

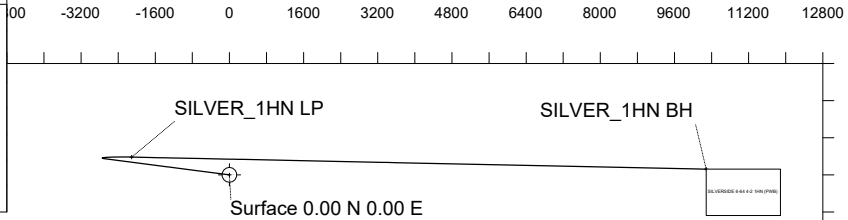
GMT Exploration

Location	DJ Basin	Slot	SILVERSIDE 6-64 4-2 1HN
Field	Elbert County Wells	Well	SILVERSIDE 6-64 4-2 1HN
Installation	Ragged 6-64 4 Pad	Wellbore	SILVERSIDE 6-64 4-2 1HN (PWB)

Created by cdoke
Date plotted 4-Apr-2023
Plot reference is SILVERSIDE 6-64 4-2 1HN (PWB).
Ref wellpath is SILVERSIDE 6-64 4-2 1HN (PWB).
Coordinates are in Feet reference SILVERSIDE 6-64 4-2 1HN.
True Vertical Depths are reference Rig Datum.
Measured Depths are reference Rig Datum.
Rig Datum: Planned Datum #1
Rig Datum to Mean Sea Level: 6016.70 ft.
Plot North is aligned to TRUE North.

Scale 1 cm = 800 ft

East (Feet) ->

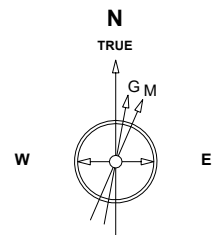
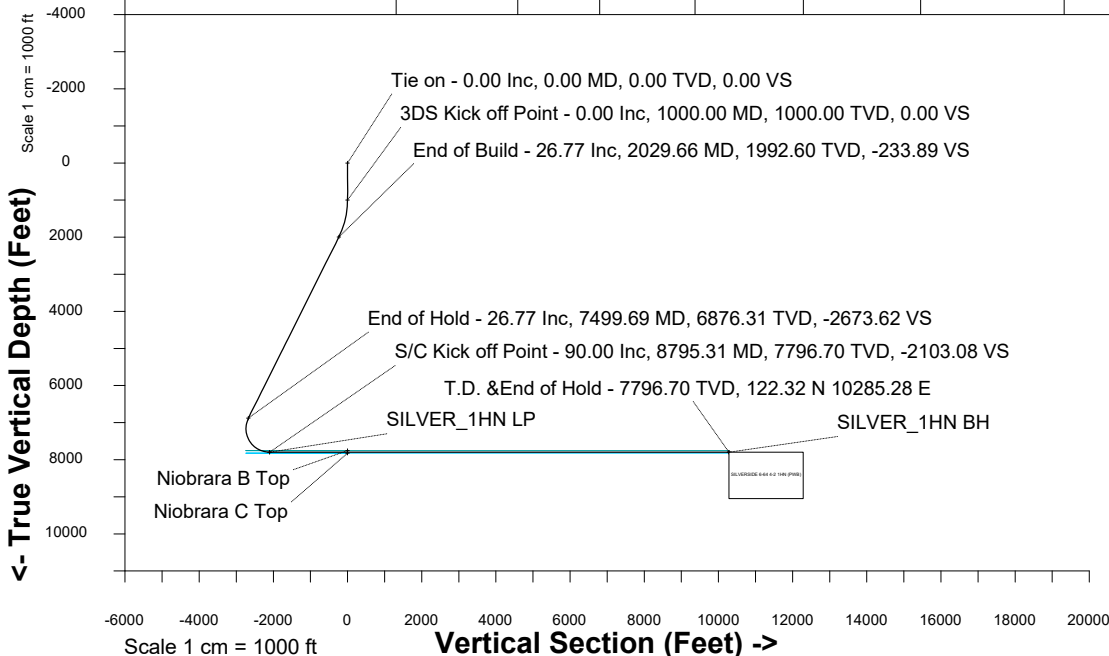


WELL PROFILE DATA

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	1000.00	0.00	277.35	1000.00	S 0.00	W 0.00	0.00	0.00
End of Build	2029.66	26.77	277.35	1992.60	N 30.20	W 234.27	2.60	-233.89
End of Hold	7499.69	26.77	277.35	6876.31	N 345.23	W 2677.91	0.00	-2673.62
Target SILVER_1HN LP	8795.31	90.00	91.20	7796.70	N 382.93	W 2107.78	9.00	-2103.08
T.D. & Target SIL... BH	21191.11	90.00	91.20	7796.70	N 122.32	E 10285.28	0.00	10286.00

<- North(Feet)

Scale 1 cm = 800 ft



Jan-3-2023
IGRF-13 Dip: 65.95 deg Field: 51361.9 nT
Lat: N39 33 44.1720 Long: W104 33 5.5800 Elev: 6016.70 ft
Magnetic North is 7.50 deg East of TRUE North
To correct azimuth from Magnetic to TRUE add 7.50 deg

