Condor Energy

Well Name: **Wickstrom 18-8H**

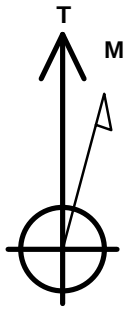
Surface Location: Wickstrom 18-2H Pad Sec.18-T6N-R60W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4700.1

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1425986.69	3377820.85	40.494790	-104.141470	

RKB - 12.5' WELL @ 4712.6ft (RKB - 12.5')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE 600' SHL	-4.9	-285.9	1541.6	Polygon
SECTION LINE	-4.9	314.1	1541.6	Polygon
SHL 313'FNL & 1659'FWL, Sec.18	1.0	0.0	0.0	Point
HARDLINE 600' BHL	1.8	-9623.3	-930.9	Polygon
BHL 660'FSL & 2383'FWL, Sec.19	6100.0	-9559.7	851.4	Point
Landing Pt. 660'FNL & 2640'FWL	6100.0	-349.7	987.4	Point



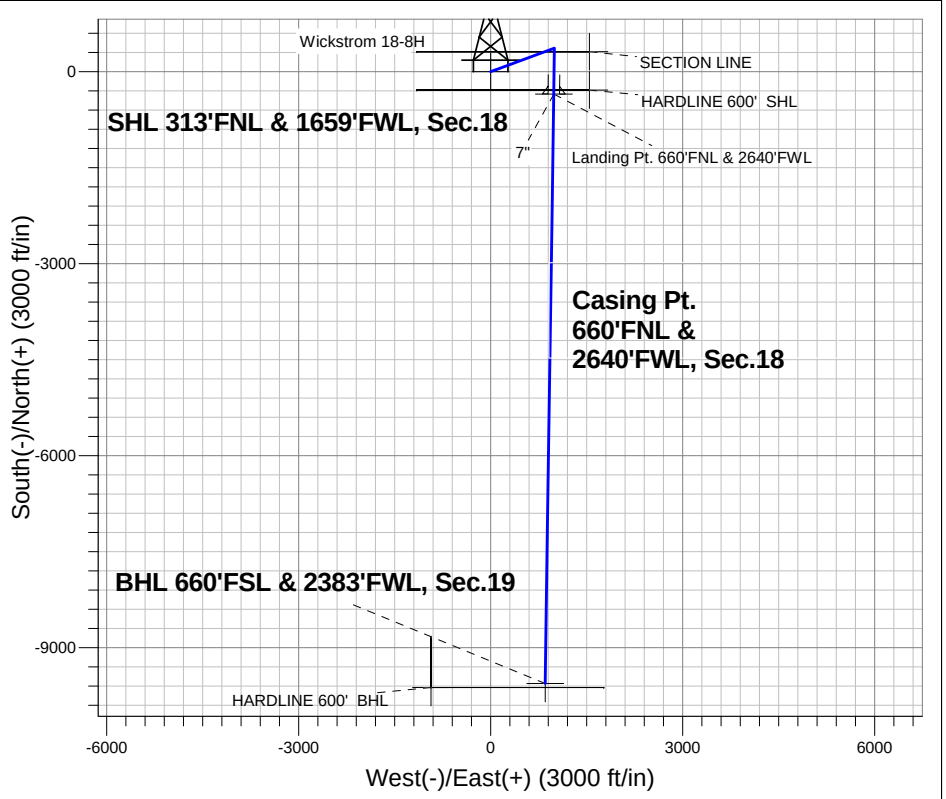
Azimuths to True North
Magnetic North: 8.25°

Magnetic Field
Strength: 53024.3snT
Dip Angle: 67.15°
Date: 7/24/2013
Model: IGRF2010

Wickstrom 18-2H Pad Sec.18-T6N-R60W
Wickstrom 18-8H
Plan #1 (7-24-13)
9:10, July 25 2013

