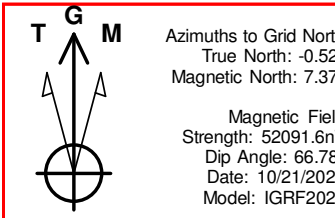
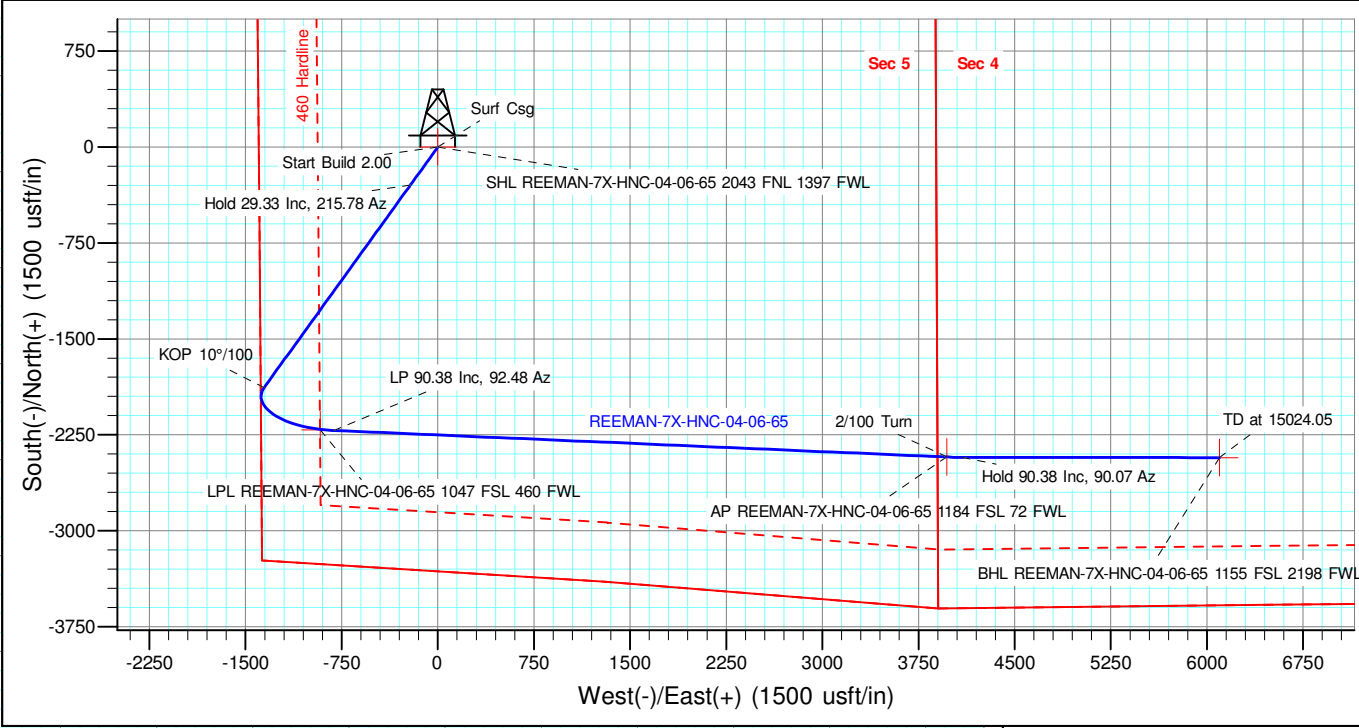
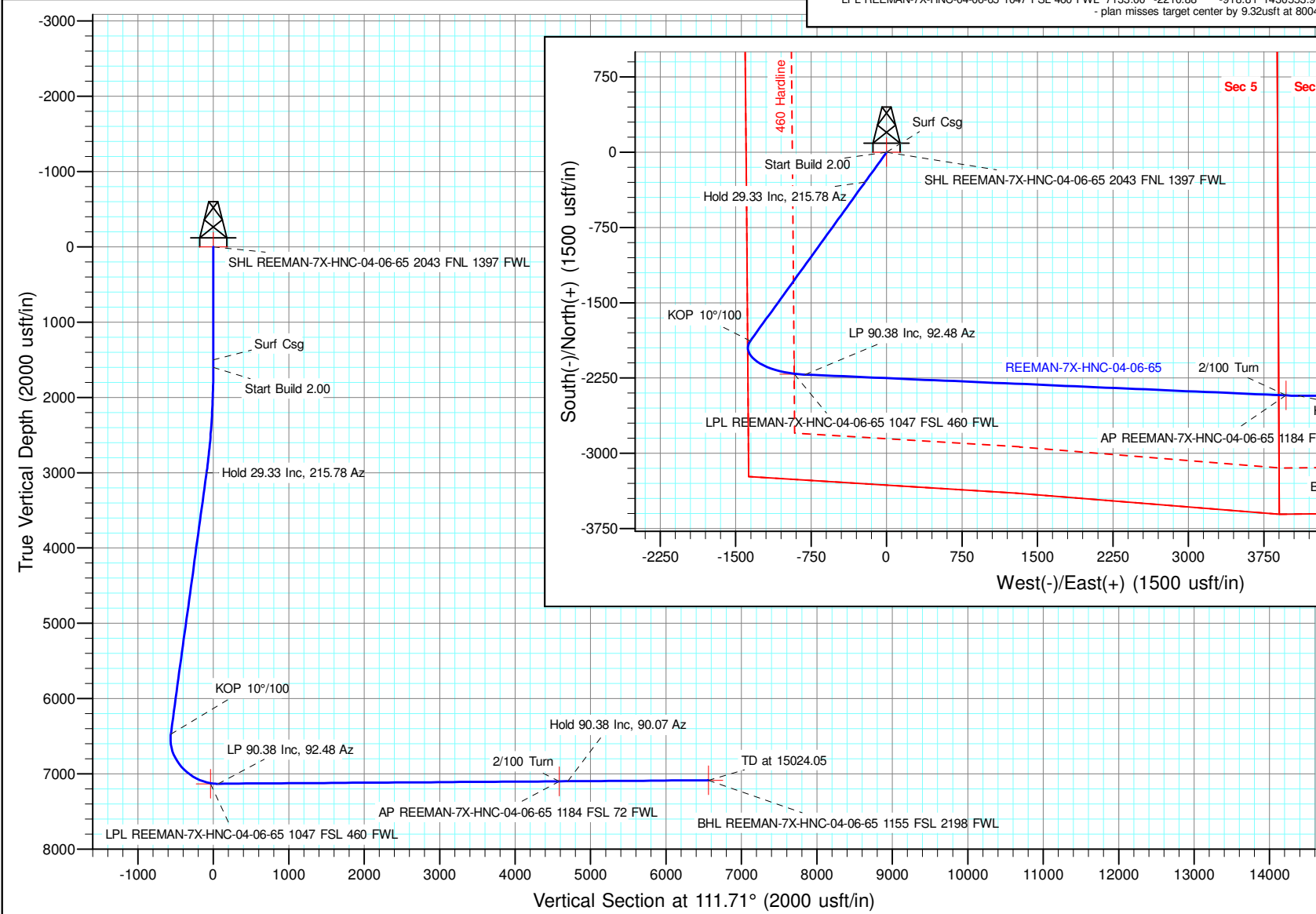


