

Well Name:

BLEHM-7X-HC-10-07-67

Project Name:

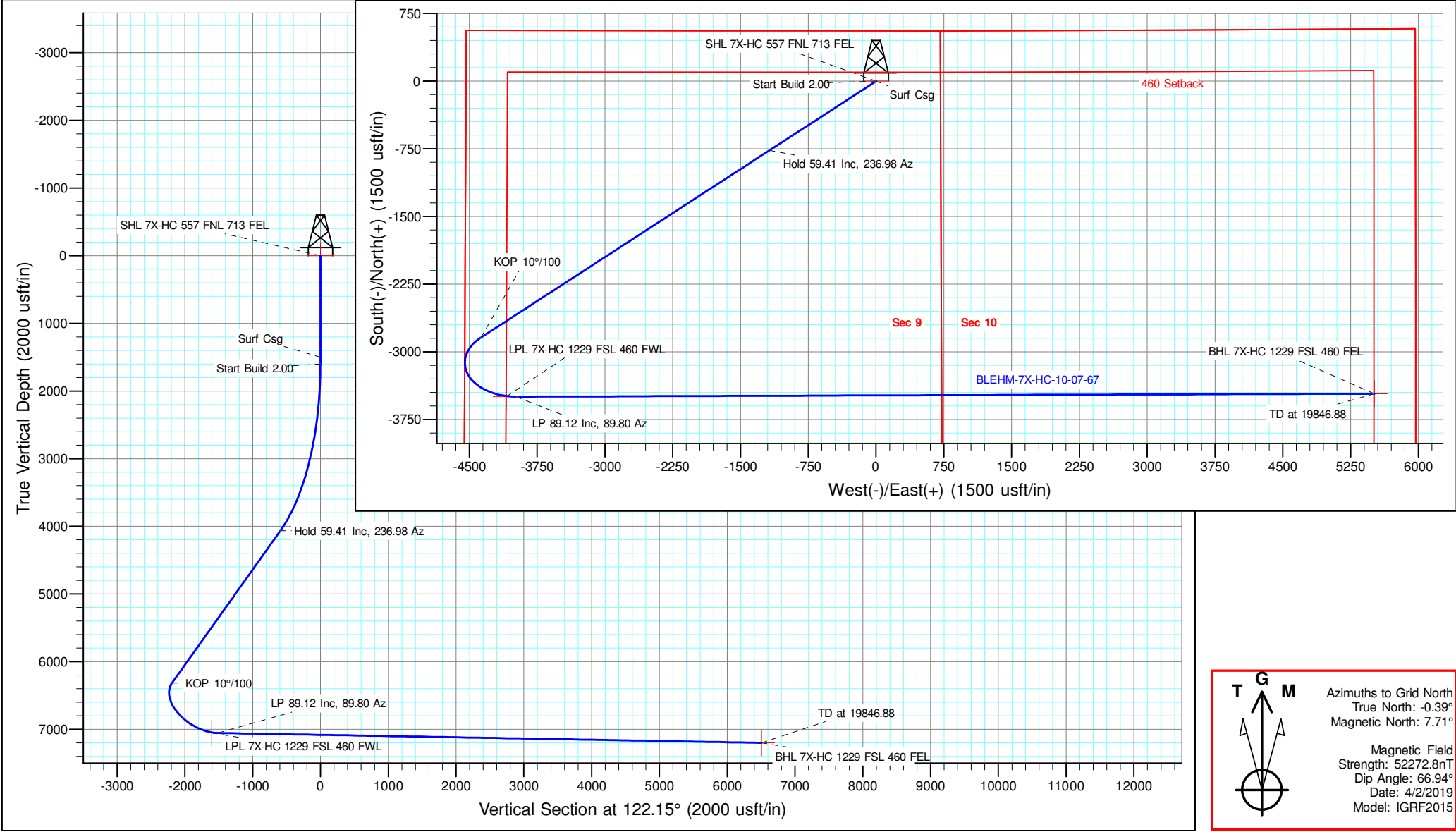
Sec. 9-T7N-R67W

Pad Name:

BLEHM 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	
4570.41	59.41	236.98	4066.05	-766.61	-1179.63	-590.87	1406.84	Hold 59.41 Inc, 236.98 Az	
8995.11	59.41	236.98	6317.86	-2842.11	-4373.31	-2190.59	5215.69	KOP 10°/100	
10351.99	89.12	89.80	7055.50	-3497.20	-3982.00	-1510.71	6309.88	LP 89.12 Inc, 89.80 Az	
19846.88	89.12	89.80	7200.79	-3463.81	5510.71	6508.91	15802.65	TD at 19846.88	

