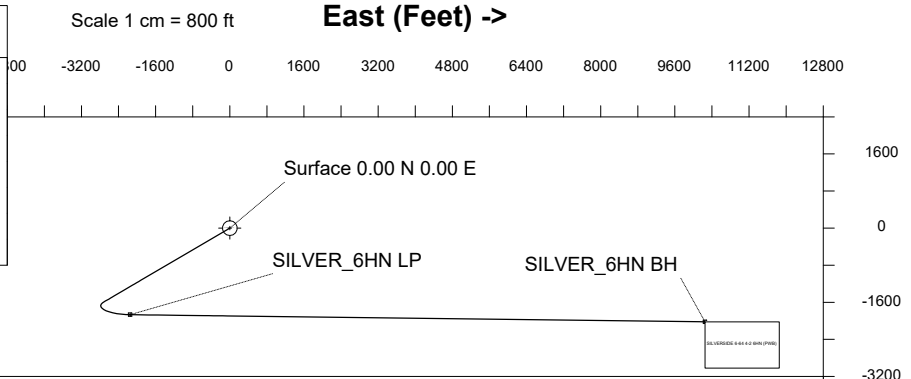


# GMT Exploration

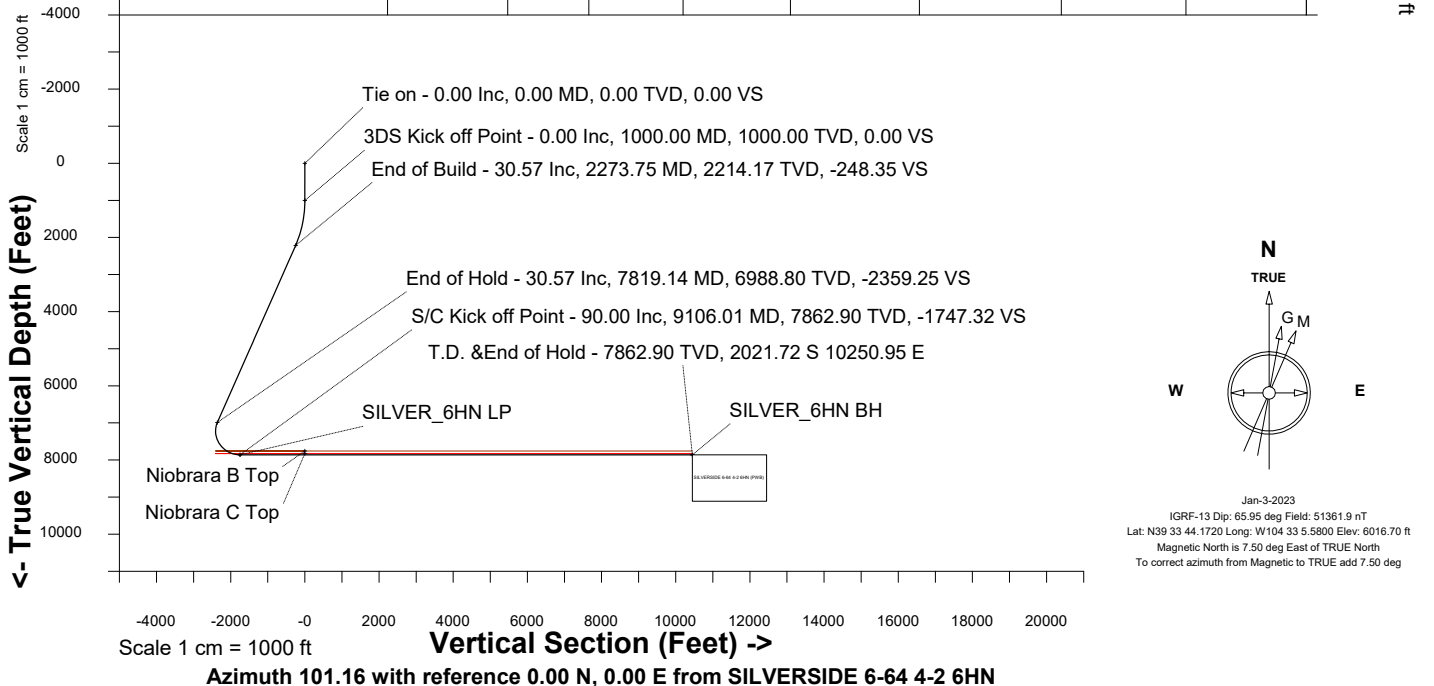
Location	DJ Basin	Slot	SILVERSIDE 6-64 4-2 6HN
Field	Elbert County Wells	Well	SILVERSIDE 6-64 4-2 6HN
Installation	Ragged 6-64 4 Pad	Wellbore	SILVERSIDE 6-64 4-2 6HN (PWB)

Created by	cdoke
Date plotted	4-Apr-2023
Plot reference is	SILVERSIDE 6-64 4-2 6HN (PWB).
Ref wellpath is	SILVERSIDE 6-64 4-2 6HN (PWB).
Coordinates are in	Feet reference SILVERSIDE 6-64 4-2 6HN.
True Vertical Depths are	reference Rig Datum.
Measured Depths are	reference Rig Datum.
Rig Datum:	Planned Datum #1
Rig Datum to Mean Sea Level:	6017.90 ft.
Plot North is	aligned to TRUE North.



