

GMT Exploration

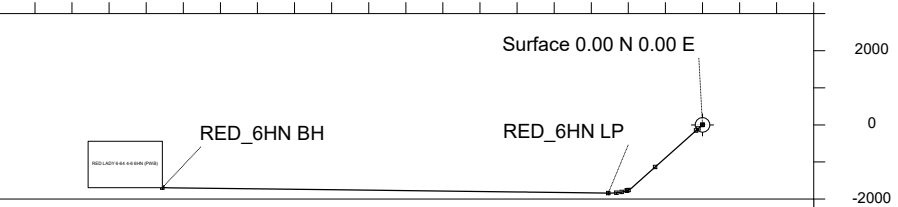
Location	DJ Basin	Slot	RED LADY 6-64 4-6 6HN
Field	Elbert County Wells	Well	RED LADY 6-64 4-6 6HN
Installation	Ragged 6-64 4 Pad	Wellbore	RED LADY 6-64 4-6 6HN (PWB)

Created by cdoke
Date plotted 4-Apr-2023
Plot reference is RED LADY 6-64 4-6 6HN (PWB).
Ref wellpath is RED LADY 6-64 4-6 6HN (PWB).
Coordinates are in Feet reference RED LADY 6-64 4-6 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: 6014.80 ft.
Plot North is aligned to TRUE North.

Scale 1 cm = 1000 ft

East (Feet) ->

-18000 -16000 -14000 -12000 -10000 -8000 -6000 -4000 -2000 0 2000

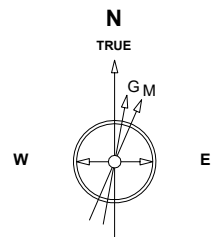
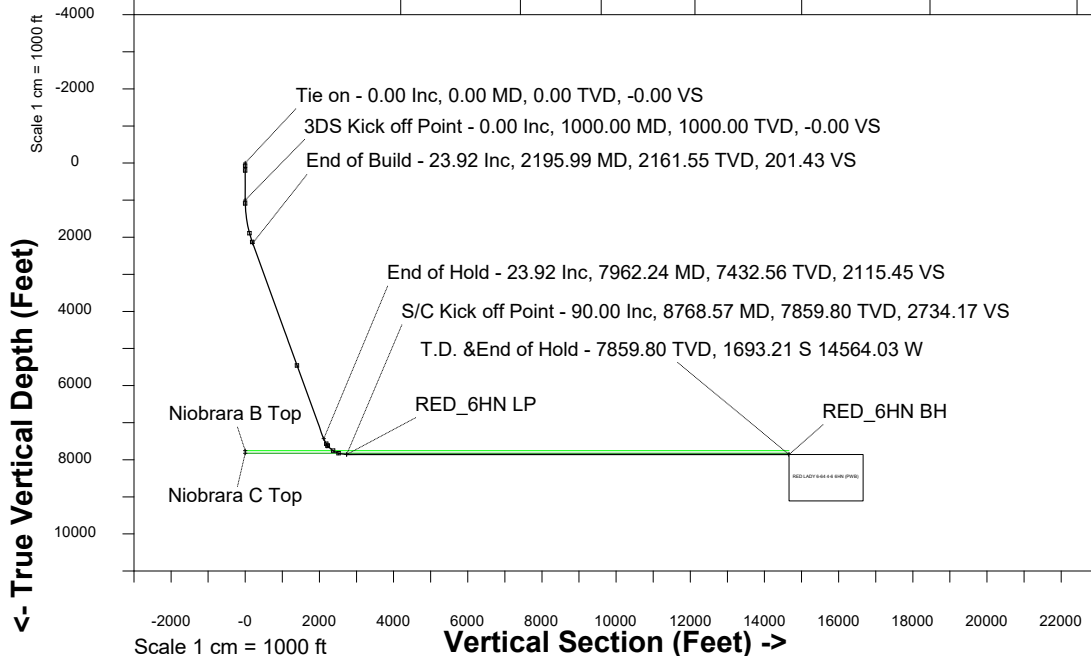


WELL PROFILE DATA

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	228.32	1000.00	S 0.00	W 0.00	0.00	-0.00
End of Build	2195.99	23.92	228.32	2161.55	S 163.61	W 183.77	2.00	201.43
End of Hold	7962.24	23.92	228.32	7432.56	S 1718.29	W 1929.93	0.00	2115.45
Target RED_6HN LP	8768.57	90.00	270.69	7859.80	S 1838.65	W 2538.82	9.00	2734.17
T.D. & Target RED... BH	20794.66	90.00	270.69	7859.80	S 1693.21	W 14564.03	0.00	14662.13

<- North(Feet)

Scale 1 cm = 1000 ft



Jan-3-2023
IGRF-13 Dip: 65.95 deg Field: 51361.9 nT
Lat: N39 33 44.1720 Long: W104 33 5.5900 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 263.37 with reference 0.00 N, 0.00 E from RED LADY 6-64 4-6 6HN

