

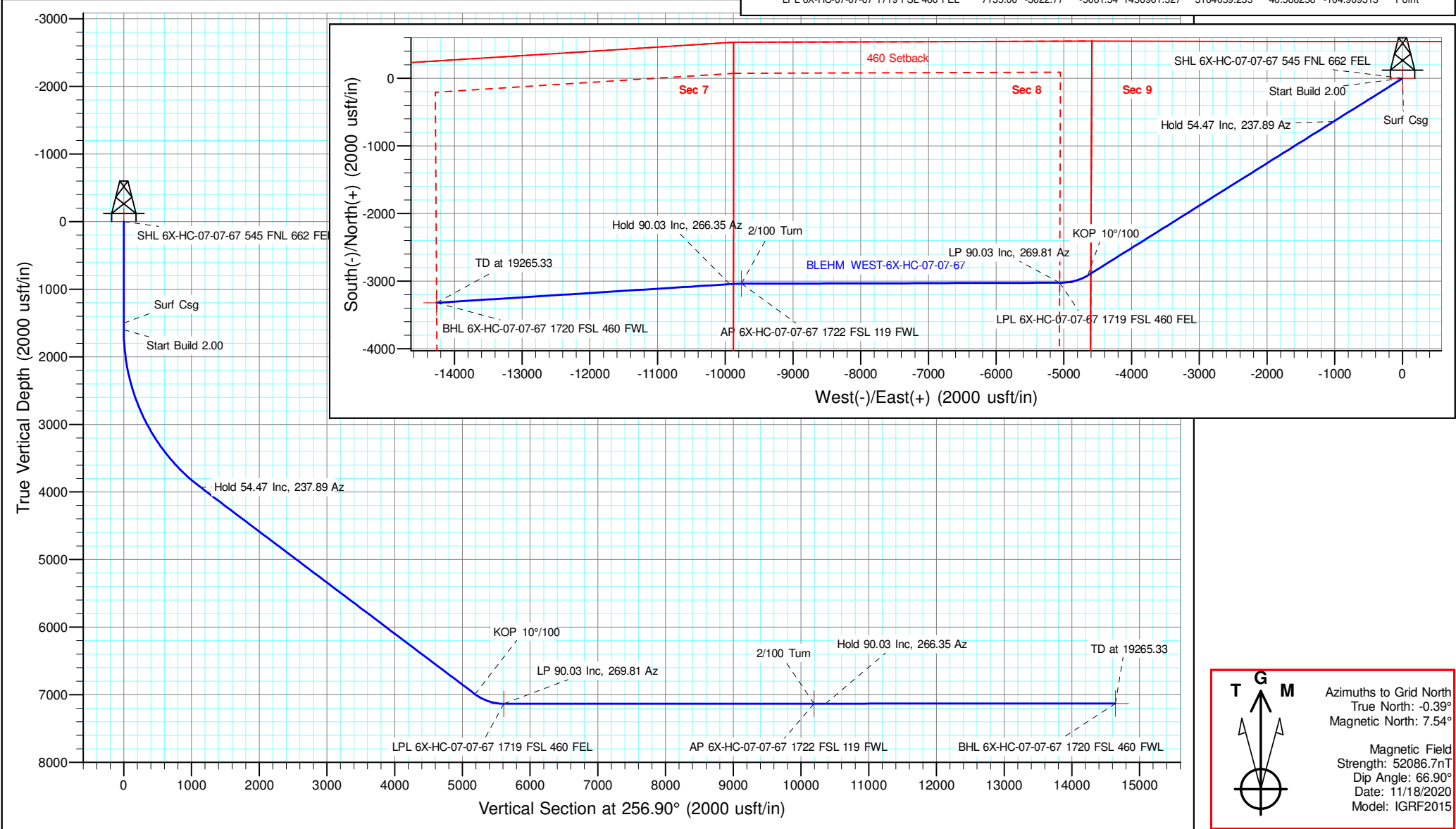
Well Name:  
**BLEHM WEST-6X-HC-07-07-67**

Project Name:  
**Sec. 9-T7N-R67W**

Pad Name:  
**BLEHM Pad**

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	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	
4323.33	54.47	237.89	3931.30	-637.70	-1016.34	1134.44	1199.83	Hold 54.47 Inc, 237.89 Az	
9590.77	54.47	237.89	6992.63	-2915.92	-4647.31	5187.34	5486.36	KOP 10°/100	
10054.16	90.03	269.81	7135.00	-3022.77	-5061.54	5615.01	5919.46	LP 90.03 Inc, 269.81 Az	
14751.69	90.03	269.81	7132.45	-3037.95	-9759.04	10193.66	10616.99	2/100 Turn	
14924.81	90.03	266.35	7132.36	-3043.73	-9932.05	10363.47	10790.11	Hold 90.03 Inc, 266.35 Az	
19265.33	90.03	266.35	7130.00	-3319.89	-14263.77	14645.03	15130.63	TD at 19265.33	