Geodetic Datum:				Elevation:				
North American Datum 1983 US State Plane 1983, Colorado Northern Zone				Ground Elevation: 5088.00 KB Elevation: KB @ 5115.00usft				
DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL 7X-HC 557 FNL 713 FEL	0.00	0.00	0.00	1459971.884	3169070.039	40.594428	-104.891198	Point
LPL 7X-HC 1229 FSL 460 FWL	7054.00	-3497.52	-4092.91	1456474.367	3164977.134	40.584904	-104.906020	Point
- plan misses target center by 10.74usft at 10242.78usft MD (7046.12 TVD, -3490.65 N, -4090.45 E)								
BHL 7X-HC 1229 FSL 460 FEL	7201.00	-3463.73	5511.72	1456508.152	3174581.755	40.584815	-104.871440	Point





## **Nickel Road Operating**

**Sec. 9-T7N-R67W**

**BLEHM Pad**

**BLEHM-7X-HC-10-07-67**

**Wellbore #1**

**Plan: Plan #2**

## **Standard Planning Report - Geographic**

**20 July, 2020**

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM-7X-HC-10-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	KB @ 5115.00usft
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	KB @ 5115.00usft
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM-7X-HC-10-07-67	<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:	1,458,460.000 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-7X-HC-10-07-67					
Well Position	+N/-S	0.00 usft	Northing:	1,459,971.883 usft	Latitude:	40.594428
	+E/-W	0.00 usft	Easting:	3,169,070.040 usft	Longitude:	-104.891198
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	4/2/2019	8.10	66.94	52,272.78831268

<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	122.15

<b>Plan Survey Tool Program</b>	<b>Date</b>	7/20/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	19,846.29 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	
4,570.41	59.41	236.98	4,066.05	-766.61	-1,179.63	2.00	2.00	0.00	236.98	
8,995.11	59.41	236.98	6,317.86	-2,842.11	-4,373.31	0.00	0.00	0.00	0.00	
10,351.99	89.12	89.80	7,055.50	-3,497.20	-3,982.00	10.00	2.19	-10.85	-129.13	
19,846.88	89.12	89.80	7,201.00	-3,463.73	5,511.72	0.00	0.00	0.00	0.00	BHL 7X-HC 1229 FSL

