

Condor Energy

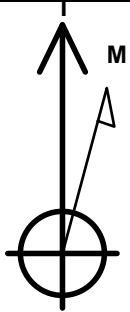
Well Name: **Wickstrom 18-11H**

Surface Location: Wickstrom 18-9H Pad Sec.18-T6N-R60W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4709.3

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1426059.23	3380170.13	40.494890	-104.133020	
RKB - 12.5' WELL @ 4721.8ft (RKB - 12.5')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 270'FNL & 1419'FEL, Sec.18	1.0	0.0	0.0	Point
HARDLINE 600' BHL , Sec.6	1.5	10148.1	802.3	Polygon
HARDLINE 600' SHL, Sec.7	1.5	896.1	819.3	Polygon
SECTION LINE	1.6	268.1	858.4	Polygon
BHL 660'FNL & 1866'FEL, Sec.6	6100.0	10088.0	-464.3	Point
Landing Pt. 660'FSL & 1837'FEL, Sec.7	6100.0	932.7	-417.2	Point



Azimuths to True North
Magnetic North: 8.24°

Magnetic Field
Strength: 53024.5nT
Dip Angle: 67.16°
Date: 7/26/2013
Model: IGRF2010

Wickstrom 18-9H Pad Sec.18-T6N-R60W
Wickstrom 18-11H
Plan #1 (7-26-13)
17:13, July 26 2013

ANNOTATIONS

TVD	MD	Annotation
1500.0	1500.0	KOP #1
5383.8	5417.6	KOP #2
6100.0	6543.1	End of Build

South(-)/North(+) (3100 ft/in)

BHL 660'FNL & 1866'FEL, Sec.6

Casing Pt. - 660'FSL & 1837'FEL, Sec.7

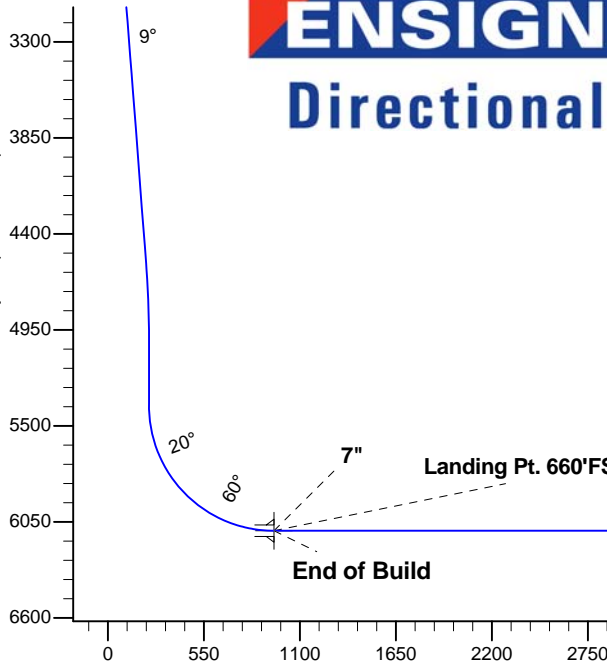
Landing Pt. 660'FSL & 1837'FEL, Sec.7

SHL 270'FNL & 1419'FEL, Sec.18

Wickstrom 18-11H

West(-)/East(+) (3100 ft/in)

True Vertical Depth (1100 ft/in)



ENSIGN
Directional

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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1933.9	8.68	297.50	1932.2	15.1	-29.1	2.00	297.50	16.5	
4	4599.9	8.68	297.50	4567.8	200.9	-385.9	0.00	0.00	218.4	
5	5033.8	0.00	0.00	5000.0	216.0	-415.0	2.00	180.00	234.9	
6	5417.6	0.00	0.00	5383.8	216.0	-415.0	0.00	0.00	234.9	
7	6542.6	90.00	359.83	6100.0	932.2	-417.2	8.00	359.83	950.4	
8	6543.1	90.00	359.83	6100.0	932.7	-417.2	0.00	0.00	950.9	Landing Pt. 660'FSL & 1837'FEL, Sec.7
9	6549.1	90.00	359.71	6100.0	938.7	-417.2	2.00	-90.00	956.9	
10	15698.6	90.00	359.71	6100.0	10088.0	-464.3	0.00	0.00	10098.7	BHL 660'FNL & 1866'FEL, Sec.6

BHL 660'FNL & 1866'FEL, Sec.6

Vertical Section at 357.36° (1100 ft/in)



