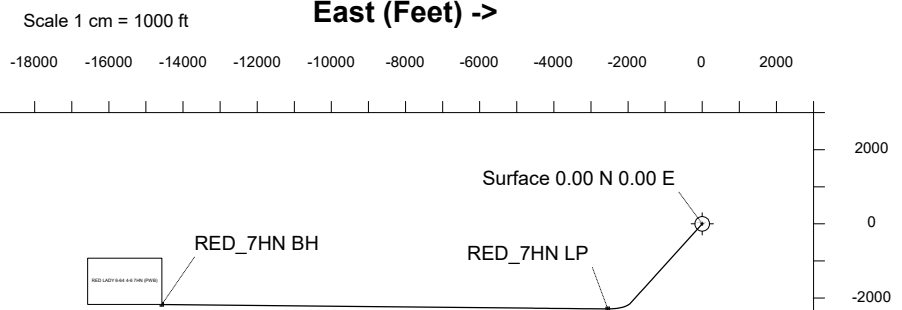


GMT Exploration

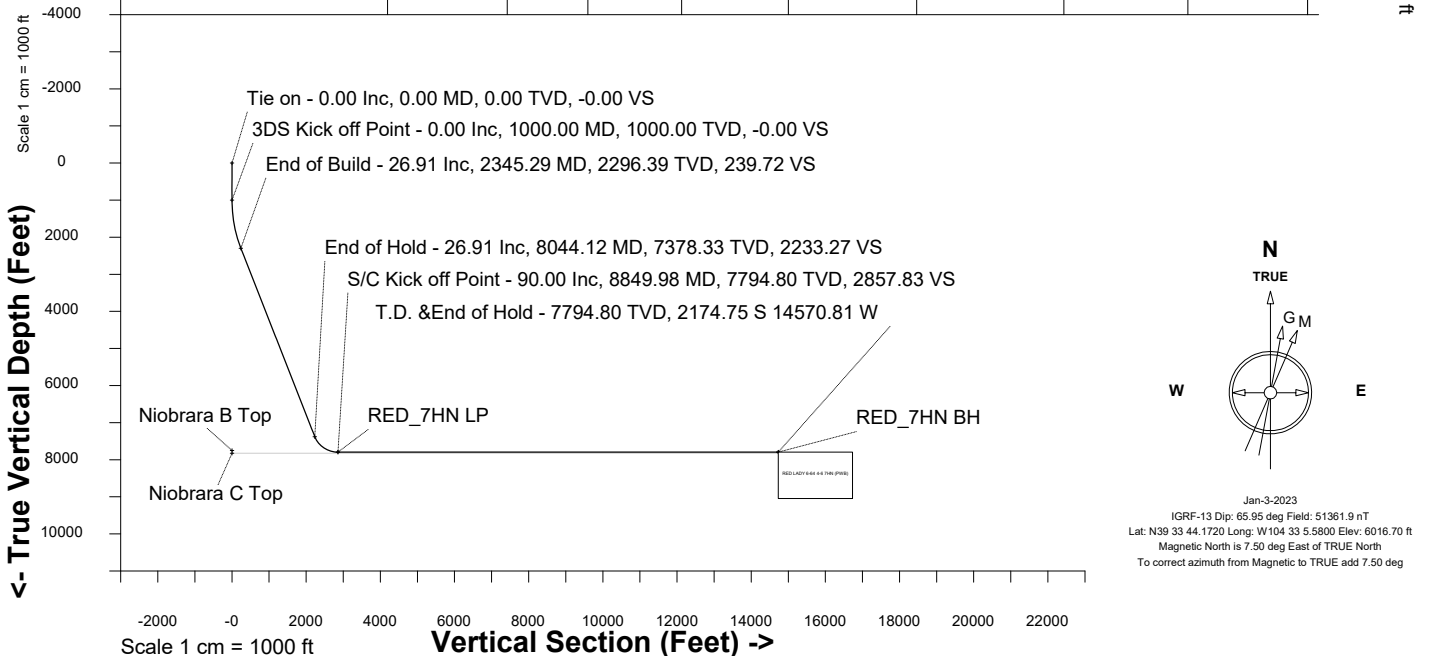
Location	DJ Basin	Slot	RED LADY 6-64 4-6 7HN
Field	Elbert County Wells	Well	RED LADY 6-64 4-6 7HN
Installation	Ragged 6-64 4 Pad	Wellbore	RED LADY 6-64 4-6 7HN (PWB)

Created by	cdoke
Date plotted	4-Apr-2023
Plot reference is RED LADY 6-64 4-6 7HN (PWB).	
Ref wellpath is RED LADY 6-64 4-6 7HN (PWB).	
Coordinates are in Feet reference RED LADY 6-64 4-6 7HN.	
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.	