Well Name:	Project Name:	Pad Name:
REEMAN-7X-HNC-04-06-65	Sec. 5-T6N-R65W	REEMAN PAD

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	
3066.59	29.33	215.78	3003.36	-297.96	-214.72	-89.26	367.27	Hold 29.33 Inc, 215.78 Az	
7049.16	29.33	215.78	6475.36	-1880.72	-1355.33	-563.42	2318.19	KOP 10°/100	
8108.63	90.38	92.48	7132.50	-2215.50	-814.00	63.35	3060.32	LP 90.38 Inc, 92.48 Az	
12898.68	90.38	92.48	7100.23	-2422.86	3971.45	4586.02	7850.27	2/100 Turn	
13019.51	90.38	90.07	7099.42	-2425.55	4092.24	4699.23	7971.10	Hold 90.38 Inc, 90.07 Az	
15023.05	90.38	90.07	7086.01	-2427.83	6095.73	6561.43	9974.59	TD at 15024.05	

Geodetic Datum:	Elevation:
North American Datum 1983 US State Plane 1983Colorado Northern Zone	Ground Elevation: 4816.00 KB Elevation: WELL @ 4843.00usft (Original Well Elev)

DESIGN TARGET DETAILS									
Name	SHL REEMAN-7X-HNC-04-06-65	2043 FNL	1397 FWL	TVD	0.00	+N/-S	0.00	+E/-W	0.00
				Northing	1432764.840	Easting	3224689.240	Latitude	40.518530
				Longitude	-104.691822	Shape	Point		
Name	BHL REEMAN-7X-HNC-04-06-65	1155 FSL	2198 FWL	086.00	-2427.83	6096.74	1430337.006	3230785.978	40.511711
									-104.669976
									Point
Name	AP REEMAN-7X-HNC-04-06-65	1184 FSL	72 FWL	7100.23	-2422.86	3971.45	1430341.978	3228660.694	40.511779
									-104.677619
									Point
Name	LPL REEMAN-7X-HNC-04-06-65	1047 FSL	460 FWL	7133.00	-2210.88	-918.81	1430553.955	3223770.430	40.512484
									-104.695199
									Point
									- plan misses target center by 9.32usft at 8004.50usft MD (7124.66 TVD, -2207.00 N, -917.34 E)