ANNOTATIONS

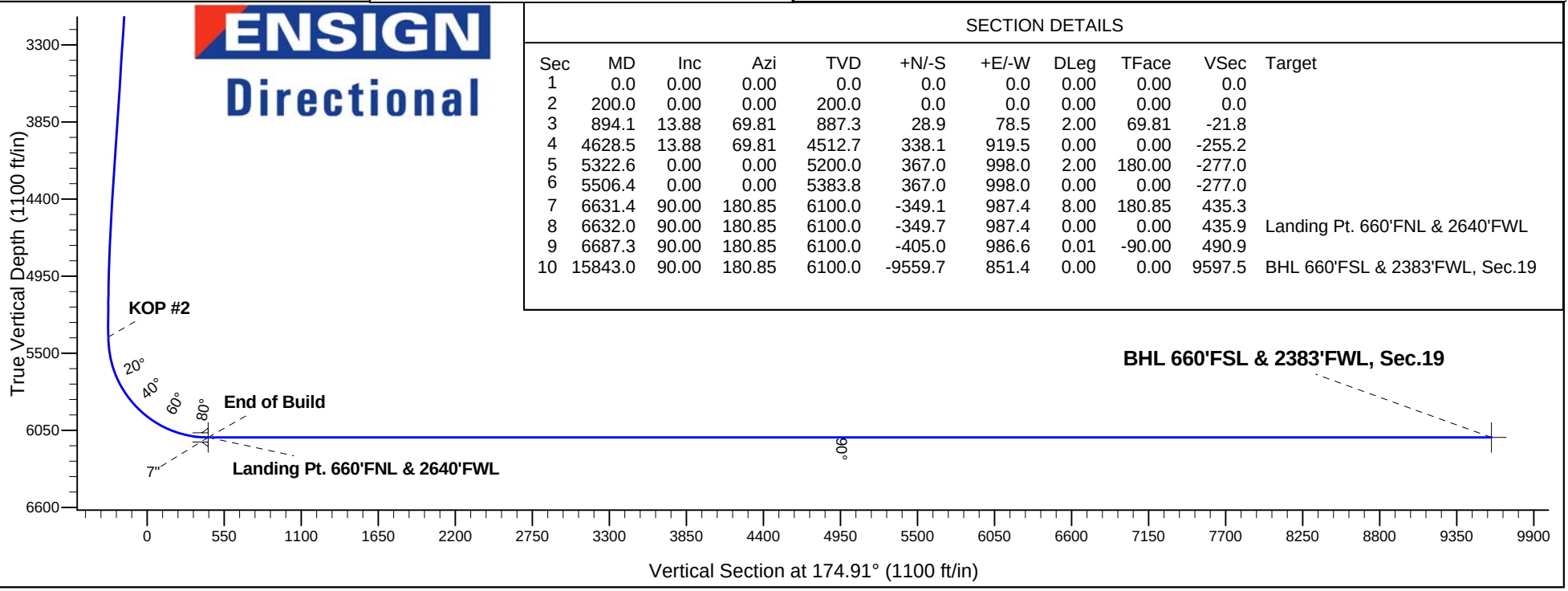
TVD	MD	Annotation
200.0	200.0	KOP #1
5383.8	5506.4	KOP #2
6100.0	6632.0	End of Build



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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	894.1	13.88	69.81	887.3	28.9	78.5	2.00	69.81	-21.8	
4	4628.5	13.88	69.81	4512.7	338.1	919.5	0.00	0.00	-255.2	
5	5322.6	0.00	0.00	5200.0	367.0	998.0	2.00	180.00	-277.0	
6	5506.4	0.00	0.00	5383.8	367.0	998.0	0.00	0.00	-277.0	
7	6631.4	90.00	180.85	6100.0	-349.1	987.4	8.00	180.85	435.3	
8	6632.0	90.00	180.85	6100.0	-349.7	987.4	0.00	0.00	435.9	Landing Pt. 660'FNL & 2640'FWL
9	6687.3	90.00	180.85	6100.0	-405.0	986.6	0.01	-90.00	490.9	
10	15843.0	90.00	180.85	6100.0	-9559.7	851.4	0.00	0.00	9597.5	BHL 660'FSL & 2383'FWL, Sec.19



Condor Energy

SEC.18-T6N-R60W
Wickstrom 18-2H Pad Sec.18-T6N-R60W
Wickstrom 18-8H

Wellbore #1

Plan: Plan #1 (7-24-13)

Standard Planning Report

25 July, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 18-8H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	**MD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 18-8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-24-13)		

Project SEC.18-T6N-R60W, Morgan County, CO

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site Wickstrom 18-2H Pad Sec.18-T6N-R60W

Site Position:		**Northing:**	1,426,014.95 ft	**Latitude:**	40.494870
From:	Lat/Long	**Easting:**	3,377,762.01 ft	**Longitude:**	-104.141680
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.88 °