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	222.14	1000.00	S 0.00	W 0.00	0.00	-0.00
End of Build	2345.29	26.91	222.14	2296.39	S 229.96	W 208.06	2.00	239.72
End of Hold	8044.12	26.91	222.14	7378.33	S 2142.27	W 1938.26	0.00	2233.27
Target RED_7HN LP	8849.98	90.00	270.57	7794.80	S 2294.34	W 2547.05	9.00	2857.83
T.D. & Target RED... BH	20874.34	90.00	270.57	7794.80	S 2174.75	W 14570.81	0.00	14732.21



Wellhead Details

Name	Latitude	Longitude	Northing	Easting	North	East	Slot Elevation Above Installation [ft]
RED LADY 6-64 4-6 7HN	N39 33 42.9804	W104 33 4.4424	1084705.5710	3267502.4232	120.57S	89.09E	-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	222.14	1000.00	-5014.80	0.00N	0.00E	==>	0.00
2345.29	26.91	222.14	2296.39	-3718.41	229.96S	208.06W	2.00	239.72
8044.12	26.91	222.14	7378.33	1363.53	2142.27S	1938.26W	==>	2233.27
8849.98	90.00	270.57	7794.80	1780.00	2294.34S	2547.05W	9.00	2857.83
20874.34	90.00	270.57	7794.80	1780.00	2174.75S	14570.81W	==>	14732.21

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 42.9804	W104 33 4.4424	Tie on, Slot Datum
77.00	0.00	0.00	77.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	Lower Dawson
100.00	0.00	0.00	100.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
200.00	0.00	0.00	200.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
202.00	0.00	0.00	202.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	Denver
300.00	0.00	0.00	300.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
400.00	0.00	0.00	400.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
500.00	0.00	0.00	500.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
600.00	0.00	0.00	600.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
700.00	0.00	0.00	700.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
800.00	0.00	0.00	800.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
900.00	0.00	0.00	900.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	
1000.00	0.00	222.14	1000.00	0.00N	0.00E	==>	0.00	N39 33 42.9804	W104 33 4.4424	3DS Kick off Point
1089.01	1.78	222.14	1089.00	1.03S	0.93W	2.00	1.07	N39 33 42.9703	W104 33 4.4542	Upper Arapahoe
1100.00	2.00	222.14	1099.98	1.29S	1.17W	2.00	1.35	N39 33 42.9676	W104 33 4.4573	
1200.00	4.00	222.14	1199.84	5.17S	4.68W	2.00	5.39	N39 33 42.9293	W104 33 4.5022	
1300.00	6.00	222.14	1299.45	11.64S	10.53W	2.00	12.13	N39 33 42.8654	W104 33 4.5768	
1400.00	8.00	222.14	1398.70	20.67S	18.71W	2.00	21.55	N39 33 42.7761	W104 33 4.6812	
1500.00	10.00	222.14	1497.47	32.27S	29.20W	2.00	33.64	N39 33 42.6614	W104 33 4.8152	
1600.00	12.00	222.14	1595.62	46.42S	42.00W	2.00	48.39	N39 33 42.5216	W104 33 4.9787	
1700.00	14.00	222.14	1693.06	63.10S	57.09W	2.00	65.78	N39 33 42.3568	W104 33 5.1714	
1800.00	16.00	222.14	1789.64	82.29S	74.46W	2.00	85.79	N39 33 42.1671	W104 33 5.3931	
1900.00	18.00	222.14	1885.27	103.97S	94.07W	2.00	108.39	N39 33 41.9528	W104 33 5.6435	
1909.19	18.18	222.14	1894.00	106.09S	95.99W	2.00	110.59	N39 33 41.9319	W104 33 5.6680	Laramie - Fox Hills
2000.00	20.00	222.14	1979.82	128.11S	115.91W	2.00	133.55	N39 33 41.7142	W104 33 5.9224	
2100.00	22.00	222.14	2073.17	154.69S	139.96W	2.00	161.26	N39 33 41.4516	W104 33 6.2294	
2159.39	23.19	222.14	2128.00	171.61S	155.26W	2.00	178.90	N39 33 41.2844	W104 33 6.4249	Pierre Shale (Base of Fox Hills)