Azimuth 89.32 with reference 0.00 N, 0.00 E from SILVERSIDE 6-64 4-2 1HN

Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Installation [ft]
SILVERSIDE 6-64 4-2 1HN	N39 33 44.1720	W104 33 5.5800	1084825.1840	3267412.0415	0.00N	0.00E	-0.00

Installation Details

Name	Installation Position (Latitude)	Installation Position (Longitude)	Northing	Easting	Coord System Name	North Alignment	Ground Level Elev [ft]
Ragged 6-64 4 Pad	N39 33 44.1720	W104 33 5.5800	1084825.1840	3267412.0415	NAD83 Colorado State Planes, North Zone, US Foot	True	6016.70

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	0.00	0.00	-6016.70	0.00N	0.00E		0.00
1000.00	0.00	277.35	1000.00	-5016.70	0.00N	0.00E	==>	0.00
2029.66	26.77	277.35	1992.60	-4024.10	30.20N	234.27W	2.60	-233.89
7499.69	26.77	277.35	6876.31	859.61	345.23N	2677.91W	==>	-2673.62
8795.31	90.00	91.20	7796.70	1780.00	382.93N	2107.78W	9.00	-2103.08
21191.11	90.00	91.20	7796.70	1780.00	122.32N	10285.28E	==>	10286.00

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)	All Station Comments
0.00	0.00	0.00	0.00	0.00N	0.00E		0.00	N39 33 44.1720	W104 33 5.5800	Tie on, Slot Datum
79.00	0.00	0.00	79.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	Lower Dawson
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
204.00	0.00	0.00	204.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	Denver
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	
1000.00	0.00	277.35	1000.00	0.00N	0.00E	==>	0.00	N39 33 44.1720	W104 33 5.5800	3DS Kick off Point
1091.03	2.37	277.35	1091.00	0.24N	1.86W	2.60	-1.86	N39 33 44.1744	W104 33 5.6038	Upper Arapahoe
1100.00	2.60	277.35	1099.97	0.29N	2.25W	2.60	-2.25	N39 33 44.1749	W104 33 5.6087	
1200.00	5.20	277.35	1199.73	1.16N	9.00W	2.60	-8.98	N39 33 44.1835	W104 33 5.6949	
1300.00	7.80	277.35	1299.07	2.61N	20.22W	2.60	-20.19	N39 33 44.1978	W104 33 5.8382	
1400.00	10.40	277.35	1397.81	4.63N	35.91W	2.60	-35.85	N39 33 44.2177	W104 33 6.0385	
1500.00	13.00	277.35	1495.72	7.22N	56.02W	2.60	-55.93	N39 33 44.2434	W104 33 6.2952	
1600.00	15.60	277.35	1592.61	10.38N	80.51W	2.60	-80.38	N39 33 44.2746	W104 33 6.6080	
1700.00	18.20	277.35	1688.29	14.10N	109.34W	2.60	-109.17	N39 33 44.3113	W104 33 6.9761	
1800.00	20.80	277.35	1782.54	18.36N	142.44W	2.60	-142.22	N39 33 44.3535	W104 33 7.3988	
1900.00	23.40	277.35	1875.19	23.17N	179.76W	2.60	-179.47	N39 33 44.4010	W104 33 7.8752	
1922.73	23.99	277.35	1896.01	24.34N	188.82W	2.60	-188.51	N39 33 44.4126	W104 33 7.9909	Laramie - Fox Hills
2000.00	26.00	277.35	1966.03	28.52N	221.20W	2.60	-220.84	N39 33 44.4538	W104 33 8.4043	
2029.66	26.77	277.35	1992.60	30.20N	234.27W	2.60	-233.89	N39 33 44.4705	W104 33 8.5713	End of Build
2100.00	26.77	277.35	2055.40	34.25N	265.69W	==>	-265.27	N39 33 44.5105	W104 33 8.9725	
2183.55	26.77	277.35	2130.00	39.06N	303.02W	==>	-302.53	N39 33 44.5581	W104 33 9.4491	Pierre Shale (Base of Fox Hills)
2200.00	26.77	277.35	2144.68	40.01N	310.36W	==>	-309.87	N39 33 44.5674	W104 33 9.5429	
2300.00	26.77	277.35	2233.96	45.77N	355.04W	==>	-354.47	N39 33 44.6243	W104 33 10.1133	
2400.00	26.77	277.35	2323.25	51.53N	399.71W	==>	-399.07	N39 33 44.6812	W104 33 10.6837	
2500.00	26.77	277.35	2412.53	57.29N	444.38W	==>	-443.67	N39 33 44.7381	W104 33 11.2541	
2600.00	26.77	277.35	2501.81	63.05N	489.06W	==>	-488.27	N39 33 44.7951	W104 33 11.8245	
2700.00	26.77	277.35	2591.09	68.81N	533.73W	==>	-532.88	N39 33 44.8520	W104 33 12.3950	
2800.00	26.77	277.35	2680.37	74.57N	578.40W	==>	-577.48	N39 33 44.9089	W104 33 12.9654	
2900.00	26.77	277.35	2769.65	80.33N	623.08W	==>	-622.08	N39 33 44.9658	W104 33 13.5358	
3000.00	26.77	277.35	2858.93	86.08N	667.75W	==>	-666.68	N39 33 45.0227	W104 33 14.1062	
3100.00	26.77	277.35	2948.21	91.84N	712.42W	==>	-711.28	N39 33 45.0796	W104 33 14.6766	
3200.00	26.77	277.35	3037.49	97.60N	757.10W	==>	-755.88	N39 33 45.1365	W104 33 15.2470	
3300.00	26.77	277.35	3126.78	103.36N	801.77W	==>	-800.48	N39 33 45.1934	W104 33 15.8174	
3400.00	26.77	277.35	3216.06	109.12N	846.44W	==>	-845.09	N39 33 45.2503	W104 33 16.3878	
3500.00	26.77	277.35	3305.34	114.88N	891.12W	==>	-889.69	N39 33 45.3072	W104 33 16.9583	
3600.00	26.77	277.35	3394.62	120.64N	935.79W	==>	-934.29	N39 33 45.3641	W104 33 17.5287	
3700.00	26.77	277.35	3483.90	126.40N	980.46W	==>	-978.89	N39 33 45.4210	W104 33 18.0991	
3800.00	26.77	277.35	3573.18	132.16N	1025.14W	==>	-1023.49	N39 33 45.4779	W104 33 18.6695	
3900.00	26.77	277.35	3662.46	137.92N	1069.81W	==>	-1068.09	N39 33 45.5348	W104 33 19.2399	
4000.00	26.77	277.35	3751.74	143.68N	1114.48W	==>	-1112.70	N39 33 45.5917	W104 33 19.8103	
4100.00	26.77	277.35	3841.03	149.43N	1159.16W	==>	-1157.30	N39 33 45.6486	W104 33 20.3808	
4200.00	26.77	277.35	3930.31	155.19N	1203.83W	==>	-1201.90	N39 33 45.7055	W104 33 20.9512	
4300.00	26.77	277.35	4019.59	160.95N	1248.50W	==>	-1246.50	N39 33 45.7624	W104 33 21.5216	
4400.00	26.77	277.35	4108.87	166.71N	1293.18W	==>	-1291.10	N39 33 45.8193	W104 33 22.0920	
4500.00	26.77	277.35	4198.15	172.47N	1337.85W	==>	-1335.70	N39 33 45.8762	W104 33 22.6624	