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM-7X-HC-10-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	KB @ 5115.00usft
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	KB @ 5115.00usft
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM-7X-HC-10-07-67	<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
0.00	0.00	0.00	0.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
<b>SHL 7X-HC 557 FNL 713 FEL</b>									
100.00	0.00	0.00	100.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
200.00	0.00	0.00	200.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
300.00	0.00	0.00	300.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
400.00	0.00	0.00	400.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
500.00	0.00	0.00	500.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
600.00	0.00	0.00	600.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
700.00	0.00	0.00	700.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
800.00	0.00	0.00	800.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
900.00	0.00	0.00	900.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
1,000.00	0.00	0.00	1,000.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
1,100.00	0.00	0.00	1,100.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
1,200.00	0.00	0.00	1,200.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
1,300.00	0.00	0.00	1,300.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
1,400.00	0.00	0.00	1,400.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
1,500.00	0.00	0.00	1,500.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
<b>Surf Csg</b>									
1,600.00	0.00	0.00	1,600.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
<b>Start Build 2.00</b>									
1,700.00	2.00	236.98	1,699.98	-0.95	-1.46	1,459,970.932	3,169,068.576	40.594425	-104.891204
1,800.00	4.00	236.98	1,799.84	-3.80	-5.85	1,459,968.081	3,169,064.188	40.594418	-104.891219
1,900.00	6.00	236.98	1,899.45	-8.55	-13.16	1,459,963.331	3,169,056.881	40.594405	-104.891246
2,000.00	8.00	236.98	1,998.70	-15.19	-23.38	1,459,956.691	3,169,046.663	40.594387	-104.891283
2,100.00	10.00	236.98	2,097.47	-23.72	-36.49	1,459,948.167	3,169,033.546	40.594364	-104.891330
2,200.00	12.00	236.98	2,195.62	-34.11	-52.49	1,459,937.770	3,169,017.548	40.594335	-104.891388
2,300.00	14.00	236.98	2,293.06	-46.37	-71.35	1,459,925.513	3,168,998.687	40.594302	-104.891456
2,400.00	16.00	236.98	2,389.64	-60.47	-93.05	1,459,911.410	3,168,976.986	40.594264	-104.891535
2,500.00	18.00	236.98	2,485.27	-76.40	-117.57	1,459,895.479	3,168,952.473	40.594220	-104.891623
2,600.00	20.00	236.98	2,579.82	-94.14	-144.86	1,459,877.739	3,168,925.175	40.594172	-104.891722
2,700.00	22.00	236.98	2,673.17	-113.67	-174.91	1,459,858.212	3,168,895.128	40.594119	-104.891831
2,800.00	24.00	236.98	2,765.21	-134.96	-207.67	1,459,836.922	3,168,862.367	40.594061	-104.891949
2,900.00	26.00	236.98	2,855.84	-157.99	-243.11	1,459,813.894	3,168,826.933	40.593999	-104.892078
3,000.00	28.00	236.98	2,944.94	-182.73	-281.17	1,459,789.156	3,168,788.868	40.593932	-104.892215
3,100.00	30.00	236.98	3,032.39	-209.14	-321.82	1,459,762.740	3,168,748.220	40.593860	-104.892362
3,200.00	32.00	236.98	3,118.11	-237.21	-365.00	1,459,734.676	3,168,705.036	40.593784	-104.892518
3,300.00	34.00	236.98	3,201.97	-266.88	-410.67	1,459,704.999	3,168,659.371	40.593703	-104.892684
3,400.00	36.00	236.98	3,283.88	-298.14	-458.76	1,459,673.745	3,168,611.280	40.593618	-104.892858
3,500.00	38.00	236.98	3,363.74	-330.93	-509.22	1,459,640.953	3,168,560.820	40.593529	-104.893040
3,600.00	40.00	236.98	3,441.45	-365.22	-561.98	1,459,606.662	3,168,508.054	40.593436	-104.893231
3,700.00	42.00	236.98	3,516.92	-400.97	-616.99	1,459,570.914	3,168,453.047	40.593339	-104.893430
3,800.00	44.00	236.98	3,590.05	-438.13	-674.17	1,459,533.753	3,168,395.865	40.593238	-104.893637
3,900.00	46.00	236.98	3,660.76	-476.66	-733.46	1,459,495.224	3,168,336.578	40.593133	-104.893851
4,000.00	48.00	236.98	3,728.95	-516.51	-794.78	1,459,455.373	3,168,275.258	40.593025	-104.894073
4,100.00	50.00	236.98	3,794.56	-557.63	-858.06	1,459,414.250	3,168,211.979	40.592913	-104.894302
4,200.00	52.00	236.98	3,857.48	-599.98	-923.22	1,459,371.904	3,168,146.820	40.592798	-104.894537
4,300.00	54.00	236.98	3,917.66	-643.50	-990.18	1,459,328.387	3,168,079.858	40.592680	-104.894779
4,400.00	56.00	236.98	3,975.02	-688.13	-1,058.86	1,459,283.753	3,168,011.177	40.592559	-104.895028
4,500.00	58.00	236.98	4,029.48	-733.83	-1,129.18	1,459,238.054	3,167,940.859	40.592435	-104.895282
4,570.41	59.41	236.98	4,066.05	-766.61	-1,179.63	1,459,205.271	3,167,890.413	40.592346	-104.895465
<b>Hold 59.41 Inc, 236.98 Az</b>									
4,600.00	59.41	236.98	4,081.11	-780.49	-1,200.98	1,459,191.390	3,167,869.054	40.592308	-104.895542
4,700.00	59.41	236.98	4,132.00	-827.40	-1,273.16	1,459,144.483	3,167,796.876	40.592181	-104.895803
4,800.00	59.41	236.98	4,182.90	-874.31	-1,345.34	1,459,097.576	3,167,724.697	40.592053	-104.896064