## 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	239.61	1000.00	S 0.00	W 0.00	0.00	0.00
End of Build	2273.75	30.57	239.61	2214.17	S 167.84	W 286.24	2.40	-248.35
End of Hold	7819.14	30.57	239.61	6988.80	S 1594.45	W 2719.16	0.00	-2359.25
Target SILVER_6HN LP	9106.01	90.00	90.71	7862.90	S 1868.19	W 2149.43	9.00	-1747.32
T.D. & Target SIL... BH	21507.34	90.00	90.71	7862.90	S 2021.72	E 10250.95	0.00	10448.42



Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Installation [ft]
SILVERSIDE 6-64 4-2 6HN	N39 33 43.1856	W104 33 5.5872	1084725.3740	3267412.5452	99.81S	0.56W	1.20

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	-6017.90	0.00N	0.00E		0.00
1000.00	0.00	239.61	1000.00	-5017.90	0.00N	0.00E	==>	0.00
2273.75	30.57	239.61	2214.17	-3803.73	167.84S	286.24W	2.40	-248.35
7819.14	30.57	239.61	6988.80	970.90	1594.45S	2719.16W	==>	-2359.25
9106.01	90.00	90.71	7862.90	1845.00	1868.19S	2149.43W	9.00	-1747.32
21507.34	90.00	90.71	7862.90	1845.00	2021.72S	10250.95E	==>	10448.42

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 43.1856	W104 33 5.5872	Tie on, Slot Datum	
80.00	0.00	0.00	80.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872	Lower Dawson	
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
205.00	0.00	0.00	205.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872	Denver	
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872		
1000.00	0.00	239.61	1000.00	0.00N	0.00E	==>	0.00	N39 33 43.1856	W104 33 5.5872	3DS Kick off Point	
1092.02	2.21	239.61	1092.00	0.90S	1.53W	2.40	-1.33	N39 33 43.1767	W104 33 5.6067	Upper Arapahoe	
1100.00	2.40	239.61	1099.97	1.06S	1.81W	2.40	-1.57	N39 33 43.1751	W104 33 5.6103		
1200.00	4.80	239.61	1199.77	4.24S	7.22W	2.40	-6.27	N39 33 43.1437	W104 33 5.6794		
1300.00	7.20	239.61	1299.21	9.52S	16.24W	2.40	-14.09	N39 33 43.0915	W104 33 5.7945		
1400.00	9.60	239.61	1398.13	16.91S	28.84W	2.40	-25.02	N39 33 43.0185	W104 33 5.9554		
1500.00	12.00	239.61	1496.35	26.39S	45.00W	2.40	-39.05	N39 33 42.9248	W104 33 6.1618		
1600.00	14.40	239.61	1593.70	37.94S	64.70W	2.40	-56.14	N39 33 42.8107	W104 33 6.4133		
1700.00	16.80	239.61	1690.01	51.54S	87.90W	2.40	-76.26	N39 33 42.6762	W104 33 6.7095		
1800.00	19.20	239.61	1785.11	67.17S	114.55W	2.40	-99.39	N39 33 42.5218	W104 33 7.0498		
1900.00	21.60	239.61	1878.83	84.80S	144.62W	2.40	-125.48	N39 33 42.3475	W104 33 7.4337		
1919.57	22.07	239.61	1897.00	88.48S	150.90W	2.40	-130.92	N39 33 42.3111	W104 33 7.5139	Laramie - Fox Hills	
2000.00	24.00	239.61	1971.01	104.40S	178.04W	2.40	-154.48	N39 33 42.1538	W104 33 7.8605		
2100.00	26.40	239.61	2061.49	125.94S	214.77W	2.40	-186.34	N39 33 41.9410	W104 33 8.3295		
2178.26	28.28	239.61	2131.01	144.12S	245.77W	2.40	-213.24	N39 33 41.7613	W104 33 8.7253	Pierre Shale (Base of Fox Hills)	
2200.00	28.80	239.61	2150.10	149.37S	254.73W	2.40	-221.02	N39 33 41.7094	W104 33 8.8397		
2273.75	30.57	239.61	2214.17	167.84S	286.24W	2.40	-248.35	N39 33 41.5268	W104 33 9.2420	End of Build	
2300.00	30.57	239.61	2236.77	174.60S	297.75W	==>	-258.34	N39 33 41.4600	W104 33 9.3890		
2400.00	30.57	239.61	2322.87	200.32S	341.63W	==>	-296.41	N39 33 41.2058	W104 33 9.9492		
2500.00	30.57	239.61	2408.97	226.05S	385.50W	==>	-334.47	N39 33 40.9515	W104 33 10.5094		
2600.00	30.57	239.61	2495.07	251.77S	429.37W	==>	-372.54	N39 33 40.6973	W104 33 11.0696		
2700.00	30.57	239.61	2581.18	277.50S	473.25W	==>	-410.61	N39 33 40.4430	W104 33 11.6297		
2800.00	30.57	239.61	2667.28	303.23S	517.12W	==>	-448.67	N39 33 40.1887	W104 33 12.1899		
2900.00	30.57	239.61	2753.38	328.95S	560.99W	==>	-486.74	N39 33 39.9345	W104 33 12.7501		
3000.00	30.57	239.61	2839.48	354.68S	604.86W	==>	-524.80	N39 33 39.6802	W104 33 13.3103		
3100.00	30.57	239.61	2925.58	380.40S	648.74W	==>	-562.87	N39 33 39.4260	W104 33 13.8704		
3200.00	30.57	239.61	3011.68	406.13S	692.61W	==>	-600.94	N39 33 39.1717	W104 33 14.4306		
3300.00	30.57	239.61	3097.78	431.86S	736.48W	==>	-639.00	N39 33 38.9174	W104 33 14.9908		
3400.00	30.57	239.61	3183.88	457.58S	780.36W	==>	-677.07	N39 33 38.6632	W104 33 15.5509		
3500.00	30.57	239.61	3269.98	483.31S	824.23W	==>	-715.13	N39 33 38.4089	W104 33 16.1111		
3600.00	30.57	239.61	3356.08	509.03S	868.10W	==>	-753.20	N39 33 38.1546	W104 33 16.6713		
3700.00	30.57	239.61	3442.18	534.76S	911.97W	==>	-791.26	N39 33 37.9004	W104 33 17.2314		
3800.00	30.57	239.61	3528.28	560.49S	955.85W	==>	-829.33	N39 33 37.6461	W104 33 17.7916		
3900.00	30.57	239.61	3614.38	586.21S	999.72W	==>	-867.40	N39 33 37.3918	W104 33 18.3518		
4000.00	30.57	239.61	3700.49	611.94S	1043.59W	==>	-905.46	N39 33 37.1376	W104 33 18.9119		
4100.00	30.57	239.61	3786.59	637.66S	1087.47W	==>	-943.53	N39 33 36.8833	W104 33 19.4721		
4200.00	30.57	239.61	3872.69	663.39S	1131.34W	==>	-981.59	N39 33 36.6290	W104 33 20.0322		
4300.00	30.57	239.61	3958.79	689.12S	1175.21W	==>	-1019.66	N39 33 36.3747	W104 33 20.5924		
4400.00	30.57	239.61	4044.89	714.84S	1219.08W	==>	-1057.73	N39 33 36.1205	W104 33 21.1525		
4500.00	30.57	239.61	4130.99	740.57S	1262.96W	==>	-1095.79	N39 33 35.8662	W104 33 21.7127		