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 6016.7ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 89.32 degrees
Bottom hole distance is 10286.00 Feet on azimuth 89.32 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 6-Apr-2023

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)	All Station Comments
4600.00	26.77	277.35	4287.43	178.23N	1382.52W	=>	-1380.31	N39 33 45.9331	W104 33 23.2328	
4700.00	26.77	277.35	4376.71	183.99N	1427.20W	=>	-1424.91	N39 33 45.9900	W104 33 23.8033	
4800.00	26.77	277.35	4465.99	189.75N	1471.87W	=>	-1469.51	N39 33 46.0469	W104 33 24.3737	
4900.00	26.77	277.35	4555.28	195.51N	1516.54W	=>	-1514.11	N39 33 46.1038	W104 33 24.9441	
5000.00	26.77	277.35	4644.56	201.27N	1561.22W	=>	-1558.71	N39 33 46.1607	W104 33 25.5145	
5100.00	26.77	277.35	4733.84	207.03N	1605.89W	=>	-1603.31	N39 33 46.2175	W104 33 26.0849	
5200.00	26.77	277.35	4823.12	212.79N	1650.56W	=>	-1647.92	N39 33 46.2744	W104 33 26.6554	
5300.00	26.77	277.35	4912.40	218.54N	1695.24W	=>	-1692.52	N39 33 46.3313	W104 33 27.2258	
5400.00	26.77	277.35	5001.68	224.30N	1739.91W	=>	-1737.12	N39 33 46.3882	W104 33 27.7962	
5500.00	26.77	277.35	5090.96	230.06N	1784.58W	=>	-1781.72	N39 33 46.4451	W104 33 28.3666	
5600.00	26.77	277.35	5180.24	235.82N	1829.26W	=>	-1826.32	N39 33 46.5020	W104 33 28.9370	
5700.00	26.77	277.35	5269.52	241.58N	1873.93W	=>	-1870.92	N39 33 46.5589	W104 33 29.5075	
5800.00	26.77	277.35	5358.81	247.34N	1918.60W	=>	-1915.53	N39 33 46.6158	W104 33 30.0779	
5900.00	26.77	277.35	5448.09	253.10N	1963.28W	=>	-1960.13	N39 33 46.6726	W104 33 30.6483	
5913.34	26.77	277.35	5460.00	253.87N	1969.24W	=>	-1966.08	N39 33 46.6802	W104 33 30.7244	Sussex Sandstone
6000.00	26.77	277.35	5537.37	258.86N	2007.95W	=>	-2004.73	N39 33 46.7295	W104 33 31.2187	
6100.00	26.77	277.35	5626.65	264.62N	2052.62W	=>	-2049.33	N39 33 46.7864	W104 33 31.7891	
6200.00	26.77	277.35	5715.93	270.38N	2097.30W	=>	-2093.93	N39 33 46.8433	W104 33 32.3596	
6300.00	26.77	277.35	5805.21	276.14N	2141.97W	=>	-2138.53	N39 33 46.9002	W104 33 32.9300	
6400.00	26.77	277.35	5894.49	281.90N	2186.64W	=>	-2183.13	N39 33 46.9570	W104 33 33.5004	
6500.00	26.77	277.35	5983.77	287.65N	2231.31W	=>	-2227.74	N39 33 47.0139	W104 33 34.0708	
6600.00	26.77	277.35	6073.06	293.41N	2275.99W	=>	-2272.34	N39 33 47.0708	W104 33 34.6413	
6700.00	26.77	277.35	6162.34	299.17N	2320.66W	=>	-2316.94	N39 33 47.1277	W104 33 35.2117	
6800.00	26.77	277.35	6251.62	304.93N	2365.33W	=>	-2361.54	N39 33 47.1846	W104 33 35.7821	
6900.00	26.77	277.35	6340.90	310.69N	2410.01W	=>	-2406.14	N39 33 47.2414	W104 33 36.3525	
7000.00	26.77	277.35	6430.18	316.45N	2454.68W	=>	-2450.74	N39 33 47.2983	W104 33 36.9229	
