

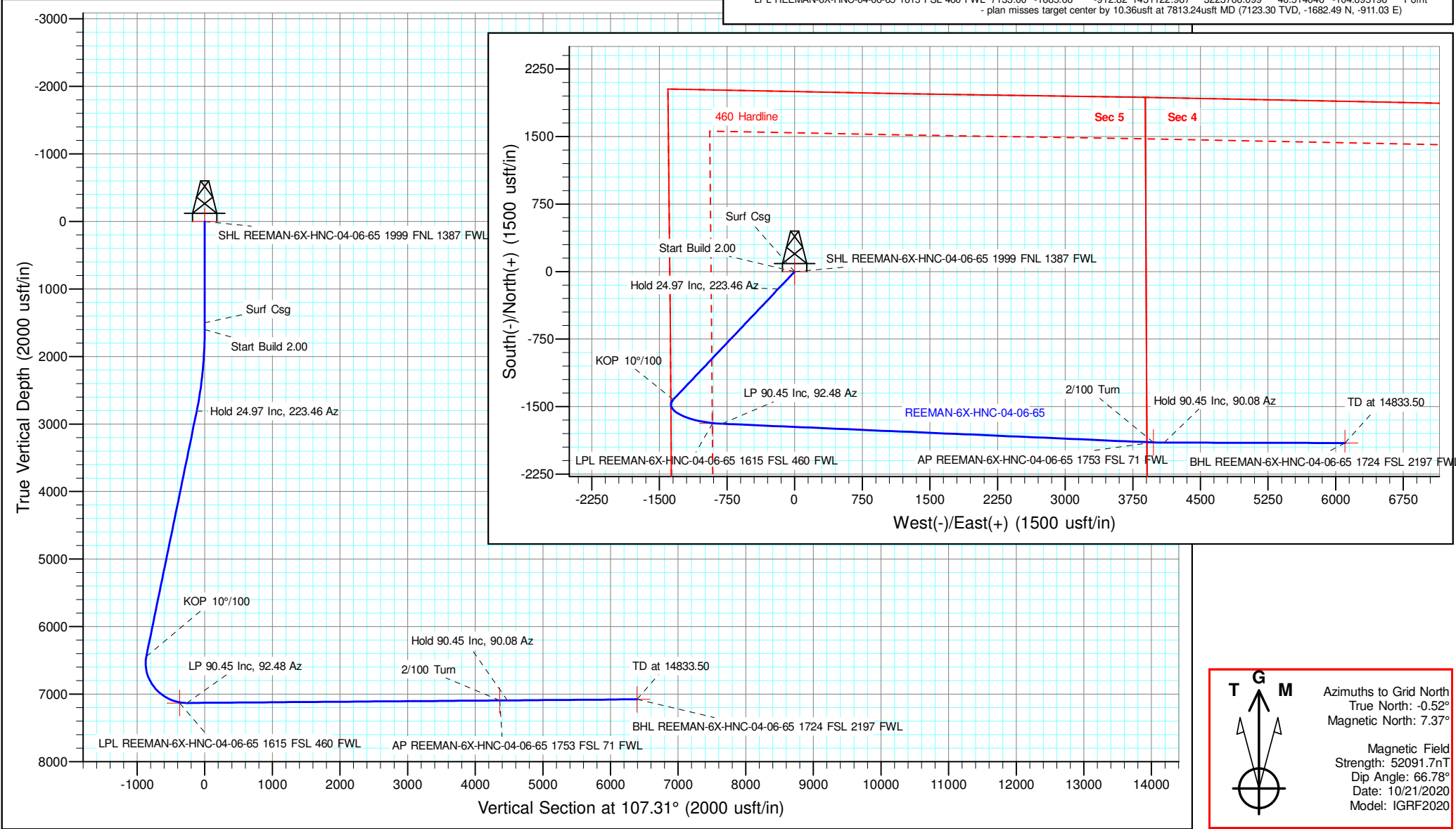
Well Name:
REEMAN-6X-HNC-04-06-65

Project Name:
Sec. 5-T6N-R65W

Pad Name:
REEMAN PAD

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	Surf Csg	
1600.00	0.00	0.00	1600.00	0.00	0.00	0.00	0.00	Start Build 2.00	
2848.31	24.97	223.46	2809.18	-194.31	-184.13	-117.96	267.70	Hold 24.97 Inc, 223.46 Az	
6856.17	24.97	223.46	6442.53	-1422.24	-1347.70	-863.37	1959.35	KOP 10°/100	
7921.08	90.45	92.48	7132.00	-1690.50	-804.00	-264.47	2660.73	LP 90.45 Inc, 92.48 Az	
12707.32	90.45	92.48	7094.66	-1897.64	3977.61	4362.13	7446.82	2/100 Turn	
12827.64	90.45	90.08	7093.72	-1900.32	4097.88	4477.75	7567.14	Hold 90.45 Inc, 90.08 Az	
14833.50	90.45	90.08	7078.00	-1902.97	6103.68	6393.45	9572.94	TD at 14833.50	

Geodetic Datum:									
North American Datum 1983 US State Plane 1983Colorado Northern Zone									
Elevation:									
Ground Elevation: 4816.00 KB Elevation: WELL @ 4843.00usft (Original Well Elev)									
DESIGN TARGET DETAILS									
Name	SHL REEMAN-6X-HNC-04-06-65	1999 FNL 1387 FWL	TVD	0.00	+N/-S	0.00	+E/-W	0.00	North
									3224678.920
									40.518650
									-104.691858
									Point
Name	BHL REEMAN-6X-HNC-04-06-65	1724 FSL 2197 FWL	7078.00	-1902.97	6103.68	1430905.682	3230782.602	40.513272	-104.669969
									Point
Name	AP REEMAN-6X-HNC-04-06-65	1753 FSL 71 FWL	7094.66	-1897.64	3977.61	1430911.011	3228656.529	40.513341	-104.677615
									Point
Name	LPL REEMAN-6X-HNC-04-06-65	1615 FSL 460 FWL	7133.00	-1685.66	-912.82	1431122.987	3223766.099	40.514046	-104.695196
									Point
- plan misses target center by 10.36usft at 7813.24usft MD (7123.30 TVD, -1682.49 N, -911.03 E)									





Nickel Road Operating

Sec. 5-T6N-R65W

REEMAN PAD

REEMAN-6X-HNC-04-06-65