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM-7X-HC-10-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	KB @ 5115.00usft
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	KB @ 5115.00usft
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM-7X-HC-10-07-67	<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
4,900.00	59.41	236.98	4,233.79	-921.21	-1,417.52	1,459,050.669	3,167,652.519	40.591926	-104.896325
5,000.00	59.41	236.98	4,284.68	-968.12	-1,489.70	1,459,003.762	3,167,580.340	40.591799	-104.896586
5,100.00	59.41	236.98	4,335.57	-1,015.03	-1,561.88	1,458,956.855	3,167,508.162	40.591671	-104.896847
5,200.00	59.41	236.98	4,386.46	-1,061.94	-1,634.06	1,458,909.947	3,167,435.983	40.591544	-104.897108
5,300.00	59.41	236.98	4,437.35	-1,108.84	-1,706.23	1,458,863.040	3,167,363.805	40.591416	-104.897369
5,400.00	59.41	236.98	4,488.25	-1,155.75	-1,778.41	1,458,816.133	3,167,291.626	40.591289	-104.897630
5,500.00	59.41	236.98	4,539.14	-1,202.66	-1,850.59	1,458,769.226	3,167,219.448	40.591162	-104.897891
5,600.00	59.41	236.98	4,590.03	-1,249.56	-1,922.77	1,458,722.319	3,167,147.269	40.591034	-104.898152
5,700.00	59.41	236.98	4,640.92	-1,296.47	-1,994.95	1,458,675.411	3,167,075.091	40.590907	-104.898413
5,800.00	59.41	236.98	4,691.81	-1,343.38	-2,067.13	1,458,628.504	3,167,002.912	40.590779	-104.898674
5,900.00	59.41	236.98	4,742.71	-1,390.29	-2,139.30	1,458,581.597	3,166,930.734	40.590652	-104.898935
6,000.00	59.41	236.98	4,793.60	-1,437.19	-2,211.48	1,458,534.690	3,166,858.555	40.590525	-104.899196
6,100.00	59.41	236.98	4,844.49	-1,484.10	-2,283.66	1,458,487.783	3,166,786.377	40.590397	-104.899457
6,200.00	59.41	236.98	4,895.38	-1,531.01	-2,355.84	1,458,440.876	3,166,714.198	40.590270	-104.899718
6,300.00	59.41	236.98	4,946.27	-1,577.91	-2,428.02	1,458,393.968	3,166,642.020	40.590142	-104.899979
6,400.00	59.41	236.98	4,997.17	-1,624.82	-2,500.20	1,458,347.061	3,166,569.841	40.590015	-104.900240
6,500.00	59.41	236.98	5,048.06	-1,671.73	-2,572.38	1,458,300.154	3,166,497.663	40.589887	-104.900502
6,600.00	59.41	236.98	5,098.95	-1,718.64	-2,644.55	1,458,253.247	3,166,425.484	40.589760	-104.900763
6,700.00	59.41	236.98	5,149.84	-1,765.54	-2,716.73	1,458,206.340	3,166,353.306	40.589633	-104.901024
6,800.00	59.41	236.98	5,200.73	-1,812.45	-2,788.91	1,458,159.432	3,166,281.127	40.589505	-104.901285
6,900.00	59.41	236.98	5,251.62	-1,859.36	-2,861.09	1,458,112.525	3,166,208.949	40.589378	-104.901546
7,000.00	59.41	236.98	5,302.52	-1,906.27	-2,933.27	1,458,065.618	3,166,136.770	40.589250	-104.901807
7,100.00	59.41	236.98	5,353.41	-1,953.17	-3,005.45	1,458,018.711	3,166,064.592	40.589123	-104.902068
7,200.00	59.41	236.98	5,404.30	-2,000.08	-3,077.63	1,457,971.804	3,165,992.413	40.588996	-104.902329
7,300.00	59.41	236.98	5,455.19	-2,046.99	-3,149.80	1,457,924.897	3,165,920.235	40.588868	-104.902590