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 6017.9ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 101.16 degrees  
Bottom hole distance is 10448.42 Feet on azimuth 101.16 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	30.57	239.61	4217.09	766.29S	1306.83W	=>	-1133.86	N39 33 35.6119	W104 33 22.2729	
4700.00	30.57	239.61	4303.19	792.02S	1350.70W	=>	-1171.92	N39 33 35.3576	W104 33 22.8330	
4800.00	30.57	239.61	4389.29	817.75S	1394.58W	=>	-1209.99	N39 33 35.1034	W104 33 23.3932	
4900.00	30.57	239.61	4475.39	843.47S	1438.45W	=>	-1248.05	N39 33 34.8491	W104 33 23.9533	
5000.00	30.57	239.61	4561.49	869.20S	1482.32W	=>	-1286.12	N39 33 34.5948	W104 33 24.5135	
5100.00	30.57	239.61	4647.59	894.92S	1526.19W	=>	-1324.19	N39 33 34.3405	W104 33 25.0736	
5200.00	30.57	239.61	4733.69	920.65S	1570.07W	=>	-1362.25	N39 33 34.0863	W104 33 25.6338	
5300.00	30.57	239.61	4819.80	946.38S	1613.94W	=>	-1400.32	N39 33 33.8320	W104 33 26.1939	
5400.00	30.57	239.61	4905.90	972.10S	1657.81W	=>	-1438.38	N39 33 33.5777	W104 33 26.7540	
5500.00	30.57	239.61	4992.00	997.83S	1701.69W	=>	-1476.45	N39 33 33.3234	W104 33 27.3142	
5600.00	30.57	239.61	5078.10	1023.55S	1745.56W	=>	-1514.52	N39 33 33.0691	W104 33 27.8743	
5700.00	30.57	239.61	5164.20	1049.28S	1789.43W	=>	-1552.58	N39 33 32.8148	W104 33 28.4345	
5800.00	30.57	239.61	5250.30	1075.01S	1833.30W	=>	-1590.65	N39 33 32.5606	W104 33 28.9946	
5900.00	30.57	239.61	5336.40	1100.73S	1877.18W	=>	-1628.71	N39 33 32.3063	W104 33 29.5547	
6000.00	30.57	239.61	5422.50	1126.46S	1921.05W	=>	-1666.78	N39 33 32.0520	W104 33 30.1149	
6044.71	30.57	239.61	5461.00	1137.96S	1940.67W	=>	-1683.80	N39 33 31.9383	W104 33 30.3653	Sussex Sandstone
6100.00	30.57	239.61	5508.60	1152.19S	1964.92W	=>	-1704.84	N39 33 31.7977	W104 33 30.6750	
6200.00	30.57	239.61	5594.70	1177.91S	2008.80W	=>	-1742.91	N39 33 31.5434	W104 33 31.2352	
6300.00	30.57	239.61	5680.80	1203.64S	2052.67W	=>	-1780.98	N39 33 31.2891	W104 33 31.7953	
6400.00	30.57	239.61	5766.90	1229.36S	2096.54W	=>	-1819.04	N39 33 31.0348	W104 33 32.3554	
6500.00	30.57	239.61	5853.00	1255.09S	2140.41W	=>	-1857.11	N39 33 30.7806	W104 33 32.9156	
6600.00	30.57	239.61	5939.11	1280.82S	2184.29W	=>	-1895.17	N39 33 30.5263	W104 33 33.4757	
6700.00	30.57	239.61	6025.21	1306.54S	2228.16W	=>	-1933.24	N39 33 30.2720	W104 33 34.0358	
6800.00	30.57	239.61	6111.31	1332.27S	2272.03W	=>	-1971.31	N39 33 30.0177	W104 33 34.5959	
6900.00	30.57	239.61	6197.41	1357.99S	2315.91W	=>	-2009.37	N39 33 29.7634	W104 33 35.1561	
7000.00	30.57	239.61	6283.51	1383.72S	2359.78W	=>	-2047.44	N39 33 29.5091	W104 33 35.7162	
7100.00	30.57	239.61	6369.61	1409.45S	2403.65W	=>	-2085.50	N39 33 29.2548	W104 33 36.2763	
7200.00	30.57	239.61	6455.71	1435.17S	2447.52W	=>	-2123.57	N39 33 29.0005	W104 33 36.8364	
7300.00	30.57	239.61	6541.81	1460.90S	2491.40W	=>	-2161.63	N39 33 28.7462	W104 33 37.3966	
7400.00	30.57	239.61	6627.91	1486.62S	2535.27W	=>	-2199.70	N39 33 28.4919	W104 33 37.9567	
7500.00	30.57	239.61	6714.01	1512.35S	2579.14W	=>	-2237.77	N39 33 28.2376	W104 33 38.5168	
7600.00	30.57	239.61	6800.11	1538.08S	2623.02W	=>	-2275.83	N39 33 27.9833	W104 33 39.0769	
7700.00	30.57	239.61	6886.21	1563.80S	2666.89W	=>	-2313.90	N39 33 27.7290	W104 33 39.6370	
7800.00	30.57	239.61	6972.32	1589.53S	2710.76W	=>	-2351.96	N39 33 27.4747	W104 33 40.1972	
7819.14	30.57	239.61	6988.80	1594.45S	2719.16W	=>	-2359.25	N39 33 27.4261	W104 33 40.3044	End of Hold
7900.00	24.93	229.68	7060.36	1615.91S	2749.93W	9.00	-2385.29	N39 33 27.2140	W104 33 40.6972	
8000.00	19.40	210.65	7153.06	1643.88S	2774.52W	9.00	-2404.00	N39 33 26.9375	W104 33 41.0111	
8100.00	16.97	182.56	7248.24	1672.81S	2783.65W	9.00	-2407.36	N39 33 26.6516	W104 33 41.1277	
8200.00	18.90	153.70	7343.56	1701.97S	2777.11W	9.00	-2395.31	N39 33 26.3634	W104 33 41.0442	
8300.00	24.16	133.56	7436.68	1730.66S	2755.06W	9.00	-2368.12	N39 33 26.0799	W104 33 40.7626	
8400.00	31.10	121.09	7525.30	1758.15S	2718.05W	9.00	-2326.48	N39 33 25.8082	W104 33 40.2899	