Directional

Condor Energy

SEC.18-T6N-R60W

Wickstrom 18-9H Pad Sec.18-T6N-R60W

Wickstrom 18-11H

Wellbore #1

Plan: Plan #1 (7-26-13)

Standard Planning Report

26 July, 2013

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,933.9	8.68	297.50	1,932.2	15.1	-29.1	2.00	2.00	0.00	297.50	
4,599.9	8.68	297.50	4,567.8	200.9	-385.9	0.00	0.00	0.00	0.00	
5,033.8	0.00	0.00	5,000.0	216.0	-415.0	2.00	-2.00	0.00	180.00	
5,417.6	0.00	0.00	5,383.8	216.0	-415.0	0.00	0.00	0.00	0.00	
6,542.6	90.00	359.83	6,100.0	932.2	-417.2	8.00	8.00	0.00	359.83	
6,543.1	90.00	359.83	6,100.0	932.7	-417.2	0.00	0.00	0.00	0.00	Landing Pt. 660'FSI
6,549.1	90.00	359.71	6,100.0	938.7	-417.2	2.00	0.00	-2.00	-90.00	
15,698.6	90.00	359.71	6,100.0	10,088.0	-464.3	0.00	0.00	0.00	0.00	BHL 660'FNL & 180°

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-11H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-11H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-26-13)		

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 270'FNL & 1419'FEL, Sec.18									
1.5	0.00	0.00	1.5	0.0	0.0	0.0	0.00	0.00	0.00
HARDLINE 600' SHL, Sec.7									
1.6	0.00	0.00	1.6	0.0	0.0	0.0	0.00	0.00	0.00
SECTION LINE									
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
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
1,600.0	2.00	297.50	1,600.0	0.8	-1.5	0.9	2.00	2.00	0.00
1,700.0	4.00	297.50	1,699.8	3.2	-6.2	3.5	2.00	2.00	0.00
1,800.0	6.00	297.50	1,799.5	7.2	-13.9	7.9	2.00	2.00	0.00
1,900.0	8.00	297.50	1,898.7	12.9	-24.7	14.0	2.00	2.00	0.00
1,933.9	8.68	297.50	1,932.2	15.1	-29.1	16.5	2.00	2.00	0.00
2,000.0	8.68	297.50	1,997.6	19.7	-37.9	21.5	0.00	0.00	0.00
2,100.0	8.68	297.50	2,096.4	26.7	-51.3	29.0	0.00	0.00	0.00
2,200.0	8.68	297.50	2,195.3	33.7	-64.7	36.6	0.00	0.00	0.00
2,300.0	8.68	297.50	2,294.2	40.6	-78.1	44.2	0.00	0.00	0.00
2,400.0	8.68	297.50	2,393.0	47.6	-91.5	51.8	0.00	0.00	0.00
2,500.0	8.68	297.50	2,491.9	54.6	-104.9	59.3	0.00	0.00	0.00
2,600.0	8.68	297.50	2,590.7	61.5	-118.2	66.9	0.00	0.00	0.00
2,700.0	8.68	297.50	2,689.6	68.5	-131.6	74.5	0.00	0.00	0.00
2,800.0	8.68	297.50	2,788.4	75.5	-145.0	82.1	0.00	0.00	0.00
2,900.0	8.68	297.50	2,887.3	82.4	-158.4	89.6	0.00	0.00	0.00
3,000.0	8.68	297.50	2,986.1	89.4	-171.8	97.2	0.00	0.00	0.00
3,100.0	8.68	297.50	3,085.0	96.4	-185.2	104.8	0.00	0.00	0.00
3,200.0	8.68	297.50	3,183.8	103.3	-198.5	112.4	0.00	0.00	0.00
3,300.0	8.68	297.50	3,282.7	110.3	-211.9	119.9	0.00	0.00	0.00
3,400.0	8.68	297.50	3,381.6	117.3	-225.3	127.5	0.00	0.00	0.00
3,500.0	8.68	297.50	3,480.4	124.2	-238.7	135.1	0.00	0.00	0.00
3,600.0	8.68	297.50	3,579.3	131.2	-252.1	142.7	0.00	0.00	0.00
3,700.0	8.68	297.50	3,678.1	138.2	-265.5	150.2	0.00	0.00	0.00
3,800.0	8.68	297.50	3,777.0	145.1	-278.8	157.8	0.00	0.00	0.00
3,900.0	8.68	297.50	3,875.8	152.1	-292.2	165.4	0.00	0.00	0.00
4,000.0	8.68	297.50	3,974.7	159.1	-305.6	172.9	0.00	0.00	0.00
4,100.0	8.68	297.50	4,073.5	166.0	-319.0	180.5	0.00	0.00	0.00
4,200.0	8.68	297.50	4,172.4	173.0	-332.4	188.1	0.00	0.00	0.00
4,300.0	8.68	297.50	4,271.3	180.0	-345.8	195.7	0.00	0.00	0.00
4,400.0	8.68	297.50	4,370.1	186.9	-359.1	203.2	0.00	0.00	0.00
4,500.0	8.68	297.50	4,469.0	193.9	-372.5	210.8	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-11H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-11H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-26-13)		