Well Wickstrom 18-8H

Well Position	**+N/-S**	-29.2 ft	**Northing:**	1,425,986.69 ft	**Latitude:**	40.494790
	+E/-W	58.4 ft	**Easting:**	3,377,820.85 ft	**Longitude:**	-104.141470
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,700.1 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/24/2013	8.25	67.15	53,024

Design Plan #1 (7-24-13)

Audit Notes:

Version:		**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	174.91

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
894.1	13.88	69.81	887.3	28.9	78.5	2.00	2.00	0.00	69.81	
4,628.5	13.88	69.81	4,512.7	338.1	919.5	0.00	0.00	0.00	0.00	
5,322.6	0.00	0.00	5,200.0	367.0	998.0	2.00	-2.00	0.00	180.00	
5,506.4	0.00	0.00	5,383.8	367.0	998.0	0.00	0.00	0.00	0.00	
6,631.4	90.00	180.85	6,100.0	-349.1	987.4	8.00	8.00	0.00	180.85	
6,632.0	90.00	180.85	6,100.0	-349.7	987.4	0.00	0.00	0.00	0.00	Landing Pt. 660'FN
6,687.3	90.00	180.85	6,100.0	-405.0	986.6	0.01	0.00	-0.01	-90.00	
15,843.0	90.00	180.85	6,100.0	-9,559.7	851.4	0.00	0.00	0.00	0.00	BHL 660'FSL & 23E

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 18-8H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	**MD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 18-8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-24-13)		

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
HARDLINE 600' SHL - SECTION LINE									
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 313'FNL & 1659'FWL, Sec.18									
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
KOP #1									
300.0	2.00	69.81	300.0	0.6	1.6	-0.5	2.00	2.00	0.00
400.0	4.00	69.81	399.8	2.4	6.5	-1.8	2.00	2.00	0.00
500.0	6.00	69.81	499.5	5.4	14.7	-4.1	2.00	2.00	0.00
600.0	8.00	69.81	598.7	9.6	26.2	-7.3	2.00	2.00	0.00
700.0	10.00	69.81	697.5	15.0	40.8	-11.3	2.00	2.00	0.00
800.0	12.00	69.81	795.6	21.6	58.8	-16.3	2.00	2.00	0.00
894.1	13.88	69.81	887.3	28.9	78.5	-21.8	2.00	2.00	0.00
900.0	13.88	69.81	893.1	29.4	79.9	-22.2	0.00	0.00	0.00
1,000.0	13.88	69.81	990.1	37.6	102.4	-28.4	0.00	0.00	0.00
1,100.0	13.88	69.81	1,087.2	45.9	124.9	-34.7	0.00	0.00	0.00
1,200.0	13.88	69.81	1,184.3	54.2	147.4	-40.9	0.00	0.00	0.00
1,300.0	13.88	69.81	1,281.4	62.5	169.9	-47.2	0.00	0.00	0.00
1,400.0	13.88	69.81	1,378.5	70.8	192.5	-53.4	0.00	0.00	0.00
1,500.0	13.88	69.81	1,475.5	79.1	215.0	-59.7	0.00	0.00	0.00
1,600.0	13.88	69.81	1,572.6	87.3	237.5	-65.9	0.00	0.00	0.00
1,700.0	13.88	69.81	1,669.7	95.6	260.0	-72.2	0.00	0.00	0.00
1,800.0	13.88	69.81	1,766.8	103.9	282.5	-78.4	0.00	0.00	0.00
1,900.0	13.88	69.81	1,863.8	112.2	305.0	-84.7	0.00	0.00	0.00
2,000.0	13.88	69.81	1,960.9	120.5	327.6	-90.9	0.00	0.00	0.00
2,100.0	13.88	69.81	2,058.0	128.7	350.1	-97.2	0.00	0.00	0.00
2,200.0	13.88	69.81	2,155.1	137.0	372.6	-103.4	0.00	0.00	0.00
2,300.0	13.88	69.81	2,252.2	145.3	395.1	-109.7	0.00	0.00	0.00
2,400.0	13.88	69.81	2,349.2	153.6	417.6	-115.9	0.00	0.00	0.00
2,500.0	13.88	69.81	2,446.3	161.9	440.2	-122.2	0.00	0.00	0.00
2,600.0	13.88	69.81	2,543.4	170.1	462.7	-128.4	0.00	0.00	0.00
2,700.0	13.88	69.81	2,640.5	178.4	485.2	-134.7	0.00	0.00	0.00
2,800.0	13.88	69.81	2,737.6	186.7	507.7	-140.9	0.00	0.00	0.00
2,900.0	13.88	69.81	2,834.6	195.0	530.2	-147.2	0.00	0.00	0.00
3,000.0	13.88	69.81	2,931.7	203.3	552.7	-153.4	0.00	0.00	0.00
3,100.0	13.88	69.81	3,028.8	211.5	575.3	-159.7	0.00	0.00	0.00
3,200.0	13.88	69.81	3,125.9	219.8	597.8	-165.9	0.00	0.00	0.00
3,300.0	13.88	69.81	3,223.0	228.1	620.3	-172.2	0.00	0.00	0.00
3,400.0	13.88	69.81	3,320.0	236.4	642.8	-178.4	0.00	0.00	0.00
3,500.0	13.88	69.81	3,417.1	244.7	665.3	-184.7	0.00	0.00	0.00
3,600.0	13.88	69.81	3,514.2	253.0	687.9	-190.9	0.00	0.00	0.00
3,700.0	13.88	69.81	3,611.3	261.2	710.4	-197.2	0.00	0.00	0.00
3,800.0	13.88	69.81	3,708.3	269.5	732.9	-203.4	0.00	0.00	0.00
3,900.0	13.88	69.81	3,805.4	277.8	755.4	-209.7	0.00	0.00	0.00
4,000.0	13.88	69.81	3,902.5	286.1	777.9	-215.9	0.00	0.00	0.00
4,100.0	13.88	69.81	3,999.6	294.4	800.5	-222.2	0.00	0.00	0.00
4,200.0	13.88	69.81	4,096.7	302.6	823.0	-228.4	0.00	0.00	0.00
4,300.0	13.88	69.81	4,193.7	310.9	845.5	-234.7	0.00	0.00	0.00
4,400.0	13.88	69.81	4,290.8	319.2	868.0	-240.9	0.00	0.00	0.00
4,500.0	13.88	69.81	4,387.9	327.5	890.5	-247.2	0.00	0.00	0.00
4,600.0	13.88	69.81	4,485.0	335.8	913.0	-253.4	0.00	0.00	0.00
4,628.5	13.88	69.81	4,512.7	338.1	919.5	-255.2	0.00	0.00	0.00