Geodetic Datum:				Elevation:				
North American Datum 1983 US State Plane 1983, Colorado Northern Zone				Ground Elevation: 5088.00 KB Elevation: WELL @ 5115.00usft (Original Well Elev)				
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point
SHL 6X-HC-07-07-67 545 FNL 662 FEL	0.00	0.00	0.00	1459984.295	3169120.776	40.594461	-104.891015	
BHL 6X-HC-07-07-67 1720 FSL 460 FWL	7130.00	-3319.89	-14263.77	1456664.410	3154857.003	40.585606	-104.942451	Point
AP 6X-HC-07-07-67 1722 FSL 119 FWL	7132.45	-3037.95	-9759.04	1456946.349	3159361.732	40.586301	-104.926226	Point
LPL 6X-HC-07-07-67 1719 FSL 460 FEL	7135.00	-3022.77	-5061.54	1456961.527	3164059.235	40.586258	-104.909313	Point



# NICKEL ROAD

O P E R A T I N G

## **Nickel Road Operating**

**Sec. 9-T7N-R67W**

**BLEHM Pad**

**BLEHM WEST-6X-HC-07-07-67**

**Wellbore #1**

**Plan: Plan #2**

## **Standard Planning Report - Geographic**

**07 April, 2021**

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

<b>Project</b>	Sec. 9-T7N-R67W, 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	BLEHM Pad				
Site Position:		Northing:	1,458,460.008 usft	Latitude:	40.590318
From:	Lat/Long	Easting:	3,166,936.305 usft	Longitude:	-104.898918
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39 °

Well	BLEHM WEST-6X-HC-07-07-67					
Well Position	+N/-S	0.00 usft	Northing:	1,459,984.294 usft	Latitude:	40.594461
	+E/-W	0.00 usft	Easting:	3,169,120.777 usft	Longitude:	-104.891015
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,088.00 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>
	IGRF2015	11/18/2020	7.93	66.90	52,086.67316628

<b>Design</b>	Plan #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	256.90

<b>Plan Survey Tool Program</b>	<b>Date</b>	4/7/2021		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	19,265.33 Plan #2 (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	
4,323.33	54.47	237.89	3,931.30	-637.70	-1,016.34	2.00	2.00	0.00	237.89	
9,590.78	54.47	237.89	6,992.63	-2,915.92	-4,647.31	0.00	0.00	0.00	0.00	
10,054.16	90.03	269.81	7,135.00	-3,022.77	-5,061.54	10.00	7.68	6.89	46.96	LPL 6X-HC-07-07-67
14,751.69	90.03	269.81	7,132.45	-3,037.95	-9,759.04	0.00	0.00	0.00	0.00	
14,924.81	90.03	266.35	7,132.36	-3,043.73	-9,932.05	2.00	0.00	-2.00	-90.00	
19,265.33	90.03	266.35	7,130.00	-3,319.89	-14,263.77	0.00	0.00	0.00	0.00	BHL 6X-HC-07-07-67