2200.00	24.00	222.14	2165.21	183.66S	166.17W	2.00	191.46	N39 33 41.1653	W104 33 6.5641	
2300.00	26.00	222.14	2255.84	215.00S	194.52W	2.00	224.13	N39 33 40.8556	W104 33 6.9261	
2345.29	26.91	222.14	2296.39	229.96S	208.06W	2.00	239.72	N39 33 40.7077	W104 33 7.0989	End of Build
2400.00	26.91	222.14	2345.18	248.31S	224.67W	==>	258.86	N39 33 40.5263	W104 33 7.3110	
2500.00	26.91	222.14	2434.35	281.87S	255.03W	==>	293.84	N39 33 40.1946	W104 33 7.6987	
2600.00	26.91	222.14	2523.53	315.43S	285.39W	==>	328.82	N39 33 39.8630	W104 33 8.0863	
2700.00	26.91	222.14	2612.70	348.98S	315.75W	==>	363.81	N39 33 39.5314	W104 33 8.4740	
2800.00	26.91	222.14	2701.88	382.54S	346.11W	==>	398.79	N39 33 39.1997	W104 33 8.8616	
2900.00	26.91	222.14	2791.05	416.10S	376.47W	==>	433.77	N39 33 38.8681	W104 33 9.2493	
3000.00	26.91	222.14	2880.23	449.65S	406.83W	==>	468.75	N39 33 38.5364	W104 33 9.6369	
3100.00	26.91	222.14	2969.40	483.21S	437.19W	==>	503.73	N39 33 38.2048	W104 33 10.0245	
3200.00	26.91	222.14	3058.58	516.76S	467.55W	==>	538.71	N39 33 37.8731	W104 33 10.4122	
3300.00	26.91	222.14	3147.75	550.32S	497.91W	==>	573.70	N39 33 37.5415	W104 33 10.7998	
3400.00	26.91	222.14	3236.93	583.88S	528.27W	==>	608.68	N39 33 37.2099	W104 33 11.1875	
3500.00	26.91	222.14	3326.10	617.43S	558.63W	==>	643.66	N39 33 36.8782	W104 33 11.5751	
3600.00	26.91	222.14	3415.28	650.99S	589.00W	==>	678.64	N39 33 36.5466	W104 33 11.9627	
3700.00	26.91	222.14	3504.45	684.55S	619.36W	==>	713.62	N39 33 36.2149	W104 33 12.3504	
3800.00	26.91	222.14	3593.63	718.10S	649.72W	==>	748.60	N39 33 35.8833	W104 33 12.7380	
3900.00	26.91	222.14	3682.80	751.66S	680.08W	==>	783.59	N39 33 35.5516	W104 33 13.1256	
4000.00	26.91	222.14	3771.98	785.21S	710.44W	==>	818.57	N39 33 35.2200	W104 33 13.5133	
4100.00	26.91	222.14	3861.15	818.77S	740.80W	==>	853.55	N39 33 34.8883	W104 33 13.9009	
4200.00	26.91	222.14	3950.33	852.33S	771.16W	==>	888.53	N39 33 34.5567	W104 33 14.2885	
4300.00	26.91	222.14	4039.50	885.88S	801.52W	==>	923.51	N39 33 34.2250	W104 33 14.6762	
4400.00	26.91	222.14	4128.68	919.44S	831.88W	==>	958.49	N39 33 33.8934	W104 33 15.0638	
4500.00	26.91	222.14	4217.85	953.00S	862.24W	==>	993.47	N39 33 33.5617	W104 33 15.4514	

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 261.51 degrees
Bottom hole distance is 14732.21 Feet on azimuth 261.51 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	26.91	222.14	4307.03	986.55S	892.60W	==>	1028.46	N39 33 33.2301	W104 33 15.8391	
4700.00	26.91	222.14	4396.21	1020.11S	922.96W	==>	1063.44	N39 33 32.8984	W104 33 16.2267	
4800.00	26.91	222.14	4485.38	1053.66S	953.32W	==>	1098.42	N39 33 32.5668	W104 33 16.6143	
4900.00	26.91	222.14	4574.56	1087.22S	983.68W	==>	1133.40	N39 33 32.2351	W104 33 17.0019	
5000.00	26.91	222.14	4663.73	1120.78S	1014.04W	==>	1168.38	N39 33 31.9035	W104 33 17.3896	
5100.00	26.91	222.14	4752.91	1154.33S	1044.40W	==>	1203.36	N39 33 31.5718	W104 33 17.7772	
5200.00	26.91	222.14	4842.08	1187.89S	1074.77W	==>	1238.35	N39 33 31.2402	W104 33 18.1648	
5300.00	26.91	222.14	4931.26	1221.45S	1105.13W	==>	1273.33	N39 33 30.9085	W104 33 18.5524	
5400.00	26.91	222.14	5020.43	1255.00S	1135.49W	==>	1308.31	N39 33 30.5769	W104 33 18.9400	
5500.00	26.91	222.14	5109.61	1288.56S	1165.85W	==>	1343.29	N39 33 30.2452	W104 33 19.3277	