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Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 18-8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-24-13)		

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)
4,700.0	12.45	69.81	4,582.3	343.7	934.7	-259.5	2.00	-2.00	0.00
4,800.0	10.45	69.81	4,680.3	350.6	953.4	-264.6	2.00	-2.00	0.00
4,900.0	8.45	69.81	4,778.9	356.3	968.8	-268.9	2.00	-2.00	0.00
5,000.0	6.45	69.81	4,878.1	360.7	981.0	-272.3	2.00	-2.00	0.00
5,100.0	4.45	69.81	4,977.6	364.0	989.9	-274.8	2.00	-2.00	0.00
5,200.0	2.45	69.81	5,077.4	366.1	995.5	-276.3	2.00	-2.00	0.00
5,300.0	0.45	69.81	5,177.4	367.0	997.9	-277.0	2.00	-2.00	0.00
5,322.6	0.00	0.00	5,200.0	367.0	998.0	-277.0	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,277.4	367.0	998.0	-277.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,377.4	367.0	998.0	-277.0	0.00	0.00	0.00
5,506.4	0.00	0.00	5,383.8	367.0	998.0	-277.0	0.00	0.00	0.00
KOP #2									
5,600.0	7.49	180.85	5,477.1	360.9	997.9	-270.9	8.00	8.00	0.00
5,700.0	15.49	180.85	5,575.0	341.0	997.6	-251.2	8.00	8.00	0.00
5,800.0	23.49	180.85	5,669.2	307.7	997.1	-218.0	8.00	8.00	0.00
5,900.0	31.49	180.85	5,757.9	261.6	996.4	-172.1	8.00	8.00	0.00
6,000.0	39.49	180.85	5,839.2	203.6	995.6	-114.4	8.00	8.00	0.00
6,100.0	47.49	180.85	5,911.7	134.8	994.6	-46.1	8.00	8.00	0.00
6,200.0	55.49	180.85	5,973.9	56.6	993.4	31.7	8.00	8.00	0.00
6,300.0	63.49	180.85	6,024.7	-29.4	992.1	117.3	8.00	8.00	0.00
6,400.0	71.49	180.85	6,062.9	-121.7	990.8	209.1	8.00	8.00	0.00
6,500.0	79.49	180.85	6,088.0	-218.4	989.3	305.3	8.00	8.00	0.00
6,600.0	87.49	180.85	6,099.3	-317.7	987.9	404.1	8.00	8.00	0.00
6,631.4	90.00	180.85	6,100.0	-349.1	987.4	435.3	8.00	8.00	0.00
6,632.0	90.00	180.85	6,100.0	-349.7	987.4	435.9	0.00	0.00	0.00
End of Build - 7" - Landing Pt. 660'FNL & 2640'FWL									
6,687.3	90.00	180.85	6,100.0	-405.0	986.6	490.9	0.01	0.00	-0.01
6,700.0	90.00	180.85	6,100.0	-417.7	986.4	503.5	0.00	0.00	0.00
6,800.0	90.00	180.85	6,100.0	-517.7	984.9	603.0	0.00	0.00	0.00
6,900.0	90.00	180.85	6,100.0	-617.7	983.4	702.5	0.00	0.00	0.00
7,000.0	90.00	180.85	6,100.0	-717.7	981.9	801.9	0.00	0.00	0.00
7,100.0	90.00	180.85	6,100.0	-817.6	980.5	901.4	0.00	0.00	0.00
7,200.0	90.00	180.85	6,100.0	-917.6	979.0	1,000.9	0.00	0.00	0.00
7,300.0	90.00	180.85	6,100.0	-1,017.6	977.5	1,100.3	0.00	0.00	0.00
7,400.0	90.00	180.85	6,100.0	-1,117.6	976.0	1,199.8	0.00	0.00	0.00
7,500.0	90.00	180.85	6,100.0	-1,217.6	974.6	1,299.3	0.00	0.00	0.00
7,600.0	90.00	180.85	6,100.0	-1,317.6	973.1	1,398.7	0.00	0.00	0.00
7,700.0	90.00	180.85	6,100.0	-1,417.6	971.6	1,498.2	0.00	0.00	0.00
7,800.0	90.00	180.85	6,100.0	-1,517.6	970.1	1,597.6	0.00	0.00	0.00
7,900.0	90.00	180.85	6,100.0	-1,617.6	968.7	1,697.1	0.00	0.00	0.00
8,000.0	90.00	180.85	6,100.0	-1,717.5	967.2	1,796.6	0.00	0.00	0.00
8,100.0	90.00	180.85	6,100.0	-1,817.5	965.7	1,896.0	0.00	0.00	0.00
8,200.0	90.00	180.85	6,100.0	-1,917.5	964.2	1,995.5	0.00	0.00	0.00
8,300.0	90.00	180.85	6,100.0	-2,017.5	962.8	2,095.0	0.00	0.00	0.00
8,400.0	90.00	180.85	6,100.0	-2,117.5	961.3	2,194.4	0.00	0.00	0.00
8,500.0	90.00	180.85	6,100.0	-2,217.5	959.8	2,293.9	0.00	0.00	0.00
8,600.0	90.00	180.85	6,100.0	-2,317.5	958.3	2,393.4	0.00	0.00	0.00
8,700.0	90.00	180.85	6,100.0	-2,417.5	956.9	2,492.8	0.00	0.00	0.00
8,800.0	90.00	180.85	6,100.0	-2,517.5	955.4	2,592.3	0.00	0.00	0.00
8,900.0	90.00	180.85	6,100.0	-2,617.4	953.9	2,691.8	0.00	0.00	0.00
9,000.0	90.00	180.85	6,100.0	-2,717.4	952.4	2,791.2	0.00	0.00	0.00
9,100.0	90.00	180.85	6,100.0	-2,817.4	950.9	2,890.7	0.00	0.00	0.00
9,200.0	90.00	180.85	6,100.0	-2,917.4	949.5	2,990.1	0.00	0.00	0.00
9,300.0	90.00	180.85	6,100.0	-3,017.4	948.0	3,089.6	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 18-8H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	**MD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 18-8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-24-13)		