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

Planned Survey										
Measured			Vertical			Map	Map			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		Latitude	Longitude
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.00	0.00	0.00	0.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
Laramie-Fox Hills - SHL 6X-HC-07-07-67 545 FNL 662 FEL										
100.00	0.00	0.00	100.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
200.00	0.00	0.00	200.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
300.00	0.00	0.00	300.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
Upper Pierre										
400.00	0.00	0.00	400.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
500.00	0.00	0.00	500.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
600.00	0.00	0.00	600.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
700.00	0.00	0.00	700.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
800.00	0.00	0.00	800.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
900.00	0.00	0.00	900.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
1,000.00	0.00	0.00	1,000.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
1,100.00	0.00	0.00	1,100.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
1,200.00	0.00	0.00	1,200.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
1,300.00	0.00	0.00	1,300.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
1,314.00	0.00	0.00	1,314.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
Pierre Shale										
1,400.00	0.00	0.00	1,400.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
1,500.00	0.00	0.00	1,500.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
Surf Csg										
1,600.00	0.00	0.00	1,600.00	0.00	0.00	1,459,984.294	3,169,120.777		40.594461	-104.891015
Start Build 2.00										
1,700.00	2.00	237.89	1,699.98	-0.93	-1.48	1,459,983.367	3,169,119.299		40.594459	-104.891021
1,800.00	4.00	237.89	1,799.84	-3.71	-5.91	1,459,980.585	3,169,114.866		40.594451	-104.891037
1,900.00	6.00	237.89	1,899.45	-8.34	-13.29	1,459,975.954	3,169,107.483		40.594438	-104.891063
2,000.00	8.00	237.89	1,998.70	-14.82	-23.62	1,459,969.477	3,169,097.161		40.594421	-104.891101
2,100.00	10.00	237.89	2,097.47	-23.13	-36.87	1,459,961.163	3,169,083.910		40.594398	-104.891149
2,200.00	12.00	237.89	2,195.62	-33.27	-53.03	1,459,951.022	3,169,067.748		40.594371	-104.891207
2,300.00	14.00	237.89	2,293.06	-45.23	-72.08	1,459,939.067	3,169,048.694		40.594338	-104.891276
2,400.00	16.00	237.89	2,389.64	-58.98	-94.01	1,459,925.312	3,169,026.772		40.594301	-104.891355
2,500.00	18.00	237.89	2,485.27	-74.52	-118.77	1,459,909.773	3,169,002.007		40.594259	-104.891445
2,600.00	20.00	237.89	2,579.82	-91.82	-146.35	1,459,892.471	3,168,974.431		40.594212	-104.891544
2,700.00	22.00	237.89	2,673.17	-110.87	-176.70	1,459,873.425	3,168,944.076		40.594160	-104.891654
2,800.00	24.00	237.89	2,765.21	-131.64	-209.80	1,459,852.659	3,168,910.980		40.594104	-104.891774
2,900.00	26.00	237.89	2,855.84	-154.10	-245.59	1,459,830.199	3,168,875.184		40.594043	-104.891903
3,000.00	28.00	237.89	2,944.94	-178.22	-284.05	1,459,806.071	3,168,836.729		40.593977	-104.892042
3,100.00	30.00	237.89	3,032.39	-203.99	-325.11	1,459,780.305	3,168,795.665		40.593907	-104.892191
3,200.00	32.00	237.89	3,118.11	-231.36	-368.74	1,459,752.933	3,168,752.040		40.593833	-104.892349
3,300.00	34.00	237.89	3,201.97	-260.31	-414.87	1,459,723.988	3,168,705.908		40.593754	-104.892516
3,400.00	36.00	237.89	3,283.88	-290.79	-463.45	1,459,693.505	3,168,657.324		40.593672	-104.892691
3,500.00	38.00	237.89	3,363.74	-322.77	-514.43	1,459,661.521	3,168,606.349		40.593585	-104.892876
3,600.00	40.00	237.89	3,441.45	-356.22	-567.73	1,459,628.075	3,168,553.043		40.593494	-104.893068
3,700.00	42.00	237.89	3,516.92	-391.09	-623.30	1,459,593.208	3,168,497.474		40.593399	-104.893269
3,800.00	44.00	237.89	3,590.05	-427.33	-681.07	1,459,556.963	3,168,439.707		40.593301	-104.893478
3,900.00	46.00	237.89	3,660.76	-464.91	-740.96	1,459,519.383	3,168,379.813		40.593199	-104.893695
4,000.00	48.00	237.89	3,728.95	-503.78	-802.91	1,459,480.514	3,168,317.866		40.593093	-104.893919
4,100.00	50.00	237.89	3,794.56	-543.89	-866.84	1,459,440.405	3,168,253.940		40.592984	-104.894150
4,200.00	52.00	237.89	3,857.48	-585.19	-932.66	1,459,399.103	3,168,188.114		40.592872	-104.894388
4,300.00	54.00	237.89	3,917.66	-627.64	-1,000.31	1,459,356.658	3,168,120.467		40.592757	-104.894633
4,323.33	54.47	237.89	3,931.30	-637.70	-1,016.34	1,459,346.599	3,168,104.435		40.592730	-104.894691
Hold 54.47 Inc, 237.89 Az										
4,400.00	54.47	237.89	3,975.86	-670.86	-1,069.19	1,459,313.437	3,168,051.582		40.592640	-104.894882
4,500.00	54.47	237.89	4,033.98	-714.11	-1,138.13	1,459,270.186	3,167,982.650		40.592522	-104.895131