7100.00	26.77	277.35	6519.46	322.21N	2499.35W	=>	-2495.35	N39 33 47.3552	W104 33 37.4934	
7200.00	26.77	277.35	6608.74	327.97N	2544.03W	=>	-2539.95	N39 33 47.4121	W104 33 38.0638	
7300.00	26.77	277.35	6698.02	333.73N	2588.70W	=>	-2584.55	N39 33 47.4689	W104 33 38.6342	
7400.00	26.77	277.35	6787.31	339.49N	2633.37W	=>	-2629.15	N39 33 47.5258	W104 33 39.2046	
7499.69	26.77	277.35	6876.61	345.23N	2677.91W	=>	-2673.62	N39 33 47.5825	W104 33 39.7733	End of Hold
7500.00	26.74	277.35	6876.59	345.25N	2678.05W	9.00	-2673.75	N39 33 47.5827	W104 33 39.7751	
7600.00	17.84	280.86	6969.02	351.02N	2715.48W	9.00	-2711.12	N39 33 47.6397	W104 33 40.2531	
7700.00	9.11	290.87	7066.19	356.74N	2737.97W	9.00	-2733.54	N39 33 47.6962	W104 33 40.5402	
7800.00	3.12	8.99	7165.69	362.26N	2744.96W	9.00	-2740.46	N39 33 47.7507	W104 33 40.6295	
7900.00	9.91	73.21	7265.07	367.44N	2736.28W	9.00	-2731.72	N39 33 47.8020	W104 33 40.5186	
8000.00	18.67	82.01	7361.89	372.16N	2712.14W	9.00	-2707.52	N39 33 47.8486	W104 33 40.2104	
8100.00	27.58	85.27	7453.77	376.30N	2673.14W	9.00	-2668.47	N39 33 47.8896	W104 33 39.7124	
8200.00	36.53	87.03	7538.44	379.76N	2620.23W	9.00	-2615.53	N39 33 47.9238	W104 33 39.0368	
8240.26	40.14	87.54	7570.01	380.94N	2595.29W	9.00	-2590.58	N39 33 47.9355	W104 33 38.7184	Sharon Springs Shale
8300.00	45.50	88.16	7613.81	382.45N	2554.72W	9.00	-2549.99	N39 33 47.9505	W104 33 38.2004	
8308.91	46.30	88.25	7620.01	382.65N	2548.32W	9.00	-2543.59	N39 33 47.9525	W104 33 38.1187	Niobrara
8323.56	47.62	88.38	7630.01	382.97N	2537.62W	9.00	-2532.89	N39 33 47.9556	W104 33 37.9820	Niobrara A
8400.00	54.48	89.00	7678.03	384.31N	2478.23W	9.00	-2473.48	N39 33 47.9689	W104 33 37.2237	
8500.00	63.46	89.66	7729.52	385.29N	2392.63W	9.00	-2387.88	N39 33 47.9787	W104 33 36.1307	
8563.45	69.16	90.03	7755.00	385.44N	2334.55W	9.00	-2329.80	N39 33 47.9803	W104 33 35.3892	Niobrara B Top
8600.00	72.45	90.23	7767.02	385.37N	2300.04W	9.00	-2295.29	N39 33 47.9796	W104 33 34.9484	
8700.00	81.43	90.74	7789.59	384.54N	2202.72W	9.00	-2198.00	N39 33 47.9715	W104 33 33.7059	
8795.31	90.00	91.20	7796.70	382.93N	2107.78W	9.00	-2103.08	N39 33 47.9556	W104 33 32.4936	S/C Kick off Point/Target, SILVER 1HN LP
8800.00	90.00	91.20	7796.70	382.83N	2103.09W	=>	-2098.39	N39 33 47.9546	W104 33 32.4337	
8900.00	90.00	91.20	7796.70	380.72N	2003.12W	=>	-1998.45	N39 33 47.9339	W104 33 31.1571	
9000.00	90.00	91.20	7796.70	378.62N	1903.14W	=>	-1898.50	N39 33 47.9132	W104 33 29.8806	
9100.00	90.00	91.20	7796.70	376.52N	1803.16W	=>	-1798.56	N39 33 47.8925	W104 33 28.6040	
9200.00	90.00	91.20	7796.70	374.42N	1703.18W	=>	-1698.61	N39 33 47.8718	W104 33 27.3274	