5600.00	26.91	222.14	5198.78	1322.11S	1196.21W	==>	1378.27	N39 33 29.9136	W104 33 19.7153	
5700.00	26.91	222.14	5287.96	1355.67S	1226.57W	==>	1413.25	N39 33 29.5819	W104 33 20.1029	
5800.00	26.91	222.14	5377.13	1389.23S	1256.93W	==>	1448.24	N39 33 29.2503	W104 33 20.4905	
5890.68	26.91	222.14	5458.00	1419.66S	1284.46W	==>	1479.96	N39 33 28.9495	W104 33 20.8420	Sussex Sandstone
5900.00	26.91	222.14	5466.31	1422.78S	1287.29W	==>	1483.22	N39 33 28.9186	W104 33 20.8781	
6000.00	26.91	222.14	5555.48	1456.34S	1317.65W	==>	1518.20	N39 33 28.5870	W104 33 21.2657	
6100.00	26.91	222.14	5644.66	1489.89S	1348.01W	==>	1553.18	N39 33 28.2553	W104 33 21.6534	
6200.00	26.91	222.14	5733.83	1523.45S	1378.37W	==>	1588.16	N39 33 27.9237	W104 33 22.0410	
6300.00	26.91	222.14	5823.01	1557.01S	1408.73W	==>	1623.14	N39 33 27.5920	W104 33 22.4286	
6400.00	26.91	222.14	5912.18	1590.56S	1439.09W	==>	1658.12	N39 33 27.2603	W104 33 22.8162	
6500.00	26.91	222.14	6001.36	1624.12S	1469.45W	==>	1693.11	N39 33 26.9287	W104 33 23.2038	
6600.00	26.91	222.14	6090.53	1657.68S	1499.81W	==>	1728.09	N39 33 26.5970	W104 33 23.5914	
6700.00	26.91	222.14	6179.71	1691.23S	1530.18W	==>	1763.07	N39 33 26.2654	W104 33 23.9790	
6800.00	26.91	222.14	6268.88	1724.79S	1560.54W	==>	1798.05	N39 33 25.9337	W104 33 24.3666	
6900.00	26.91	222.14	6358.06	1758.34S	1590.90W	==>	1833.03	N39 33 25.6021	W104 33 24.7542	
7000.00	26.91	222.14	6447.23	1791.90S	1621.26W	==>	1868.01	N39 33 25.2704	W104 33 25.1418	
7100.00	26.91	222.14	6536.41	1825.46S	1651.62W	==>	1903.00	N39 33 24.9387	W104 33 25.5294	
7200.00	26.91	222.14	6625.58	1859.01S	1681.98W	==>	1937.98	N39 33 24.6071	W104 33 25.9170	
7300.00	26.91	222.14	6714.76	1892.57S	1712.34W	==>	1972.96	N39 33 24.2754	W104 33 26.3046	
7400.00	26.91	222.14	6803.93	1926.13S	1742.70W	==>	2007.94	N39 33 23.9438	W104 33 26.6922	
7500.00	26.91	222.14	6893.11	1959.68S	1773.06W	==>	2042.92	N39 33 23.6121	W104 33 27.0798	
7600.00	26.91	222.14	6982.28	1993.24S	1803.42W	==>	2077.90	N39 33 23.2804	W104 33 27.4674	
7700.00	26.91	222.14	7071.46	2026.79S	1833.78W	==>	2112.88	N39 33 22.9488	W104 33 27.8550	
7800.00	26.91	222.14	7160.64	2060.35S	1864.14W	==>	2147.87	N39 33 22.6171	W104 33 28.2426	
7900.00	26.91	222.14	7249.81	2093.91S	1894.50W	==>	2182.85	N39 33 22.2855	W104 33 28.6302	
8000.00	26.91	222.14	7338.99	2127.46S	1924.86W	==>	2217.83	N39 33 21.9538	W104 33 29.0178	
8044.12	26.91	222.14	7378.33	2142.27S	1938.26W	==>	2233.27	N39 33 21.8075	W104 33 29.1888	End of Hold
8100.00	30.26	229.98	7427.41	2160.71S	1957.54W	9.00	2255.05	N39 33 21.6252	W104 33 29.4349	
8200.00	37.15	240.49	7510.62	2191.85S	2003.20W	9.00	2304.82	N39 33 21.3174	W104 33 30.0179	
8274.86	42.75	246.32	7568.01	2213.21S	2046.19W	9.00	2350.49	N39 33 21.1062	W104 33 30.5668	Sharon Springs Shale
8300.00	44.69	248.00	7586.18	2219.95S	2062.21W	9.00	2367.32	N39 33 21.0396	W104 33 30.7712	
8346.26	48.32	250.82	7618.01	2231.73S	2093.62W	9.00	2400.13	N39 33 20.9232	W104 33 31.1722	Niobrara
8361.46	49.53	251.67	7628.00	2235.41S	2104.47W	9.00	2411.41	N39 33 20.8868	W104 33 31.3108	Niobrara A
8400.00	52.62	253.71	7652.21	2244.32S	2133.09W	9.00	2441.03	N39 33 20.7987	W104 33 31.6762	
8500.00	60.76	258.30	7707.11	2264.35S	2214.12W	9.00	2524.12	N39 33 20.6007	W104 33 32.7106	
