

Synergy Resources

Well Name: **Conrad 44-1GHZ**

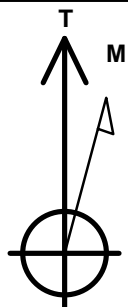
Surface Location: Brian Conrad 1-C Pad Sec.1-T6N-R59W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4901.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1437198.34	3437350.77	40.522860	-103.926745	
RKB - 13.5' WELL @ 4914.5ft (RKB - 13.5')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 331'FSL & 2460'FEL	1.0	0.0	0.0	Point
BHL 600'FSL & 950'FEL	6183.0	-4362.3	1494.3	Point
Landing Pt. 685'FNL & 950'FEL	6183.0	-358.5	1508.8	Point



Azimuths to True North
Magnetic North: 7.93°

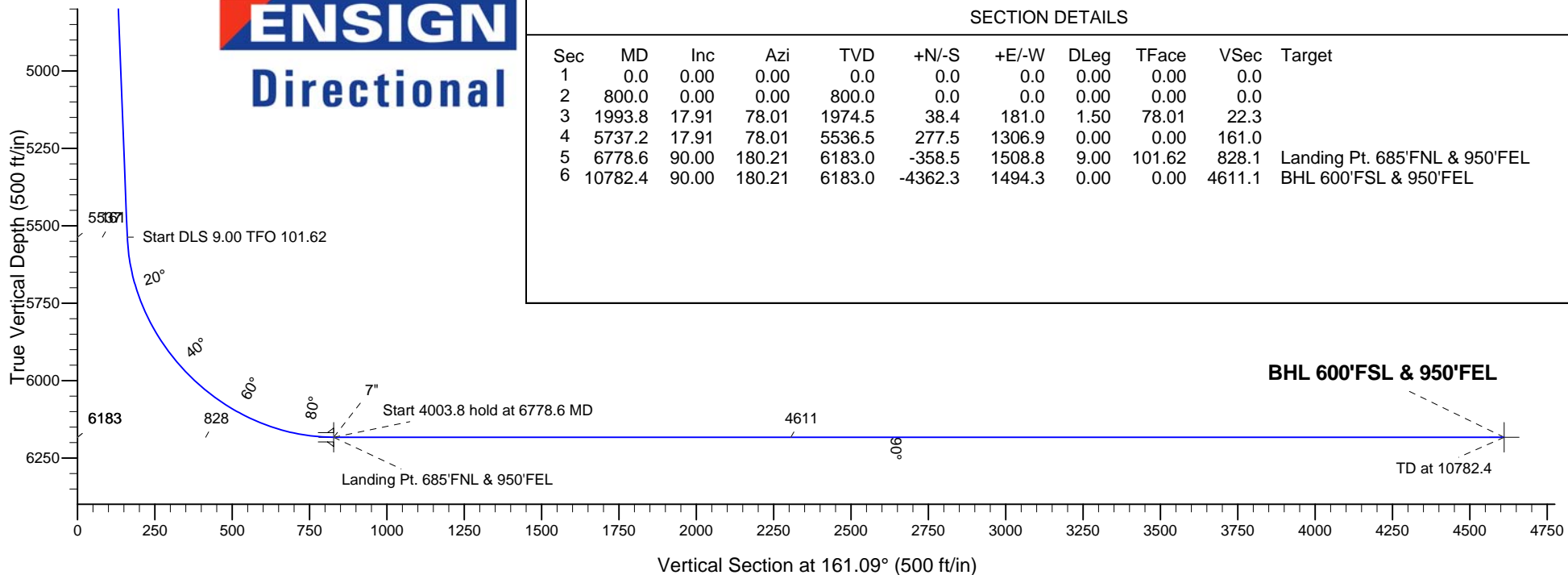
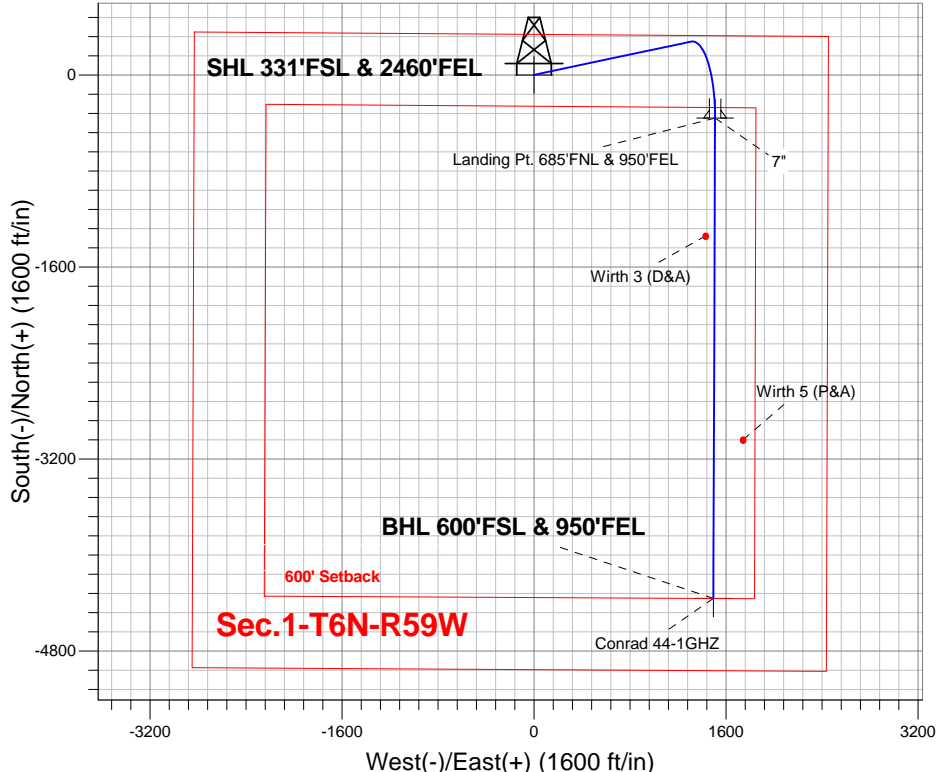
Magnetic Field
Strength: 52901.7snT
Dip Angle: 67.16°
Date: 1/14/2015
Model: IGRF2010