7,400.00	59.41	236.98	5,506.08	-2,093.89	-3,221.98	1,457,877.989	3,165,848.056	40.588741	-104.902851
7,500.00	59.41	236.98	5,556.98	-2,140.80	-3,294.16	1,457,831.082	3,165,775.878	40.588613	-104.903112
7,600.00	59.41	236.98	5,607.87	-2,187.71	-3,366.34	1,457,784.175	3,165,703.699	40.588486	-104.903373
7,700.00	59.41	236.98	5,658.76	-2,234.62	-3,438.52	1,457,737.268	3,165,631.521	40.588358	-104.903634
7,800.00	59.41	236.98	5,709.65	-2,281.52	-3,510.70	1,457,690.361	3,165,559.342	40.588231	-104.903895
7,900.00	59.41	236.98	5,760.54	-2,328.43	-3,582.87	1,457,643.453	3,165,487.164	40.588104	-104.904156
8,000.00	59.41	236.98	5,811.43	-2,375.34	-3,655.05	1,457,596.546	3,165,414.985	40.587976	-104.904417
8,100.00	59.41	236.98	5,862.33	-2,422.24	-3,727.23	1,457,549.639	3,165,342.807	40.587849	-104.904678
8,200.00	59.41	236.98	5,913.22	-2,469.15	-3,799.41	1,457,502.732	3,165,270.628	40.587721	-104.904939
8,300.00	59.41	236.98	5,964.11	-2,516.06	-3,871.59	1,457,455.825	3,165,198.450	40.587594	-104.905200
8,400.00	59.41	236.98	6,015.00	-2,562.97	-3,943.77	1,457,408.917	3,165,126.271	40.587467	-104.905461
8,500.00	59.41	236.98	6,065.89	-2,609.87	-4,015.95	1,457,362.010	3,165,054.093	40.587339	-104.905722
8,600.00	59.41	236.98	6,116.79	-2,656.78	-4,088.12	1,457,315.103	3,164,981.914	40.587212	-104.905983
8,700.00	59.41	236.98	6,167.68	-2,703.69	-4,160.30	1,457,268.196	3,164,909.736	40.587084	-104.906244
8,800.00	59.41	236.98	6,218.57	-2,750.59	-4,232.48	1,457,221.289	3,164,837.557	40.586957	-104.906505
8,900.00	59.41	236.98	6,269.46	-2,797.50	-4,304.66	1,457,174.382	3,164,765.379	40.586829	-104.906766
8,995.11	59.41	236.98	6,317.86	-2,842.11	-4,373.31	1,457,129.770	3,164,696.733	40.586708	-104.907014
KOP 10°/100									
9,000.00	59.10	236.54	6,320.36	-2,844.42	-4,376.82	1,457,127.464	3,164,693.215	40.586702	-104.907027
9,100.00	53.18	226.82	6,376.15	-2,895.59	-4,441.97	1,457,076.289	3,164,628.070	40.586563	-104.907263
9,200.00	48.17	215.61	6,439.62	-2,953.42	-4,492.98	1,457,018.462	3,164,577.058	40.586405	-104.907448
9,300.00	44.43	202.77	6,508.85	-3,016.14	-4,528.31	1,456,955.739	3,164,541.730	40.586233	-104.907576
9,400.00	42.29	188.51	6,581.73	-3,081.86	-4,546.88	1,456,890.027	3,164,523.159	40.586053	-104.907645
9,500.00	42.02	173.60	6,656.05	-3,148.56	-4,548.13	1,456,823.322	3,164,521.908	40.585870	-104.907651
9,600.00	43.66	159.07	6,729.55	-3,214.23	-4,532.02	1,456,757.651	3,164,538.016	40.585690	-104.907594
9,700.00	47.00	145.79	6,800.00	-3,276.87	-4,499.04	1,456,695.010	3,164,570.994	40.585517	-104.907477
9,800.00	51.70	134.13	6,865.26	-3,334.58	-4,450.20	1,456,637.301	3,164,619.840	40.585358	-104.907303
9,900.00	57.39	124.03	6,923.34	-3,385.60	-4,386.97	1,456,586.279	3,164,683.069	40.585217	-104.907076
10,000.00	63.80	115.21	6,972.48	-3,428.39	-4,311.28	1,456,543.493	3,164,758.760	40.585098	-104.906805