8600.00	69.04	262.21	7749.50	2279.57S	2303.28W	9.00	2614.56	N39 33 20.4502	W104 33 33.8490	
8610.01	69.87	262.57	7753.01	2280.81S	2312.57W	9.00	2623.93	N39 33 20.4380	W104 33 33.9676	Niobrara B Top
8700.00	77.40	265.70	7778.36	2289.58S	2398.40W	9.00	2710.10	N39 33 20.3512	W104 33 35.0633	
8800.00	85.80	268.97	7792.97	2294.14S	2497.11W	9.00	2808.41	N39 33 20.3060	W104 33 36.3237	
8849.98	90.00	270.57	7794.80	2294.34S	2547.05W	9.00	2857.83	N39 33 20.3040	W104 33 36.9612	S/C Kick off Point/Target, RED_7HN LP
8900.00	90.00	270.57	7794.80	2293.84S	2597.06W	==>	2907.23	N39 33 20.3089	W104 33 37.5998	
9000.00	90.00	270.57	7794.80	2292.85S	2697.06W	==>	3005.98	N39 33 20.3186	W104 33 38.8764	
9100.00	90.00	270.57	7794.80	2291.85S	2797.05W	==>	3104.73	N39 33 20.3283	W104 33 40.1531	
9200.00	90.00	270.57	7794.80	2290.86S	2897.05W	==>	3203.48	N39 33 20.3380	W104 33 41.4298	
9300.00	90.00	270.57	7794.80	2289.86S	2997.04W	==>	3302.24	N39 33 20.3477	W104 33 42.7064	
9400.00	90.00	270.57	7794.80	2288.87S	3097.04W	==>	3400.99	N39 33 20.3574	W104 33 43.9831	
9500.00	90.00	270.57	7794.80	2287.88S	3197.03W	==>	3499.74	N39 33 20.3672	W104 33 45.2597	
9600.00	90.00	270.57	7794.80	2286.88S	3297.03W	==>	3598.50	N39 33 20.3769	W104 33 46.5364	
9700.00	90.00	270.57	7794.80	2285.89S	3397.03W	==>	3697.25	N39 33 20.3866	W104 33 47.8131	
9800.00	90.00	270.57	7794.80	2284.89S	3497.02W	==>	3796.00	N39 33 20.3962	W104 33 49.0897	
9900.00	90.00	270.57	7794.80	2283.90S	3597.02W	==>	3894.75	N39 33 20.4059	W104 33 50.3664	
10000.00	90.00	270.57	7794.80	2282.90S	3697.01W	==>	3993.51	N39 33 20.4156	W104 33 51.6431	
10100.00	90.00	270.57	7794.80	2281.91S	3797.01W	==>	4092.26	N39 33 20.4253	W104 33 52.9197	
10200.00	90.00	270.57	7794.80	2280.91S	3897.00W	==>	4191.01	N39 33 20.4350	W104 33 54.1964	
10300.00	90.00	270.57	7794.80	2279.92S	3997.00W	==>	4289.76	N39 33 20.4446	W104 33 55.4731	
10400.00	90.00	270.57	7794.80	2278.92S	4096.99W	==>	4388.52	N39 33 20.4543	W104 33 56.7497	
10500.00	90.00	270.57	7794.80	2277.93S	4196.99W	==>	4487.27	N39 33 20.4640	W104 33 58.0264	
10600.00	90.00	270.57	7794.80	2276.94S	4296.98W	==>	4586.02	N39 33 20.4736	W104 33 59.3031	
10700.00	90.00	270.57	7794.80	2275.94S	4396.98W	==>	4684.78	N39 33 20.4833	W104 34 0.5797	
10800.00	90.00	270.57	7794.80	2274.95S	4496.97W	==>	4783.53	N39 33 20.4930	W104 34 1.8564	
10900.00	90.00	270.57	7794.80	2273.95S	4596.97W	==>	4882.28	N39 33 20.5026	W104 34 3.1330	
11000.00	90.00	270.57	7794.80	2272.96S	4696.96W	==>	4981.03	N39 33 20.5122	W104 34 4.4097	
11100.00	90.00	270.57	7794.80	2271.96S	4796.96W	==>	5079.79	N39 33 20.5219	W104 34 5.6864	
11200.00	90.00	270.57	7794.80	2270.97S	4896.95W	==>	5178.54	N39 33 20.5315	W104 34 6.9630	
11300.00	90.00	270.57	7794.80	2269.97S	4996.95W	==>	5277.29	N39 33 20.5412	W104 34 8.2397	
11400.00	90.00	270.57	7794.80	2268.98S	5096.94W	==>	5376.04	N39 33 20.5508	W104 34 9.5164	
11500.00	90.00	270.57	7794.80	2267.98S	5196.94W	==>	5474.80	N39 33 20.5604	W104 34 10.7930	
11600.00	90.00	270.57	7794.80	2266.99S	5296.93W	==>	5573.55	N39 33 20.5700	W104 34 12.0697	
11700.00	90.00	270.57	7794.80	2266.00S	5396.93W	==>	5672.30	N39 33 20.5797	W104 34 13.3464	
11800.00	90.00	270.57	7794.80	2265.00S	5496.92W	==>	5771.06	N39 33 20.5893	W104 34 14.6230	