Wellhead Details							
Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Installation [ft]
RED LADY 6-64 4-6 6HN	N39 33 43.1784	W104 33 4.4388	1084725.6076	3267502.4908	100.54S	89.38E	-1.90

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	-6014.80	0.00N	0.00E		0.00
1000.00	0.00	228.32	1000.00	-5014.80	0.00N	0.00E	==>	0.00
2195.99	23.92	228.32	2161.55	-3853.25	163.61S	183.77W	2.00	201.43
7962.24	23.92	228.32	7432.56	1417.76	1718.29S	1929.93W	==>	2115.45
8768.57	90.00	270.69	7859.80	1845.00	1838.65S	2538.82W	9.00	2734.17
20794.66	90.00	270.69	7859.80	1845.00	1693.21S	14564.03W	==>	14662.13

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 43.1784	W104 33 4.4388	Tie on, Slot Datum	
77.00	0.00	0.00	77.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388	Lower Dawson	
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
202.00	0.00	0.00	202.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388	Denver	
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388		
1000.00	0.00	228.32	1000.00	0.00N	0.00E	==>	0.00	N39 33 43.1784	W104 33 4.4388	3DS Kick off Point	
1089.01	1.78	228.32	1089.00	0.92S	1.03W	2.00	1.13	N39 33 43.1693	W104 33 4.4520	Upper Arapahoe	
1100.00	2.00	228.32	1099.98	1.16S	1.30W	2.00	1.43	N39 33 43.1669	W104 33 4.4554		
1200.00	4.00	228.32	1199.84	4.64S	5.21W	2.00	5.71	N39 33 43.1325	W104 33 4.5053		
1300.00	6.00	228.32	1299.45	10.44S	11.72W	2.00	12.85	N39 33 43.0753	W104 33 4.5885		
1400.00	8.00	228.32	1398.70	18.54S	20.82W	2.00	22.82	N39 33 42.9952	W104 33 4.7047		
1500.00	10.00	228.32	1497.47	28.94S	32.51W	2.00	35.63	N39 33 42.8924	W104 33 4.8538		
1600.00	12.00	228.32	1595.62	41.63S	46.76W	2.00	51.25	N39 33 42.7670	W104 33 5.0358		
1700.00	14.00	228.32	1693.06	56.59S	63.56W	2.00	69.67	N39 33 42.6192	W104 33 5.2503		
1800.00	16.00	228.32	1789.64	73.80S	82.89W	2.00	90.85	N39 33 42.4491	W104 33 5.4971		
1900.00	18.00	228.32	1885.27	93.24S	104.72W	2.00	114.79	N39 33 42.2569	W104 33 5.7759		
1909.19	18.18	228.32	1894.00	95.13S	106.85W	2.00	117.12	N39 33 42.2382	W104 33 5.8031	Laramie - Fox Hills	
2000.00	20.00	228.32	1979.82	114.89S	129.04W	2.00	141.44	N39 33 42.0430	W104 33 6.0864		
2100.00	22.00	228.32	2073.17	138.71S	155.80W	2.00	170.78	N39 33 41.8075	W104 33 6.4281		
2159.39	23.19	228.32	2128.00	153.89S	172.84W	2.00	189.46	N39 33 41.6575	W104 33 6.6457	Pierre Shale (Base of Fox Hills)	
2195.99	23.92	228.32	2161.55	163.61S	183.77W	2.00	201.43	N39 33 41.5614	W104 33 6.7852	End of Build	
2200.00	23.92	228.32	2165.22	164.69S	184.98W	==>	202.76	N39 33 41.5507	W104 33 6.8007		
2300.00	23.92	228.32	2256.63	191.66S	215.26W	==>	235.95	N39 33 41.2843	W104 33 7.1873		
2400.00	23.92	228.32	2348.04	218.62S	245.54W	==>	269.15	N39 33 41.0178	W104 33 7.5740		
2500.00	23.92	228.32	2439.45	245.58S	275.83W	==>	302.34	N39 33 40.7513	W104 33 7.9606		
2600.00	23.92	228.32	2530.86	272.54S	306.11W	==>	335.53	N39 33 40.4848	W104 33 8.3473		
2700.00	23.92	228.32	2622.27	299.50S	336.39W	==>	368.73	N39 33 40.2184	W104 33 8.7339		
2800.00	23.92	228.32	2713.68	326.46S	366.67W	==>	401.92	N39 33 39.9519	W104 33 9.1206		
2900.00	23.92	228.32	2805.10	353.43S	396.96W	==>	435.12	N39 33 39.6854	W104 33 9.5072		
3000.00	23.92	228.32	2896.51	380.39S	427.24W	==>	468.31	N39 33 39.4190	W104 33 9.8939		
3100.00	23.92	228.32	2987.92	407.35S	457.52W	==>	501.50	N39 33 39.1525	W104 33 10.2805		
3200.00	23.92	228.32	3079.33	434.31S	487.80W	==>	534.70	N39 33 38.8860	W104 33 10.6672		
3300.00	23.92	228.32	3170.74	461.27S	518.09W	==>	567.89	N39 33 38.6196	W104 33 11.0538		
3400.00	23.92	228.32	3262.15	488.23S	548.37W	==>	601.08	N39 33 38.3531	W104 33 11.4405		
3500.00	23.92	228.32	3353.56	515.20S	578.65W	==>	634.28	N39 33 38.0866	W104 33 11.8271		
3600.00	23.92	228.32	3444.97	542.16S	608.94W	==>	667.47	N39 33 37.8202	W104 33 12.2138		
3700.00	23.92	228.32	3536.39	569.12S	639.22W	==>	700.66	N39 33 37.5537	W104 33 12.6004		
3800.00	23.92	228.32	3627.80	596.08S	669.50W	==>	733.86	N39 33 37.2872	W104 33 12.9871		
3900.00	23.92	228.32	3719.21	623.04S	699.78W	==>	767.05	N39 33 37.0207	W104 33 13.3737		
4000.00	23.92	228.32	3810.62	650.00S	730.07W	==>	800.24	N39 33 36.7543	W104 33 13.7604		
4100.00	23.92	228.32	3902.03	676.97S	760.35W	==>	833.44	N39 33 36.4878	W104 33 14.1470		
4200.00	23.92	228.32	3993.44	703.93S	790.63W	==>	866.63	N39 33 36.2213	W104 33 14.5336		
4300.00	23.92	228.32	4084.85	730.89S	820.91W	==>	899.83	N39 33 35.9548	W104 33 14.9203		
4400.00	23.92	228.32	4176.27	757.85S	851.20W	==>	933.02	N39 33 35.6884	W104 33 15.3069		
4500.00	23.92	228.32	4267.68	784.81S	881.48W	==>	966.21	N39 33 35.4219	W104 33 15.6935		