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM-7X-HC-10-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	KB @ 5115.00usft
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	KB @ 5115.00usft
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM-7X-HC-10-07-67	<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)			
10,100.00	70.69	107.33	7,011.19	-3,461.64	-4,225.43	1,456,510.244	3,164,844.613	40.585005	-104.906497	
10,200.00	77.88	100.12	7,038.29	-3,484.34	-4,132.02	1,456,487.541	3,164,938.020	40.584941	-104.906161	
10,242.30	80.99	97.19	7,046.04	-3,490.59	-4,090.92	1,456,481.292	3,164,979.123	40.584923	-104.906013	
LPL 7X-HC 1229 FSL 460 FWL										
10,300.00	85.26	93.28	7,052.95	-3,495.81	-4,033.90	1,456,476.075	3,165,036.143	40.584908	-104.905808	
10,351.99	89.12	89.80	7,055.50	-3,497.20	-3,982.00	1,456,474.683	3,165,088.039	40.584903	-104.905621	
LP 89.12 Inc, 89.80 Az										
10,400.00	89.12	89.80	7,056.23	-3,497.03	-3,934.00	1,456,474.852	3,165,136.038	40.584902	-104.905448	
10,500.00	89.12	89.80	7,057.77	-3,496.68	-3,834.01	1,456,475.204	3,165,236.026	40.584902	-104.905088	
10,600.00	89.12	89.80	7,059.30	-3,496.33	-3,734.03	1,456,475.556	3,165,336.014	40.584901	-104.904728	
10,700.00	89.12	89.80	7,060.83	-3,495.98	-3,634.04	1,456,475.907	3,165,436.001	40.584900	-104.904368	
10,800.00	89.12	89.80	7,062.36	-3,495.62	-3,534.05	1,456,476.259	3,165,535.989	40.584899	-104.904008	
10,900.00	89.12	89.80	7,063.89	-3,495.27	-3,434.06	1,456,476.611	3,165,635.977	40.584898	-104.903648	
11,000.00	89.12	89.80	7,065.42	-3,494.92	-3,334.07	1,456,476.962	3,165,735.964	40.584897	-104.903288	
11,100.00	89.12	89.80	7,066.95	-3,494.57	-3,234.09	1,456,477.314	3,165,835.952	40.584896	-104.902928	
11,200.00	89.12	89.80	7,068.48	-3,494.22	-3,134.10	1,456,477.666	3,165,935.940	40.584895	-104.902568	
11,300.00	89.12	89.80	7,070.01	-3,493.87	-3,034.11	1,456,478.018	3,166,035.927	40.584895	-104.902208	
11,400.00	89.12	89.80	7,071.54	-3,493.51	-2,934.12	1,456,478.369	3,166,135.915	40.584894	-104.901848	
11,500.00	89.12	89.80	7,073.07	-3,493.16	-2,834.14	1,456,478.721	3,166,235.903	40.584893	-104.901488	
11,600.00	89.12	89.80	7,074.60	-3,492.81	-2,734.15	1,456,479.073	3,166,335.890	40.584892	-104.901128	
11,700.00	89.12	89.80	7,076.13	-3,492.46	-2,634.16	1,456,479.424	3,166,435.878	40.584891	-104.900768	
11,800.00	89.12	89.80	7,077.66	-3,492.11	-2,534.17	1,456,479.776	3,166,535.866	40.584890	-104.900408	
11,900.00	89.12	89.80	7,079.19	-3,491.76	-2,434.19	1,456,480.128	3,166,635.853	40.584889	-104.900048	
12,000.00	89.12	89.80	7,080.72	-3,491.40	-2,334.20	1,456,480.480	3,166,735.841	40.584888	-104.899688	
12,100.00	89.12	89.80	7,082.25	-3,491.05	-2,234.21	1,456,480.831	3,166,835.829	40.584887	-104.899328	
12,200.00	89.12	89.80	7,083.78	-3,490.70	-2,134.22	1,456,481.183	3,166,935.816	40.584887	-104.898968	
12,300.00	89.12	89.80	7,085.31	-3,490.35	-2,034.23	1,456,481.535	3,167,035.804	40.584886	-104.898608	
12,400.00	89.12	89.80	7,086.84	-3,490.00	-1,934.25	1,456,481.886	3,167,135.792	40.584885	-104.898248	
12,500.00	89.12	89.80	7,088.37	-3,489.65	-1,834.26	1,456,482.238	3,167,235.779	40.584884	-104.897888	
12,600.00	89.12	89.80	7,089.90	-3,489.29	-1,734.27	1,456,482.590	3,167,335.767	40.584883	-104.897528	
12,700.00	89.12	89.80	7,091.43	-3,488.94	-1,634.28	1,456,482.942	3,167,435.755	40.584882	-104.897168	
12,800.00	89.12	89.80	7,092.96	-3,488.59	-1,534.30	1,456,483.293	3,167,535.742	40.584881	-104.896808	
12,900.00	89.12	89.80	7,094.49	-3,488.24	-1,434.31	1,456,483.645	3,167,635.730	40.584880	-104.896448	
13,000.00	89.12	89.80	7,096.02	-3,487.89	-1,334.32	1,456,483.997	3,167,735.718	40.584879	-104.896088	
13,100.00	89.12	89.80	7,097.55	-3,487.54	-1,234.33	1,456,484.348	3,167,835.705	40.584878	-104.895728	
13,200.00	89.12	89.80	7,099.08	-3,487.18	-1,134.35	1,456,484.700	3,167,935.693	40.584878	-104.895368	
13,300.00	89.12	89.80	7,100.61	-3,486.83	-1,034.36	1,456,485.052	3,168,035.681	40.584877	-104.895008	
13,400.00	89.12	89.80	7,102.14	-3,486.48	-934.37	1,456,485.404	3,168,135.668	40.584876	-104.894648	
13,500.00	89.12	89.80	7,103.67	-3,486.13	-834.38	1,456,485.755	3,168,235.656	40.584875	-104.894288	
13,600.00	89.12	89.80	7,105.21	-3,485.78	-734.40	1,456,486.107	3,168,335.644	40.584874	-104.893928	
13,700.00	89.12	89.80	7,106.74	-3,485.42	-634.41	1,456,486.459	3,168,435.631	40.584873	-104.893568	
13,800.00	89.12	89.80	7,108.27	-3,485.07	-534.42	1,456,486.810	3,168,535.619	40.584872	-104.893208	
13,900.00	89.12	89.80	7,109.80	-3,484.72	-434.43	1,456,487.162	3,168,635.608	40.584871	-104.892848	
14,000.00	89.12	89.80	7,111.33	-3,484.37	-334.44	1,456,487.514	3,168,735.595	40.584870	-104.892488	
14,100.00	89.12	89.80	7,112.86	-3,484.02	-234.46	1,456,487.866	3,168,835.583	40.584869	-104.892128	
14,200.00	89.12	89.80	7,114.39	-3,483.67	-134.47	1,456,488.217	3,168,935.571	40.584868	-104.891768	
14,300.00	89.12	89.80	7,115.92	-3,483.31	-34.48	1,456,488.569	3,169,035.558	40.584868	-104.891409	
14,400.00	89.12	89.80	7,117.45	-3,482.96	65.51	1,456,488.921	3,169,135.546	40.584867	-104.891049	
14,500.00	89.12	89.80	7,118.98	-3,482.61	165.49	1,456,489.272	3,169,235.534	40.584866	-104.890689	
14,600.00	89.12	89.80	7,120.51	-3,482.26	265.48	1,456,489.624	3,169,335.521	40.584865	-104.890329	
14,700.00	89.12	89.80	7,122.04	-3,481.91	365.47	1,456,489.976	3,169,435.509	40.584864	-104.889969	
14,800.00	89.12	89.80	7,123.57	-3,481.56	465.46	1,456,490.328	3,169,535.497	40.584863	-104.889609	
14,900.00	89.12	89.80	7,125.10	-3,481.20	565.44	1,456,490.679	3,169,635.484	40.584862	-104.889249	
15,000.00	89.12	89.80	7,126.63	-3,480.85	665.43	1,456,491.031	3,169,735.472	40.584861	-104.888889	