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)
4,599.9	8.68	297.50	4,567.8	200.9	-385.9	218.4	0.00	0.00	0.00
4,600.0	8.68	297.50	4,567.8	200.9	-385.9	218.4	0.00	0.00	0.00
4,700.0	6.68	297.50	4,666.9	207.0	-397.8	225.1	2.00	-2.00	0.00
4,800.0	4.68	297.50	4,766.4	211.6	-406.5	230.1	2.00	-2.00	0.00
4,900.0	2.68	297.50	4,866.2	214.6	-412.2	233.3	2.00	-2.00	0.00
5,000.0	0.68	297.50	4,966.2	215.9	-414.8	234.8	2.00	-2.00	0.00
5,033.8	0.00	0.00	5,000.0	216.0	-415.0	234.9	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,066.2	216.0	-415.0	234.9	0.00	0.00	0.00
5,200.0	0.00	0.00	5,166.2	216.0	-415.0	234.9	0.00	0.00	0.00
5,300.0	0.00	0.00	5,266.2	216.0	-415.0	234.9	0.00	0.00	0.00
5,400.0	0.00	0.00	5,366.2	216.0	-415.0	234.9	0.00	0.00	0.00
5,417.6	0.00	0.00	5,383.8	216.0	-415.0	234.9	0.00	0.00	0.00
KOP #2									
5,500.0	6.59	359.83	5,466.0	220.7	-415.0	239.6	8.00	8.00	0.00
5,600.0	14.59	359.83	5,564.2	239.1	-415.1	257.9	8.00	8.00	0.00
5,700.0	22.59	359.83	5,658.9	270.9	-415.2	289.7	8.00	8.00	0.00
5,800.0	30.59	359.83	5,748.3	315.7	-415.3	334.4	8.00	8.00	0.00
5,900.0	38.59	359.83	5,830.5	372.4	-415.5	391.1	8.00	8.00	0.00
6,000.0	46.59	359.83	5,904.1	440.0	-415.7	458.7	8.00	8.00	0.00
6,100.0	54.59	359.83	5,967.5	517.2	-415.9	535.8	8.00	8.00	0.00
6,200.0	62.59	359.83	6,019.6	602.5	-416.2	621.0	8.00	8.00	0.00
6,300.0	70.59	359.83	6,059.3	694.2	-416.5	712.6	8.00	8.00	0.00
6,400.0	78.59	359.83	6,085.8	790.5	-416.7	808.8	8.00	8.00	0.00
6,500.0	86.59	359.83	6,098.7	889.6	-417.0	907.8	8.00	8.00	0.00
6,542.6	90.00	359.83	6,100.0	932.2	-417.2	950.4	8.00	8.00	0.00
6,543.1	90.00	359.83	6,100.0	932.7	-417.2	950.9	0.00	0.00	0.00
End of Build - 7" - Landing Pt. 660°FSL & 1837°FEL, Sec.7									
6,549.1	90.00	359.71	6,100.0	938.7	-417.2	956.9	2.00	0.00	-2.00
6,600.0	90.00	359.71	6,100.0	989.6	-417.5	1,007.7	0.00	0.00	0.00
6,700.0	90.00	359.71	6,100.0	1,089.6	-418.0	1,107.6	0.00	0.00	0.00
6,800.0	90.00	359.71	6,100.0	1,189.6	-418.5	1,207.5	0.00	0.00	0.00
6,900.0	90.00	359.71	6,100.0	1,289.6	-419.0	1,307.5	0.00	0.00	0.00
7,000.0	90.00	359.71	6,100.0	1,389.6	-419.5	1,407.4	0.00	0.00	0.00
7,100.0	90.00	359.71	6,100.0	1,489.5	-420.0	1,507.3	0.00	0.00	0.00
7,200.0	90.00	359.71	6,100.0	1,589.5	-420.6	1,607.2	0.00	0.00	0.00
7,300.0	90.00	359.71	6,100.0	1,689.5	-421.1	1,707.1	0.00	0.00	0.00
7,400.0	90.00	359.71	6,100.0	1,789.5	-421.6	1,807.0	0.00	0.00	0.00
7,500.0	90.00	359.71	6,100.0	1,889.5	-422.1	1,907.0	0.00	0.00	0.00
7,600.0	90.00	359.71	6,100.0	1,989.5	-422.6	2,006.9	0.00	0.00	0.00
7,700.0	90.00	359.71	6,100.0	2,089.5	-423.1	2,106.8	0.00	0.00	0.00
7,800.0	90.00	359.71	6,100.0	2,189.5	-423.6	2,206.7	0.00	0.00	0.00
7,900.0	90.00	359.71	6,100.0	2,289.5	-424.2	2,306.6	0.00	0.00	0.00
8,000.0	90.00	359.71	6,100.0	2,389.5	-424.7	2,406.5	0.00	0.00	0.00
8,100.0	90.00	359.71	6,100.0	2,489.5	-425.2	2,506.5	0.00	0.00	0.00
8,200.0	90.00	359.71	6,100.0	2,589.5	-425.7	2,606.4	0.00	0.00	0.00
8,300.0	90.00	359.71	6,100.0	2,689.5	-426.2	2,706.3	0.00	0.00	0.00
8,400.0	90.00	359.71	6,100.0	2,789.5	-426.7	2,806.2	0.00	0.00	0.00
8,500.0	90.00	359.71	6,100.0	2,889.5	-427.2	2,906.1	0.00	0.00	0.00
8,600.0	90.00	359.71	6,100.0	2,989.5	-427.8	3,006.0	0.00	0.00	0.00
8,700.0	90.00	359.71	6,100.0	3,089.5	-428.3	3,106.0	0.00	0.00	0.00
8,800.0	90.00	359.71	6,100.0	3,189.5	-428.8	3,205.9	0.00	0.00	0.00
8,900.0	90.00	359.71	6,100.0	3,289.5	-429.3	3,305.8	0.00	0.00	0.00
9,000.0	90.00	359.71	6,100.0	3,389.5	-429.8	3,405.7	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-11H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-11H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-26-13)		