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 6014.8ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 263.37 degrees
Bottom hole distance is 14662.13 Feet on azimuth 263.37 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	23.92	228.32	4359.09	811.77S	911.76W	==>	999.41	N39 33 35.1554	W104 33 16.0802	
4700.00	23.92	228.32	4450.50	838.74S	942.04W	==>	1032.60	N39 33 34.8889	W104 33 16.4668	
4800.00	23.92	228.32	4541.91	865.70S	972.33W	==>	1065.79	N39 33 34.6225	W104 33 16.8535	
4900.00	23.92	228.32	4633.32	892.66S	1002.61W	==>	1098.99	N39 33 34.3560	W104 33 17.2401	
5000.00	23.92	228.32	4724.73	919.62S	1032.89W	==>	1132.18	N39 33 34.0895	W104 33 17.6267	
5100.00	23.92	228.32	4816.14	946.58S	1063.17W	==>	1165.37	N39 33 33.8230	W104 33 18.0134	
5200.00	23.92	228.32	4907.56	973.54S	1093.46W	==>	1198.57	N39 33 33.5566	W104 33 18.4000	
5300.00	23.92	228.32	4998.97	1000.51S	1123.74W	==>	1231.76	N39 33 33.2901	W104 33 18.7866	
5400.00	23.92	228.32	5090.38	1027.47S	1154.02W	==>	1264.95	N39 33 33.0236	W104 33 19.1732	
5500.00	23.92	228.32	5181.79	1054.43S	1184.30W	==>	1298.15	N39 33 32.7571	W104 33 19.5599	
5600.00	23.92	228.32	5273.20	1081.39S	1214.59W	==>	1331.34	N39 33 32.4907	W104 33 19.9465	
5700.00	23.92	228.32	5364.61	1108.35S	1244.87W	==>	1364.54	N39 33 32.2242	W104 33 20.3331	
5800.00	23.92	228.32	5456.02	1135.31S	1275.15W	==>	1397.73	N39 33 31.9577	W104 33 20.7198	
5802.16	23.92	228.32	5458.00	1135.90S	1275.81W	==>	1398.45	N39 33 31.9519	W104 33 20.7281	Sussex Sandstone
5900.00	23.92	228.32	5547.44	1162.28S	1305.44W	==>	1430.92	N39 33 31.6912	W104 33 21.1064	
6000.00	23.92	228.32	5638.85	1189.24S	1335.72W	==>	1464.12	N39 33 31.4247	W104 33 21.4930	
6100.00	23.92	228.32	5730.26	1216.20S	1366.00W	==>	1497.31	N39 33 31.1583	W104 33 21.8796	
6200.00	23.92	228.32	5821.67	1243.16S	1396.28W	==>	1530.50	N39 33 30.8918	W104 33 22.2663	
6300.00	23.92	228.32	5913.08	1270.12S	1426.57W	==>	1563.70	N39 33 30.6253	W104 33 22.6529	
6400.00	23.92	228.32	6004.49	1297.08S	1456.85W	==>	1596.89	N39 33 30.3588	W104 33 23.0395	
6500.00	23.92	228.32	6095.90	1324.05S	1487.13W	==>	1630.08	N39 33 30.0923	W104 33 23.4261	
6600.00	23.92	228.32	6187.31	1351.01S	1517.41W	==>	1663.28	N39 33 29.8258	W104 33 23.8127	
6700.00	23.92	228.32	6278.73	1377.97S	1547.70W	==>	1696.47	N39 33 29.5594	W104 33 24.1994	
6800.00	23.92	228.32	6370.14	1404.93S	1577.98W	==>	1729.66	N39 33 29.2929	W104 33 24.5860	
6900.00	23.92	228.32	6461.55	1431.89S	1608.26W	==>	1762.86	N39 33 29.0264	W104 33 24.9726	
7000.00	23.92	228.32	6552.96	1458.85S	1638.54W	==>	1796.05	N39 33 28.7599	W104 33 25.3592	
7100.00	23.92	228.32	6644.37	1485.82S	1668.83W	==>	1829.25	N39 33 28.4934	W104 33 25.7458	
7200.00	23.92	228.32	6735.78	1512.78S	1699.11W	==>	1862.44	N39 33 28.2269	W104 33 26.1324	
7300.00	23.92	228.32	6827.19	1539.74S	1729.39W	==>	1895.63	N39 33 27.9605	W104 33 26.5191	
7400.00	23.92	228.32	6918.61	1566.70S	1759.67W	==>	1928.83	N39 33 27.6940	W104 33 26.9057	
7500.00	23.92	228.32	7010.02	1593.66S	1789.96W	==>	1962.02	N39 33 27.4275	W104 33 27.2923	
7600.00	23.92	228.32	7101.43	1620.62S	1820.24W	==>	1995.21	N39 33 27.1610	W104 33 27.6789	
7700.00	23.92	228.32	7192.84	1647.59S	1850.52W	==>	2028.41	N39 33 26.8945	W104 33 28.0655	
7800.00	23.92	228.32	7284.25	1674.55S	1880.80W	==>	2061.60	N39 33 26.6280	W104 33 28.4521	
7900.00	23.92	228.32	7375.66	1701.51S	1911.09W	==>	2094.79	N39 33 26.3615	W104 33 28.8387	
7962.24	23.92	228.32	7432.56	1718.29S	1929.93W	==>	2115.45	N39 33 26.1957	W104 33 29.0793	End of Hold
8000.00	26.43	233.72	7466.73	1728.36S	1942.43W	9.00	2129.03	N39 33 26.0962	W104 33 29.2389	
8100.00	33.78	244.15	7553.24	1753.70S	1985.48W	9.00	2174.71	N39 33 25.8457	W104 33 29.7884	
8117.91	35.17	245.59	7568.00	1758.00S	1994.65W	9.00	2184.32	N39 33 25.8032	W104 33 29.9056	Sharon Springs Shale
8181.09	40.19	249.97	7618.00	1772.52S	2030.41W	9.00	2221.52	N39 33 25.6597	W104 33 30.3621	Niobrara