Brian Conrad 1-C Pad Sec.1-T6N-R59W
Conrad 44-1GHZ
Plan #1 (1-14-15)
14:24, January 20 2015

ANNOTATIONS

TVD	MD	Annotation
800.0	800.0	KOP - Start Build 1.50
5536.5	5737.2	Start DLS 9.00 TFO 101.62
6183.0	6778.6	Start 4003.8 hold at 6778.6 MD
6183.0	10782.4	TD at 10782.4

South(-)/North(+) (1600 ft/in)



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	1993.8	17.91	78.01	1974.5	38.4	181.0	1.50	78.01	22.3	
4	5737.2	17.91	78.01	5536.5	277.5	1306.9	0.00	0.00	161.0	
5	6778.6	90.00	180.21	6183.0	-358.5	1508.8	9.00	101.62	828.1	Landing Pt. 685'FNL & 950'FEL
6	10782.4	90.00	180.21	6183.0	-4362.3	1494.3	0.00	0.00	4611.1	BHL 600'FSL & 950'FEL



Synergy Resources

SEC.1-T6N-R59W

Brian Conrad 1-C Pad Sec.1-T6N-R59W

Conrad 44-1GHZ

Wellbore #1

Plan: Plan #1 (1-14-15)

Standard Planning Report

20 January, 2015

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,993.8	17.91	78.01	1,974.5	38.4	181.0	1.50	1.50	0.00	78.01	
5,737.2	17.91	78.01	5,536.5	277.5	1,306.9	0.00	0.00	0.00	0.00	
6,778.6	90.00	180.21	6,183.0	-358.5	1,508.8	9.00	6.92	9.81	101.62	Landing Pt. 685'FN
10,782.4	90.00	180.21	6,183.0	-4,362.3	1,494.3	0.00	0.00	0.00	0.00	BHL 600'FSL & 95C