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)
9,100.0	90.00	359.71	6,100.0	3,489.5	-430.3	3,505.6	0.00	0.00	0.00
9,200.0	90.00	359.71	6,100.0	3,589.5	-430.8	3,605.5	0.00	0.00	0.00
9,300.0	90.00	359.71	6,100.0	3,689.5	-431.4	3,705.5	0.00	0.00	0.00
9,400.0	90.00	359.71	6,100.0	3,789.5	-431.9	3,805.4	0.00	0.00	0.00
9,500.0	90.00	359.71	6,100.0	3,889.5	-432.4	3,905.3	0.00	0.00	0.00
9,600.0	90.00	359.71	6,100.0	3,989.5	-432.9	4,005.2	0.00	0.00	0.00
9,700.0	90.00	359.71	6,100.0	4,089.5	-433.4	4,105.1	0.00	0.00	0.00
9,800.0	90.00	359.71	6,100.0	4,189.5	-433.9	4,205.0	0.00	0.00	0.00
9,900.0	90.00	359.71	6,100.0	4,289.5	-434.4	4,305.0	0.00	0.00	0.00
10,000.0	90.00	359.71	6,100.0	4,389.5	-435.0	4,404.9	0.00	0.00	0.00
10,100.0	90.00	359.71	6,100.0	4,489.5	-435.5	4,504.8	0.00	0.00	0.00
10,200.0	90.00	359.71	6,100.0	4,589.5	-436.0	4,604.7	0.00	0.00	0.00
10,300.0	90.00	359.71	6,100.0	4,689.5	-436.5	4,704.6	0.00	0.00	0.00
10,400.0	90.00	359.71	6,100.0	4,789.5	-437.0	4,804.5	0.00	0.00	0.00
10,500.0	90.00	359.71	6,100.0	4,889.5	-437.5	4,904.4	0.00	0.00	0.00
10,600.0	90.00	359.71	6,100.0	4,989.5	-438.1	5,004.4	0.00	0.00	0.00
10,700.0	90.00	359.71	6,100.0	5,089.5	-438.6	5,104.3	0.00	0.00	0.00
10,800.0	90.00	359.71	6,100.0	5,189.5	-439.1	5,204.2	0.00	0.00	0.00
10,900.0	90.00	359.71	6,100.0	5,289.5	-439.6	5,304.1	0.00	0.00	0.00
11,000.0	90.00	359.71	6,100.0	5,389.5	-440.1	5,404.0	0.00	0.00	0.00
11,100.0	90.00	359.71	6,100.0	5,489.5	-440.6	5,503.9	0.00	0.00	0.00
11,200.0	90.00	359.71	6,100.0	5,589.5	-441.1	5,603.9	0.00	0.00	0.00
11,300.0	90.00	359.71	6,100.0	5,689.5	-441.7	5,703.8	0.00	0.00	0.00
11,400.0	90.00	359.71	6,100.0	5,789.5	-442.2	5,803.7	0.00	0.00	0.00
11,500.0	90.00	359.71	6,100.0	5,889.5	-442.7	5,903.6	0.00	0.00	0.00
11,600.0	90.00	359.71	6,100.0	5,989.5	-443.2	6,003.5	0.00	0.00	0.00
11,700.0	90.00	359.71	6,100.0	6,089.5	-443.7	6,103.4	0.00	0.00	0.00
11,800.0	90.00	359.71	6,100.0	6,189.5	-444.2	6,203.4	0.00	0.00	0.00