# NICKEL ROAD

O P E R A T I N G

## **Nickel Road Operating**

**Sec. 5-T6N-R65W**

**REEMAN PAD**

**REEMAN-7X-HNC-04-06-65**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report - Geographic**

**28 October, 2020**

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REEMAN-7X-HNC-04-06-65
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Project:</b>	Sec. 5-T6N-R65W	<b>MD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Site:</b>	REEMAN PAD	<b>North Reference:</b>	Grid
<b>Well:</b>	REEMAN-7X-HNC-04-06-65	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	Sec. 5-T6N-R65W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	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-7X-HNC-04-06-65					
Well Position	+N/-S	0.00 usft	Northing:	1,432,764.840 usft	Latitude:	40.518530
	+E/-W	0.00 usft	Easting:	3,224,689.240 usft	Longitude:	-104.691822
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,816.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	10/21/2020	7.89	66.78	52,091.64318137

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	111.71

<b>Plan Survey Tool Program</b>	<b>Date</b>	10/26/2020			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	15,023.61 Design #1 (Wellbore #1)	MWD		
			OWSG MWD - Standard		

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
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	
3,066.59	29.33	215.78	3,003.36	-297.96	-214.72	2.00	2.00	0.00	215.78	
7,049.16	29.33	215.78	6,475.36	-1,880.72	-1,355.33	0.00	0.00	0.00	0.00	
8,108.63	90.38	92.48	7,132.50	-2,215.50	-814.00	10.00	5.76	-11.64	-119.63	
12,898.68	90.38	92.48	7,100.23	-2,422.86	3,971.45	0.00	0.00	0.00	0.00	
13,019.51	90.38	90.07	7,099.42	-2,425.55	4,092.24	2.00	0.00	-2.00	-89.99	
15,024.05	90.38	90.07	7,086.00	-2,427.83	6,096.74	0.00	0.00	0.00	0.00	BHL REEMAN-7X-HN