Database:	Landmark	Local Co-ordinate Reference:	Well Conrad 44-1GHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4914.5ft (RKB - 13.5')
Project:	SEC.1-T6N-R59W	MD Reference:	WELL @ 4914.5ft (RKB - 13.5')
Site:	Brian Conrad 1-C Pad Sec.1-T6N-R59W	North Reference:	True
Well:	Conrad 44-1GHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-14-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 331'FSL & 2460'FEL									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 1.50									
900.0	1.50	78.01	900.0	0.3	1.3	0.2	1.50	1.50	0.00
1,000.0	3.00	78.01	999.9	1.1	5.1	0.6	1.50	1.50	0.00
1,100.0	4.50	78.01	1,099.7	2.4	11.5	1.4	1.50	1.50	0.00
1,200.0	6.00	78.01	1,199.3	4.3	20.5	2.5	1.50	1.50	0.00
1,300.0	7.50	78.01	1,298.6	6.8	32.0	3.9	1.50	1.50	0.00
1,400.0	9.00	78.01	1,397.5	9.8	46.0	5.7	1.50	1.50	0.00
1,500.0	10.50	78.01	1,496.1	13.3	62.6	7.7	1.50	1.50	0.00
1,600.0	12.00	78.01	1,594.2	17.3	81.6	10.1	1.50	1.50	0.00
1,700.0	13.50	78.01	1,691.7	21.9	103.2	12.7	1.50	1.50	0.00
1,800.0	15.00	78.01	1,788.6	27.0	127.3	15.7	1.50	1.50	0.00
1,900.0	16.50	78.01	1,884.9	32.7	153.9	19.0	1.50	1.50	0.00
1,993.8	17.91	78.01	1,974.5	38.4	181.0	22.3	1.50	1.50	0.00
2,000.0	17.91	78.01	1,980.4	38.8	182.9	22.5	0.00	0.00	0.00
2,100.0	17.91	78.01	2,075.5	45.2	212.9	26.2	0.00	0.00	0.00
2,200.0	17.91	78.01	2,170.7	51.6	243.0	29.9	0.00	0.00	0.00
2,300.0	17.91	78.01	2,265.8	58.0	273.1	33.6	0.00	0.00	0.00
2,400.0	17.91	78.01	2,361.0	64.4	303.2	37.4	0.00	0.00	0.00
2,500.0	17.91	78.01	2,456.1	70.8	333.3	41.1	0.00	0.00	0.00
2,600.0	17.91	78.01	2,551.3	77.1	363.3	44.8	0.00	0.00	0.00
2,700.0	17.91	78.01	2,646.4	83.5	393.4	48.5	0.00	0.00	0.00
2,800.0	17.91	78.01	2,741.6	89.9	423.5	52.2	0.00	0.00	0.00
2,900.0	17.91	78.01	2,836.8	96.3	453.6	55.9	0.00	0.00	0.00
3,000.0	17.91	78.01	2,931.9	102.7	483.6	59.6	0.00	0.00	0.00
3,100.0	17.91	78.01	3,027.1	109.1	513.7	63.3	0.00	0.00	0.00
3,200.0	17.91	78.01	3,122.2	115.5	543.8	67.0	0.00	0.00	0.00
3,300.0	17.91	78.01	3,217.4	121.8	573.9	70.7	0.00	0.00	0.00
3,400.0	17.91	78.01	3,312.5	128.2	604.0	74.4	0.00	0.00	0.00
3,500.0	17.91	78.01	3,407.7	134.6	634.0	78.1	0.00	0.00	0.00
3,600.0	17.91	78.01	3,502.8	141.0	664.1	81.8	0.00	0.00	0.00
3,700.0	17.91	78.01	3,598.0	147.4	694.2	85.5	0.00	0.00	0.00
3,800.0	17.91	78.01	3,693.2	153.8	724.3	89.2	0.00	0.00	0.00
3,900.0	17.91	78.01	3,788.3	160.2	754.3	92.9	0.00	0.00	0.00
4,000.0	17.91	78.01	3,883.5	166.6	784.4	96.6	0.00	0.00	0.00
4,100.0	17.91	78.01	3,978.6	172.9	814.5	100.3	0.00	0.00	0.00
4,200.0	17.91	78.01	4,073.8	179.3	844.6	104.1	0.00	0.00	0.00
4,300.0	17.91	78.01	4,168.9	185.7	874.6	107.8	0.00	0.00	0.00
4,400.0	17.91	78.01	4,264.1	192.1	904.7	111.5	0.00	0.00	0.00
4,500.0	17.91	78.01	4,359.2	198.5	934.8	115.2	0.00	0.00	0.00
4,600.0	17.91	78.01	4,454.4	204.9	964.9	118.9	0.00	0.00	0.00
4,700.0	17.91	78.01	4,549.6	211.3	995.0	122.6	0.00	0.00	0.00
4,800.0	17.91	78.01	4,644.7	217.6	1,025.0	126.3	0.00	0.00	0.00
4,900.0	17.91	78.01	4,739.9	224.0	1,055.1	130.0	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Conrad 44-1GHZ
Company:	Synergy Resources	TVD Reference:	WELL @ 4914.5ft (RKB - 13.5')
Project:	SEC.1-T6N-R59W	MD Reference:	WELL @ 4914.5ft (RKB - 13.5')
Site:	Brian Conrad 1-C Pad Sec.1-T6N-R59W	North Reference:	True
Well:	Conrad 44-1GHZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (1-14-15)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,000.0	17.91	78.01	4,835.0	230.4	1,085.2	133.7	0.00	0.00	0.00
5,100.0	17.91	78.01	4,930.2	236.8	1,115.3	137.4	0.00	0.00	0.00
