	90.32	91.23	7181.59	1517.92N	1010.15W	==>	-740.58	40.59458498	-104.71069129
9473.00	90.32	91.23	7181.02	1515.78N	910.17W	==>	-642.38	40.59457664	-104.71033138
9573.00	90.32	91.23	7180.46	1513.63N	810.20W	==>	-544.19	40.59456831	-104.70997148
9673.00	90.32	91.23	7179.90	1511.49N	710.22W	==>	-446.00	40.59455997	-104.70961157
9773.00	90.32	91.23	7179.33	1509.34N	610.25W	==>	-347.81	40.59455164	-104.70925167
9873.00	90.32	91.23	7178.77	1507.19N	510.27W	==>	-249.62	40.59454330	-104.70889176
9973.00	90.32	91.23	7178.21	1505.05N	410.29W	==>	-151.43	40.59453496	-104.70853186
10073.00	90.32	91.23	7177.65	1502.90N	310.32W	==>	-53.23	40.59452662	-104.70817195
10173.00	90.32	91.23	7177.08	1500.76N	210.34W	==>	44.96	40.59451828	-104.70781205
10273.00	90.32	91.23	7176.52	1498.61N	110.37W	==>	143.15	40.59450994	-104.70745215
10373.00	90.32	91.23	7175.96	1496.46N	10.39W	==>	241.34	40.59450159	-104.70709224
10473.00	90.32	91.23	7175.39	1494.32N	89.58E	==>	339.53	40.59449325	-104.70673234
10573.00	90.32	91.23	7174.83	1492.17N	189.56E	==>	437.72	40.59448490	-104.70637243
10673.00	90.32	91.23	7174.27	1490.03N	289.53E	==>	535.92	40.59447656	-104.70601253
10773.00	90.32	91.23	7173.70	1487.88N	389.51E	==>	634.11	40.59446821	-104.70565263
10873.00	90.32	91.23	7173.14	1485.73N	489.48E	==>	732.30	40.59445986	-104.70529272
10973.00	90.32	91.23	7172.58	1483.59N	589.46E	==>	830.49	40.59445151	-104.70493282
11073.00	90.32	91.23	7172.01	1481.44N	689.43E	==>	928.68	40.59444316	-104.70457292
11173.00	90.32	91.23	7171.45	1479.30N	789.41E	==>	1026.87	40.59443481	-104.70421301
11273.00	90.32	91.23	7170.89	1477.15N	889.39E	==>	1125.06	40.59442646	-104.70385311
11373.00	90.32	91.23	7170.32	1475.00N	989.36E	==>	1223.26	40.59441810	-104.70349321
11473.00	90.32	91.23	7169.76	1472.86N	1089.34E	==>	1321.45	40.59440975	-104.70313330
11573.00	90.32	91.23	7169.20	1470.71N	1189.31E	==>	1419.64	40.59440139	-104.70277340
11673.00	90.32	91.23	7168.63	1468.57N	1289.29E	==>	1517.83	40.59439303	-104.70241350
11773.00	90.32	91.23	7168.07	1466.42N	1389.26E	==>	1616.02	40.59438467	-104.70205359
11873.00	90.32	91.23	7167.51	1464.27N	1489.24E	==>	1714.21	40.59437631	-104.70169369