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

Planned Survey									
Measured			Vertical			Map	Map		
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
4,600.00	54.47	237.89	4,092.09	-757.36	-1,207.06	1,459,226.935	3,167,913.717	40.592405	-104.895380
4,700.00	54.47	237.89	4,150.21	-800.61	-1,275.99	1,459,183.684	3,167,844.785	40.592288	-104.895629
4,800.00	54.47	237.89	4,208.33	-843.86	-1,344.92	1,459,140.433	3,167,775.853	40.592170	-104.895879
4,813.20	54.47	237.89	4,216.00	-849.57	-1,354.02	1,459,134.724	3,167,766.755	40.592155	-104.895912
Sussex									
4,900.00	54.47	237.89	4,266.45	-887.11	-1,413.86	1,459,097.182	3,167,706.921	40.592053	-104.896128
5,000.00	54.47	237.89	4,324.57	-930.36	-1,482.79	1,459,053.930	3,167,637.988	40.591935	-104.896377
5,100.00	54.47	237.89	4,382.68	-973.62	-1,551.72	1,459,010.679	3,167,569.056	40.591818	-104.896627
5,200.00	54.47	237.89	4,440.80	-1,016.87	-1,620.65	1,458,967.428	3,167,500.124	40.591700	-104.896876
5,300.00	54.47	237.89	4,498.92	-1,060.12	-1,689.58	1,458,924.177	3,167,431.191	40.591583	-104.897125
5,400.00	54.47	237.89	4,557.04	-1,103.37	-1,758.52	1,458,880.926	3,167,362.259	40.591466	-104.897374
5,413.70	54.47	237.89	4,565.00	-1,109.29	-1,767.96	1,458,875.000	3,167,352.814	40.591449	-104.897408
Shannon									
5,463.60	54.47	237.89	4,594.00	-1,130.88	-1,802.36	1,458,853.418	3,167,318.418	40.591391	-104.897533
Pierre Shale									
5,500.00	54.47	237.89	4,615.15	-1,146.62	-1,827.45	1,458,837.675	3,167,293.327	40.591348	-104.897624
5,600.00	54.47	237.89	4,673.27	-1,189.87	-1,896.38	1,458,794.424	3,167,224.395	40.591231	-104.897873
5,700.00	54.47	237.89	4,731.39	-1,233.12	-1,965.31	1,458,751.173	3,167,155.462	40.591113	-104.898122
5,800.00	54.47	237.89	4,789.51	-1,276.37	-2,034.25	1,458,707.922	3,167,086.530	40.590996	-104.898371
5,900.00	54.47	237.89	4,847.63	-1,319.62	-2,103.18	1,458,664.671	3,167,017.598	40.590878	-104.898621
6,000.00	54.47	237.89	4,905.74	-1,362.87	-2,172.11	1,458,621.420	3,166,948.665	40.590761	-104.898870
6,100.00	54.47	237.89	4,963.86	-1,406.13	-2,241.04	1,458,578.169	3,166,879.733	40.590643	-104.899119
6,200.00	54.47	237.89	5,021.98	-1,449.38	-2,309.98	1,458,534.918	3,166,810.801	40.590526	-104.899368
6,300.00	54.47	237.89	5,080.10	-1,492.63	-2,378.91	1,458,491.667	3,166,741.869	40.590409	-104.899618
6,400.00	54.47	237.89	5,138.22	-1,535.88	-2,447.84	1,458,448.416	3,166,672.936	40.590291	-104.899867
6,500.00	54.47	237.89	5,196.33	-1,579.13	-2,516.77	1,458,405.165	3,166,604.004	40.590174	-104.900116
6,600.00	54.47	237.89	5,254.45	-1,622.38	-2,585.70	1,458,361.914	3,166,535.072	40.590056	-104.900365
6,700.00	54.47	237.89	5,312.57	-1,665.63	-2,654.64	1,458,318.663	3,166,466.139	40.589939	-104.900615
6,800.00	54.47	237.89	5,370.69	-1,708.88	-2,723.57	1,458,275.412	3,166,397.207	40.589821	-104.900864
6,900.00	54.47	237.89	5,428.80	-1,752.13	-2,792.50	1,458,232.161	3,166,328.275	40.589704	-104.901113
7,000.00	54.47	237.89	5,486.92	-1,795.38	-2,861.43	1,458,188.910	3,166,259.343	40.589587	-104.901362
7,100.00	54.47	237.89	5,545.04	-1,838.64	-2,930.37	1,458,145.659	3,166,190.410	40.589469	-104.901612
7,200.00	54.47	237.89	5,603.16	-1,881.89	-2,999.30	1,458,102.408	3,166,121.478	40.589352	-104.901861
7,300.00	54.47	237.89	5,661.28	-1,925.14	-3,068.23	1,458,059.156	3,166,052.546	40.589234	-104.902110
7,400.00	54.47	237.89	5,719.39	-1,968.39	-3,137.16	1,458,015.905	3,165,983.614	40.589117	-104.902359
7,500.00	54.47	237.89	5,777.51	-2,011.64	-3,206.09	1,457,972.654	3,165,914.681	40.588999	-104.902609
7,600.00	54.47	237.89	5,835.63	-2,054.89	-3,275.03	1,457,929.403	3,165,845.749	40.588882	-104.902858
7,700.00	54.47	237.89	5,893.75	-2,098.14	-3,343.96	1,457,886.152	3,165,776.817	40.588764	-104.903107
7,800.00	54.47	237.89	5,951.87	-2,141.39	-3,412.89	1,457,842.901	3,165,707.884	40.588647	-104.903356
7,900.00	54.47	237.89	6,009.98	-2,184.64	-3,481.82	1,457,799.650	3,165,638.952	40.588530	-104.903605
8,000.00	54.47	237.89	6,068.10	-2,227.90	-3,550.76	1,457,756.399	3,165,570.020	40.588412	-104.903855
8,100.00	54.47	237.89	6,126.22	-2,271.15	-3,619.69	1,457,713.148	3,165,501.088	40.588295	-104.904104
8,200.00	54.47	237.89	6,184.34	-2,314.40	-3,688.62	1,457,669.897	3,165,432.155	40.588177	-104.904353
8,300.00	54.47	237.89	6,242.46	-2,357.65	-3,757.55	1,457,626.646	3,165,363.223	40.588060	-104.904602
8,400.00	54.47	237.89	6,300.57	-2,400.90	-3,826.49	1,457,583.395	3,165,294.291	40.587942	-104.904852
8,500.00	54.47	237.89	6,358.69	-2,444.15	-3,895.42	1,457,540.144	3,165,225.358	40.587825	-104.905101
8,600.00	54.47	237.89	6,416.81	-2,487.40	-3,964.35	1,457,496.893	3,165,156.426	40.587707	-104.905350
8,700.00	54.47	237.89	6,474.93	-2,530.65	-4,033.28	1,457,453.642	3,165,087.494	40.587590	-104.905599
8,800.00	54.47	237.89	6,533.04	-2,573.90	-4,102.21	1,457,410.391	3,165,018.562	40.587473	-104.905849
8,900.00	54.47	237.89	6,591.16	-2,617.15	-4,171.15	1,457,367.140	3,164,949.629	40.587355	-104.906098
9,000.00	54.47	237.89	6,649.28	-2,660.41	-4,240.08	1,457,323.889	3,164,880.697	40.587238	-104.906347
9,100.00	54.47	237.89	6,707.40	-2,703.66	-4,309.01	1,457,280.638	3,164,811.765	40.587120	-104.906596
9,200.00	54.47	237.89	6,765.52	-2,746.91	-4,377.94	1,457,237.387	3,164,742.832	40.587003	-104.906845
9,300.00	54.47	237.89	6,823.63	-2,790.16	-4,446.88	1,457,194.136	3,164,673.900	40.586885	-104.907095