8194.29	41.26	250.77	7628.01	1775.41S	2038.52W	9.00	2229.91	N39 33 25.6311	W104 33 30.4657	Niobrara A
8200.00	41.72	251.10	7632.28	1776.64S	2042.09W	9.00	2233.60	N39 33 25.6189	W104 33 30.5113	
8300.00	49.97	256.15	7701.91	1796.63S	2110.89W	9.00	2304.24	N39 33 25.4213	W104 33 31.3896	
8386.13	57.21	259.59	7753.01	1811.08S	2178.61W	9.00	2373.18	N39 33 25.2784	W104 33 32.2542	Niobrara B Top
8400.00	58.38	260.09	7760.40	1813.15S	2190.17W	9.00	2384.90	N39 33 25.2579	W104 33 32.4017	
8500.00	66.90	263.37	7806.32	1825.82S	2277.97W	9.00	2473.58	N39 33 25.1327	W104 33 33.5228	
8546.35	70.87	264.74	7823.01	1830.29S	2320.97W	9.00	2516.80	N39 33 25.0885	W104 33 34.0717	Niobrara C Top
8600.00	75.48	266.25	7838.54	1834.31S	2372.15W	9.00	2568.11	N39 33 25.0486	W104 33 34.7252	
8700.00	84.09	268.92	7856.27	1838.42S	2470.38W	9.00	2666.15	N39 33 25.0079	W104 33 35.9793	
8768.57	90.00	270.69	7859.80	1838.65S	2538.82W	9.00	2734.17	N39 33 25.0056	W104 33 36.8532	S/C Kick off Point/Target, RED_6HN LP
8800.00	90.00	270.69	7859.80	1838.27S	2570.25W	==>	2765.34	N39 33 25.0093	W104 33 37.2544	
8900.00	90.00	270.69	7859.80	1837.06S	2670.24W	==>	2864.52	N39 33 25.0212	W104 33 38.5311	
9000.00	90.00	270.69	7859.80	1835.85S	2770.23W	==>	2963.71	N39 33 25.0330	W104 33 39.8077	
9100.00	90.00	270.69	7859.80	1834.64S	2870.23W	==>	3062.89	N39 33 25.0449	W104 33 41.0844	
9200.00	90.00	270.69	7859.80	1833.43S	2970.22W	==>	3162.08	N39 33 25.0567	W104 33 42.3611	
9300.00	90.00	270.69	7859.80	1832.22S	3070.21W	==>	3261.26	N39 33 25.0685	W104 33 43.6377	
9400.00	90.00	270.69	7859.80	1831.02S	3170.21W	==>	3360.44	N39 33 25.0804	W104 33 44.9144	
9500.00	90.00	270.69	7859.80	1829.81S	3270.20W	==>	3459.63	N39 33 25.0922	W104 33 46.1910	
9600.00	90.00	270.69	7859.80	1828.60S	3370.19W	==>	3558.81	N39 33 25.1040	W104 33 47.4677	
9700.00	90.00	270.69	7859.80	1827.39S	3470.18W	==>	3658.00	N39 33 25.1158	W104 33 48.7444	
9800.00	90.00	270.69	7859.80	1826.18S	3570.18W	==>	3757.18	N39 33 25.1276	W104 33 50.0210	
9900.00	90.00	270.69	7859.80	1824.97S	3670.17W	==>	3856.36	N39 33 25.1394	W104 33 51.2977	
10000.00	90.00	270.69	7859.80	1823.76S	3770.16W	==>	3955.55	N39 33 25.1513	W104 33 52.5743	
10100.00	90.00	270.69	7859.80	1822.55S	3870.15W	==>	4054.73	N39 33 25.1631	W104 33 53.8510	
10200.00	90.00	270.69	7859.80	1821.34S	3970.15W	==>	4153.92	N39 33 25.1749	W104 33 55.1276	
10300.00	90.00	270.69	7859.80	1820.13S	4070.14W	==>	4253.10	N39 33 25.1866	W104 33 56.4043	
10400.00	90.00	270.69	7859.80	1818.92S	4170.13W	==>	4352.28	N39 33 25.1984	W104 33 57.6810	
10500.00	90.00	270.69	7859.80	1817.71S	4270.12W	==>	4451.47	N39 33 25.2102	W104 33 58.9576	
10600.00	90.00	270.69	7859.80	1816.50S	4370.12W	==>	4550.65	N39 33 25.2220	W104 34 0.2343	
10700.00	90.00	270.69	7859.80	1815.29S	4470.11W	==>	4649.84	N39 33 25.2338	W104 34 1.5109	
10800.00	90.00	270.69	7859.80	1814.08S	4570.10W	==>	4749.02	N39 33 25.2456	W104 34 2.7876	
10900.00	90.00	270.69	7859.80	1812.87S	4670.10W	==>	4848.20	N39 33 25.2573	W104 34 4.0643	
11000.00	90.00	270.69	7859.80	1811.66S	4770.09W	==>	4947.39	N39 33 25.2691	W104 34 5.3409	
11100.00	90.00	270.69	7859.80	1810.46S	4870.08W	==>	5046.57	N39 33 25.2809	W104 34 6.6176	
11200.00	90.00	270.69	7859.80	1809.25S	4970.07W	==>	5145.76	N39 33 25.2926	W104 34 7.8942	
11300.00	90.00	270.69	7859.80	1808.04S	5070.07W	==>	5244.94	N39 33 25.3044	W104 34 9.1709	
11400.00	90.00	270.69	7859.80	1806.83S	5170.06W	==>	5344.12	N39 33 25.3161	W104 34 10.4476	
11500.00	90.00	270.69	7859.80	1805.62S	5270.05W	==>	5443.31	N39 33 25.3279	W104 34 11.7242	
11600.00	90.00	270.69	7859.80	1804.41S	5370.04W	==>	5542.49	N39 33 25.3396	W104 34 13.0009	
11700.00	90.00	270.69	7859.80	1803.20S	5470.04W	==>	5641.68	N39 33 25.3513	W104 34 14.2775	
11800.00	90.00	270.69	7859.80	1801.99S	5570.03W	==>	5740.86	N39 33 25.3631	W104 34 15.5542	
11900.00	90.00	270.69	7859.80	1800.78S	5670.02W	==>	5840.04	N39 33 25.3748	W104 34 16.8309	
12000.00	90.00	270.69	7859.80	1799.57S	5770.02W	==>	5939.23	N39 33 25.3865	W104 34 18.1075	