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)
9,400.0	90.00	180.85	6,100.0	-3,117.4	946.5	3,189.1	0.00	0.00	0.00
9,500.0	90.00	180.85	6,100.0	-3,217.4	945.0	3,288.5	0.00	0.00	0.00
9,600.0	90.00	180.85	6,100.0	-3,317.4	943.6	3,388.0	0.00	0.00	0.00
9,700.0	90.00	180.85	6,100.0	-3,417.4	942.1	3,487.5	0.00	0.00	0.00
9,800.0	90.00	180.85	6,100.0	-3,517.3	940.6	3,586.9	0.00	0.00	0.00
9,900.0	90.00	180.85	6,100.0	-3,617.3	939.1	3,686.4	0.00	0.00	0.00
10,000.0	90.00	180.85	6,100.0	-3,717.3	937.7	3,785.9	0.00	0.00	0.00
10,100.0	90.00	180.85	6,100.0	-3,817.3	936.2	3,885.3	0.00	0.00	0.00
10,200.0	90.00	180.85	6,100.0	-3,917.3	934.7	3,984.8	0.00	0.00	0.00
10,300.0	90.00	180.85	6,100.0	-4,017.3	933.2	4,084.2	0.00	0.00	0.00
10,400.0	90.00	180.85	6,100.0	-4,117.3	931.8	4,183.7	0.00	0.00	0.00
10,500.0	90.00	180.85	6,100.0	-4,217.3	930.3	4,283.2	0.00	0.00	0.00
10,600.0	90.00	180.85	6,100.0	-4,317.3	928.8	4,382.6	0.00	0.00	0.00
10,700.0	90.00	180.85	6,100.0	-4,417.3	927.3	4,482.1	0.00	0.00	0.00
10,800.0	90.00	180.85	6,100.0	-4,517.2	925.9	4,581.6	0.00	0.00	0.00
10,900.0	90.00	180.85	6,100.0	-4,617.2	924.4	4,681.0	0.00	0.00	0.00
11,000.0	90.00	180.85	6,100.0	-4,717.2	922.9	4,780.5	0.00	0.00	0.00
11,100.0	90.00	180.85	6,100.0	-4,817.2	921.4	4,880.0	0.00	0.00	0.00
11,200.0	90.00	180.85	6,100.0	-4,917.2	919.9	4,979.4	0.00	0.00	0.00
11,300.0	90.00	180.85	6,100.0	-5,017.2	918.5	5,078.9	0.00	0.00	0.00
11,400.0	90.00	180.85	6,100.0	-5,117.2	917.0	5,178.3	0.00	0.00	0.00
11,500.0	90.00	180.85	6,100.0	-5,217.2	915.5	5,277.8	0.00	0.00	0.00
11,600.0	90.00	180.85	6,100.0	-5,317.2	914.0	5,377.3	0.00	0.00	0.00
11,700.0	90.00	180.85	6,100.0	-5,417.1	912.6	5,476.7	0.00	0.00	0.00
11,800.0	90.00	180.85	6,100.0	-5,517.1	911.1	5,576.2	0.00	0.00	0.00
11,900.0	90.00	180.85	6,100.0	-5,617.1	909.6	5,675.7	0.00	0.00	0.00
12,000.0	90.00	180.85	6,100.0	-5,717.1	908.1	5,775.1	0.00	0.00	0.00
12,100.0	90.00	180.85	6,100.0	-5,817.1	906.7	5,874.6	0.00	0.00	0.00
12,200.0	90.00	180.85	6,100.0	-5,917.1	905.2	5,974.1	0.00	0.00	0.00