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

28 October, 2020

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well REEMAN-6X-HNC-04-06-65
Company:	Nickel Road Operating	TVD Reference:	WELL @ 4843.00usft (Original Well Elev)
Project:	Sec. 5-T6N-R65W	MD Reference:	WELL @ 4843.00usft (Original Well Elev)
Site:	REEMAN PAD	North Reference:	Grid
Well:	REEMAN-6X-HNC-04-06-65	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Sec. 5-T6N-R65W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	REEMAN PAD				
Site Position:		Northing:	1,432,900.490 usft	Latitude:	40.518901
From:	Map	Easting:	3,224,708.630 usft	Longitude:	-104.691748
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.52

Well	REEMAN-6X-HNC-04-06-65					
Well Position	+N/-S	0.00 usft	Northing:	1,432,808.650 usft	Latitude:	40.518650
	+E/-W	0.00 usft	Easting:	3,224,678.920 usft	Longitude:	-104.691858
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,816.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/21/2020	7.89	66.78	52,091.70215414

Design	Design #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	107.31

Plan Survey Tool Program	Date	10/26/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	14,833.50 Design #1 (Wellbore #1)	MWD		
			OWSG MWD - Standard		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,848.31	24.97	223.46	2,809.18	-194.31	-184.13	2.00	2.00	0.00	223.46	
6,856.17	24.97	223.46	6,442.53	-1,422.24	-1,347.70	0.00	0.00	0.00	0.00	
7,921.08	90.45	92.48	7,132.00	-1,690.50	-804.00	10.00	6.15	-12.30	-128.06	
12,707.32	90.45	92.48	7,094.66	-1,897.64	3,977.61	0.00	0.00	0.00	0.00	
12,827.64	90.45	90.08	7,093.72	-1,900.32	4,097.88	2.00	0.00	-2.00	-89.99	
14,833.50	90.45	90.08	7,078.00	-1,902.97	6,103.68	0.00	0.00	0.00	0.00	BHL REEMAN-6X-HN