9300.00	90.00	91.20	7796.70	372.31N	1603.20W	=>	-1598.66	N39 33 47.8511	W104 33 26.0508	
9400.00	90.00	91.20	7796.70	370.21N	1503.23W	=>	-1498.72	N39 33 47.8304	W104 33 24.7742	
9500.00	90.00	91.20	7796.70	368.11N	1403.25W	=>	-1398.77	N39 33 47.8097	W104 33 23.4976	
9600.00	90.00	91.20	7796.70	366.01N	1303.27W	=>	-1298.83	N39 33 47.7889	W104 33 22.2210	
9700.00	90.00	91.20	7796.70	363.91N	1203.29W	=>	-1198.88	N39 33 47.7682	W104 33 20.9445	
9800.00	90.00	91.20	7796.70	361.80N	1103.32W	=>	-1098.93	N39 33 47.7475	W104 33 19.6679	
9900.00	90.00	91.20	7796.70	359.70N	1003.34W	=>	-998.99	N39 33 47.7267	W104 33 18.3913	
10000.00	90.00	91.20	7796.70	357.60N	903.36W	=>	-899.04	N39 33 47.7060	W104 33 17.1147	
10100.00	90.00	91.20	7796.70	355.50N	803.38W	=>	-799.10	N39 33 47.6853	W104 33 15.8381	
10200.00	90.00	91.20	7796.70	353.39N	703.40W	=>	-699.15	N39 33 47.6645	W104 33 14.5615	
10300.00	90.00	91.20	7796.70	351.29N	603.43W	=>	-599.21	N39 33 47.6438	W104 33 13.2849	
10400.00	90.00	91.20	7796.70	349.19N	503.45W	=>	-499.26	N39 33 47.6230	W104 33 12.0084	
10500.00	90.00	91.20	7796.70	347.09N	403.47W	=>	-399.31	N39 33 47.6022	W104 33 10.7318	
10600.00	90.00	91.20	7796.70	344.98N	303.49W	=>	-299.37	N39 33 47.5815	W104 33 9.4552	
10700.00	90.00	91.20	7796.70	342.88N	203.51W	=>	-199.42	N39 33 47.5607	W104 33 8.1786	
10800.00	90.00	91.20	7796.70	340.78N	103.54W	=>	-99.48	N39 33 47.5399	W104 33 6.9020	
10900.00	90.00	91.20	7796.70	338.68N	3.56W	=>	0.47	N39 33 47.5192	W104 33 5.6254	
11000.00	90.00	91.20	7796.70	336.57N	96.42E	=>	100.42	N39 33 47.4984	W104 33 4.3489	
11100.00	90.00	91.20	7796.70	334.47N	196.40E	=>	200.36	N39 33 47.4776	W104 33 3.0723	
11200.00	90.00	91.20	7796.70	332.37N	296.38E	=>	300.31	N39 33 47.4568	W104 33 1.7957	
11300.00	90.00	91.20	7796.70	330.27N	396.35E	=>	400.25	N39 33 47.4360	W104 33 0.5191	
11400.00	90.00	91.20	7796.70	328.17N	496.33E	=>	500.20	N39 33 47.4152	W104 32 59.2425	
11500.00	90.00	91.20	7796.70	326.06N	596.31E	=>	600.14	N39 33 47.3944	W104 32 57.9659	
11600.00	90.00	91.20	7796.70	323.96N	696.29E	=>	700.09	N39 33 47.3736	W104 32 56.6894	
11700.00	90.00	91.20	7796.70	321.86N	796.26E	=>	800.04	N39 33 47.3528	W104 32 55.4128	
11800.00	90.00	91.20	7796.70	319.76N	896.24E	=>	899.98	N39 33 47.3320	W104 32 54.1362	
11900.00	90.00	91.20	7796.70	317.65N	996.22E	=>	999.93	N39 33 47.3112	W104 32 52.8596	
12000.00	90.00	91.20	7796.70	315.55N	1096.20E	=>	1099.87	N39 33 47.2904	W104 32 51.5830	
12100.00	90.00	91.20	7796.70	313.45N	1196.18E	=>	1199.82	N39 33 47.2696	W104 32 50.3065	
12200.00	90.00	91.20	7796.70	311.35N	1296.15E	=>	1299.76	N39 33 47.2487	W104 32 49.0299	