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REEMAN-7X-HNC-04-06-65
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Project:</b>	Sec. 5-T6N-R65W	<b>MD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Site:</b>	REEMAN PAD	<b>North Reference:</b>	Grid
<b>Well:</b>	REEMAN-7X-HNC-04-06-65	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	1,432,764.840	3,224,689.240	40.518530	-104.691822
<b>SHL REEMAN-7X-HNC-04-06-65 2043 FNL 1397 FWL</b>									
100.00	0.00	0.00	100.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
200.00	0.00	0.00	200.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
300.00	0.00	0.00	300.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
400.00	0.00	0.00	400.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
500.00	0.00	0.00	500.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
600.00	0.00	0.00	600.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
700.00	0.00	0.00	700.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
800.00	0.00	0.00	800.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
900.00	0.00	0.00	900.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
1,000.00	0.00	0.00	1,000.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
1,100.00	0.00	0.00	1,100.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
1,200.00	0.00	0.00	1,200.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
1,300.00	0.00	0.00	1,300.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
1,400.00	0.00	0.00	1,400.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
1,500.00	0.00	0.00	1,500.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
<b>Surf Csg</b>									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
<b>Start Build 2.00</b>									
1,700.00	2.00	215.78	1,699.98	-1.42	-1.02	1,432,763.424	3,224,688.220	40.518526	-104.691826
1,800.00	4.00	215.78	1,799.84	-5.66	-4.08	1,432,759.178	3,224,685.160	40.518514	-104.691837
1,900.00	6.00	215.78	1,899.45	-12.73	-9.18	1,432,752.108	3,224,680.065	40.518495	-104.691856
2,000.00	8.00	215.78	1,998.70	-22.62	-16.30	1,432,742.221	3,224,672.940	40.518468	-104.691882
2,100.00	10.00	215.78	2,097.47	-35.31	-25.45	1,432,729.531	3,224,663.794	40.518433	-104.691915
2,200.00	12.00	215.78	2,195.62	-50.79	-36.60	1,432,714.051	3,224,652.639	40.518391	-104.691956
2,300.00	14.00	215.78	2,293.06	-69.04	-49.75	1,432,695.802	3,224,639.488	40.518341	-104.692004
2,400.00	16.00	215.78	2,389.64	-90.03	-64.88	1,432,674.806	3,224,624.357	40.518284	-104.692059
2,500.00	18.00	215.78	2,485.27	-113.75	-81.98	1,432,651.087	3,224,607.265	40.518219	-104.692121
2,600.00	20.00	215.78	2,579.82	-140.16	-101.01	1,432,624.676	3,224,588.231	40.518147	-104.692190
2,700.00	22.00	215.78	2,673.17	-169.24	-121.96	1,432,595.603	3,224,567.280	40.518068	-104.692267
2,800.00	24.00	215.78	2,765.21	-200.93	-144.80	1,432,563.905	3,224,544.437	40.517982	-104.692350
2,900.00	26.00	215.78	2,855.84	-235.22	-169.51	1,432,529.621	3,224,519.730	40.517888	-104.692440
3,000.00	28.00	215.78	2,944.94	-272.05	-196.05	1,432,492.791	3,224,493.189	40.517788	-104.692536
3,066.59	29.33	215.78	3,003.36	-297.96	-214.72	1,432,466.878	3,224,474.515	40.517717	-104.692604
<b>Hold 29.33 Inc, 215.78 Az</b>									
3,100.00	29.33	215.78	3,032.49	-311.24	-224.29	1,432,453.599	3,224,464.945	40.517681	-104.692639
3,200.00	29.33	215.78	3,119.67	-350.98	-252.93	1,432,413.856	3,224,436.305	40.517573	-104.692744
3,300.00	29.33	215.78	3,206.85	-390.73	-281.57	1,432,374.114	3,224,407.666	40.517464	-104.692848
3,400.00	29.33	215.78	3,294.03	-430.47	-310.21	1,432,334.372	3,224,379.026	40.517356	-104.692952
3,500.00	29.33	215.78	3,381.21	-470.21	-338.85	1,432,294.630	3,224,350.386	40.517247	-104.693057
3,600.00	29.33	215.78	3,468.39	-509.95	-367.49	1,432,254.888	3,224,321.746	40.517139	-104.693161
3,700.00	29.33	215.78	3,555.57	-549.69	-396.13	1,432,215.146	3,224,293.106	40.517031	-104.693265
3,800.00	29.33	215.78	3,642.75	-589.44	-424.77	1,432,175.404	3,224,264.466	40.516922	-104.693369
3,900.00	29.33	215.78	3,729.93	-629.18	-453.41	1,432,135.662	3,224,235.826	40.516814	-104.693474
4,000.00	29.33	215.78	3,817.11	-668.92	-482.05	1,432,095.920	3,224,207.186	40.516706	-104.693578
4,100.00	29.33	215.78	3,904.29	-708.66	-510.69	1,432,056.178	3,224,178.546	40.516597	-104.693682
4,200.00	29.33	215.78	3,991.47	-748.40	-539.33	1,432,016.436	3,224,149.906	40.516489	-104.693787
4,300.00	29.33	215.78	4,078.65	-788.15	-567.97	1,431,976.693	3,224,121.266	40.516381	-104.693891
4,400.00	29.33	215.78	4,165.83	-827.89	-596.61	1,431,936.951	3,224,092.626	40.516272	-104.693995
4,500.00	29.33	215.78	4,253.01	-867.63	-625.25	1,431,897.209	3,224,063.986	40.516164	-104.694100
4,600.00	29.33	215.78	4,340.19	-907.37	-653.89	1,431,857.467	3,224,035.346	40.516055	-104.694204
4,700.00	29.33	215.78	4,427.37	-947.11	-682.53	1,431,817.725	3,224,006.707	40.515947	-104.694308
4,800.00	29.33	215.78	4,514.55	-986.86	-711.17	1,431,777.983	3,223,978.067	40.515839	-104.694413