11,900.0	90.00	359.71	6,100.0	6,289.5	-444.7	6,303.3	0.00	0.00	0.00
12,000.0	90.00	359.71	6,100.0	6,389.5	-445.3	6,403.2	0.00	0.00	0.00
12,100.0	90.00	359.71	6,100.0	6,489.5	-445.8	6,503.1	0.00	0.00	0.00
12,200.0	90.00	359.71	6,100.0	6,589.5	-446.3	6,603.0	0.00	0.00	0.00
12,300.0	90.00	359.71	6,100.0	6,689.5	-446.8	6,702.9	0.00	0.00	0.00
12,400.0	90.00	359.71	6,100.0	6,789.5	-447.3	6,802.9	0.00	0.00	0.00
12,500.0	90.00	359.71	6,100.0	6,889.5	-447.8	6,902.8	0.00	0.00	0.00
12,600.0	90.00	359.71	6,100.0	6,989.5	-448.3	7,002.7	0.00	0.00	0.00
12,700.0	90.00	359.71	6,100.0	7,089.5	-448.9	7,102.6	0.00	0.00	0.00
12,800.0	90.00	359.71	6,100.0	7,189.5	-449.4	7,202.5	0.00	0.00	0.00
12,900.0	90.00	359.71	6,100.0	7,289.5	-449.9	7,302.4	0.00	0.00	0.00
13,000.0	90.00	359.71	6,100.0	7,389.5	-450.4	7,402.4	0.00	0.00	0.00
13,100.0	90.00	359.71	6,100.0	7,489.5	-450.9	7,502.3	0.00	0.00	0.00
13,200.0	90.00	359.71	6,100.0	7,589.5	-451.4	7,602.2	0.00	0.00	0.00
13,300.0	90.00	359.71	6,100.0	7,689.5	-451.9	7,702.1	0.00	0.00	0.00
13,400.0	90.00	359.71	6,100.0	7,789.5	-452.5	7,802.0	0.00	0.00	0.00
13,500.0	90.00	359.71	6,100.0	7,889.5	-453.0	7,901.9	0.00	0.00	0.00
13,600.0	90.00	359.71	6,100.0	7,989.5	-453.5	8,001.9	0.00	0.00	0.00
13,700.0	90.00	359.71	6,100.0	8,089.5	-454.0	8,101.8	0.00	0.00	0.00
13,800.0	90.00	359.71	6,100.0	8,189.5	-454.5	8,201.7	0.00	0.00	0.00
13,900.0	90.00	359.71	6,100.0	8,289.5	-455.0	8,301.6	0.00	0.00	0.00
14,000.0	90.00	359.71	6,100.0	8,389.5	-455.5	8,401.5	0.00	0.00	0.00
14,100.0	90.00	359.71	6,100.0	8,489.5	-456.1	8,501.4	0.00	0.00	0.00
14,200.0	90.00	359.71	6,100.0	8,589.5	-456.6	8,601.4	0.00	0.00	0.00
14,300.0	90.00	359.71	6,100.0	8,689.5	-457.1	8,701.3	0.00	0.00	0.00
14,400.0	90.00	359.71	6,100.0	8,789.5	-457.6	8,801.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-11H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-11H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-26-13)		