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well REEMAN-6X-HNC-04-06-65
Company:	Nickel Road Operating	TVD Reference:	WELL @ 4843.00usft (Original Well Elev)
Project:	Sec. 5-T6N-R65W	MD Reference:	WELL @ 4843.00usft (Original Well Elev)
Site:	REEMAN PAD	North Reference:	Grid
Well:	REEMAN-6X-HNC-04-06-65	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
SHL REEMAN-6X-HNC-04-06-65 1999 FNL 1387 FWL									
100.00	0.00	0.00	100.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
200.00	0.00	0.00	200.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
300.00	0.00	0.00	300.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
400.00	0.00	0.00	400.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
500.00	0.00	0.00	500.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
600.00	0.00	0.00	600.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
700.00	0.00	0.00	700.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
800.00	0.00	0.00	800.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
900.00	0.00	0.00	900.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
1,000.00	0.00	0.00	1,000.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
1,100.00	0.00	0.00	1,100.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
1,200.00	0.00	0.00	1,200.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
1,300.00	0.00	0.00	1,300.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
1,400.00	0.00	0.00	1,400.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
1,500.00	0.00	0.00	1,500.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
Surf Csg									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
Start Build 2.00									
1,700.00	2.00	223.46	1,699.98	-1.27	-1.20	1,432,807.383	3,224,677.719	40.518647	-104.691862
1,800.00	4.00	223.46	1,799.84	-5.07	-4.80	1,432,803.584	3,224,674.120	40.518636	-104.691876
1,900.00	6.00	223.46	1,899.45	-11.39	-10.79	1,432,797.258	3,224,668.125	40.518619	-104.691897
2,000.00	8.00	223.46	1,998.70	-20.24	-19.18	1,432,788.413	3,224,659.743	40.518595	-104.691928
2,100.00	10.00	223.46	2,097.47	-31.59	-29.94	1,432,777.058	3,224,648.984	40.518564	-104.691967
2,200.00	12.00	223.46	2,195.62	-45.44	-43.06	1,432,763.209	3,224,635.860	40.518527	-104.692014
2,300.00	14.00	223.46	2,293.06	-61.77	-58.53	1,432,746.881	3,224,620.388	40.518482	-104.692071
2,400.00	16.00	223.46	2,389.64	-80.56	-76.33	1,432,728.095	3,224,602.586	40.518431	-104.692135
2,500.00	18.00	223.46	2,485.27	-101.78	-96.44	1,432,706.873	3,224,582.477	40.518373	-104.692208
2,600.00	20.00	223.46	2,579.82	-125.41	-118.83	1,432,683.243	3,224,560.085	40.518309	-104.692290
2,700.00	22.00	223.46	2,673.17	-151.42	-143.48	1,432,657.231	3,224,535.436	40.518238	-104.692379
2,800.00	24.00	223.46	2,765.21	-179.78	-170.36	1,432,628.870	3,224,508.562	40.518161	-104.692477
2,848.31	24.97	223.46	2,809.18	-194.31	-184.13	1,432,614.337	3,224,494.791	40.518121	-104.692527
Hold 24.97 Inc, 223.46 Az									
2,900.00	24.97	223.46	2,856.04	-210.15	-199.14	1,432,598.501	3,224,479.785	40.518078	-104.692581
3,000.00	24.97	223.46	2,946.70	-240.79	-228.17	1,432,567.863	3,224,450.752	40.517995	-104.692687
3,100.00	24.97	223.46	3,037.35	-271.42	-257.20	1,432,537.225	3,224,421.720	40.517912	-104.692792
3,200.00	24.97	223.46	3,128.01	-302.06	-286.23	1,432,506.588	3,224,392.688	40.517828	-104.692897
3,300.00	24.97	223.46	3,218.66	-332.70	-315.26	1,432,475.950	3,224,363.656	40.517745	-104.693003
3,400.00	24.97	223.46	3,309.32	-363.34	-344.30	1,432,445.312	3,224,334.624	40.517661	-104.693108
3,500.00	24.97	223.46	3,399.97	-393.98	-373.33	1,432,414.674	3,224,305.591	40.517578	-104.693214
3,600.00	24.97	223.46	3,490.63	-424.61	-402.36	1,432,384.036	3,224,276.559	40.517495	-104.693319
3,700.00	24.97	223.46	3,581.29	-455.25	-431.39	1,432,353.398	3,224,247.527	40.517411	-104.693425
3,800.00	24.97	223.46	3,671.94	-485.89	-460.43	1,432,322.760	3,224,218.495	40.517328	-104.693530
3,900.00	24.97	223.46	3,762.60	-516.53	-489.46	1,432,292.122	3,224,189.462	40.517245	-104.693635
4,000.00	24.97	223.46	3,853.25	-547.17	-518.49	1,432,261.484	3,224,160.430	40.517161	-104.693741
4,100.00	24.97	223.46	3,943.91	-577.80	-547.52	1,432,230.846	3,224,131.398	40.517078	-104.693846
4,200.00	24.97	223.46	4,034.56	-608.44	-576.55	1,432,200.209	3,224,102.366	40.516994	-104.693952
4,300.00	24.97	223.46	4,125.22	-639.08	-605.59	1,432,169.571	3,224,073.334	40.516911	-104.694057
4,400.00	24.97	223.46	4,215.88	-669.72	-634.62	1,432,138.933	3,224,044.301	40.516828	-104.694163
4,500.00	24.97	223.46	4,306.53	-700.36	-663.65	1,432,108.295	3,224,015.269	40.516744	-104.694268
4,600.00	24.97	223.46	4,397.19	-730.99	-692.68	1,432,077.657	3,223,986.237	40.516661	-104.694373
4,700.00	24.97	223.46	4,487.84	-761.63	-721.72	1,432,047.019	3,223,957.205	40.516578	-104.694479
4,800.00	24.97	223.46	4,578.50	-792.27	-750.75	1,432,016.381	3,223,928.172	40.516494	-104.694584