8454.62	35.25	116.28	7571.01	1772.42S	2691.82W	9.00	-2297.99	N39 33 25.6672	W104 33 39.9551	Sharon Springs Shale
8500.00	38.82	112.99	7607.23	1783.78S	2666.97W	9.00	-2271.41	N39 33 25.5550	W104 33 39.6378	
8517.86	40.25	111.83	7621.01	1788.12S	2656.46W	9.00	-2260.26	N39 33 25.5121	W104 33 39.5035	Niobrara Niobrara A
8531.06	41.31	111.02	7631.00	1791.26S	2648.43W	9.00	-2251.78	N39 33 25.4810	W104 33 39.4011	
8600.00	46.95	107.27	7680.47	1806.92S	2603.09W	9.00	-2204.27	N39 33 25.3264	W104 33 38.8222	
8700.00	55.29	102.91	7743.21	1826.99S	2527.99W	9.00	-2126.70	N39 33 25.1281	W104 33 37.8633	
8723.03	57.23	102.04	7756.00	1831.12S	2509.29W	9.00	-2107.55	N39 33 25.0872	W104 33 37.6245	Niobrara B Top
8800.00	63.75	99.36	7793.90	1843.50S	2443.51W	9.00	-2040.62	N39 33 24.9650	W104 33 36.7846	
8883.28	70.86	96.79	7826.01	1854.24S	2367.48W	9.00	-1963.95	N39 33 24.8589	W104 33 35.8140	Niobrara C Top
8900.00	72.29	96.30	7831.30	1856.05S	2351.73W	9.00	-1948.14	N39 33 24.8411	W104 33 35.6128	
9000.00	80.88	93.52	7854.48	1864.32S	2254.91W	9.00	-1851.56	N39 33 24.7594	W104 33 34.3767	
9100.00	89.48	90.87	7862.87	1868.11S	2155.44W	9.00	-1753.23	N39 33 24.7220	W104 33 33.1067	S/C Kick off Point/Target, SILVER 6HN LP
9106.01	90.00	90.71	7862.90	1868.19S	2149.43W	9.00	-1747.32	N39 33 24.7212	W104 33 33.0300	
9200.00	90.00	90.71	7862.90	1869.36S	2055.45W	=>	-1654.89	N39 33 24.7098	W104 33 31.8300	
9300.00	90.00	90.71	7862.90	1870.60S	1955.45W	=>	-1556.54	N39 33 24.6976	W104 33 30.5534	
9400.00	90.00	90.71	7862.90	1871.83S	1855.46W	=>	-1458.20	N39 33 24.6855	W104 33 29.2767	
9500.00	90.00	90.71	7862.90	1873.07S	1755.47W	=>	-1359.86	N39 33 24.6733	W104 33 28.0001	
9600.00	90.00	90.71	7862.90	1874.31S	1655.48W	=>	-1261.52	N39 33 24.6611	W104 33 26.7234	
9700.00	90.00	90.71	7862.90	1875.55S	1555.48W	=>	-1163.18	N39 33 24.6490	W104 33 25.4468	
9800.00	90.00	90.71	7862.90	1876.79S	1455.49W	=>	-1064.83	N39 33 24.6368	W104 33 24.1701	
9900.00	90.00	90.71	7862.90	1878.02S	1355.50W	=>	-966.49	N39 33 24.6246	W104 33 22.8935	
10000.00	90.00	90.71	7862.90	1879.26S	1255.51W	=>	-868.15	N39 33 24.6124	W104 33 21.6168	
10100.00	90.00	90.71	7862.90	1880.50S	1155.51W	=>	-769.81	N39 33 24.6002	W104 33 20.3402	
10200.00	90.00	90.71	7862.90	1881.74S	1055.52W	=>	-671.47	N39 33 24.5880	W104 33 19.0635	
10300.00	90.00	90.71	7862.90	1882.98S	955.53W	=>	-573.12	N39 33 24.5758	W104 33 17.7869	
10400.00	90.00	90.71	7862.90	1884.21S	855.54W	=>	-474.78	N39 33 24.5636	W104 33 16.5102	
10500.00	90.00	90.71	7862.90	1885.45S	755.54W	=>	-376.44	N39 33 24.5514	W104 33 15.2336	
10600.00	90.00	90.71	7862.90	1886.69S	655.55W	=>	-278.10	N39 33 24.5392	W104 33 13.9569	
10700.00	90.00	90.71	7862.90	1887.93S	555.56W	=>	-179.75	N39 33 24.5270	W104 33 12.6803	
10800.00	90.00	90.71	7862.90	1889.17S	455.57W	=>	-81.41	N39 33 24.5148	W104 33 11.4036	
10900.00	90.00	90.71	7862.90	1890.40S	355.58W	=>	16.93	N39 33 24.5026	W104 33 10.1270	
11000.00	90.00	90.71	7862.90	1891.64S	255.58W	=>	115.27	N39 33 24.4904	W104 33 8.8503	
11100.00	90.00	90.71	7862.90	1892.88S	155.59W	=>	213.61	N39 33 24.4781	W104 33 7.5737	
11200.00	90.00	90.71	7862.90	1894.12S	55.60W	=>	311.96	N39 33 24.4659	W104 33 6.2970	
11300.00	90.00	90.71	7862.90	1895.36S	44.39E	=>	410.30	N39 33 24.4537	W104 33 5.0204	
11400.00	90.00	90.71	7862.90	1896.59S	144.39E	=>	508.64	N39 33 24.4414	W104 33 3.7438	
11500.00	90.00	90.71	7862.90	1897.83S	244.38E	=>	606.98	N39 33 24.4292	W104 33 2.4671	
11600.00	90.00	90.71	7862.90	1899.07S	344.37E	=>	705.32	N39 33 24.4169	W104 33 1.1905	
11700.00	90.00	90.71	7862.90	1900.31S	444.36E	=>	803.67	N39 33 24.4047	W104 32 59.9138	
11800.00	90.00	90.71	7862.90	1901.55S	544.36E	=>	902.01	N39 33 24.3924	W104 32 58.6372	
11900.00	90.00	90.71	7862.90	1902.78S	644.35E	=>	1000.35	N39 33 24.3802	W104 32 57.3605	
12000.00	90.00	90.71	7862.90	1904.02S	744.34E	=>	1098.69	N39 33 24.3679	W104 32 56.0839	
12100.00	90.00	90.71	7862.90	1905.26S	844.33E	=>	1197.04	N39 33 24.3556	W104 32 54.8072	