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REEMAN-7X-HNC-04-06-65
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Project:</b>	Sec. 5-T6N-R65W	<b>MD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Site:</b>	REEMAN PAD	<b>North Reference:</b>	Grid
<b>Well:</b>	REEMAN-7X-HNC-04-06-65	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	29.33	215.78	4,601.73	-1,026.60	-739.81	1,431,738.241	3,223,949.427	40.515730	-104.694517
5,000.00	29.33	215.78	4,688.91	-1,066.34	-768.45	1,431,698.499	3,223,920.787	40.515622	-104.694621
5,100.00	29.33	215.78	4,776.09	-1,106.08	-797.09	1,431,658.757	3,223,892.147	40.515514	-104.694725
5,200.00	29.33	215.78	4,863.27	-1,145.83	-825.73	1,431,619.015	3,223,863.507	40.515405	-104.694830
5,300.00	29.33	215.78	4,950.45	-1,185.57	-854.37	1,431,579.272	3,223,834.867	40.515297	-104.694934
5,400.00	29.33	215.78	5,037.63	-1,225.31	-883.01	1,431,539.530	3,223,806.227	40.515188	-104.695038
5,500.00	29.33	215.78	5,124.81	-1,265.05	-911.65	1,431,499.788	3,223,777.587	40.515080	-104.695143
5,600.00	29.33	215.78	5,211.99	-1,304.79	-940.29	1,431,460.046	3,223,748.947	40.514972	-104.695247
5,700.00	29.33	215.78	5,299.17	-1,344.54	-968.93	1,431,420.304	3,223,720.307	40.514863	-104.695351
5,800.00	29.33	215.78	5,386.35	-1,384.28	-997.57	1,431,380.562	3,223,691.667	40.514755	-104.695456
5,900.00	29.33	215.78	5,473.53	-1,424.02	-1,026.21	1,431,340.820	3,223,663.027	40.514647	-104.695560
6,000.00	29.33	215.78	5,560.71	-1,463.76	-1,054.85	1,431,301.078	3,223,634.387	40.514538	-104.695664
6,100.00	29.33	215.78	5,647.89	-1,503.50	-1,083.49	1,431,261.336	3,223,605.748	40.514430	-104.695768
6,200.00	29.33	215.78	5,735.06	-1,543.25	-1,112.13	1,431,221.594	3,223,577.108	40.514321	-104.695873
6,300.00	29.33	215.78	5,822.24	-1,582.99	-1,140.77	1,431,181.851	3,223,548.468	40.514213	-104.695977
6,400.00	29.33	215.78	5,909.42	-1,622.73	-1,169.41	1,431,142.109	3,223,519.828	40.514105	-104.696081
6,500.00	29.33	215.78	5,996.60	-1,662.47	-1,198.05	1,431,102.367	3,223,491.188	40.513996	-104.696186
6,600.00	29.33	215.78	6,083.78	-1,702.21	-1,226.69	1,431,062.625	3,223,462.548	40.513888	-104.696290
6,700.00	29.33	215.78	6,170.96	-1,741.96	-1,255.33	1,431,022.883	3,223,433.908	40.513780	-104.696394
6,800.00	29.33	215.78	6,258.14	-1,781.70	-1,283.97	1,430,983.141	3,223,405.268	40.513671	-104.696499
6,900.00	29.33	215.78	6,345.32	-1,821.44	-1,312.61	1,430,943.399	3,223,376.628	40.513563	-104.696603
7,000.00	29.33	215.78	6,432.50	-1,861.18	-1,341.25	1,430,903.657	3,223,347.988	40.513454	-104.696707
7,049.16	29.33	215.78	6,475.36	-1,880.72	-1,355.33	1,430,884.121	3,223,333.910	40.513401	-104.696758
<b>KOP 10°/100</b>									
7,100.00	27.15	206.06	6,520.17	-1,901.26	-1,367.71	1,430,863.584	3,223,321.525	40.513345	-104.696804
7,200.00	25.21	183.69	6,610.13	-1,943.11	-1,379.14	1,430,821.732	3,223,310.102	40.513231	-104.696846
7,300.00	26.84	161.08	6,700.21	-1,985.83	-1,373.17	1,430,779.014	3,223,316.067	40.513113	-104.696826
7,400.00	31.51	142.82	6,787.67	-2,028.11	-1,350.00	1,430,736.729	3,223,339.237	40.512997	-104.696744
7,500.00	38.09	129.56	6,869.86	-2,068.68	-1,310.33	1,430,696.162	3,223,378.909	40.512884	-104.696603
7,600.00	45.77	119.93	6,944.28	-2,106.30	-1,255.36	1,430,658.544	3,223,433.877	40.512780	-104.696406
7,700.00	54.06	112.61	7,008.66	-2,139.82	-1,186.77	1,430,625.019	3,223,502.472	40.512686	-104.696161
7,800.00	62.72	106.71	7,061.06	-2,168.23	-1,106.63	1,430,596.606	3,223,582.609	40.512606	-104.695873
7,900.00	71.58	101.68	7,099.88	-2,190.67	-1,017.39	1,430,574.168	3,223,671.853	40.512542	-104.695553
8,000.00	80.56	97.15	7,123.93	-2,206.45	-921.75	1,430,558.387	3,223,767.492	40.512496	-104.695210
8,004.08	80.93	96.97	7,124.59	-2,206.95	-917.75	1,430,557.892	3,223,771.490	40.512495	-104.695195
<b>LPL REEMAN-7X-HNC-04-06-65 1047 FSL 460 FWL</b>									
8,100.00	89.60	92.85	7,132.50	-2,215.10	-822.62	1,430,549.741	3,223,866.621	40.512470	-104.694853
8,108.63	90.38	92.48	7,132.50	-2,215.50	-814.00	1,430,549.340	3,223,875.240	40.512469	-104.694822
<b>LP 90.38 Inc, 92.48 Az</b>									
8,200.00	90.38	92.48	7,131.89	-2,219.46	-722.72	1,430,545.383	3,223,966.524	40.512456	-104.694494
8,300.00	90.38	92.48	7,131.22	-2,223.79	-622.81	1,430,541.053	3,224,066.428	40.512441	-104.694135
8,400.00	90.38	92.48	7,130.55	-2,228.12	-522.91	1,430,536.722	3,224,166.331	40.512427	-104.693776
8,500.00	90.38	92.48	7,129.88	-2,232.45	-423.00	1,430,532.392	3,224,266.235	40.512413	-104.693417
8,600.00	90.38	92.48	7,129.21	-2,236.78	-323.10	1,430,528.061	3,224,366.139	40.512398	-104.693058
8,700.00	90.38	92.48	7,128.54	-2,241.11	-223.20	1,430,523.731	3,224,466.043	40.512384	-104.692699
8,800.00	90.38	92.48	7,127.87	-2,245.44	-123.29	1,430,519.400	3,224,565.947	40.512369	-104.692339
8,900.00	90.38	92.48	7,127.20	-2,249.77	-23.39	1,430,515.070	3,224,665.851	40.512355	-104.691980
9,000.00	90.38	92.48	7,126.53	-2,254.10	76.52	1,430,510.739	3,224,765.755	40.512341	-104.691621
9,100.00	90.38	92.48	7,125.86	-2,258.43	176.42	1,430,506.409	3,224,865.659	40.512326	-104.691262
9,200.00	90.38	92.48	7,125.19	-2,262.76	276.32	1,430,502.078	3,224,965.563	40.512312	-104.690903
9,300.00	90.38	92.48	7,124.52	-2,267.09	376.23	1,430,497.747	3,225,065.467	40.512297	-104.690544
9,400.00	90.38	92.48	7,123.85	-2,271.42	476.13	1,430,493.417	3,225,165.371	40.512283	-104.690185
9,500.00	90.38	92.48	7,123.18	-2,275.75	576.04	1,430,489.086	3,225,265.275	40.512269	-104.689825
9,600.00	90.38	92.48	7,122.51	-2,280.08	675.94	1,430,484.756	3,225,365.179	40.512254	-104.689466