11900.00	90.00	270.57	7794.80	2264.01S	5596.92W	==>	5869.81	N39 33 20.5989	W104 34 15.8997	
12000.00	90.00	270.57	7794.80	2263.01S	5696.91W	==>	5968.56	N39 33 20.6085	W104 34 17.1764	
12100.00	90.00	270.57	7794.80	2262.02S	5796.91W	==>	6067.31	N39 33 20.6181	W104 34 18.4530	

All data is in Feet unless otherwise stated
Coordinates are from Slot MD's are from Rig (Planned Datum #1 6014.8ft above Mean Sea Level)
Vertical Section is from 0.00N 0.00E on azimuth 261.51 degrees
Bottom hole distance is 14732.21 Feet on azimuth 261.51 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	270.57	7794.80	2261.02S	5896.90W	==>	6166.07	N39 33 20.6277	W104 34 19.7297	
12300.00	90.00	270.57	7794.80	2260.03S	5996.90W	==>	6264.82	N39 33 20.6373	W104 34 21.0064	
12400.00	90.00	270.57	7794.80	2259.03S	6096.89W	==>	6363.57	N39 33 20.6469	W104 34 22.2830	
12500.00	90.00	270.57	7794.80	2258.04S	6196.89W	==>	6462.32	N39 33 20.6565	W104 34 23.5597	
12600.00	90.00	270.57	7794.80	2257.04S	6296.88W	==>	6561.08	N39 33 20.6660	W104 34 24.8364	
12700.00	90.00	270.57	7794.80	2256.05S	6396.88W	==>	6659.83	N39 33 20.6756	W104 34 26.1130	
12800.00	90.00	270.57	7794.80	2255.06S	6496.87W	==>	6758.58	N39 33 20.6852	W104 34 27.3897	
12900.00	90.00	270.57	7794.80	2254.06S	6596.87W	==>	6857.34	N39 33 20.6948	W104 34 28.6664	
13000.00	90.00	270.57	7794.80	2253.07S	6696.86W	==>	6956.09	N39 33 20.7043	W104 34 29.9430	
13100.00	90.00	270.57	7794.80	2252.07S	6796.86W	==>	7054.84	N39 33 20.7139	W104 34 31.2197	
13200.00	90.00	270.57	7794.80	2251.08S	6896.85W	==>	7153.59	N39 33 20.7234	W104 34 32.4964	
13300.00	90.00	270.57	7794.80	2250.08S	6996.85W	==>	7252.35	N39 33 20.7330	W104 34 33.7730	
13400.00	90.00	270.57	7794.80	2249.09S	7096.84W	==>	7351.10	N39 33 20.7426	W104 34 35.0497	
13500.00	90.00	270.57	7794.80	2248.09S	7196.84W	==>	7449.85	N39 33 20.7521	W104 34 36.3264	
13600.00	90.00	270.57	7794.80	2247.10S	7296.83W	==>	7548.60	N39 33 20.7616	W104 34 37.6030	
13700.00	90.00	270.57	7794.80	2246.10S	7396.83W	==>	7647.36	N39 33 20.7712	W104 34 38.8797	
13800.00	90.00	270.57	7794.80	2245.11S	7496.82W	==>	7746.11	N39 33 20.7807	W104 34 40.1564	
13900.00	90.00	270.57	7794.80	2244.12S	7596.82W	==>	7844.86	N39 33 20.7902	W104 34 41.4330	
14000.00	90.00	270.57	7794.80	2243.12S	7696.81W	==>	7943.62	N39 33 20.7998	W104 34 42.7097	
14100.00	90.00	270.57	7794.80	2242.13S	7796.81W	==>	8042.37	N39 33 20.8093	W104 34 43.9864	
14200.00	90.00	270.57	7794.80	2241.13S	7896.80W	==>	8141.12	N39 33 20.8188	W104 34 45.2630	
14300.00	90.00	270.57	7794.80	2240.14S	7996.80W	==>	8239.87	N39 33 20.8283	W104 34 46.5397	
14400.00	90.00	270.57	7794.80	2239.14S	8096.79W	==>	8338.63	N39 33 20.8378	W104 34 47.8164	
14500.00	90.00	270.57	7794.80	2238.15S	8196.79W	==>	8437.38	N39 33 20.8473	W104 34 49.0931	
14600.00	90.00	270.57	7794.80	2237.15S	8296.78W	==>	8536.13	N39 33 20.8568	W104 34 50.3697	
14700.00	90.00	270.57	7794.80	2236.16S	8396.78W	==>	8634.88	N39 33 20.8663	W104 34 51.6464	
14800.00	90.00	270.57	7794.80	2235.16S	8496.77W	==>	8733.64	N39 33 20.8758	W104 34 52.9231	
14900.00	90.00	270.57	7794.80	2234.17S	8596.77W	==>	8832.39	N39 33 20.8853	W104 34 54.1997	
15000.00	90.00	270.57	7794.80	2233.18S	8696.76W	==>	8931.14	N39 33 20.8948	W104 34 55.4764	
15100.00	90.00	270.57	7794.80	2232.18S	8796.76W	==>	9029.90	N39 33 20.9043	W104 34 56.7531	