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Coordinates are from Slot MD's are from Rig and TVD's are from Rig ( Planned Datum #1 6017.9ft above Mean Sea Level )  
Vertical Section is from 0.00N 0.00E on azimuth 101.16 degrees  
Bottom hole distance is 10448.42 Feet on azimuth 101.16 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
12200.00	90.00	90.71	7862.90	1906.50S	944.33E	=>	1295.38	N39 33 24.3434	W104 32 53.5306	
12300.00	90.00	90.71	7862.90	1907.74S	1044.32E	=>	1393.72	N39 33 24.3311	W104 32 52.2539	
12400.00	90.00	90.71	7862.90	1908.97S	1144.31E	=>	1492.06	N39 33 24.3188	W104 32 50.9773	
12500.00	90.00	90.71	7862.90	1910.21S	1244.30E	=>	1590.40	N39 33 24.3065	W104 32 49.7006	
12600.00	90.00	90.71	7862.90	1911.45S	1344.29E	=>	1688.75	N39 33 24.2943	W104 32 48.4240	
12700.00	90.00	90.71	7862.90	1912.69S	1444.29E	=>	1787.09	N39 33 24.2820	W104 32 47.1473	
12800.00	90.00	90.71	7862.90	1913.93S	1544.28E	=>	1885.43	N39 33 24.2697	W104 32 45.8707	
12900.00	90.00	90.71	7862.90	1915.16S	1644.27E	=>	1983.77	N39 33 24.2574	W104 32 44.5940	
13000.00	90.00	90.71	7862.90	1916.40S	1744.26E	=>	2082.11	N39 33 24.2451	W104 32 43.3174	
13100.00	90.00	90.71	7862.90	1917.64S	1844.26E	=>	2180.46	N39 33 24.2328	W104 32 42.0408	
13200.00	90.00	90.71	7862.90	1918.88S	1944.25E	=>	2278.80	N39 33 24.2205	W104 32 40.7641	
13300.00	90.00	90.71	7862.90	1920.12S	2044.24E	=>	2377.14	N39 33 24.2081	W104 32 39.4875	
13400.00	90.00	90.71	7862.90	1921.35S	2144.23E	=>	2475.48	N39 33 24.1958	W104 32 38.2108	
13500.00	90.00	90.71	7862.90	1922.59S	2244.23E	=>	2573.83	N39 33 24.1835	W104 32 36.9342	
13600.00	90.00	90.71	7862.90	1923.83S	2344.22E	=>	2672.17	N39 33 24.1712	W104 32 35.6575	
13700.00	90.00	90.71	7862.90	1925.07S	2444.21E	=>	2770.51	N39 33 24.1588	W104 32 34.3809	
13800.00	90.00	90.71	7862.90	1926.31S	2544.20E	=>	2868.85	N39 33 24.1465	W104 32 33.1042	
13900.00	90.00	90.71	7862.90	1927.54S	2644.19E	=>	2967.19	N39 33 24.1342	W104 32 31.8276	
14000.00	90.00	90.71	7862.90	1928.78S	2744.19E	=>	3065.54	N39 33 24.1218	W104 32 30.5509	
14100.00	90.00	90.71	7862.90	1930.02S	2844.18E	=>	3163.88	N39 33 24.1095	W104 32 29.2743	
14200.00	90.00	90.71	7862.90	1931.26S	2944.17E	=>	3262.22	N39 33 24.0971	W104 32 27.9977	
14300.00	90.00	90.71	7862.90	1932.50S	3044.16E	=>	3360.56	N39 33 24.0848	W104 32 26.7210	
14400.00	90.00	90.71	7862.90	1933.73S	3144.16E	=>	3458.90	N39 33 24.0724	W104 32 25.4444	
14500.00	90.00	90.71	7862.90	1934.97S	3244.15E	=>	3557.25	N39 33 24.0601	W104 32 24.1677	
14600.00	90.00	90.71	7862.90	1936.21S	3344.14E	=>	3655.59	N39 33 24.0477	W104 32 22.8911	
14700.00	90.00	90.71	7862.90	1937.45S	3444.13E	=>	3753.93	N39 33 24.0353	W104 32 21.6144	
14800.00	90.00	90.71	7862.90	1938.69S	3544.13E	=>	3852.27	N39 33 24.0230	W104 32 20.3378	
14900.00	90.00	90.71	7862.90	1939.92S	3644.12E	=>	3950.62	N39 33 24.0106	W104 32 19.0611	
15000.00	90.00	90.71	7862.90	1941.16S	3744.11E	=>	4048.96	N39 33 23.9982	W104 32 17.7845	
15100.00	90.00	90.71	7862.90	1942.40S	3844.10E	=>	4147.30	N39 33 23.9858	W104 32 16.5079	
15200.00	90.00	90.71	7862.90	1943.64S	3944.10E	=>	4245.64	N39 33 23.9734	W104 32 15.2312	
15300.00	90.00	90.71	7862.90	1944.88S	4044.09E	=>	4343.98	N39 33 23.9610	W104 32 13.9546	
15400.00	90.00	90.71	7862.90	1946.11S	4144.08E	=>	4442.33	N39 33 23.9486	W104 32 12.6779	
15500.00	90.00	90.71	7862.90	1947.35S	4244.07E	=>	4540.67	N39 33 23.9362	W104 32 11.4013	
15600.00	90.00	90.71	7862.90	1948.59S	4344.06E	=>	4639.01	N39 33 23.9238	W104 32 10.1246	
15700.00	90.00	90.71	7862.90	1949.83S	4444.06E	=>	4737.35	N39 33 23.9114	W104 32 8.8480	
15800.00	90.00	90.71	7862.90	1951.07S	4544.05E	=>	4835.69	N39 33 23.8990	W104 32 7.5714	
15900.00	90.00	90.71	7862.90	1952.30S	4644.04E	=>	4934.04	N39 33 23.8866	W104 32 6.2947	
16000.00	90.00	90.71	7862.90	1953.54S	4744.03E	=>	5032.38	N39 33 23.8742	W104 32 5.0181	
16100.00	90.00	90.71	7862.90	1954.78S	4844.03E	=>	5130.72	N39 33 23.8617	W104 32 3.7414	
16200.00	90.00	90.71	7862.90	1956.02S	4944.02E	=>	5229.06	N39 33 23.8493	W104 32 2.4648	