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well REEMAN-6X-HNC-04-06-65
Company:	Nickel Road Operating	TVD Reference:	WELL @ 4843.00usft (Original Well Elev)
Project:	Sec. 5-T6N-R65W	MD Reference:	WELL @ 4843.00usft (Original Well Elev)
Site:	REEMAN PAD	North Reference:	Grid
Well:	REEMAN-6X-HNC-04-06-65	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,900.00	24.97	223.46	4,669.15	-822.91	-779.78	1,431,985.743	3,223,899.140	40.516411	-104.694690
5,000.00	24.97	223.46	4,759.81	-853.54	-808.81	1,431,955.105	3,223,870.108	40.516328	-104.694795
5,100.00	24.97	223.46	4,850.46	-884.18	-837.84	1,431,924.467	3,223,841.076	40.516244	-104.694900
5,200.00	24.97	223.46	4,941.12	-914.82	-866.88	1,431,893.830	3,223,812.044	40.516161	-104.695006
5,300.00	24.97	223.46	5,031.78	-945.46	-895.91	1,431,863.192	3,223,783.011	40.516077	-104.695111
5,400.00	24.97	223.46	5,122.43	-976.10	-924.94	1,431,832.554	3,223,753.979	40.515994	-104.695217
5,500.00	24.97	223.46	5,213.09	-1,006.73	-953.97	1,431,801.916	3,223,724.947	40.515911	-104.695322
5,600.00	24.97	223.46	5,303.74	-1,037.37	-983.01	1,431,771.278	3,223,695.915	40.515827	-104.695428
5,700.00	24.97	223.46	5,394.40	-1,068.01	-1,012.04	1,431,740.640	3,223,666.882	40.515744	-104.695533
5,800.00	24.97	223.46	5,485.05	-1,098.65	-1,041.07	1,431,710.002	3,223,637.850	40.515661	-104.695638
5,900.00	24.97	223.46	5,575.71	-1,129.29	-1,070.10	1,431,679.364	3,223,608.818	40.515577	-104.695744
6,000.00	24.97	223.46	5,666.37	-1,159.92	-1,099.13	1,431,648.726	3,223,579.786	40.515494	-104.695849
6,100.00	24.97	223.46	5,757.02	-1,190.56	-1,128.17	1,431,618.088	3,223,550.753	40.515410	-104.695955
6,200.00	24.97	223.46	5,847.68	-1,221.20	-1,157.20	1,431,587.451	3,223,521.721	40.515327	-104.696060
6,300.00	24.97	223.46	5,938.33	-1,251.84	-1,186.23	1,431,556.813	3,223,492.689	40.515244	-104.696165
6,400.00	24.97	223.46	6,028.99	-1,282.48	-1,215.26	1,431,526.175	3,223,463.657	40.515160	-104.696271
6,500.00	24.97	223.46	6,119.64	-1,313.11	-1,244.30	1,431,495.537	3,223,434.625	40.515077	-104.696376
6,600.00	24.97	223.46	6,210.30	-1,343.75	-1,273.33	1,431,464.899	3,223,405.592	40.514994	-104.696482
6,700.00	24.97	223.46	6,300.96	-1,374.39	-1,302.36	1,431,434.261	3,223,376.560	40.514910	-104.696587
6,800.00	24.97	223.46	6,391.61	-1,405.03	-1,331.39	1,431,403.623	3,223,347.528	40.514827	-104.696692
6,856.17	24.97	223.46	6,442.53	-1,422.24	-1,347.70	1,431,386.415	3,223,331.221	40.514780	-104.696752
KOP 10°/100									
6,900.00	22.51	214.42	6,482.66	-1,435.88	-1,358.81	1,431,372.771	3,223,320.110	40.514743	-104.696792
7,000.00	19.48	187.54	6,576.23	-1,468.28	-1,371.85	1,431,340.369	3,223,307.068	40.514654	-104.696840
7,100.00	21.07	158.77	6,670.26	-1,501.65	-1,367.52	1,431,307.001	3,223,311.403	40.514562	-104.696826