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)	
14,500.0	90.00	359.71	6,100.0	8,889.5	-458.1	8,901.1	0.00	0.00	0.00	
14,600.0	90.00	359.71	6,100.0	8,989.5	-458.6	9,001.0	0.00	0.00	0.00	
14,700.0	90.00	359.71	6,100.0	9,089.4	-459.1	9,100.9	0.00	0.00	0.00	
14,800.0	90.00	359.71	6,100.0	9,189.4	-459.7	9,200.9	0.00	0.00	0.00	
14,900.0	90.00	359.71	6,100.0	9,289.4	-460.2	9,300.8	0.00	0.00	0.00	
15,000.0	90.00	359.71	6,100.0	9,389.4	-460.7	9,400.7	0.00	0.00	0.00	
15,100.0	90.00	359.71	6,100.0	9,489.4	-461.2	9,500.6	0.00	0.00	0.00	
15,200.0	90.00	359.71	6,100.0	9,589.4	-461.7	9,600.5	0.00	0.00	0.00	
15,300.0	90.00	359.71	6,100.0	9,689.4	-462.2	9,700.4	0.00	0.00	0.00	
15,400.0	90.00	359.71	6,100.0	9,789.4	-462.8	9,800.4	0.00	0.00	0.00	
15,500.0	90.00	359.71	6,100.0	9,889.4	-463.3	9,900.3	0.00	0.00	0.00	
15,600.0	90.00	359.71	6,100.0	9,989.4	-463.8	10,000.2	0.00	0.00	0.00	
15,698.6	90.00	359.71	6,100.0	10,088.0	-464.3	10,098.7	0.00	0.00	0.00	
BHL 660'FNL & 1866'FEL, Sec.6 - HARDLINE 600' BHL , Sec.6										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
SECTION LINE	0.00	0.00	1.6	268.1	858.4	1,426,340.49	3,381,024.28	40.495626	-104.129934	
- plan misses target center by 899.3ft at 1.6ft MD (1.6 TVD, 0.0 N, 0.0 E)										
- Polygon										
Point 1			1.6	0.0	0.0	1,426,340.49	3,381,024.28			
Point 2			1.6	0.0	-2,700.0	1,426,298.87	3,378,324.69			
BHL 660'FNL & 1866'	0.00	0.00	6,100.0	10,088.0	-464.3	1,436,138.53	3,379,550.42	40.522580	-104.134690	
- plan hits target center										
- Point										
SHL 270'FNL & 1419'	0.00	0.00	1.0	0.0	0.0	1,426,059.24	3,380,170.13	40.494890	-104.133020	
- plan hits target center										
- Point										
HARDLINE 600' SHL,	0.00	0.00	1.5	896.1	819.3	1,426,967.78	3,380,975.50	40.497349	-104.130074	
- plan misses target center by 1214.2ft at 1.5ft MD (1.5 TVD, 0.0 N, 0.0 E)										
- Polygon										
Point 1			1.5	0.0	0.0	1,426,967.78	3,380,975.50			
Point 2			1.5	0.0	-2,700.0	1,426,926.16	3,378,275.92			
Point 3			1.5	0.0	0.0	1,426,967.78	3,380,975.50			
Point 4			1.5	1,000.0	0.0	1,427,967.62	3,380,960.08			
Landing Pt. 660'FSL &	0.00	0.00	6,100.0	932.7	-417.2	1,426,985.32	3,379,738.64	40.497450	-104.134520	
- plan hits target center										
- Point										
HARDLINE 600' BHL	0.00	0.00	1.5	10,148.1	802.3	1,436,218.08	3,380,815.87	40.522745	-104.130134	
- plan misses target center by 6228.9ft at 15698.6ft MD (6100.0 TVD, 10088.0 N, -464.3 E)										
- Polygon										
Point 1			1.5	0.0	0.0	1,436,218.08	3,380,815.87			
Point 2			1.5	0.0	-2,700.0	1,436,176.46	3,378,116.28			
Point 3			1.5	0.0	0.0	1,436,218.08	3,380,815.87			
Point 4			1.5	-1,000.0	0.0	1,435,218.24	3,380,831.28			

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-11H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.8ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-11H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-26-13)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,543.1	6,100.0	7"	7	7-1/2	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,500.0	1,500.0	0.0	0.0	KOP #1	
5,417.6	5,383.8	216.0	-415.0	KOP #2	
6,543.1	6,100.0	932.7	-417.2	End of Build	