5,200.0	17.91	78.01	5,025.3	243.2	1,145.3	141.1	0.00	0.00	0.00
5,300.0	17.91	78.01	5,120.5	249.6	1,175.4	144.8	0.00	0.00	0.00
5,400.0	17.91	78.01	5,215.6	256.0	1,205.5	148.5	0.00	0.00	0.00
5,500.0	17.91	78.01	5,310.8	262.3	1,235.6	152.2	0.00	0.00	0.00
5,600.0	17.91	78.01	5,406.0	268.7	1,265.7	155.9	0.00	0.00	0.00
5,700.0	17.91	78.01	5,501.1	275.1	1,295.7	159.6	0.00	0.00	0.00
5,737.2	17.91	78.01	5,536.5	277.5	1,306.9	161.0	0.00	0.00	0.00
Start DLS 9.00 TFO 101.62									
5,800.0	17.63	96.59	5,596.4	278.4	1,325.8	166.3	9.00	-0.44	29.57
5,900.0	20.56	122.87	5,691.0	267.1	1,355.7	186.6	9.00	2.93	26.29
6,000.0	26.30	140.49	5,782.8	240.4	1,384.6	221.2	9.00	5.74	17.62
6,100.0	33.43	151.62	5,869.6	199.0	1,411.8	269.2	9.00	7.12	11.13
6,200.0	41.22	159.08	5,949.1	143.9	1,436.7	329.5	9.00	7.80	7.46
6,300.0	49.37	164.48	6,019.4	76.4	1,458.7	400.4	9.00	8.15	5.41
6,400.0	57.71	168.69	6,078.8	-1.7	1,477.2	480.4	9.00	8.34	4.21
6,500.0	66.17	172.19	6,125.8	-88.7	1,491.7	567.3	9.00	8.46	3.49
6,600.0	74.69	175.25	6,159.3	-182.2	1,502.0	659.1	9.00	8.53	3.06
6,700.0	83.26	178.07	6,178.4	-280.1	1,507.6	753.6	9.00	8.56	2.82
6,778.6	90.00	180.21	6,183.0	-358.5	1,508.8	828.1	9.00	8.58	2.72
Start 4003.8 hold at 6778.6 MD - 7" - Landing Pt. 685'FNL & 950'FEL									
6,800.0	90.00	180.21	6,183.0	-379.9	1,508.7	848.4	0.01	0.01	0.00
6,900.0	90.00	180.21	6,183.0	-479.9	1,508.4	942.9	0.00	0.00	0.00
7,000.0	90.00	180.21	6,183.0	-579.9	1,508.0	1,037.3	0.00	0.00	0.00
7,100.0	90.00	180.21	6,183.0	-679.9	1,507.6	1,131.8	0.00	0.00	0.00
7,200.0	90.00	180.21	6,183.0	-779.9	1,507.3	1,226.3	0.00	0.00	0.00
7,300.0	90.00	180.21	6,183.0	-879.9	1,506.9	1,320.8	0.00	0.00	0.00
7,400.0	90.00	180.21	6,183.0	-979.9	1,506.6	1,415.3	0.00	0.00	0.00
7,500.0	90.00	180.21	6,183.0	-1,079.9	1,506.2	1,509.8	0.00	0.00	0.00
7,600.0	90.00	180.21	6,183.0	-1,179.9	1,505.8	1,604.3	0.00	0.00	0.00
7,700.0	90.00	180.21	6,183.0	-1,279.9	1,505.5	1,698.7	0.00	0.00	0.00
7,800.0	90.00	180.21	6,183.0	-1,379.9	1,505.1	1,793.2	0.00	0.00	0.00
7,900.0	90.00	180.21	6,183.0	-1,479.9	1,504.8	1,887.7	0.00	0.00	0.00
8,000.0	90.00	180.21	6,183.0	-1,579.9	1,504.4	1,982.2	0.00	0.00	0.00
8,100.0	90.00	180.21	6,183.0	-1,679.9	1,504.0	2,076.7	0.00	0.00	0.00
8,200.0	90.00	180.21	6,183.0	-1,779.9	1,503.7	2,171.2	0.00	0.00	0.00
8,300.0	90.00	180.21	6,183.0	-1,879.9	1,503.3	2,265.7	0.00	0.00	0.00
8,400.0	90.00	180.21	6,183.0	-1,979.9	1,502.9	2,360.1	0.00	0.00	0.00
8,500.0	90.00	180.21	6,183.0	-2,079.9	1,502.6	2,454.6	0.00	0.00	0.00
8,600.0	90.00	180.21	6,183.0	-2,179.9	1,502.2	2,549.1	0.00	0.00	0.00
8,700.0	90.00	180.21	6,183.0	-2,279.9	1,501.9	2,643.6	0.00	0.00	0.00
8,800.0	90.00	180.21	6,183.0	-2,379.9	1,501.5	2,738.1	0.00	0.00	0.00
8,900.0	90.00	180.21	6,183.0	-2,479.9	1,501.1	2,832.6	0.00	0.00	0.00
9,000.0	90.00	180.21	6,183.0	-2,579.9	1,500.8	2,927.0	0.00	0.00	0.00
9,100.0	90.00	180.21	6,183.0	-2,679.9	1,500.4	3,021.5	0.00	0.00	0.00
9,200.0	90.00	180.21	6,183.0	-2,779.9	1,500.0	3,116.0	0.00	0.00	0.00
9,300.0	90.00	180.21	6,183.0	-2,879.9	1,499.7	3,210.5	0.00	0.00	0.00
9,400.0	90.00	180.21	6,183.0	-2,979.9	1,499.3	3,305.0	0.00	0.00	0.00
9,500.0	90.00	180.21	6,183.0	-3,079.9	1,499.0	3,399.5	0.00	0.00	0.00
9,600.0	90.00	180.21	6,183.0	-3,179.9	1,498.6	3,494.0	0.00	0.00	0.00
9,700.0	90.00	180.21	6,183.0	-3,279.9	1,498.2	3,588.4	0.00	0.00	0.00
9,800.0	90.00	180.21	6,183.0	-3,379.9	1,497.9	3,682.9	0.00	0.00	0.00
9,900.0	90.00	180.21	6,183.0	-3,479.9	1,497.5	3,777.4	0.00	0.00	0.00