7,200.00	26.48	137.67	6,761.91	-1,534.97	-1,345.94	1,431,273.680	3,223,332.981	40.514470	-104.696749
7,300.00	33.91	124.25	6,848.38	-1,567.23	-1,307.77	1,431,241.420	3,223,371.148	40.514381	-104.696613
7,400.00	42.31	115.41	6,927.05	-1,597.45	-1,254.18	1,431,211.200	3,223,424.744	40.514297	-104.696421
7,500.00	51.20	109.10	6,995.53	-1,624.71	-1,186.78	1,431,183.938	3,223,492.140	40.514220	-104.696180
7,600.00	60.35	104.21	7,051.73	-1,648.19	-1,107.63	1,431,160.463	3,223,571.289	40.514154	-104.695896
7,700.00	69.65	100.15	7,093.96	-1,667.16	-1,019.13	1,431,141.489	3,223,659.785	40.514100	-104.695578
7,800.00	79.04	96.55	7,120.92	-1,681.06	-923.98	1,431,127.591	3,223,754.941	40.514059	-104.695236
7,812.77	80.24	96.12	7,123.22	-1,682.45	-911.49	1,431,126.205	3,223,767.427	40.514055	-104.695191
LPL REEMAN-6X-HNC-04-06-65 1615 FSL 460 FWL									
7,900.00	88.46	93.18	7,131.80	-1,689.46	-825.06	1,431,119.192	3,223,853.864	40.514033	-104.694881
7,921.08	90.45	92.48	7,132.00	-1,690.50	-804.00	1,431,118.150	3,223,874.920	40.514030	-104.694805
LP 90.45 Inc, 92.48 Az									
8,000.00	90.45	92.48	7,131.38	-1,693.92	-725.16	1,431,114.733	3,223,953.759	40.514019	-104.694522
8,100.00	90.45	92.48	7,130.60	-1,698.25	-625.26	1,431,110.402	3,224,053.662	40.514004	-104.694162
8,200.00	90.45	92.48	7,129.81	-1,702.58	-525.35	1,431,106.072	3,224,153.565	40.513990	-104.693803
8,300.00	90.45	92.48	7,129.03	-1,706.91	-425.45	1,431,101.742	3,224,253.469	40.513976	-104.693444
8,400.00	90.45	92.48	7,128.25	-1,711.24	-325.55	1,431,097.412	3,224,353.372	40.513961	-104.693085
8,500.00	90.45	92.48	7,127.46	-1,715.57	-225.64	1,431,093.081	3,224,453.275	40.513947	-104.692726
8,600.00	90.45	92.48	7,126.68	-1,719.90	-125.74	1,431,088.751	3,224,553.178	40.513932	-104.692367
8,700.00	90.45	92.48	7,125.90	-1,724.23	-25.84	1,431,084.421	3,224,653.081	40.513918	-104.692008
8,800.00	90.45	92.48	7,125.11	-1,728.56	74.06	1,431,080.090	3,224,752.984	40.513904	-104.691648
8,900.00	90.45	92.48	7,124.33	-1,732.89	173.97	1,431,075.760	3,224,852.887	40.513889	-104.691289
9,000.00	90.45	92.48	7,123.55	-1,737.22	273.87	1,431,071.430	3,224,952.790	40.513875	-104.690930
9,100.00	90.45	92.48	7,122.76	-1,741.55	373.77	1,431,067.099	3,225,052.694	40.513861	-104.690571
9,200.00	90.45	92.48	7,121.98	-1,745.88	473.68	1,431,062.769	3,225,152.597	40.513846	-104.690212
9,300.00	90.45	92.48	7,121.20	-1,750.21	573.58	1,431,058.439	3,225,252.500	40.513832	-104.689853
9,400.00	90.45	92.48	7,120.41	-1,754.54	673.48	1,431,054.108	3,225,352.403	40.513817	-104.689493
9,500.00	90.45	92.48	7,119.63	-1,758.87	773.39	1,431,049.778	3,225,452.306	40.513803	-104.689134
9,600.00	90.45	92.48	7,118.85	-1,763.20	873.29	1,431,045.448	3,225,552.209	40.513789	-104.688775