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 6014.8ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 263.37 degrees
Bottom hole distance is 14662.13 Feet on azimuth 263.37 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
12100.00	90.00	270.69	7859.80	1798.36S	5870.01W	==>	6038.41	N39 33 25.3983	W104 34 19.3842	
12200.00	90.00	270.69	7859.80	1797.15S	5970.00W	==>	6137.60	N39 33 25.4100	W104 34 20.6609	
12300.00	90.00	270.69	7859.80	1795.94S	6069.99W	==>	6236.78	N39 33 25.4217	W104 34 21.9375	
12400.00	90.00	270.69	7859.80	1794.73S	6169.99W	==>	6335.97	N39 33 25.4334	W104 34 23.2142	
12500.00	90.00	270.69	7859.80	1793.52S	6269.98W	==>	6435.15	N39 33 25.4451	W104 34 24.4908	
12600.00	90.00	270.69	7859.80	1792.31S	6369.97W	==>	6534.33	N39 33 25.4568	W104 34 25.7675	
12700.00	90.00	270.69	7859.80	1791.10S	6469.96W	==>	6633.52	N39 33 25.4685	W104 34 27.0442	
12800.00	90.00	270.69	7859.80	1789.90S	6569.96W	==>	6732.70	N39 33 25.4802	W104 34 28.3208	
12900.00	90.00	270.69	7859.80	1788.69S	6669.95W	==>	6831.89	N39 33 25.4919	W104 34 29.5975	
13000.00	90.00	270.69	7859.80	1787.48S	6769.94W	==>	6931.07	N39 33 25.5036	W104 34 30.8741	
13100.00	90.00	270.69	7859.80	1786.27S	6869.93W	==>	7030.25	N39 33 25.5153	W104 34 32.1508	
13200.00	90.00	270.69	7859.80	1785.06S	6969.93W	==>	7129.44	N39 33 25.5269	W104 34 33.4275	
13300.00	90.00	270.69	7859.80	1783.85S	7069.92W	==>	7228.62	N39 33 25.5386	W104 34 34.7041	
13400.00	90.00	270.69	7859.80	1782.64S	7169.91W	==>	7327.81	N39 33 25.5503	W104 34 35.9808	
13500.00	90.00	270.69	7859.80	1781.43S	7269.91W	==>	7426.99	N39 33 25.5620	W104 34 37.2575	
13600.00	90.00	270.69	7859.80	1780.22S	7369.90W	==>	7526.17	N39 33 25.5736	W104 34 38.5341	
13700.00	90.00	270.69	7859.80	1779.01S	7469.89W	==>	7625.36	N39 33 25.5853	W104 34 39.8108	
13800.00	90.00	270.69	7859.80	1777.80S	7569.88W	==>	7724.54	N39 33 25.5969	W104 34 41.0875	
13900.00	90.00	270.69	7859.80	1776.59S	7669.88W	==>	7823.73	N39 33 25.6086	W104 34 42.3641	
14000.00	90.00	270.69	7859.80	1775.38S	7769.87W	==>	7922.91	N39 33 25.6202	W104 34 43.6408	
14100.00	90.00	270.69	7859.80	1774.17S	7869.86W	==>	8022.09	N39 33 25.6319	W104 34 44.9174	
14200.00	90.00	270.69	7859.80	1772.96S	7969.85W	==>	8121.28	N39 33 25.6435	W104 34 46.1941	
14300.00	90.00	270.69	7859.80	1771.75S	8069.85W	==>	8220.46	N39 33 25.6552	W104 34 47.4708	
14400.00	90.00	270.69	7859.80	1770.54S	8169.84W	==>	8319.65	N39 33 25.6668	W104 34 48.7474	
14500.00	90.00	270.69	7859.80	1769.34S	8269.83W	==>	8418.83	N39 33 25.6784	W104 34 50.0241	
14600.00	90.00	270.69	7859.80	1768.13S	8369.83W	==>	8518.01	N39 33 25.6900	W104 34 51.3008	
14700.00	90.00	270.69	7859.80	1766.92S	8469.82W	==>	8617.20	N39 33 25.7017	W104 34 52.5774	