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,312.68	54.47	237.89	6,831.00	-2,795.64	-4,455.61	1,457,188.654	3,164,665.163	40.586870	-104.907126	
Niobrara										
9,400.00	54.47	237.89	6,881.75	-2,833.41	-4,515.81	1,457,150.885	3,164,604.968	40.586768	-104.907344	
9,500.00	54.47	237.89	6,939.87	-2,876.66	-4,584.74	1,457,107.633	3,164,536.036	40.586650	-104.907593	
9,590.78	54.47	237.89	6,992.63	-2,915.92	-4,647.31	1,457,068.372	3,164,473.462	40.586544	-104.907819	
KOP 10°/100										
9,600.00	55.10	238.72	6,997.95	-2,919.88	-4,653.73	1,457,064.413	3,164,467.050	40.586533	-104.907843	
9,700.00	62.26	246.90	7,049.96	-2,958.64	-4,729.67	1,457,025.655	3,164,391.107	40.586428	-104.908117	
9,800.00	69.85	254.04	7,090.56	-2,988.99	-4,815.72	1,456,995.303	3,164,305.054	40.586346	-104.908427	
9,835.56	72.61	256.40	7,102.00	-2,997.58	-4,848.28	1,456,986.718	3,164,272.500	40.586323	-104.908545	
Fort Hays										
9,900.00	77.69	260.50	7,118.51	-3,010.02	-4,909.27	1,456,974.279	3,164,211.507	40.586290	-104.908765	
9,934.16	80.41	262.61	7,125.00	-3,014.94	-4,942.44	1,456,969.358	3,164,178.338	40.586277	-104.908884	
Codell										
10,000.00	85.68	266.59	7,132.97	-3,021.07	-5,007.47	1,456,963.223	3,164,113.307	40.586262	-104.909119	
10,054.16	90.03	269.81	7,135.00	-3,022.77	-5,061.54	1,456,961.527	3,164,059.235	40.586258	-104.909313	
LP 90.03 Inc, 269.81 Az - LPL 6X-HC-07-07-67 1719 FSL 460 FEL										
10,100.00	90.03	269.81	7,134.98	-3,022.92	-5,107.38	1,456,961.379	3,164,013.392	40.586259	-104.909478	
10,200.00	90.03	269.81	7,134.92	-3,023.24	-5,207.38	1,456,961.056	3,163,913.392	40.586259	-104.909838	
10,300.00	90.03	269.81	7,134.87	-3,023.56	-5,307.38	1,456,960.733	3,163,813.393	40.586260	-104.910198	
10,400.00	90.03	269.81	7,134.81	-3,023.89	-5,407.38	1,456,960.409	3,163,713.393	40.586261	-104.910558	
10,500.00	90.03	269.81	7,134.76	-3,024.21	-5,507.38	1,456,960.086	3,163,613.394	40.586262	-104.910918	
10,600.00	90.03	269.81	7,134.70	-3,024.53	-5,607.38	1,456,959.763	3,163,513.394	40.586263	-104.911279	
10,700.00	90.03	269.81	7,134.65	-3,024.85	-5,707.38	1,456,959.440	3,163,413.395	40.586264	-104.911639	
10,800.00	90.03	269.81	7,134.60	-3,025.18	-5,807.38	1,456,959.117	3,163,313.395	40.586265	-104.911999	
10,900.00	90.03	269.81	7,134.54	-3,025.50	-5,907.38	1,456,958.794	3,163,213.396	40.586266	-104.912359	
11,000.00	90.03	269.81	7,134.49	-3,025.82	-6,007.38	1,456,958.471	3,163,113.396	40.586267	-104.912719	
11,100.00	90.03	269.81	7,134.43	-3,026.15	-6,107.38	1,456,958.148	3,163,013.397	40.586268	-104.913079	
11,200.00	90.03	269.81	7,134.38	-3,026.47	-6,207.38	1,456,957.825	3,162,913.398	40.586269	-104.913439	
11,300.00	90.03	269.81	7,134.32	-3,026.79	-6,307.38	1,456,957.501	3,162,813.398	40.586270	-104.913799	
11,400.00	90.03	269.81	7,134.27	-3,027.12	-6,407.38	1,456,957.178	3,162,713.399	40.586271	-104.914159	
11,500.00	90.03	269.81	7,134.22	-3,027.44	-6,507.38	1,456,956.855	3,162,613.399	40.586272	-104.914519	
11,600.00	90.03	269.81	7,134.16	-3,027.76	-6,607.38	1,456,956.532	3,162,513.400	40.586273	-104.914879	
11,700.00	90.03	269.81	7,134.11	-3,028.09	-6,707.38	1,456,956.209	3,162,413.400	40.586273	-104.915239	
11,800.00	90.03	269.81	7,134.05	-3,028.41	-6,807.38	1,456,955.886	3,162,313.401	40.586274	-104.915599	
11,900.00	90.03	269.81	7,134.00	-3,028.73	-6,907.38	1,456,955.563	3,162,213.401	40.586275	-104.915959	
12,000.00	90.03	269.81	7,133.94	-3,029.05	-7,007.37	1,456,955.240	3,162,113.402	40.586276	-104.916319	
12,100.00	90.03	269.81	7,133.89	-3,029.38	-7,107.37	1,456,954.917	3,162,013.402	40.586277	-104.916679	
12,200.00	90.03	269.81	7,133.84	-3,029.70	-7,207.37	1,456,954.594	3,161,913.403	40.586278	-104.917039	
12,300.00	90.03	269.81	7,133.78	-3,030.02	-7,307.37	1,456,954.270	3,161,813.403	40.586279	-104.917399	
12,400.00	90.03	269.81	7,133.73	-3,030.35	-7,407.37	1,456,953.947	3,161,713.404	40.586280	-104.917759	
12,500.00	90.03	269.81	7,133.67	-3,030.67	-7,507.37	1,456,953.624	3,161,613.405	40.586281	-104.918119	
12,600.00	90.03	269.81	7,133.62	-3,030.99	-7,607.37	1,456,953.301	3,161,513.405	40.586282	-104.918479	
12,700.00	90.03	269.81	7,133.56	-3,031.32	-7,707.37	1,456,952.978	3,161,413.406	40.586283	-104.918839	
12,800.00	90.03	269.81	7,133.51	-3,031.64	-7,807.37	1,456,952.655	3,161,313.406	40.586284	-104.919199	
12,900.00	90.03	269.81	7,133.46	-3,031.96	-7,907.37	1,456,952.332	3,161,213.407	40.586284	-104.919559	
13,000.00	90.03	269.81	7,133.40	-3,032.29	-8,007.37	1,456,952.009	3,161,113.407	40.586285	-104.919919	
13,100.00	90.03	269.81	7,133.35	-3,032.61	-8,107.37	1,456,951.686	3,161,013.408	40.586286	-104.920280	
13,200.00	90.03	269.81	7,133.29	-3,032.93	-8,207.37	1,456,951.362	3,160,913.408	40.586287	-104.920640	
13,300.00	90.03	269.81	7,133.24	-3,033.26	-8,307.37	1,456,951.039	3,160,813.409	40.586288	-104.921000	
13,400.00	90.03	269.81	7,133.18	-3,033.58	-8,407.37	1,456,950.716	3,160,713.409	40.586289	-104.921360	
13,500.00	90.03	269.81	7,133.13	-3,033.90	-8,507.37	1,456,950.393	3,160,613.410	40.586290	-104.921720	
13,600.00	90.03	269.81	7,133.08	-3,034.22	-8,607.37	1,456,950.070	3,160,513.411	40.586291	-104.922080	
13,700.00	90.03	269.81	7,133.02	-3,034.55	-8,707.37	1,456,949.747	3,160,413.411	40.586292	-104.922440	