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well REEMAN-6X-HNC-04-06-65
Company:	Nickel Road Operating	TVD Reference:	WELL @ 4843.00usft (Original Well Elev)
Project:	Sec. 5-T6N-R65W	MD Reference:	WELL @ 4843.00usft (Original Well Elev)
Site:	REEMAN PAD	North Reference:	Grid
Well:	REEMAN-6X-HNC-04-06-65	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,700.00	90.45	92.48	7,118.06	-1,767.53	973.19	1,431,041.118	3,225,652.112	40.513774	-104.688416
9,800.00	90.45	92.48	7,117.28	-1,771.86	1,073.10	1,431,036.787	3,225,752.015	40.513760	-104.688057
9,900.00	90.45	92.48	7,116.50	-1,776.19	1,173.00	1,431,032.457	3,225,851.919	40.513745	-104.687698
10,000.00	90.45	92.48	7,115.71	-1,780.52	1,272.90	1,431,028.127	3,225,951.822	40.513731	-104.687339
10,100.00	90.45	92.48	7,114.93	-1,784.85	1,372.81	1,431,023.796	3,226,051.725	40.513717	-104.686979
10,200.00	90.45	92.48	7,114.15	-1,789.18	1,472.71	1,431,019.466	3,226,151.628	40.513702	-104.686620
10,300.00	90.45	92.48	7,113.36	-1,793.51	1,572.61	1,431,015.136	3,226,251.531	40.513688	-104.686261
10,400.00	90.45	92.48	7,112.58	-1,797.84	1,672.51	1,431,010.805	3,226,351.434	40.513673	-104.685902
10,500.00	90.45	92.48	7,111.80	-1,802.17	1,772.42	1,431,006.475	3,226,451.337	40.513659	-104.685543
10,600.00	90.45	92.48	7,111.01	-1,806.51	1,872.32	1,431,002.145	3,226,551.240	40.513645	-104.685184
10,700.00	90.45	92.48	7,110.23	-1,810.84	1,972.22	1,430,997.814	3,226,651.144	40.513630	-104.684825
10,800.00	90.45	92.48	7,109.44	-1,815.17	2,072.13	1,430,993.484	3,226,751.047	40.513616	-104.684465
10,900.00	90.45	92.48	7,108.66	-1,819.50	2,172.03	1,430,989.154	3,226,850.950	40.513601	-104.684106
11,000.00	90.45	92.48	7,107.88	-1,823.83	2,271.93	1,430,984.824	3,226,950.853	40.513587	-104.683747
11,100.00	90.45	92.48	7,107.09	-1,828.16	2,371.84	1,430,980.493	3,227,050.756	40.513573	-104.683388
11,200.00	90.45	92.48	7,106.31	-1,832.49	2,471.74	1,430,976.163	3,227,150.659	40.513558	-104.683029
11,300.00	90.45	92.48	7,105.53	-1,836.82	2,571.64	1,430,971.833	3,227,250.562	40.513544	-104.682670
11,400.00	90.45	92.48	7,104.74	-1,841.15	2,671.55	1,430,967.502	3,227,350.465	40.513529	-104.682311
11,500.00	90.45	92.48	7,103.96	-1,845.48	2,771.45	1,430,963.172	3,227,450.369	40.513515	-104.681951
11,600.00	90.45	92.48	7,103.18	-1,849.81	2,871.35	1,430,958.842	3,227,550.272	40.513500	-104.681592
11,700.00	90.45	92.48	7,102.39	-1,854.14	2,971.26	1,430,954.511	3,227,650.175	40.513486	-104.681233
11,800.00	90.45	92.48	7,101.61	-1,858.47	3,071.16	1,430,950.181	3,227,750.078	40.513472	-104.680874
11,900.00	90.45	92.48	7,100.83	-1,862.80	3,171.06	1,430,945.851	3,227,849.981	40.513457	-104.680515
12,000.00	90.45	92.48	7,100.04	-1,867.13	3,270.96	1,430,941.521	3,227,949.884	40.513443	-104.680156
12,100.00	90.45	92.48	7,099.26	-1,871.46	3,370.87	1,430,937.190	3,228,049.787	40.513428	-104.679796