15200.00	90.00	270.57	7794.80	2231.19S	8896.75W	==>	9128.65	N39 33 20.9138	W104 34 58.0297	
15300.00	90.00	270.57	7794.80	2230.19S	8996.75W	==>	9227.40	N39 33 20.9233	W104 34 59.3064	
15400.00	90.00	270.57	7794.80	2229.20S	9096.74W	==>	9326.15	N39 33 20.9327	W104 35 0.5831	
15500.00	90.00	270.57	7794.80	2228.20S	9196.74W	==>	9424.91	N39 33 20.9422	W104 35 1.8597	
15600.00	90.00	270.57	7794.80	2227.21S	9296.73W	==>	9523.66	N39 33 20.9517	W104 35 3.1364	
15700.00	90.00	270.57	7794.80	2226.21S	9396.73W	==>	9622.41	N39 33 20.9611	W104 35 4.4131	
15800.00	90.00	270.57	7794.80	2225.22S	9496.72W	==>	9721.16	N39 33 20.9706	W104 35 5.6898	
15900.00	90.00	270.57	7794.80	2224.23S	9596.72W	==>	9819.92	N39 33 20.9800	W104 35 6.9664	
16000.00	90.00	270.57	7794.80	2223.23S	9696.71W	==>	9918.67	N39 33 20.9895	W104 35 8.2431	
16100.00	90.00	270.57	7794.80	2222.24S	9796.71W	==>	10017.42	N39 33 20.9989	W104 35 9.5198	
16200.00	90.00	270.57	7794.80	2221.24S	9896.70W	==>	10116.18	N39 33 21.0084	W104 35 10.7964	
16300.00	90.00	270.57	7794.80	2220.25S	9996.70W	==>	10214.93	N39 33 21.0178	W104 35 12.0731	
16400.00	90.00	270.57	7794.80	2219.25S	10096.69W	==>	10313.68	N39 33 21.0272	W104 35 13.3498	
16500.00	90.00	270.57	7794.80	2218.26S	10196.69W	==>	10412.43	N39 33 21.0367	W104 35 14.6264	
16600.00	90.00	270.57	7794.80	2217.26S	10296.68W	==>	10511.19	N39 33 21.0461	W104 35 15.9031	
16700.00	90.00	270.57	7794.80	2216.27S	10396.68W	==>	10609.94	N39 33 21.0555	W104 35 17.1798	
16800.00	90.00	270.57	7794.80	2215.27S	10496.67W	==>	10708.69	N39 33 21.0649	W104 35 18.4565	
16900.00	90.00	270.57	7794.80	2214.28S	10596.67W	==>	10807.44	N39 33 21.0743	W104 35 19.7331	
17000.00	90.00	270.57	7794.80	2213.29S	10696.66W	==>	10906.20	N39 33 21.0837	W104 35 21.0098	
17100.00	90.00	270.57	7794.80	2212.29S	10796.66W	==>	11004.95	N39 33 21.0931	W104 35 22.2865	
17200.00	90.00	270.57	7794.80	2211.30S	10896.65W	==>	11103.70	N39 33 21.1025	W104 35 23.5631	
17300.00	90.00	270.57	7794.80	2210.30S	10996.65W	==>	11202.46	N39 33 21.1119	W104 35 24.8398	
17400.00	90.00	270.57	7794.80	2209.31S	11096.64W	==>	11301.21	N39 33 21.1213	W104 35 26.1165	
17500.00	90.00	270.57	7794.80	2208.31S	11196.64W	==>	11399.96	N39 33 21.1307	W104 35 27.3932	
17600.00	90.00	270.57	7794.80	2207.32S	11296.63W	==>	11498.71	N39 33 21.1401	W104 35 28.6698	
17700.00	90.00	270.57	7794.80	2206.32S	11396.63W	==>	11597.47	N39 33 21.1495	W104 35 29.9465	
17800.00	90.00	270.57	7794.80	2205.33S	11496.62W	==>	11696.22	N39 33 21.1589	W104 35 31.2232	
17900.00	90.00	270.57	7794.80	2204.33S	11596.62W	==>	11794.97	N39 33 21.1682	W104 35 32.4998	
18000.00	90.00	270.57	7794.80	2203.34S	11696.61W	==>	11893.72	N39 33 21.1776	W104 35 33.7765	
18100.00	90.00	270.57	7794.80	2202.35S	11796.61W	==>	11992.48	N39 33 21.1870	W104 35 35.0532	
18200.00	90.00	270.57	7794.80	2201.35S	11896.60W	==>	12091.23	N39 33 21.1963	W104 35 36.3299	
18300.00	90.00	270.57	7794.80	2200.36S	11996.60W	==>	12189.98	N39 33 21.2057	W104 35 37.6065	
18400.00	90.00	270.57	7794.80	2199.36S	12096.59W	==>	12288.74	N39 33 21.2150	W104 35 38.8832	
18500.00	90.00	270.57	7794.80	2198.37S	12196.59W	==>	12387.49	N39 33 21.2244	W104 35 40.1599	
18600.00	90.00	270.57	7794.80	2197.37S	12296.58W	==>	12486.24	N39 33 21.2337	W104 35 41.4365	