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM-7X-HC-10-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	KB @ 5115.00usft
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	KB @ 5115.00usft
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM-7X-HC-10-07-67	<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
15,100.00	89.12	89.80	7,128.16	-3,480.50	765.42	1,456,491.383	3,169,835.460	40.584860	-104.888529
15,200.00	89.12	89.80	7,129.69	-3,480.15	865.41	1,456,491.734	3,169,935.447	40.584859	-104.888169
15,300.00	89.12	89.80	7,131.22	-3,479.80	965.40	1,456,492.086	3,170,035.435	40.584858	-104.887809
15,400.00	89.12	89.80	7,132.75	-3,479.45	1,065.38	1,456,492.438	3,170,135.423	40.584857	-104.887449
15,500.00	89.12	89.80	7,134.28	-3,479.09	1,165.37	1,456,492.789	3,170,235.410	40.584856	-104.887089
15,600.00	89.12	89.80	7,135.81	-3,478.74	1,265.36	1,456,493.141	3,170,335.398	40.584855	-104.886729
15,700.00	89.12	89.80	7,137.34	-3,478.39	1,365.35	1,456,493.493	3,170,435.386	40.584855	-104.886369
15,800.00	89.12	89.80	7,138.87	-3,478.04	1,465.33	1,456,493.845	3,170,535.373	40.584854	-104.886009
15,900.00	89.12	89.80	7,140.40	-3,477.69	1,565.32	1,456,494.196	3,170,635.361	40.584853	-104.885649
16,000.00	89.12	89.80	7,141.93	-3,477.34	1,665.31	1,456,494.548	3,170,735.349	40.584852	-104.885289
16,100.00	89.12	89.80	7,143.46	-3,476.98	1,765.30	1,456,494.900	3,170,835.336	40.584851	-104.884929
16,200.00	89.12	89.80	7,144.99	-3,476.63	1,865.28	1,456,495.251	3,170,935.324	40.584850	-104.884569
16,300.00	89.12	89.80	7,146.52	-3,476.28	1,965.27	1,456,495.603	3,171,035.312	40.584849	-104.884209
16,400.00	89.12	89.80	7,148.05	-3,475.93	2,065.26	1,456,495.955	3,171,135.299	40.584848	-104.883849
16,500.00	89.12	89.80	7,149.58	-3,475.58	2,165.25	1,456,496.307	3,171,235.287	40.584847	-104.883489
16,600.00	89.12	89.80	7,151.11	-3,475.23	2,265.24	1,456,496.658	3,171,335.275	40.584846	-104.883129
16,700.00	89.12	89.80	7,152.65	-3,474.87	2,365.22	1,456,497.010	3,171,435.262	40.584845	-104.882769
16,800.00	89.12	89.80	7,154.18	-3,474.52	2,465.21	1,456,497.362	3,171,535.250	40.584844	-104.882409
16,900.00	89.12	89.80	7,155.71	-3,474.17	2,565.20	1,456,497.713	3,171,635.238	40.584843	-104.882049
17,000.00	89.12	89.80	7,157.24	-3,473.82	2,665.19	1,456,498.065	3,171,735.225	40.584842	-104.881689
17,100.00	89.12	89.80	7,158.77	-3,473.47	2,765.17	1,456,498.417	3,171,835.213	40.584841	-104.881329
17,200.00	89.12	89.80	7,160.30	-3,473.11	2,865.16	1,456,498.769	3,171,935.201	40.584840	-104.880969
17,300.00	89.12	89.80	7,161.83	-3,472.76	2,965.15	1,456,499.120	3,172,035.188	40.584839	-104.880609
17,400.00	89.12	89.80	7,163.36	-3,472.41	3,065.14	1,456,499.472	3,172,135.176	40.584839	-104.880249
17,500.00	89.12	89.80	7,164.89	-3,472.06	3,165.12	1,456,499.824	3,172,235.164	40.584838	-104.879889
17,600.00	89.12	89.80	7,166.42	-3,471.71	3,265.11	1,456,500.175	3,172,335.151	40.584837	-104.879529
17,700.00	89.12	89.80	7,167.95	-3,471.36	3,365.10	1,456,500.527	3,172,435.139	40.584836	-104.879169
17,800.00	89.12	89.80	7,169.48	-3,471.00	3,465.09	1,456,500.879	3,172,535.127	40.584835	-104.878809
17,900.00	89.12	89.80	7,171.01	-3,470.65	3,565.07	1,456,501.231	3,172,635.114	40.584834	-104.878449
18,000.00	89.12	89.80	7,172.54	-3,470.30	3,665.06	1,456,501.582	3,172,735.102	40.584833	-104.878089
18,100.00	89.12	89.80	7,174.07	-3,469.95	3,765.05	1,456,501.934	3,172,835.090	40.584832	-104.877729
18,200.00	89.12	89.80	7,175.60	-3,469.60	3,865.04	1,456,502.286	3,172,935.077	40.584831	-104.877369
18,300.00	89.12	89.80	7,177.13	-3,469.25	3,965.03	1,456,502.637	3,173,035.065	40.584830	-104.877009
18,400.00	89.12	89.80	7,178.66	-3,468.89	4,065.01	1,456,502.989	3,173,135.053	40.584829	-104.876649
18,500.00	89.12	89.80	7,180.19	-3,468.54	4,165.00	1,456,503.341	3,173,235.040	40.584828	-104.876289
18,600.00	89.12	89.80	7,181.72	-3,468.19	4,264.99	1,456,503.693	3,173,335.028	40.584827	-104.875929
18,700.00	89.12	89.80	7,183.25	-3,467.84	4,364.98	1,456,504.044	3,173,435.016	40.584826	-104.875569
18,800.00	89.12	89.80	7,184.78	-3,467.49	4,464.96	1,456,504.396	3,173,535.003	40.584825	-104.875209
18,900.00	89.12	89.80	7,186.31	-3,467.14	4,564.95	1,456,504.748	3,173,634.991	40.584824	-104.874849
19,000.00	89.12	89.80	7,187.84	-3,466.78	4,664.94	1,456,505.099	3,173,734.979	40.584823	-104.874489
19,100.00	89.12	89.80	7,189.37	-3,466.43	4,764.93	1,456,505.451	3,173,834.966	40.584822	-104.874129
19,200.00	89.12	89.80	7,190.90	-3,466.08	4,864.91	1,456,505.803	3,173,934.954	40.584821	-104.873769
19,300.00	89.12	89.80	7,192.43	-3,465.73	4,964.90	1,456,506.155	3,174,034.942	40.584820	-104.873409
19,400.00	89.12	89.80	7,193.96	-3,465.38	5,064.89	1,456,506.506	3,174,134.929	40.584819	-104.873049
19,500.00	89.12	89.80	7,195.49	-3,465.03	5,164.88	1,456,506.858	3,174,234.917	40.584818	-104.872689
19,600.00	89.12	89.80	7,197.02	-3,464.67	5,264.87	1,456,507.210	3,174,334.905	40.584817	-104.872329
19,700.00	89.12	89.80	7,198.55	-3,464.32	5,364.85	1,456,507.561	3,174,434.892	40.584816	-104.871969
19,800.00	89.12	89.80	7,200.09	-3,463.97	5,464.84	1,456,507.913	3,174,534.880	40.584815	-104.871609
19,846.88	89.12	89.80	7,201.00	-3,463.73	5,511.72	1,456,508.152	3,174,581.755	40.584815	-104.871440
TD at 19846.88 - BHL 7X-HC 1229 FSL 460 FEL									