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig & are from Rig (Planned Datum #1 6016.7ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 89.32 degrees
Bottom hole distance is 10286.00 Feet on azimuth 89.32 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 6-Apr-2023

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)	All Station Comments
12300.00	90.00	91.20	7796.70	309.24N	1396.13E	=>	1399.71	N39 33 47.2279	W104 32 47.7533	
12400.00	90.00	91.20	7796.70	307.14N	1496.11E	=>	1499.66	N39 33 47.2071	W104 32 46.4767	
12500.00	90.00	91.20	7796.70	305.04N	1596.09E	=>	1599.60	N39 33 47.1862	W104 32 45.2001	
12600.00	90.00	91.20	7796.70	302.94N	1696.07E	=>	1699.55	N39 33 47.1654	W104 32 43.9236	
12700.00	90.00	91.20	7796.70	300.83N	1796.04E	=>	1799.49	N39 33 47.1445	W104 32 42.6470	
12800.00	90.00	91.20	7796.70	298.73N	1896.02E	=>	1899.44	N39 33 47.1237	W104 32 41.3704	
12900.00	90.00	91.20	7796.70	296.63N	1996.00E	=>	1999.39	N39 33 47.1028	W104 32 40.0938	
13000.00	90.00	91.20	7796.70	294.53N	2095.98E	=>	2099.33	N39 33 47.0820	W104 32 38.8172	
13100.00	90.00	91.20	7796.70	292.43N	2195.96E	=>	2199.28	N39 33 47.0611	W104 32 37.5407	
13200.00	90.00	91.20	7796.70	290.32N	2295.93E	=>	2299.22	N39 33 47.0402	W104 32 36.2641	
13300.00	90.00	91.20	7796.70	288.22N	2395.91E	=>	2399.17	N39 33 47.0194	W104 32 34.9875	
13400.00	90.00	91.20	7796.70	286.12N	2495.89E	=>	2499.11	N39 33 46.9985	W104 32 33.7109	
13500.00	90.00	91.20	7796.70	284.02N	2595.87E	=>	2599.06	N39 33 46.9776	W104 32 32.4344	
13600.00	90.00	91.20	7796.70	281.91N	2695.84E	=>	2699.01	N39 33 46.9567	W104 32 31.1578	
13700.00	90.00	91.20	7796.70	279.81N	2795.82E	=>	2798.95	N39 33 46.9358	W104 32 29.8812	
13800.00	90.00	91.20	7796.70	277.71N	2895.80E	=>	2898.90	N39 33 46.9150	W104 32 28.6046	
13900.00	90.00	91.20	7796.70	275.61N	2995.78E	=>	2998.84	N39 33 46.8941	W104 32 27.3280	
14000.00	90.00	91.20	7796.70	273.50N	3095.76E	=>	3098.79	N39 33 46.8732	W104 32 26.0515	
14100.00	90.00	91.20	7796.70	271.40N	3195.73E	=>	3198.74	N39 33 46.8523	W104 32 24.7749	
14200.00	90.00	91.20	7796.70	269.30N	3295.71E	=>	3298.68	N39 33 46.8314	W104 32 23.4983	
14300.00	90.00	91.20	7796.70	267.20N	3395.69E	=>	3398.63	N39 33 46.8104	W104 32 22.2217	
14400.00	90.00	91.20	7796.70	265.09N	3495.67E	=>	3498.57	N39 33 46.7895	W104 32 20.9452	
14500.00	90.00	91.20	7796.70	262.99N	3595.65E	=>	3598.52	N39 33 46.7686	W104 32 19.6686	
14600.00	90.00	91.20	7796.70	260.89N	3695.62E	=>	3698.46	N39 33 46.7477	W104 32 18.3920	
14700.00	90.00	91.20	7796.70	258.79N	3795.60E	=>	3798.41	N39 33 46.7268	W104 32 17.1154	
14800.00	90.00	91.20	7796.70	256.69N	3895.58E	=>	3898.36	N39 33 46.7058	W104 32 15.8389	
14900.00	90.00	91.20	7796.70	254.58N	3995.56E	=>	3998.30	N39 33 46.6849	W104 32 14.5623	
15000.00	90.00	91.20	7796.70	252.48N	4095.54E	=>	4098.25	N39 33 46.6640	W104 32 13.2857	
15100.00	90.00	91.20	7796.70	250.38N	4195.51E	=>	4198.19	N39 33 46.6430	W104 32 12.0091	
15200.00	90.00	91.20	7796.70	248.28N	4295.49E	=>	4298.14	N39 33 46.6221	W104 32 10.7326	
15300.00	90.00	91.20	7796.70	246.17N	4395.47E	=>	4398.09	N39 33 46.6011	W104 32 9.4560	
15400.00	90.00	91.20	7796.70	244.07N	4495.45E	=>	4498.03	N39 33 46.5802	W104 32 8.1794	
15500.00	90.00	91.20	7796.70	241.97N	4595.42E	=>	4597.98	N39 33 46.5592	W104 32 6.9028	
15600.00	90.00	91.20	7796.70	239.87N	4695.40E	=>	4697.92	N39 33 46.5383	W104 32 5.6263	
15700.00	90.00	91.20	7796.70	237.76N	4795.38E	=>	4797.87	N39 33 46.5173	W104 32 4.3497	
15800.00	90.00	91.20	7796.70	235.66N	4895.36E	=>	4897.81	N39 33 46.4963	W104 32 3.0731	
15900.00	90.00	91.20	7796.70	233.56N	4995.34E	=>	4997.76	N39 33 46.4754	W104 32 1.7966	
16000.00	90.00	91.20	7796.70	231.46N	5095.31E	=>	5097.71	N39 33 46.4544	W104 32 0.5200	
16100.00	90.00	91.20	7796.70	229.35N	5195.29E	=>	5197.65	N39 33 46.4334	W104 31 59.2434	
16200.00	90.00	91.20	7796.70	227.25N	5295.27E	=>	5297.60	N39 33 46.4124	W104 31 57.9668	