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REEMAN-7X-HNC-04-06-65
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Project:</b>	Sec. 5-T6N-R65W	<b>MD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Site:</b>	REEMAN PAD	<b>North Reference:</b>	Grid
<b>Well:</b>	REEMAN-7X-HNC-04-06-65	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	90.38	92.48	7,121.84	-2,284.41	775.84	1,430,480.425	3,225,465.083	40.512240	-104.689107
9,800.00	90.38	92.48	7,121.17	-2,288.75	875.75	1,430,476.095	3,225,564.987	40.512225	-104.688748
9,900.00	90.38	92.48	7,120.50	-2,293.08	975.65	1,430,471.764	3,225,664.891	40.512211	-104.688389
10,000.00	90.38	92.48	7,119.84	-2,297.41	1,075.55	1,430,467.434	3,225,764.795	40.512197	-104.688030
10,100.00	90.38	92.48	7,119.17	-2,301.74	1,175.46	1,430,463.103	3,225,864.698	40.512182	-104.687671
10,200.00	90.38	92.48	7,118.50	-2,306.07	1,275.36	1,430,458.773	3,225,964.602	40.512168	-104.687311
10,300.00	90.38	92.48	7,117.83	-2,310.40	1,375.27	1,430,454.442	3,226,064.506	40.512154	-104.686952
10,400.00	90.38	92.48	7,117.16	-2,314.73	1,475.17	1,430,450.112	3,226,164.410	40.512139	-104.686593
10,500.00	90.38	92.48	7,116.49	-2,319.06	1,575.07	1,430,445.781	3,226,264.314	40.512125	-104.686234
10,600.00	90.38	92.48	7,115.82	-2,323.39	1,674.98	1,430,441.451	3,226,364.218	40.512110	-104.685875
10,700.00	90.38	92.48	7,115.15	-2,327.72	1,774.88	1,430,437.120	3,226,464.122	40.512096	-104.685516
10,800.00	90.38	92.48	7,114.48	-2,332.05	1,874.79	1,430,432.790	3,226,564.026	40.512081	-104.685157
10,900.00	90.38	92.48	7,113.81	-2,336.38	1,974.69	1,430,428.459	3,226,663.930	40.512067	-104.684797
11,000.00	90.38	92.48	7,113.14	-2,340.71	2,074.59	1,430,424.129	3,226,763.834	40.512053	-104.684438
11,100.00	90.38	92.48	7,112.47	-2,345.04	2,174.50	1,430,419.798	3,226,863.738	40.512038	-104.684079
11,200.00	90.38	92.48	7,111.80	-2,349.37	2,274.40	1,430,415.468	3,226,963.642	40.512024	-104.683720
11,300.00	90.38	92.48	7,111.13	-2,353.70	2,374.31	1,430,411.137	3,227,063.546	40.512009	-104.683361
11,400.00	90.38	92.48	7,110.46	-2,358.03	2,474.21	1,430,406.807	3,227,163.450	40.511995	-104.683002
11,500.00	90.38	92.48	7,109.79	-2,362.36	2,574.11	1,430,402.476	3,227,263.354	40.511981	-104.682643
11,600.00	90.38	92.48	7,109.12	-2,366.69	2,674.02	1,430,398.145	3,227,363.258	40.511966	-104.682283
11,700.00	90.38	92.48	7,108.45	-2,371.03	2,773.92	1,430,393.815	3,227,463.161	40.511952	-104.681924
11,800.00	90.38	92.48	7,107.78	-2,375.36	2,873.83	1,430,389.484	3,227,563.065	40.511937	-104.681565
11,900.00	90.38	92.48	7,107.11	-2,379.69	2,973.73	1,430,385.154	3,227,662.969	40.511923	-104.681206
12,000.00	90.38	92.48	7,106.44	-2,384.02	3,073.63	1,430,380.823	3,227,762.873	40.511909	-104.680847
12,100.00	90.38	92.48	7,105.77	-2,388.35	3,173.54	1,430,376.493	3,227,862.777	40.511894	-104.680488