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well BLEHM-7X-HC-10-07-67
<b>Company:</b>	Nickel Road Operating	<b>TVD Reference:</b>	KB @ 5115.00usft
<b>Project:</b>	Sec. 9-T7N-R67W	<b>MD Reference:</b>	KB @ 5115.00usft
<b>Site:</b>	BLEHM Pad	<b>North Reference:</b>	Grid
<b>Well:</b>	BLEHM-7X-HC-10-07-67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #2		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
SHL 7X-HC 557 FNL 71: - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	1,459,971.883	3,169,070.040	40.594428	-104.891198
LPL 7X-HC 1229 FSL 4ℓ - plan misses target center by 10.74usft at 10242.30usft MD (7046.04 TVD, -3490.59 N, -4090.92 E) - Point	0.00	0.00	7,054.00	-3,497.52	-4,092.91	1,456,474.367	3,164,977.134	40.584904	-104.906020
BHL 7X-HC 1229 FSL 4ℓ - plan hits target center - Point	0.00	0.00	7,201.00	-3,463.73	5,511.72	1,456,508.152	3,174,581.755	40.584815	-104.871440

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+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
4,570.41	4,066.05	-766.61	-1,179.63	Hold 59.41 Inc, 236.98 Az
8,995.11	6,317.86	-2,842.11	-4,373.31	KOP 10°/100
10,351.99	7,055.50	-3,497.20	-3,982.00	LP 89.12 Inc, 89.80 Az
19,846.88	7,201.00	-3,463.73	5,511.72	TD at 19846.88