16300.00	90.00	91.20	7796.70	225.15N	5395.25E	=>	5397.54	N39 33 46.3914	W104 31 56.6903	
16400.00	90.00	91.20	7796.70	223.05N	5495.23E	=>	5497.49	N39 33 46.3704	W104 31 55.4137	
16500.00	90.00	91.20	7796.70	220.95N	5595.20E	=>	5597.44	N39 33 46.3494	W104 31 54.1371	
16600.00	90.00	91.20	7796.70	218.84N	5695.18E	=>	5697.38	N39 33 46.3284	W104 31 52.8606	
16700.00	90.00	91.20	7796.70	216.74N	5795.16E	=>	5797.33	N39 33 46.3074	W104 31 51.5840	
16800.00	90.00	91.20	7796.70	214.64N	5895.14E	=>	5897.27	N39 33 46.2864	W104 31 50.3074	
16900.00	90.00	91.20	7796.70	212.54N	5995.12E	=>	5997.22	N39 33 46.2654	W104 31 49.0308	
17000.00	90.00	91.20	7796.70	210.43N	6095.09E	=>	6097.16	N39 33 46.2444	W104 31 47.7543	
17100.00	90.00	91.20	7796.70	208.33N	6195.07E	=>	6197.11	N39 33 46.2234	W104 31 46.4777	
17200.00	90.00	91.20	7796.70	206.23N	6295.05E	=>	6297.06	N39 33 46.2023	W104 31 45.2011	
17300.00	90.00	91.20	7796.70	204.13N	6395.03E	=>	6397.00	N39 33 46.1813	W104 31 43.9246	
17400.00	90.00	91.20	7796.70	202.02N	6495.00E	=>	6496.95	N39 33 46.1603	W104 31 42.6480	
17500.00	90.00	91.20	7796.70	199.92N	6594.98E	=>	6596.89	N39 33 46.1392	W104 31 41.3714	
17600.00	90.00	91.20	7796.70	197.82N	6694.96E	=>	6696.84	N39 33 46.1182	W104 31 40.0949	
17700.00	90.00	91.20	7796.70	195.72N	6794.94E	=>	6796.79	N39 33 46.0972	W104 31 38.8183	
17800.00	90.00	91.20	7796.70	193.61N	6894.92E	=>	6896.73	N39 33 46.0761	W104 31 37.5417	
17900.00	90.00	91.20	7796.70	191.51N	6994.89E	=>	6996.68	N39 33 46.0551	W104 31 36.2651	
18000.00	90.00	91.20	7796.70	189.41N	7094.87E	=>	7096.62	N39 33 46.0340	W104 31 34.9886	
18100.00	90.00	91.20	7796.70	187.31N	7194.85E	=>	7196.57	N39 33 46.0129	W104 31 33.7120	
18200.00	90.00	91.20	7796.70	185.21N	7294.83E	=>	7296.51	N39 33 45.9919	W104 31 32.4354	
18300.00	90.00	91.20	7796.70	183.10N	7394.81E	=>	7396.46	N39 33 45.9708	W104 31 31.1589	
18400.00	90.00	91.20	7796.70	181.00N	7494.78E	=>	7496.41	N39 33 45.9497	W104 31 29.8823	
18500.00	90.00	91.20	7796.70	178.90N	7594.76E	=>	7596.35	N39 33 45.9287	W104 31 28.6057	
18600.00	90.00	91.20	7796.70	176.80N	7694.74E	=>	7696.30	N39 33 45.9076	W104 31 27.3292	
18700.00	90.00	91.20	7796.70	174.69N	7794.72E	=>	7796.24	N39 33 45.8865	W104 31 26.0526	
18800.00	90.00	91.20	7796.70	172.59N	7894.70E	=>	7896.19	N39 33 45.8654	W104 31 24.7760	
18900.00	90.00	91.20	7796.70	170.49N	7994.67E	=>	7996.14	N39 33 45.8443	W104 31 23.4995	
19000.00	90.00	91.20	7796.70	168.39N	8094.65E	=>	8096.08	N39 33 45.8232	W104 31 22.2229	
19100.00	90.00	91.20	7796.70	166.28N	8194.63E	=>	8196.03	N39 33 45.8021	W104 31 20.9463	
19200.00	90.00	91.20	7796.70	164.18N	8294.61E	=>	8295.97	N39 33 45.7810	W104 31 19.6698	
19300.00	90.00	91.20	7796.70	162.08N	8394.58E	=>	8395.92	N39 33 45.7599	W104 31 18.3932	
19400.00	90.00	91.20	7796.70	159.98N	8494.56E	=>	8495.86	N39 33 45.7388	W104 31 17.1167	
19500.00	90.00	91.20	7796.70	157.87N	8594.54E	=>	8595.81	N39 33 45.7177	W104 31 15.8401	
19600.00	90.00	91.20	7796.70	155.77N	8694.52E	=>	8695.76	N39 33 45.6966	W104 31 14.5635	
19700.00	90.00	91.20	7796.70	153.67N	8794.50E	=>	8795.70	N39 33 45.6754	W104 31 13.2870	
19800.00	90.00	91.20	7796.70	151.57N	8894.47E	=>	8895.65	N39 33 45.6543	W104 31 12.0104	
19900.00	90.00	91.20	7796.70	149.46N	8994.45E	=>	8995.59	N39 33 45.6332	W104 31 10.7338	
20000.00	90.00	91.20	7796.70	147.36N	9094.43E	=>	9095.54	N39 33 45.6120	W104 31 9.4573	
20100.00	90.00	91.20	7796.70	145.26N	9194.41E	=>	9195.49	N39 33 45.5909	W104 31 8.1807	
20200.00	90.00	91.20	7796.70	143.16N	9294.39E	=>	9295.43	N39 33 45.5698	W104 31 6.9041	
20300.00	90.00	91.20	7796.70	141.06N	9394.36E	=>	9395.38	N39 33 45.5486	W104 31 5.6276	
20400.00	90.00	91.20	7796.70	138.95N	9494.34E	=>	9495.32	N39 33 45.5275	W104 31 4.3510	
20500.00	90.00	91.20	7796.70	136.85N	9594.32E	=>	9595.27	N39 33 45.5063	W104 31 3.0745	
20600.00	90.00	91.20	7796.70	134.75N	9694.30E	=>	9695.21	N39 33 45.4852	W104 31 1.7979	
20700.00	90.00	91.20	7796.70	132.65N	9794.28E	=>	9795.16	N39 33 45.4640	W104 31 0.5213	