12,200.00	90.45	92.48	7,098.48	-1,875.79	3,470.77	1,430,932.860	3,228,149.690	40.513414	-104.679437
12,300.00	90.45	92.48	7,097.69	-1,880.12	3,570.67	1,430,928.530	3,228,249.593	40.513400	-104.679078
12,400.00	90.45	92.48	7,096.91	-1,884.45	3,670.58	1,430,924.199	3,228,349.497	40.513385	-104.678719
12,500.00	90.45	92.48	7,096.13	-1,888.78	3,770.48	1,430,919.869	3,228,449.400	40.513371	-104.678360
12,600.00	90.45	92.48	7,095.34	-1,893.11	3,870.38	1,430,915.539	3,228,549.303	40.513356	-104.678001
12,700.00	90.45	92.48	7,094.56	-1,897.44	3,970.29	1,430,911.208	3,228,649.206	40.513342	-104.677642
12,707.32	90.45	92.48	7,094.66	-1,897.64	3,977.61	1,430,911.011	3,228,656.528	40.513341	-104.677615
2/100 Turn - AP REEMAN-6X-HNC-04-06-65 1753 FSL 71 FWL									
12,800.00	90.45	90.63	7,093.93	-1,900.15	4,070.24	1,430,908.496	3,228,749.164	40.513332	-104.677282
12,827.64	90.45	90.08	7,093.72	-1,900.32	4,097.88	1,430,908.326	3,228,776.803	40.513331	-104.677183
Hold 90.45 Inc, 90.08 Az									
12,900.00	90.45	90.08	7,093.15	-1,900.42	4,170.24	1,430,908.231	3,228,849.160	40.513329	-104.676923
13,000.00	90.45	90.08	7,092.36	-1,900.55	4,270.24	1,430,908.099	3,228,949.157	40.513326	-104.676563
13,100.00	90.45	90.08	7,091.58	-1,900.68	4,370.23	1,430,907.967	3,229,049.154	40.513323	-104.676203
13,200.00	90.45	90.08	7,090.80	-1,900.81	4,470.23	1,430,907.835	3,229,149.151	40.513320	-104.675844
13,300.00	90.45	90.08	7,090.01	-1,900.95	4,570.23	1,430,907.703	3,229,249.148	40.513317	-104.675484
13,400.00	90.45	90.08	7,089.23	-1,901.08	4,670.23	1,430,907.572	3,229,349.145	40.513314	-104.675124
13,500.00	90.45	90.08	7,088.45	-1,901.21	4,770.22	1,430,907.440	3,229,449.142	40.513311	-104.674765
13,600.00	90.45	90.08	7,087.66	-1,901.34	4,870.22	1,430,907.308	3,229,549.138	40.513308	-104.674405
13,700.00	90.45	90.08	7,086.88	-1,901.47	4,970.22	1,430,907.176	3,229,649.135	40.513305	-104.674046
13,800.00	90.45	90.08	7,086.10	-1,901.61	5,070.21	1,430,907.044	3,229,749.132	40.513302	-104.673686
13,900.00	90.45	90.08	7,085.31	-1,901.74	5,170.21	1,430,906.913	3,229,849.129	40.513299	-104.673326
14,000.00	90.45	90.08	7,084.53	-1,901.87	5,270.21	1,430,906.781	3,229,949.126	40.513296	-104.672967
14,100.00	90.45	90.08	7,083.75	-1,902.00	5,370.20	1,430,906.649	3,230,049.123	40.513294	-104.672607
14,200.00	90.45	90.08	7,082.96	-1,902.13	5,470.20	1,430,906.517	3,230,149.119	40.513291	-104.672247
14,300.00	90.45	90.08	7,082.18	-1,902.26	5,570.20	1,430,906.385	3,230,249.116	40.513288	-104.671888
14,400.00	90.45	90.08	7,081.40	-1,902.40	5,670.19	1,430,906.254	3,230,349.113	40.513285	-104.671528
14,500.00	90.45	90.08	7,080.61	-1,902.53	5,770.19	1,430,906.122	3,230,449.110	40.513282	-104.671169
14,600.00	90.45	90.08	7,079.83	-1,902.66	5,870.19	1,430,905.990	3,230,549.107	40.513279	-104.670809