16300.00	90.00	90.71	7862.90	1957.26S	5044.01E	=>	5327.41	N39 33 23.8369	W104 32 1.1881	
16400.00	90.00	90.71	7862.90	1958.49S	5144.00E	=>	5425.75	N39 33 23.8244	W104 31 59.9115	
16500.00	90.00	90.71	7862.90	1959.73S	5244.00E	=>	5524.09	N39 33 23.8120	W104 31 58.6349	
16600.00	90.00	90.71	7862.90	1960.97S	5343.99E	=>	5622.43	N39 33 23.7996	W104 31 57.3582	
16700.00	90.00	90.71	7862.90	1962.21S	5443.98E	=>	5720.77	N39 33 23.7871	W104 31 56.0816	
16800.00	90.00	90.71	7862.90	1963.45S	5543.97E	=>	5819.12	N39 33 23.7747	W104 31 54.8049	
16900.00	90.00	90.71	7862.90	1964.68S	5643.96E	=>	5917.46	N39 33 23.7622	W104 31 53.5283	
17000.00	90.00	90.71	7862.90	1965.92S	5743.96E	=>	6015.80	N39 33 23.7497	W104 31 52.2517	
17100.00	90.00	90.71	7862.90	1967.16S	5843.95E	=>	6114.14	N39 33 23.7373	W104 31 50.9750	
17200.00	90.00	90.71	7862.90	1968.40S	5943.94E	=>	6212.48	N39 33 23.7248	W104 31 49.6984	
17300.00	90.00	90.71	7862.90	1969.64S	6043.93E	=>	6310.83	N39 33 23.7123	W104 31 48.4217	
17400.00	90.00	90.71	7862.90	1970.87S	6143.93E	=>	6409.17	N39 33 23.6999	W104 31 47.1451	
17500.00	90.00	90.71	7862.90	1972.11S	6243.92E	=>	6507.51	N39 33 23.6874	W104 31 45.8684	
17600.00	90.00	90.71	7862.90	1973.35S	6343.91E	=>	6605.85	N39 33 23.6749	W104 31 44.5918	
17700.00	90.00	90.71	7862.90	1974.59S	6443.90E	=>	6704.20	N39 33 23.6624	W104 31 43.3152	
17800.00	90.00	90.71	7862.90	1975.83S	6543.90E	=>	6802.54	N39 33 23.6499	W104 31 42.0385	
17900.00	90.00	90.71	7862.90	1977.06S	6643.89E	=>	6900.88	N39 33 23.6374	W104 31 40.7619	
18000.00	90.00	90.71	7862.90	1978.30S	6743.88E	=>	6999.22	N39 33 23.6249	W104 31 39.4852	
18100.00	90.00	90.71	7862.90	1979.54S	6843.87E	=>	7097.56	N39 33 23.6124	W104 31 38.2086	
18200.00	90.00	90.71	7862.90	1980.78S	6943.87E	=>	7195.91	N39 33 23.5999	W104 31 36.9320	
18300.00	90.00	90.71	7862.90	1982.02S	7043.86E	=>	7294.25	N39 33 23.5874	W104 31 35.6553	
18400.00	90.00	90.71	7862.90	1983.25S	7143.85E	=>	7392.59	N39 33 23.5749	W104 31 34.3787	
18500.00	90.00	90.71	7862.90	1984.49S	7243.84E	=>	7490.93	N39 33 23.5624	W104 31 33.1020	
18600.00	90.00	90.71	7862.90	1985.73S	7343.83E	=>	7589.27	N39 33 23.5498	W104 31 31.8254	
18700.00	90.00	90.71	7862.90	1986.97S	7443.83E	=>	7687.62	N39 33 23.5373	W104 31 30.5488	
18800.00	90.00	90.71	7862.90	1988.21S	7543.82E	=>	7785.96	N39 33 23.5248	W104 31 29.2721	
18900.00	90.00	90.71	7862.90	1989.44S	7643.81E	=>	7884.30	N39 33 23.5122	W104 31 27.9955	
19000.00	90.00	90.71	7862.90	1990.68S	7743.80E	=>	7982.64	N39 33 23.4997	W104 31 26.7189	
19100.00	90.00	90.71	7862.90	1991.92S	7843.80E	=>	8080.99	N39 33 23.4872	W104 31 25.4422	
19200.00	90.00	90.71	7862.90	1993.16S	7943.79E	=>	8179.33	N39 33 23.4746	W104 31 24.1656	
19300.00	90.00	90.71	7862.90	1994.40S	8043.78E	=>	8277.67	N39 33 23.4621	W104 31 22.8889	
19400.00	90.00	90.71	7862.90	1995.63S	8143.77E	=>	8376.01	N39 33 23.4495	W104 31 21.6123	
19500.00	90.00	90.71	7862.90	1996.87S	8243.77E	=>	8474.35	N39 33 23.4369	W104 31 20.3357	
19600.00	90.00	90.71	7862.90	1998.11S	8343.76E	=>	8572.70	N39 33 23.4244	W104 31 19.0590	
19700.00	90.00	90.71	7862.90	1999.35S	8443.75E	=>	8671.04	N39 33 23.4118	W104 31 17.7824	
19800.00	90.00	90.71	7862.90	2000.59S	8543.74E	=>	8769.38	N39 33 23.3992	W104 31 16.5058	
19900.00	90.00	90.71	7862.90	2001.82S	8643.73E	=>	8867.72	N39 33 23.3867	W104 31 15.2291	
20000.00	90.00	90.71	7862.90	2003.06S	8743.73E	=>	8966.06	N39 33 23.3741	W104 31 13.9525	
20100.00	90.00	90.71	7862.90	2004.30S	8843.72E	=>	9064.41	N39 33 23.3615	W104 31 12.6758	
20200.00	90.00	90.71	7862.90	2005.54S	8943.71E	=>	9162.75	N39 33 23.3489	W104 31 11.3992	
20300.00	90.00	90.71	7862.90	2006.78S	9043.70E	=>	9261.09	N39 33 23.3363	W104 31 10.1226	
20400.00	90.00	90.71	7862.90	2008.01S	9143.70E	=>	9359.43	N39 33 23.3237	W104 31 8.8459	
20500.00	90.00	90.71	7862.90	2009.25S	9243.69E	=>	9457.78	N39 33 23.3111	W104 31 7.5693	
20600.00	90.00	90.71	7862.90	2010.49S	9343.68E	=>	9556.12	N39 33 23.2985	W104 31 6.2927	