Database: Landmark
Company: Synergy Resources
Project: SEC.1-T6N-R59W
Site: Brian Conrad 1-C Pad Sec.1-T6N-R59W
Well: Conrad 44-1GHZ
Wellbore: Wellbore #1
Design: Plan #1 (1-14-15)

Local Co-ordinate Reference: Well Conrad 44-1GHZ
TVD Reference: WELL @ 4914.5ft (RKB - 13.5')
MD Reference: WELL @ 4914.5ft (RKB - 13.5')
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,000.0	90.00	180.21	6,183.0	-3,579.9	1,497.2	3,871.9	0.00	0.00	0.00
10,100.0	90.00	180.21	6,183.0	-3,679.9	1,496.8	3,966.4	0.00	0.00	0.00
10,200.0	90.00	180.21	6,183.0	-3,779.9	1,496.4	4,060.9	0.00	0.00	0.00
10,300.0	90.00	180.21	6,183.0	-3,879.9	1,496.1	4,155.4	0.00	0.00	0.00
10,400.0	90.00	180.21	6,183.0	-3,979.9	1,495.7	4,249.8	0.00	0.00	0.00
10,500.0	90.00	180.21	6,183.0	-4,079.9	1,495.3	4,344.3	0.00	0.00	0.00
10,600.0	90.00	180.21	6,183.0	-4,179.9	1,495.0	4,438.8	0.00	0.00	0.00
10,700.0	90.00	180.21	6,183.0	-4,279.9	1,494.6	4,533.3	0.00	0.00	0.00
10,782.4	90.00	180.21	6,183.0	-4,362.3	1,494.3	4,611.1	0.00	0.00	0.00
BHL 600'FSL & 950'FEL									

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Landing Pt. 685'FNL & 2460'I - plan hits target center - Point	0.00	0.00	6,183.0	-358.5	1,508.8	1,436,866.65	3,438,865.65	40.521876	-103.921318
SHL 331'FSL & 2460'I - plan hits target center - Point	0.00	0.00	1.0	0.0	0.0	1,437,198.35	3,437,350.77	40.522860	-103.926745
BHL 600'FSL & 950'F - plan hits target center - Point	0.00	0.00	6,183.0	-4,362.3	1,494.3	1,432,863.38	3,438,922.19	40.510886	-103.921371

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,778.6	6,183.0	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
800.0	800.0	0.0	0.0	KOP - Start Build 1.50
5,737.2	5,536.5	277.5	1,306.9	Start DLS 9.00 TFO 101.62
6,778.6	6,183.0	-358.5	1,508.8	Start 4003.8 hold at 6778.6 MD
10,782.4	6,183.0	-4,362.3	1,494.3	TD at 10782.4