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well REEMAN-6X-HNC-04-06-65
Company:	Nickel Road Operating	TVD Reference:	WELL @ 4843.00usft (Original Well Elev)
Project:	Sec. 5-T6N-R65W	MD Reference:	WELL @ 4843.00usft (Original Well Elev)
Site:	REEMAN PAD	North Reference:	Grid
Well:	REEMAN-6X-HNC-04-06-65	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
14,700.00	90.45	90.08	7,079.05	-1,902.79	5,970.18	1,430,905.858	3,230,649.104	40.513276	-104.670449
14,800.00	90.45	90.08	7,078.26	-1,902.92	6,070.18	1,430,905.726	3,230,749.100	40.513273	-104.670090
14,833.50	90.45	90.08	7,078.00	-1,902.97	6,103.68	1,430,905.682	3,230,782.601	40.513272	-104.669969
TD at 14833.50 - BHL REEMAN-6X-HNC-04-06-65 1724 FSL 2197 FWL									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
SHL REEMAN-6X-HNC- - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,432,808.650	3,224,678.920	40.518650	-104.691858
BHL REEMAN-6X-HNC- - plan hits target center - Point	0.00	0.00	7,078.00	-1,902.97	6,103.68	1,430,905.682	3,230,782.601	40.513272	-104.669969
AP REEMAN-6X-HNC-0 - plan hits target center - Point	0.00	0.00	7,094.66	-1,897.64	3,977.61	1,430,911.011	3,228,656.528	40.513341	-104.677615
LPL REEMAN-6X-HNC- - plan misses target center by 10.38usft at 7812.77usft MD (7123.22 TVD, -1682.45 N, -911.49 E) - Point	0.00	0.00	7,133.00	-1,685.66	-912.82	1,431,122.987	3,223,766.099	40.514046	-104.695196

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,500.00	1,500.00	0.00	0.00	Surf Csg	
1,600.00	1,600.00	0.00	0.00	Start Build 2.00	
2,848.31	2,809.18	-194.31	-184.13	Hold 24.97 Inc, 223.46 Az	
6,856.17	6,442.53	-1,422.24	-1,347.70	KOP 10°/100	
7,921.08	7,132.00	-1,690.50	-804.00	LP 90.45 Inc, 92.48 Az	
12,707.32	7,094.66	-1,897.64	3,977.61	2/100 Turn	
12,827.64	7,093.72	-1,900.32	4,097.88	Hold 90.45 Inc, 90.08 Az	
14,833.50	7,078.00	-1,902.97	6,103.68	TD at 14833.50	