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
13,800.00	90.03	269.81	7,132.97	-3,034.87	-8,807.36	1,456,949.424	3,160,313.412	40.586293	-104.922800	
13,900.00	90.03	269.81	7,132.91	-3,035.19	-8,907.36	1,456,949.101	3,160,213.412	40.586293	-104.923160	
14,000.00	90.03	269.81	7,132.86	-3,035.52	-9,007.36	1,456,948.778	3,160,113.413	40.586294	-104.923520	
14,100.00	90.03	269.81	7,132.80	-3,035.84	-9,107.36	1,456,948.455	3,160,013.413	40.586295	-104.923880	
14,200.00	90.03	269.81	7,132.75	-3,036.16	-9,207.36	1,456,948.131	3,159,913.414	40.586296	-104.924240	
14,300.00	90.03	269.81	7,132.70	-3,036.49	-9,307.36	1,456,947.808	3,159,813.414	40.586297	-104.924600	
14,400.00	90.03	269.81	7,132.64	-3,036.81	-9,407.36	1,456,947.485	3,159,713.415	40.586298	-104.924960	
14,500.00	90.03	269.81	7,132.59	-3,037.13	-9,507.36	1,456,947.162	3,159,613.415	40.586299	-104.925320	
14,600.00	90.03	269.81	7,132.53	-3,037.46	-9,607.36	1,456,946.839	3,159,513.416	40.586300	-104.925680	
14,700.00	90.03	269.81	7,132.48	-3,037.78	-9,707.36	1,456,946.516	3,159,413.416	40.586301	-104.926040	
14,751.69	90.03	269.81	7,132.45	-3,037.95	-9,759.04	1,456,946.349	3,159,361.732	40.586301	-104.926226	
2/100 Turn - AP 6X-HC-07-07-67 1722 FSL 119 FWL										
14,800.00	90.03	268.85	7,132.42	-3,038.51	-9,807.36	1,456,945.785	3,159,313.421	40.586300	-104.926400	
14,900.00	90.03	266.85	7,132.37	-3,042.26	-9,907.28	1,456,942.031	3,159,213.496	40.586292	-104.926760	
14,924.81	90.03	266.35	7,132.36	-3,043.73	-9,932.05	1,456,940.560	3,159,188.725	40.586288	-104.926849	
Hold 90.03 Inc, 266.35 Az										
15,000.00	90.03	266.35	7,132.32	-3,048.52	-10,007.08	1,456,935.777	3,159,113.692	40.586276	-104.927120	
15,100.00	90.03	266.35	7,132.26	-3,054.88	-10,106.88	1,456,929.414	3,159,013.895	40.586261	-104.927479	
15,200.00	90.03	266.35	7,132.21	-3,061.24	-10,206.68	1,456,923.052	3,158,914.098	40.586245	-104.927838	
15,300.00	90.03	266.35	7,132.15	-3,067.60	-10,306.48	1,456,916.690	3,158,814.300	40.586229	-104.928198	
15,400.00	90.03	266.35	7,132.10	-3,073.97	-10,406.27	1,456,910.328	3,158,714.503	40.586214	-104.928557	
15,500.00	90.03	266.35	7,132.04	-3,080.33	-10,506.07	1,456,903.966	3,158,614.705	40.586198	-104.928917	
15,600.00	90.03	266.35	7,131.99	-3,086.69	-10,605.87	1,456,897.604	3,158,514.908	40.586182	-104.929276	
15,700.00	90.03	266.35	7,131.94	-3,093.05	-10,705.67	1,456,891.241	3,158,415.111	40.586167	-104.929636	
15,800.00	90.03	266.35	7,131.88	-3,099.42	-10,805.46	1,456,884.879	3,158,315.313	40.586151	-104.929995	
15,900.00	90.03	266.35	7,131.83	-3,105.78	-10,905.26	1,456,878.517	3,158,215.516	40.586135	-104.930355	
16,000.00	90.03	266.35	7,131.77	-3,112.14	-11,005.06	1,456,872.155	3,158,115.718	40.586119	-104.930714	