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Vertical Section is from 0.00N 0.00E on azimuth 101.16 degrees  
Bottom hole distance is 10448.42 Feet on azimuth 101.16 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
20700.00	90.00	90.71	7862.90	2011.73S	9443.67E	=>	9654.46	N39 33 23.2859	W104 31 5.0160	
20800.00	90.00	90.71	7862.90	2012.97S	9543.67E	=>	9752.80	N39 33 23.2733	W104 31 3.7394	
20900.00	90.00	90.71	7862.90	2014.20S	9643.66E	=>	9851.14	N39 33 23.2607	W104 31 2.4627	
21000.00	90.00	90.71	7862.90	2015.44S	9743.65E	=>	9949.49	N39 33 23.2481	W104 31 1.1861	
21100.00	90.00	90.71	7862.90	2016.68S	9843.64E	=>	10047.83	N39 33 23.2355	W104 30 59.9095	
21200.00	90.00	90.71	7862.90	2017.92S	9943.64E	=>	10146.17	N39 33 23.2228	W104 30 58.6328	
21300.00	90.00	90.71	7862.90	2019.16S	10043.63E	=>	10244.51	N39 33 23.2102	W104 30 57.3562	
21400.00	90.00	90.71	7862.90	2020.39S	10143.62E	=>	10342.85	N39 33 23.1976	W104 30 56.0796	
21500.00	90.00	90.71	7862.90	2021.63S	10243.61E	=>	10441.20	N39 33 23.1849	W104 30 54.8029	
21507.34	90.00	90.71	7862.90	2021.72S	10250.95E	=>	10448.42	N39 33 23.1840	W104 30 54.7092	End of Hold/Target, SILVER 6HN BH