18700.00	90.00	270.57	7794.80	2196.38S	12396.58W	==>	12584.99	N39 33 21.2431	W104 35 42.7132	
18800.00	90.00	270.57	7794.80	2195.38S	12496.58W	==>	12683.75	N39 33 21.2524	W104 35 43.9899	
18900.00	90.00	270.57	7794.80	2194.39S	12596.57W	==>	12782.50	N39 33 21.2617	W104 35 45.2666	
19000.00	90.00	270.57	7794.80	2193.39S	12696.57W	==>	12881.25	N39 33 21.2711	W104 35 46.5432	
19100.00	90.00	270.57	7794.80	2192.40S	12796.56W	==>	12980.00	N39 33 21.2804	W104 35 47.8199	
19200.00	90.00	270.57	7794.80	2191.41S	12896.56W	==>	13078.76	N39 33 21.2897	W104 35 49.0966	
19300.00	90.00	270.57	7794.80	2190.41S	12996.55W	==>	13177.51	N39 33 21.2990	W104 35 50.3733	
19400.00	90.00	270.57	7794.80	2189.42S	13096.55W	==>	13276.26	N39 33 21.3083	W104 35 51.6499	
19500.00	90.00	270.57	7794.80	2188.42S	13196.54W	==>	13375.02	N39 33 21.3177	W104 35 52.9266	
19600.00	90.00	270.57	7794.80	2187.43S	13296.54W	==>	13473.77	N39 33 21.3270	W104 35 54.2033	
19700.00	90.00	270.57	7794.80	2186.43S	13396.53W	==>	13572.52	N39 33 21.3363	W104 35 55.4799	
19800.00	90.00	270.57	7794.80	2185.44S	13496.53W	==>	13671.27	N39 33 21.3456	W104 35 56.7566	
19900.00	90.00	270.57	7794.80	2184.44S	13596.52W	==>	13770.03	N39 33 21.3549	W104 35 58.0333	
20000.00	90.00	270.57	7794.80	2183.45S	13696.52W	==>	13868.78	N39 33 21.3641	W104 35 59.3100	
20100.00	90.00	270.57	7794.80	2182.45S	13796.51W	==>	13967.53	N39 33 21.3734	W104 36 0.5866	
20200.00	90.00	270.57	7794.80	2181.46S	13896.51W	==>	14066.28	N39 33 21.3827	W104 36 1.8633	
20300.00	90.00	270.57	7794.80	2180.47S	13996.50W	==>	14165.04	N39 33 21.3920	W104 36 3.1400	
20400.00	90.00	270.57	7794.80	2179.47S	14096.50W	==>	14263.79	N39 33 21.4013	W104 36 4.4167	
20500.00	90.00	270.57	7794.80	2178.48S	14196.49W	==>	14362.54	N39 33 21.4105	W104 36 5.6933	
20600.00	90.00	270.57	7794.80	2177.48S	14296.49W	==>	14461.30	N39 33 21.4198	W104 36 6.9700	

All data is in Feet unless otherwise stated

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	270.57	7794.80	2176.49S	14396.48W	==>	14560.05	N39 33 21.4291	W104 36 8.2467	
20800.00	90.00	270.57	7794.80	2175.49S	14496.48W	==>	14658.80	N39 33 21.4383	W104 36 9.5234	
20874.34	90.00	270.57	7794.80	2174.75S	14570.81W	==>	14732.21	N39 33 21.4452	W104 36 10.4724	End of Hold/Target, RED_7HN 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 261.51 degrees
Bottom hole distance is 14732.21 Feet on azimuth 261.51 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 7HN BH	2174.75S	14570.81W	7794.80	N39 33 21.4452	W104 36 10.4724	1082374.98	3252955.33
RED 7HN LP	2294.34S	2547.05W	7794.80	N39 33 20.3040	W104 33 36.9612	1082384.05	3264980.00

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	1.03S	0.93W
Laramie - Fox Hills	1909.19	1894.00	18.18	71.82	106.09S	95.99W
Pierre Shale (Base of Fox Hills)	2159.39	2128.00	23.19	66.81	171.61S	155.26W
Sussex Sandstone	5890.68	5458.00	26.91	63.09	1419.66S	1284.46W
Sharon Springs Shale	8274.86	7568.01	42.75	47.25	2213.21S	2046.19W
Niobrara	8346.26	7618.01	48.32	41.68	2231.73S	2093.62W
Niobrara A	8361.46	7628.00	49.53	40.47	2235.41S	2104.47W
Niobrara B Top	8610.01	7753.01	69.87	20.13	2280.81S	2312.57W

Survey Tool Program					
Reference	Survey Name	MD[ft]	TVD[ft]	Survey Tool	Error Model
1095802	Planned	20874.34	7794.80	WdW Rate Gyro	Standard

Notes