14800.00	90.00	270.69	7859.80	1765.71S	8569.81W	==>	8716.38	N39 33 25.7133	W104 34 53.8541	
14900.00	90.00	270.69	7859.80	1764.50S	8669.80W	==>	8815.57	N39 33 25.7249	W104 34 55.1308	
15000.00	90.00	270.69	7859.80	1763.29S	8769.80W	==>	8914.75	N39 33 25.7365	W104 34 56.4074	
15100.00	90.00	270.69	7859.80	1762.08S	8869.79W	==>	9013.93	N39 33 25.7481	W104 34 57.6841	
15200.00	90.00	270.69	7859.80	1760.87S	8969.78W	==>	9113.12	N39 33 25.7597	W104 34 58.9607	
15300.00	90.00	270.69	7859.80	1759.66S	9069.77W	==>	9212.30	N39 33 25.7713	W104 35 0.2374	
15400.00	90.00	270.69	7859.80	1758.45S	9169.77W	==>	9311.49	N39 33 25.7829	W104 35 1.5141	
15500.00	90.00	270.69	7859.80	1757.24S	9269.76W	==>	9410.67	N39 33 25.7945	W104 35 2.7907	
15600.00	90.00	270.69	7859.80	1756.03S	9369.75W	==>	9509.85	N39 33 25.8061	W104 35 4.0674	
15700.00	90.00	270.69	7859.80	1754.82S	9469.74W	==>	9609.04	N39 33 25.8176	W104 35 5.3441	
15800.00	90.00	270.69	7859.80	1753.61S	9569.74W	==>	9708.22	N39 33 25.8292	W104 35 6.6207	
15900.00	90.00	270.69	7859.80	1752.40S	9669.73W	==>	9807.41	N39 33 25.8408	W104 35 7.8974	
16000.00	90.00	270.69	7859.80	1751.19S	9769.72W	==>	9906.59	N39 33 25.8524	W104 35 9.1741	
16100.00	90.00	270.69	7859.80	1749.98S	9869.72W	==>	10005.77	N39 33 25.8639	W104 35 10.4507	
16200.00	90.00	270.69	7859.80	1748.78S	9969.71W	==>	10104.96	N39 33 25.8755	W104 35 11.7274	
16300.00	90.00	270.69	7859.80	1747.57S	10069.70W	==>	10204.14	N39 33 25.8870	W104 35 13.0041	
16400.00	90.00	270.69	7859.80	1746.36S	10169.69W	==>	10303.33	N39 33 25.8986	W104 35 14.2807	
16500.00	90.00	270.69	7859.80	1745.15S	10269.69W	==>	10402.51	N39 33 25.9101	W104 35 15.5574	
16600.00	90.00	270.69	7859.80	1743.94S	10369.68W	==>	10501.69	N39 33 25.9217	W104 35 16.8341	
16700.00	90.00	270.69	7859.80	1742.73S	10469.67W	==>	10600.88	N39 33 25.9332	W104 35 18.1107	
16800.00	90.00	270.69	7859.80	1741.52S	10569.66W	==>	10700.06	N39 33 25.9448	W104 35 19.3874	
16900.00	90.00	270.69	7859.80	1740.31S	10669.66W	==>	10799.25	N39 33 25.9563	W104 35 20.6641	
17000.00	90.00	270.69	7859.80	1739.10S	10769.65W	==>	10898.43	N39 33 25.9678	W104 35 21.9407	
17100.00	90.00	270.69	7859.80	1737.89S	10869.64W	==>	10997.61	N39 33 25.9794	W104 35 23.2174	
17200.00	90.00	270.69	7859.80	1736.68S	10969.63W	==>	11096.80	N39 33 25.9909	W104 35 24.4941	
17300.00	90.00	270.69	7859.80	1735.47S	11069.63W	==>	11195.98	N39 33 26.0024	W104 35 25.7707	
17400.00	90.00	270.69	7859.80	1734.26S	11169.62W	==>	11295.17	N39 33 26.0139	W104 35 27.0474	
17500.00	90.00	270.69	7859.80	1733.05S	11269.61W	==>	11394.35	N39 33 26.0254	W104 35 28.3241	
17600.00	90.00	270.69	7859.80	1731.84S	11369.61W	==>	11493.53	N39 33 26.0369	W104 35 29.6007	