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 Vertical Section is from 0.00N 0.00E on azimuth 101.16 degrees  
 Bottom hole distance is 10448.42 Feet on azimuth 101.16 degrees from Wellhead  
 Calculation method uses Minimum Curvature method  
 Prepared by  
 Date Printed: 6-Apr-2023

Targets							
Name	North[ft]	East[ft]	TVD[ft]	Latitude	Longitude	Northing	Easting
SILVER 6HN BH	2021.72S	10250.95E	7862.90	N39 33 23.1840	W104 30 54.7092	1082813.36	3277684.81
SILVER 6HN LP	1868.19S	2149.43W	7862.90	N39 33 24.7212	W104 33 33.0300	1082834.25	3265283.16

Formations						
Formation Name	Formation MD	Formation TVD	Wellpath Inc	Incidence Angle	North	East
Lower Dawson	80.00	80.00	0.00	90.00	0.00N	0.00E
Denver	205.00	205.00	0.00	90.00	0.00N	0.00E
Upper Arapahoe	1092.02	1092.00	2.21	87.79	0.90S	1.53W
Laramie - Fox Hills	1919.57	1897.00	22.07	67.93	88.48S	150.90W
Pierre Shale (Base of Fox Hills)	2178.26	2131.01	28.28	61.72	144.12S	245.77W
Sussex Sandstone	6044.71	5461.00	30.57	59.43	1137.96S	1940.67W
Sharon Springs Shale	8454.62	7571.01	35.25	54.75	1772.42S	2691.82W
Niobrara	8517.86	7621.01	40.25	49.75	1788.12S	2656.46W
Niobrara A	8531.06	7631.00	41.31	48.69	1791.26S	2648.43W
Niobrara B Top	8723.03	7756.00	57.23	32.77	1831.12S	2509.29W
Niobrara C Top	8883.28	7826.01	70.86	19.14	1854.24S	2367.48W

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
1095604	Planned	21507.34	7862.90	WdW Rate Gyro	Standard

Notes