12,200.00	90.38	92.48	7,105.10	-2,392.68	3,273.44	1,430,372.162	3,227,962.681	40.511880	-104.680129
12,300.00	90.38	92.48	7,104.43	-2,397.01	3,373.35	1,430,367.832	3,228,062.585	40.511865	-104.679769
12,400.00	90.38	92.48	7,103.76	-2,401.34	3,473.25	1,430,363.501	3,228,162.489	40.511851	-104.679410
12,500.00	90.38	92.48	7,103.10	-2,405.67	3,573.15	1,430,359.171	3,228,262.393	40.511836	-104.679051
12,600.00	90.38	92.48	7,102.43	-2,410.00	3,673.06	1,430,354.840	3,228,362.297	40.511822	-104.678692
12,700.00	90.38	92.48	7,101.76	-2,414.33	3,772.96	1,430,350.510	3,228,462.201	40.511808	-104.678333
12,800.00	90.38	92.48	7,101.09	-2,418.66	3,872.87	1,430,346.179	3,228,562.105	40.511793	-104.677974
12,898.68	90.38	92.48	7,100.23	-2,422.86	3,971.45	1,430,341.978	3,228,660.694	40.511779	-104.677619
<b>2/100 Turn - AP REEMAN-7X-HNC-04-06-65 1184 FSL 72 FWL</b>									
12,900.00	90.38	92.46	7,100.22	-2,422.92	3,972.77	1,430,341.921	3,228,662.011	40.511779	-104.677615
13,000.00	90.38	90.46	7,099.55	-2,425.46	4,072.73	1,430,339.381	3,228,761.971	40.511769	-104.677255
13,019.51	90.38	90.07	7,099.42	-2,425.55	4,092.24	1,430,339.292	3,228,781.484	40.511769	-104.677185
<b>Hold 90.38 Inc, 90.07 Az</b>									
13,100.00	90.38	90.07	7,098.88	-2,425.64	4,172.73	1,430,339.201	3,228,861.968	40.511766	-104.676896
13,200.00	90.38	90.07	7,098.21	-2,425.75	4,272.73	1,430,339.087	3,228,961.966	40.511763	-104.676536
13,300.00	90.38	90.07	7,097.54	-2,425.87	4,372.72	1,430,338.973	3,229,061.964	40.511761	-104.676176
13,400.00	90.38	90.07	7,096.87	-2,425.98	4,472.72	1,430,338.858	3,229,161.962	40.511758	-104.675817
13,500.00	90.38	90.07	7,096.21	-2,426.10	4,572.72	1,430,338.744	3,229,261.959	40.511755	-104.675457
13,600.00	90.38	90.07	7,095.54	-2,426.21	4,672.72	1,430,338.630	3,229,361.957	40.511752	-104.675097
13,700.00	90.38	90.07	7,094.87	-2,426.32	4,772.72	1,430,338.516	3,229,461.955	40.511749	-104.674738
13,800.00	90.38	90.07	7,094.20	-2,426.44	4,872.71	1,430,338.402	3,229,561.952	40.511746	-104.674378
13,900.00	90.38	90.07	7,093.53	-2,426.55	4,972.71	1,430,338.288	3,229,661.950	40.511743	-104.674019
14,000.00	90.38	90.07	7,092.86	-2,426.67	5,072.71	1,430,338.174	3,229,761.948	40.511741	-104.673659
14,100.00	90.38	90.07	7,092.19	-2,426.78	5,172.71	1,430,338.060	3,229,861.945	40.511738	-104.673299
14,200.00	90.38	90.07	7,091.52	-2,426.89	5,272.70	1,430,337.946	3,229,961.943	40.511735	-104.672940
14,300.00	90.38	90.07	7,090.85	-2,427.01	5,372.70	1,430,337.832	3,230,061.941	40.511732	-104.672580
14,400.00	90.38	90.07	7,090.18	-2,427.12	5,472.70	1,430,337.718	3,230,161.938	40.511729	-104.672220
14,500.00	90.38	90.07	7,089.51	-2,427.24	5,572.70	1,430,337.604	3,230,261.936	40.511726	-104.671861
14,600.00	90.38	90.07	7,088.84	-2,427.35	5,672.69	1,430,337.490	3,230,361.934	40.511723	-104.671501