16,100.00	90.03	266.35	7,131.72	-3,118.50	-11,104.86	1,456,865.793	3,158,015.921	40.586104	-104.931074	
16,200.00	90.03	266.35	7,131.66	-3,124.86	-11,204.65	1,456,859.431	3,157,916.124	40.586088	-104.931433	
16,300.00	90.03	266.35	7,131.61	-3,131.23	-11,304.45	1,456,853.069	3,157,816.326	40.586072	-104.931792	
16,400.00	90.03	266.35	7,131.56	-3,137.59	-11,404.25	1,456,846.706	3,157,716.529	40.586057	-104.932152	
16,500.00	90.03	266.35	7,131.50	-3,143.95	-11,504.05	1,456,840.344	3,157,616.731	40.586041	-104.932511	
16,600.00	90.03	266.35	7,131.45	-3,150.31	-11,603.84	1,456,833.982	3,157,516.934	40.586025	-104.932871	
16,700.00	90.03	266.35	7,131.39	-3,156.67	-11,703.64	1,456,827.620	3,157,417.137	40.586010	-104.933230	
16,800.00	90.03	266.35	7,131.34	-3,163.04	-11,803.44	1,456,821.258	3,157,317.339	40.585994	-104.933590	
16,900.00	90.03	266.35	7,131.28	-3,169.40	-11,903.23	1,456,814.896	3,157,217.542	40.585978	-104.933949	
17,000.00	90.03	266.35	7,131.23	-3,175.76	-12,003.03	1,456,808.533	3,157,117.744	40.585962	-104.934309	
17,100.00	90.03	266.35	7,131.18	-3,182.12	-12,102.83	1,456,802.171	3,157,017.947	40.585947	-104.934668	
17,200.00	90.03	266.35	7,131.12	-3,188.49	-12,202.63	1,456,795.809	3,156,918.150	40.585931	-104.935027	
17,300.00	90.03	266.35	7,131.07	-3,194.85	-12,302.42	1,456,789.447	3,156,818.352	40.585915	-104.935387	
17,400.00	90.03	266.35	7,131.01	-3,201.21	-12,402.22	1,456,783.085	3,156,718.555	40.585900	-104.935746	
17,500.00	90.03	266.35	7,130.96	-3,207.57	-12,502.02	1,456,776.723	3,156,618.758	40.585884	-104.936106	
17,600.00	90.03	266.35	7,130.90	-3,213.93	-12,601.82	1,456,770.360	3,156,518.960	40.585868	-104.936465	
17,700.00	90.03	266.35	7,130.85	-3,220.30	-12,701.61	1,456,763.998	3,156,419.163	40.585852	-104.936825	
17,800.00	90.03	266.35	7,130.80	-3,226.66	-12,801.41	1,456,757.636	3,156,319.365	40.585837	-104.937184	
17,900.00	90.03	266.35	7,130.74	-3,233.02	-12,901.21	1,456,751.274	3,156,219.568	40.585821	-104.937544	
18,000.00	90.03	266.35	7,130.69	-3,239.38	-13,001.01	1,456,744.912	3,156,119.771	40.585805	-104.937903	
18,100.00	90.03	266.35	7,130.63	-3,245.74	-13,100.80	1,456,738.550	3,156,019.973	40.585789	-104.938263	
18,200.00	90.03	266.35	7,130.58	-3,252.11	-13,200.60	1,456,732.188	3,155,920.176	40.585774	-104.938622	
18,300.00	90.03	266.35	7,130.52	-3,258.47	-13,300.40	1,456,725.825	3,155,820.378	40.585758	-104.938981	
18,400.00	90.03	266.35	7,130.47	-3,264.83	-13,400.20	1,456,719.463	3,155,720.581	40.585742	-104.939341	
18,500.00	90.03	266.35	7,130.42	-3,271.19	-13,499.99	1,456,713.101	3,155,620.784	40.585727	-104.939700	
18,600.00	90.03	266.35	7,130.36	-3,277.56	-13,599.79	1,456,706.739	3,155,520.986	40.585711	-104.940060	
18,700.00	90.03	266.35	7,130.31	-3,283.92	-13,699.59	1,456,700.377	3,155,421.189	40.585695	-104.940419	