12,300.0	90.00	180.85	6,100.0	-6,017.1	903.7	6,073.5	0.00	0.00	0.00
12,400.0	90.00	180.85	6,100.0	-6,117.1	902.2	6,173.0	0.00	0.00	0.00
12,500.0	90.00	180.85	6,100.0	-6,217.1	900.8	6,272.5	0.00	0.00	0.00
12,600.0	90.00	180.85	6,100.0	-6,317.0	899.3	6,371.9	0.00	0.00	0.00
12,700.0	90.00	180.85	6,100.0	-6,417.0	897.8	6,471.4	0.00	0.00	0.00
12,800.0	90.00	180.85	6,100.0	-6,517.0	896.3	6,570.8	0.00	0.00	0.00
12,900.0	90.00	180.85	6,100.0	-6,617.0	894.9	6,670.3	0.00	0.00	0.00
13,000.0	90.00	180.85	6,100.0	-6,717.0	893.4	6,769.8	0.00	0.00	0.00
13,100.0	90.00	180.85	6,100.0	-6,817.0	891.9	6,869.2	0.00	0.00	0.00
13,200.0	90.00	180.85	6,100.0	-6,917.0	890.4	6,968.7	0.00	0.00	0.00
13,300.0	90.00	180.85	6,100.0	-7,017.0	888.9	7,068.2	0.00	0.00	0.00
13,400.0	90.00	180.85	6,100.0	-7,117.0	887.5	7,167.6	0.00	0.00	0.00
13,500.0	90.00	180.85	6,100.0	-7,216.9	886.0	7,267.1	0.00	0.00	0.00
13,600.0	90.00	180.85	6,100.0	-7,316.9	884.5	7,366.6	0.00	0.00	0.00
13,700.0	90.00	180.85	6,100.0	-7,416.9	883.0	7,466.0	0.00	0.00	0.00
13,800.0	90.00	180.85	6,100.0	-7,516.9	881.6	7,565.5	0.00	0.00	0.00
13,900.0	90.00	180.85	6,100.0	-7,616.9	880.1	7,664.9	0.00	0.00	0.00
14,000.0	90.00	180.85	6,100.0	-7,716.9	878.6	7,764.4	0.00	0.00	0.00
14,100.0	90.00	180.85	6,100.0	-7,816.9	877.1	7,863.9	0.00	0.00	0.00
14,200.0	90.00	180.85	6,100.0	-7,916.9	875.7	7,963.3	0.00	0.00	0.00
14,300.0	90.00	180.85	6,100.0	-8,016.9	874.2	8,062.8	0.00	0.00	0.00
14,400.0	90.00	180.85	6,100.0	-8,116.8	872.7	8,162.3	0.00	0.00	0.00
14,500.0	90.00	180.85	6,100.0	-8,216.8	871.2	8,261.7	0.00	0.00	0.00
14,600.0	90.00	180.85	6,100.0	-8,316.8	869.8	8,361.2	0.00	0.00	0.00
14,700.0	90.00	180.85	6,100.0	-8,416.8	868.3	8,460.7	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 18-8H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	**MD Reference:**	WELL @ 4712.6ft (RKB - 12.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 18-8H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-24-13)		