11973.00	90.32	91.23	7166.94	1462.13N	1589.21E	==>	1812.41	40.59436795	-104.70133379
12073.00	90.32	91.23	7166.38	1459.98N	1689.19E	==>	1910.60	40.59435959	-104.70097388
12173.00	90.32	91.23	7165.82	1457.84N	1789.16E	==>	2008.79	40.59435123	-104.70061398
12273.00	90.32	91.23	7165.26	1455.69N	1889.14E	==>	2106.98	40.59434286	-104.70025408
12373.00	90.32	91.23	7164.69	1453.54N	1989.11E	==>	2205.17	40.59433450	-104.69989418
12473.00	90.32	91.23	7164.13	1451.40N	2089.09E	==>	2303.36	40.59432613	-104.69953427
12573.00	90.32	91.23	7163.57	1449.25N	2189.07E	==>	2401.56	40.59431776	-104.69917437
12673.00	90.32	91.23	7163.00	1447.11N	2289.04E	==>	2499.75	40.59430939	-104.69881447
12773.00	90.32	91.23	7162.44	1444.96N	2389.02E	==>	2597.94	40.59430102	-104.69845457
12873.00	90.32	91.23	7161.88	1442.81N	2488.99E	==>	2696.13	40.59429265	-104.69809467
12973.00	90.32	91.23	7161.31	1440.67N	2588.97E	==>	2794.32	40.59428428	-104.69773476
13073.00	90.32	91.23	7160.75	1438.52N	2688.94E	==>	2892.51	40.59427591	-104.69737486
13173.00	90.32	91.23	7160.19	1436.38N	2788.92E	==>	2990.71	40.59426753	-104.69701496
13273.00	90.32	91.23	7159.62	1434.23N	2888.89E	==>	3088.90	40.59425916	-104.69665506
13373.00	90.32	91.23	7159.06	1432.08N	2988.87E	==>	3187.09	40.59425078	-104.69629516
13473.00	90.32	91.23	7158.50	1429.94N	3088.84E	==>	3285.28	40.59424240	-104.69593526
13573.00	90.32	91.23	7157.93	1427.79N	3188.82E	==>	3383.47	40.59423403	-104.69557536
13673.00	90.32	91.23	7157.37	1425.65N	3288.79E	==>	3481.66	40.59422565	-104.69521545
13773.00	90.32	91.23	7156.81	1423.50N	3388.77E	==>	3579.85	40.59421726	-104.69485555
13873.00	90.32	91.23	7156.24	1421.35N	3488.75E	==>	3678.05	40.59420888	-104.69449565
13973.00	90.32	91.23	7155.68	1419.21N	3588.72E	==>	3776.24	40.59420050	-104.69413575
14073.00	90.32	91.23	7155.12	1417.06N	3688.70E	==>	3874.43	40.59419211	-104.69377585
14173.00	90.32	91.23	7154.55	1414.92N	3788.67E	==>	3972.62	40.59418373	-104.69341595
14273.00	90.32	91.23	7153.99	1412.77N	3888.65E	==>	4070.81	40.59417534	-104.69305605
14373.00	90.32	91.23	7153.43	1410.63N	3988.62E	==>	4169.00	40.59416696	-104.69269615