17700.00	90.00	270.69	7859.80	1730.63S	11469.60W	==>	11592.72	N39 33 26.0484	W104 35 30.8774	
17800.00	90.00	270.69	7859.80	1729.42S	11569.59W	==>	11691.90	N39 33 26.0599	W104 35 32.1541	
17900.00	90.00	270.69	7859.80	1728.22S	11669.58W	==>	11791.09	N39 33 26.0714	W104 35 33.4307	
18000.00	90.00	270.69	7859.80	1727.01S	11769.58W	==>	11890.27	N39 33 26.0829	W104 35 34.7074	
18100.00	90.00	270.69	7859.80	1725.80S	11869.57W	==>	11989.45	N39 33 26.0944	W104 35 35.9841	
18200.00	90.00	270.69	7859.80	1724.59S	11969.56W	==>	12088.64	N39 33 26.1059	W104 35 37.2608	
18300.00	90.00	270.69	7859.80	1723.38S	12069.55W	==>	12187.82	N39 33 26.1174	W104 35 38.5374	
18400.00	90.00	270.69	7859.80	1722.17S	12169.55W	==>	12287.01	N39 33 26.1288	W104 35 39.8141	
18500.00	90.00	270.69	7859.80	1720.96S	12269.54W	==>	12386.19	N39 33 26.1403	W104 35 41.0908	
18600.00	90.00	270.69	7859.80	1719.75S	12369.53W	==>	12485.38	N39 33 26.1518	W104 35 42.3674	
18700.00	90.00	270.69	7859.80	1718.54S	12469.53W	==>	12584.56	N39 33 26.1632	W104 35 43.6441	
18800.00	90.00	270.69	7859.80	1717.33S	12569.52W	==>	12683.74	N39 33 26.1747	W104 35 44.9208	
18900.00	90.00	270.69	7859.80	1716.12S	12669.51W	==>	12782.93	N39 33 26.1861	W104 35 46.1974	
19000.00	90.00	270.69	7859.80	1714.91S	12769.50W	==>	12882.11	N39 33 26.1976	W104 35 47.4741	
19100.00	90.00	270.69	7859.80	1713.70S	12869.50W	==>	12981.30	N39 33 26.2090	W104 35 48.7508	
19200.00	90.00	270.69	7859.80	1712.49S	12969.49W	==>	13080.48	N39 33 26.2205	W104 35 50.0274	
19300.00	90.00	270.69	7859.80	1711.28S	13069.48W	==>	13179.66	N39 33 26.2319	W104 35 51.3041	
19400.00	90.00	270.69	7859.80	1710.07S	13169.47W	==>	13278.85	N39 33 26.2433	W104 35 52.5808	
19500.00	90.00	270.69	7859.80	1708.86S	13269.47W	==>	13378.03	N39 33 26.2548	W104 35 53.8575	
19600.00	90.00	270.69	7859.80	1707.65S	13369.46W	==>	13477.22	N39 33 26.2662	W104 35 55.1341	
19700.00	90.00	270.69	7859.80	1706.45S	13469.45W	==>	13576.40	N39 33 26.2776	W104 35 56.4108	
19800.00	90.00	270.69	7859.80	1705.24S	13569.44W	==>	13675.58	N39 33 26.2890	W104 35 57.6875	
19900.00	90.00	270.69	7859.80	1704.03S	13669.44W	==>	13774.77	N39 33 26.3005	W104 35 58.9641	
20000.00	90.00	270.69	7859.80	1702.82S	13769.43W	==>	13873.95	N39 33 26.3119	W104 36 0.2408	
20100.00	90.00	270.69	7859.80	1701.61S	13869.42W	==>	13973.14	N39 33 26.3233	W104 36 1.5175	
20200.00	90.00	270.69	7859.80	1700.40S	13969.42W	==>	14072.32	N39 33 26.3347	W104 36 2.7942	
20300.00	90.00	270.69	7859.80	1699.19S	14069.41W	==>	14171.50	N39 33 26.3461	W104 36 4.0708	
20400.00	90.00	270.69	7859.80	1697.98S	14169.40W	==>	14270.69	N39 33 26.3575	W104 36 5.3475	
20500.00	90.00	270.69	7859.80	1696.77S	14269.39W	==>	14369.87	N39 33 26.3689	W104 36 6.6242	