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig (Planned Datum #1 6016.7ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 89.32 degrees
Bottom hole distance is 10286.00 Feet on azimuth 89.32 degrees from Wellhead
Calculation method uses Minimum Curvature method
Prepared by
Date Printed: 6-Apr-2023

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)	All Station Comments
20800.00	90.00	91.20	7796.70	130.54N	9894.25E	==>	9895.11	N39 33 45.4428	W104 30 59.2448	
20900.00	90.00	91.20	7796.70	128.44N	9994.23E	==>	9995.05	N39 33 45.4217	W104 30 57.9682	
21000.00	90.00	91.20	7796.70	126.34N	10094.21E	==>	10095.00	N39 33 45.4005	W104 30 56.6916	
21100.00	90.00	91.20	7796.70	124.24N	10194.19E	==>	10194.94	N39 33 45.3793	W104 30 55.4151	
21191.11	90.00	91.20	7796.70	122.32N	10285.28E	==>	10286.00	N39 33 45.3600	W104 30 54.2520	End of Hold/Target, SILVER 1HN BH

All data is in Feet unless otherwise stated
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 Vertical Section is from 0.00N 0.00E on azimuth 89.32 degrees
 Bottom hole distance is 10286.00 Feet on azimuth 89.32 degrees from Wellhead
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Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
SILVER 1HN BH	122.32N	10285.28E	7796.70	N39 33 45.3600	W104 30 54.2520	1085057.51	3277695.70
SILVER 1HN LP	382.93N	2107.78W	7796.70	N39 33 47.9556	W104 33 32.4936	1085185.55	3265300.23

Formations						
Formation Name	Formation MD	Formation TVD	Wellpath Inc	Incidence Angle	North	East
Lower Dawson	79.00	79.00	0.00	90.00	0.00N	0.00E
Denver	204.00	204.00	0.00	90.00	0.00N	0.00E
Upper Arapahoe	1091.03	1091.00	2.37	87.63	0.24N	1.86W
Laramie - Fox Hills	1922.73	1896.01	23.99	66.01	24.34N	188.82W
Pierre Shale (Base of Fox Hills)	2183.55	2130.00	26.77	63.23	39.06N	303.02W
Sussex Sandstone	5913.34	5460.00	26.77	63.23	253.87N	1969.24W
Sharon Springs Shale	8240.26	7570.01	40.14	49.86	380.94N	2595.29W
Niobrara	8308.91	7620.01	46.30	43.70	382.65N	2548.32W
Niobrara A	8323.56	7630.01	47.62	42.38	382.97N	2537.62W
Niobrara B Top	8563.45	7755.00	69.16	20.84	385.44N	2334.55W

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
1095514	Planned	21191.11	7796.70	WdW Rate Gyro	Standard

Notes