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Vertical Section is from 0.00N 0.00E on azimuth 80.32 degrees  
Bottom hole distance is 7904.92 Feet on azimuth 80.32 degrees from Wellhead  
Calculation method uses Minimum Curvature method  
Prepared by  
Date Printed: 28-Sep-2021

SYS DRILL  
Well Design Combined Report  
Wellbore: Ruby East 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)
14473.00	90.32	91.23	7152.86	1408.48N	4088.60E	==>	4267.20	40.59415857	-104.69233625
14573.00	90.32	91.23	7152.30	1406.33N	4188.57E	==>	4365.39	40.59415018	-104.69197635
14673.00	90.32	91.23	7151.74	1404.19N	4288.55E	==>	4463.58	40.59414179	-104.69161645
14773.00	90.32	91.23	7151.18	1402.04N	4388.52E	==>	4561.77	40.59413339	-104.69125655
14873.00	90.32	91.23	7150.61	1399.90N	4488.50E	==>	4659.96	40.59412500	-104.69089665
14973.00	90.32	91.23	7150.05	1397.75N	4588.47E	==>	4758.15	40.59411661	-104.69053675
15073.00	90.32	91.23	7149.49	1395.60N	4688.45E	==>	4856.35	40.59410821	-104.69017685
15173.00	90.32	91.23	7148.92	1393.46N	4788.43E	==>	4954.54	40.59409981	-104.68981695
15273.00	90.32	91.23	7148.36	1391.31N	4888.40E	==>	5052.73	40.59409142	-104.68945705
15373.00	90.32	91.23	7147.80	1389.17N	4988.38E	==>	5150.92	40.59408302	-104.68909715
15473.00	90.32	91.23	7147.23	1387.02N	5088.35E	==>	5249.11	40.59407462	-104.68873725
15573.00	90.32	91.23	7146.67	1384.87N	5188.33E	==>	5347.30	40.59406622	-104.68837735
15673.00	90.32	91.23	7146.11	1382.73N	5288.30E	==>	5445.50	40.59405781	-104.68801745
15773.00	90.32	91.23	7145.54	1380.58N	5388.28E	==>	5543.69	40.59404941	-104.68765755
15873.00	90.32	91.23	7144.98	1378.44N	5488.25E	==>	5641.88	40.59404101	-104.68729765
15973.00	90.32	91.23	7144.42	1376.29N	5588.23E	==>	5740.07	40.59403260	-104.68693775
16073.00	90.32	91.23	7143.85	1374.14N	5688.20E	==>	5838.26	40.59402419	-104.68657785
16173.00	90.32	91.23	7143.29	1372.00N	5788.18E	==>	5936.45	40.59401579	-104.68621795
16273.00	90.32	91.23	7142.73	1369.85N	5888.15E	==>	6034.65	40.59400738	-104.68585805
16373.00	90.32	91.23	7142.16	1367.71N	5988.13E	==>	6132.84	40.59399897	-104.68549815
16473.00	90.32	91.23	7141.60	1365.56N	6088.11E	==>	6231.03	40.59399056	-104.68513826
16573.00	90.32	91.23	7141.04	1363.41N	6188.08E	==>	6329.22	40.59398214	-104.68477836
16673.00	90.32	91.23	7140.47	1361.27N	6288.06E	==>	6427.41	40.59397373	-104.68441846
16773.00	90.32	91.23	7139.91	1359.12N	6388.03E	==>	6525.60	40.59396532	-104.68405856
16873.00	90.32	91.23	7139.35	1356.98N	6488.01E	==>	6623.79	40.59395690	-104.68369866
16973.00	90.32	91.23	7138.78	1354.83N	6587.98E	==>	6721.99	40.59394848	-104.68333876
17073.00	90.32	91.23	7138.22	1352.68N	6687.96E	==>	6820.18	40.59394007	-104.68297886
17173.00	90.32	91.23	7137.66	1350.54N	6787.93E	==>	6918.37	40.59393165	-104.68261897
17273.00	90.32	91.23	7137.10	1348.39N	6887.91E	==>	7016.56	40.59392323	-104.68225907
17373.00	90.32	91.23	7136.53	1346.25N	6987.88E	==>	7114.75	40.59391481	-104.68189917
17473.00	90.32	91.23	7135.97	1344.10N	7087.86E	==>	7212.94	40.59390638	-104.68153927
17573.00	90.32	91.23	7135.41	1341.95N	7187.83E	==>	7311.14	40.59389796	-104.68117937
17673.00	90.32	91.23	7134.84	1339.81N	7287.81E	==>	7409.33	40.59388954	-104.68081948
17773.00	90.32	91.23	7134.28	1337.66N	7387.79E	==>	7507.52	40.59388111	-104.68045958
17873.00	90.32	91.23	7133.72	1335.52N	7487.76E	==>	7605.71	40.59387268	-104.68009968
17973.00	90.32	91.23	7133.15	1333.37N	7587.74E	==>	7703.90	40.59386426	-104.67973978
18073.00	90.32	91.23	7132.59	1331.22N	7687.71E	==>	7802.09	40.59385583	-104.67937989
18173.00	90.32	91.23	7132.03	1329.08N	7787.69E	==>	7900.29	40.59384740	-104.67901999
18177.72	90.32	91.23	7132.00	1328.98N	7792.41E	==>	7904.92	40.59384700	-104.67900300

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Calculation method uses Minimum Curvature method  
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Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
Ruby East 3 - LP	1538.55N	1970.92W	7187.00	40.594666500	-104.71415000	1460444.92	3218236.03
Ruby East 3 - BHL	1328.98N	7792.41E	7132.00	40.59384700	-104.67900300	1460235.36	3227999.08

Survey Tool Program						
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model	
1026290	Planned	1573.00	1573.00	WdW Rate Gyro	Standard	
1026289	Planned	18177.72	7132.00	ISWWSA MWD	Rev 4 + SAG + FLT	

Notes