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)
14,800.0	90.00	180.85	6,100.0	-8,516.8	866.8	8,560.1	0.00	0.00	0.00
14,900.0	90.00	180.85	6,100.0	-8,616.8	865.3	8,659.6	0.00	0.00	0.00
15,000.0	90.00	180.85	6,100.0	-8,716.8	863.9	8,759.0	0.00	0.00	0.00
15,100.0	90.00	180.85	6,100.0	-8,816.8	862.4	8,858.5	0.00	0.00	0.00
15,200.0	90.00	180.85	6,100.0	-8,916.8	860.9	8,958.0	0.00	0.00	0.00
15,300.0	90.00	180.85	6,100.0	-9,016.8	859.4	9,057.4	0.00	0.00	0.00
15,400.0	90.00	180.85	6,100.0	-9,116.7	857.9	9,156.9	0.00	0.00	0.00
15,500.0	90.00	180.85	6,100.0	-9,216.7	856.5	9,256.4	0.00	0.00	0.00
15,600.0	90.00	180.85	6,100.0	-9,316.7	855.0	9,355.8	0.00	0.00	0.00
15,700.0	90.00	180.85	6,100.0	-9,416.7	853.5	9,455.3	0.00	0.00	0.00
15,800.0	90.00	180.85	6,100.0	-9,516.7	852.0	9,554.8	0.00	0.00	0.00
15,843.0	90.00	180.85	6,100.0	-9,559.7	851.4	9,597.5	0.00	0.00	0.00
HARDLINE 600' BHL - BHL 660'FSL & 2383'FWL, Sec.19									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,632.0	6,100.0	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
200.0	200.0	0.0	0.0	KOP #1
5,506.4	5,383.8	367.0	998.0	KOP #2
6,632.0	6,100.0	-349.7	987.4	End of Build