All data is in Feet unless otherwise stated
Coordinates

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
20600.00	90.00	270.69	7859.80	1695.56S	14369.39W	==>	14469.06	N39 33 26.3802	W104 36 7.9008	
20700.00	90.00	270.69	7859.80	1694.35S	14469.38W	==>	14568.24	N39 33 26.3916	W104 36 9.1775	
20794.66	90.00	270.69	7859.80	1693.21S	14564.03W	==>	14662.13	N39 33 26.4024	W104 36 10.3860	End of Hold/Target, RED_6HN BH

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 6014.8ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 263.37 degrees
Bottom hole distance is 14662.13 Feet on azimuth 263.37 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
RED 6HN BH	1693.21S	14564.03W	7859.80	N39 33 26.4024	W104 36 10.3860	1082876.63	3252957.02
RED 6HN LP	1838.65S	2538.82W	7859.80	N39 33 25.0056	W104 33 36.8532	1082859.85	3264983.42

Formations						
Formation Name	Formation MD	Formation TVD	Wellpath Inc	Incidence Angle	North	East
Lower Dawson	77.00	77.00	0.00	90.00	0.00N	0.00E
Denver	202.00	202.00	0.00	90.00	0.00N	0.00E
Upper Arapahoe	1089.01	1089.00	1.78	88.22	0.92S	1.03W
Laramie - Fox Hills	1909.19	1894.00	18.18	71.82	95.13S	106.85W
Pierre Shale (Base of Fox Hills)	2159.39	2128.00	23.19	66.81	153.89S	172.84W
Sussex Sandstone	5802.16	5458.00	23.92	66.08	1135.90S	1275.81W
Sharon Springs Shale	8117.91	7568.00	35.17	54.83	1758.00S	1994.65W
Niobrara	8181.09	7618.00	40.19	49.81	1772.52S	2030.41W
Niobrara A	8194.29	7628.01	41.26	48.74	1775.41S	2038.52W
Niobrara B Top	8386.13	7753.01	57.21	32.79	1811.08S	2178.61W
Niobrara C Top	8546.35	7823.01	70.87	19.13	1830.29S	2320.97W

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
1095784	Planned	20794.66	7859.80	WdW Rate Gyro	Standard

Notes