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well REEMAN-7X-HNC-04-06-65
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Project:</b>	Sec. 5-T6N-R65W	<b>MD Reference:</b>	WELL @ 4843.00usft (Original Well Elev)
<b>Site:</b>	REEMAN PAD	<b>North Reference:</b>	Grid
<b>Well:</b>	REEMAN-7X-HNC-04-06-65	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	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	90.38	90.07	7,088.17	-2,427.46	5,772.69	1,430,337.376	3,230,461.931	40.511720	-104.671142
14,800.00	90.38	90.07	7,087.50	-2,427.58	5,872.69	1,430,337.262	3,230,561.929	40.511718	-104.670782
14,900.00	90.38	90.07	7,086.83	-2,427.69	5,972.69	1,430,337.148	3,230,661.927	40.511715	-104.670422
15,000.00	90.38	90.07	7,086.16	-2,427.81	6,072.69	1,430,337.034	3,230,761.925	40.511712	-104.670063
15,024.05	90.38	90.07	7,086.00	-2,427.83	6,096.74	1,430,337.006	3,230,785.978	40.511711	-104.669976
TD at 15024.05 - BHL REEMAN-7X-HNC-04-06-65 1155 FSL 2198 FWL									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL REEMAN-7X-HNC- - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,432,764.840	3,224,689.240	40.518530	-104.691822
BHL REEMAN-7X-HNC- - plan hits target center - Point	0.00	0.00	7,086.00	-2,427.83	6,096.74	1,430,337.006	3,230,785.978	40.511711	-104.669976
AP REEMAN-7X-HNC-0 - plan hits target center - Point	0.00	0.00	7,100.23	-2,422.86	3,971.45	1,430,341.978	3,228,660.694	40.511779	-104.677619
LPL REEMAN-7X-HNC- - plan misses target center by 9.35usft at 8004.08usft MD (7124.59 TVD, -2206.95 N, -917.75 E) - Point	0.00	0.00	7,133.00	-2,210.88	-918.81	1,430,553.956	3,223,770.430	40.512484	-104.695199

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
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
3,066.59	3,003.36	-297.96	-214.72	Hold 29.33 Inc, 215.78 Az
7,049.16	6,475.36	-1,880.72	-1,355.33	KOP 10°/100
8,108.63	7,132.50	-2,215.50	-814.00	LP 90.38 Inc, 92.48 Az
12,898.68	7,100.23	-2,422.86	3,971.45	2/100 Turn
13,019.51	7,099.42	-2,425.55	4,092.24	Hold 90.38 Inc, 90.07 Az
15,024.05	7,086.00	-2,427.83	6,096.74	TD at 15024.05