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
18,800.00	90.03	266.35	7,130.25	-3,290.28	-13,799.39	1,456,694.015	3,155,321.391	40.585679	-104.940779
18,900.00	90.03	266.35	7,130.20	-3,296.64	-13,899.18	1,456,687.652	3,155,221.594	40.585664	-104.941138
19,000.00	90.03	266.35	7,130.14	-3,303.00	-13,998.98	1,456,681.290	3,155,121.797	40.585648	-104.941498
19,100.00	90.03	266.35	7,130.09	-3,309.37	-14,098.78	1,456,674.928	3,155,021.999	40.585632	-104.941857
19,200.00	90.03	266.35	7,130.04	-3,315.73	-14,198.57	1,456,668.566	3,154,922.202	40.585616	-104.942216
19,265.33	90.03	266.35	7,130.00	-3,319.89	-14,263.77	1,456,664.409	3,154,857.003	40.585606	-104.942451
TD at 19265.33 - BHL 6X-HC-07-07-67 1720 FSL 460 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 6X-HC-07-07-67 54 - plan hits target center - Point	0.00	0.01	0.00	0.00	0.00	1,459,984.294	3,169,120.777	40.594461	-104.891015
BHL 6X-HC-07-07-67 17 - plan hits target center - Point	0.00	0.00	7,130.00	-3,319.89	-14,263.77	1,456,664.409	3,154,857.003	40.585606	-104.942451
AP 6X-HC-07-07-67 172 - plan hits target center - Point	0.00	0.00	7,132.45	-3,037.95	-9,759.04	1,456,946.349	3,159,361.732	40.586301	-104.926226
LPL 6X-HC-07-07-67 17 - plan hits target center - Point	0.00	0.00	7,135.00	-3,022.77	-5,061.54	1,456,961.527	3,164,059.235	40.586258	-104.909313

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.00	0.00	Laramie-Fox Hills				
300.00	300.00	Upper Pierre				
1,314.00	1,314.00	Pierre Shale				
4,813.20	4,216.00	Sussex				
5,413.70	4,565.00	Shannon				
5,463.60	4,594.00	Pierre Shale				
9,312.68	6,831.00	Niobrara				
9,835.56	7,102.00	Fort Hays				
9,934.16	7,125.00	Codell				



<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM WEST-6X-HC-07-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	WELL @ 5115.00usft (Original Well Elev)
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM WEST-6X-HC-07-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

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
4,323.33	3,931.30	-637.70	-1,016.34	Hold 54.47 Inc, 237.89 Az
9,590.78	6,992.63	-2,915.92	-4,647.31	KOP 10°/100
10,054.16	7,135.00	-3,022.77	-5,061.54	LP 90.03 Inc, 269.81 Az
14,751.69	7,132.45	-3,037.95	-9,759.04	2/100 Turn
14,924.81	7,132.36	-3,043.73	-9,932.05	Hold 90.03 Inc, 266.35 Az
19,265.33	7,130.00	-3,319.89	-14,263.77	TD at 19265.33