

Condor Energy

Well Name: **Wickstrom 18-13H**

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

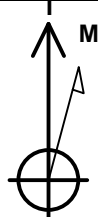
Ground Elevation: 4708.7

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1426060.13	3380228.53	40.494890	-104.132810	

RKB - 12.5' WELL @ 4721.2ft (RKB - 12.5')

WELLBORE TARGET DETAILS

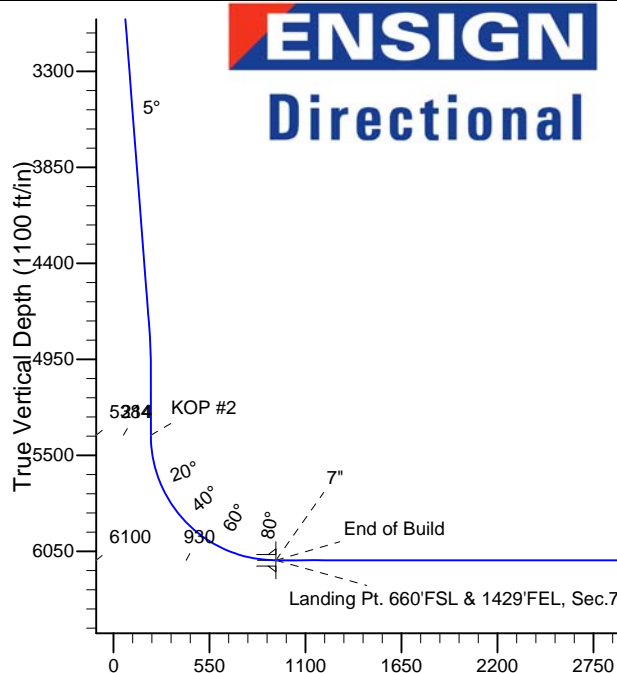
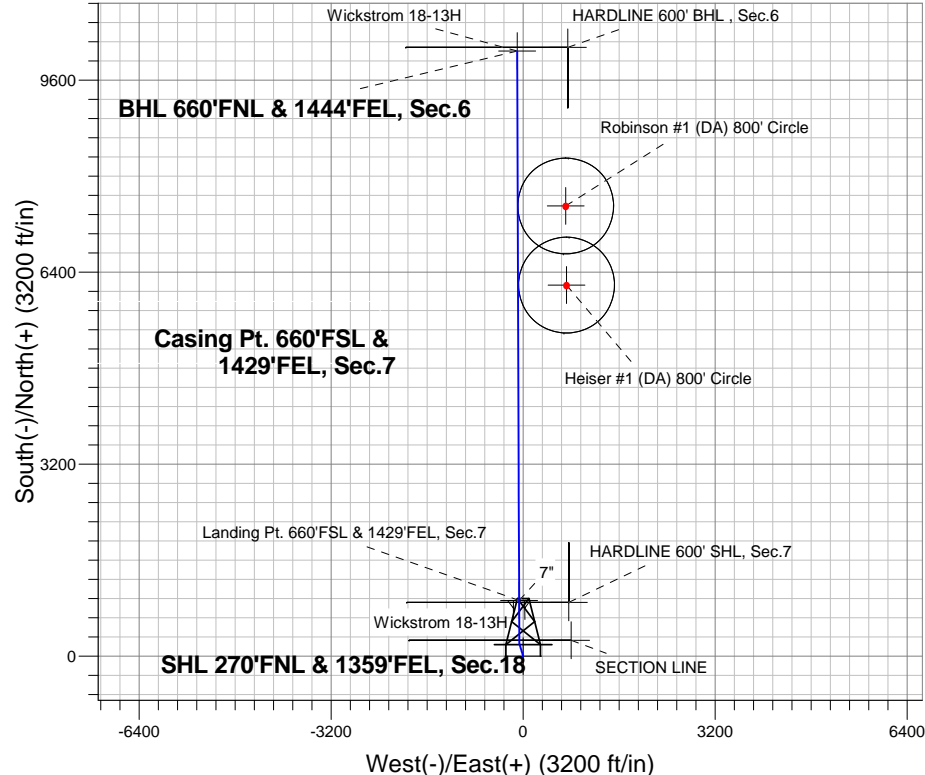
Name	TVD	+N/-S	+E/-W	Shape
Heiser #1 (DA) 800' Circle	0.4	6186.2	723.0	Circle (Radius: 800.0)
Robinson #1 (DA) 800' Circle	0.4	7505.0	709.0	Circle (Radius: 800.0)
HARDLINE 600' BHL , Sec.6	0.9	10148.1	743.9	Polygon
HARDLINE 600' SHL, Sec.7	0.9	896.1	760.9	Polygon
SECTION LINE	1.0	268.1	800.0	Polygon
SHL 270'FNL & 1359'FEL, Sec.18	1.0	0.0	0.0	Point
BHL 660'FNL & 1444'FEL, Sec.6	6100.0	10088.0	-100.1	Point
Landing Pt. 660'FSL & 1429'FEL, Sec.7	6100.0	929.0	-66.7	Point



Azimuths to True North
Magnetic North: 8.18°

Magnetic Field
Strength: 52976.6nT
Dip Angle: 67.14°
Date: 1/7/2014
Model: IGRF2010

Wickstrom 18-9H Pad Sec.18-T6N-R60W
Wickstrom 18-13H
Plan #2 (1-7-14)
15:43, January 07 2014



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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2229.5	4.59	343.28	2229.2	8.8	-2.6	2.00	343.28	8.8	
4	4779.2	4.59	343.28	4770.8	204.2	-61.4	0.00	0.00	204.8	
5	5008.7	0.00	0.00	5000.0	213.0	-64.0	2.00	180.00	213.6	
6	5392.6	0.00	0.00	5384.0	213.0	-64.0	0.00	0.00	213.6	
7	6517.4	90.00	359.78	6100.0	929.0	-66.7	8.00	359.78	929.6	
8	6517.4	90.00	359.78	6100.0	929.0	-66.7	0.00	0.00	929.6	Landing Pt. 660'FSL & 1429'FEL, Sec.7
9	6517.9	90.00	359.79	6100.0	929.6	-66.8	2.00	90.00	930.2	
10	15676.4	90.00	359.79	6100.0	10088.0	-100.1	0.00	0.00	10088.5	BHL 660'FNL & 1444'FEL, Sec.6

BHL 660'FNL & 1444'FEL, Sec.6

Vertical Section at 359.43° (1100 ft/in)



Condor Energy

SEC.18-T6N-R60W

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

Wickstrom 18-13H

Wellbore #1

Plan: Plan #2 (1-7-14)

Standard Planning Report

07 January, 2014

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,229.5	4.59	343.28	2,229.2	8.8	-2.6	2.00	2.00	0.00	343.28	
4,779.2	4.59	343.28	4,770.8	204.2	-61.4	0.00	0.00	0.00	0.00	
5,008.7	0.00	0.00	5,000.0	213.0	-64.0	2.00	-2.00	0.00	180.00	
5,392.6	0.00	0.00	5,384.0	213.0	-64.0	0.00	0.00	0.00	0.00	
6,517.4	90.00	359.78	6,100.0	929.0	-66.7	8.00	8.00	0.00	359.78	
6,517.4	90.00	359.78	6,100.0	929.0	-66.7	0.00	0.00	0.00	0.00	Landing Pt. 660'FSI
6,517.9	90.00	359.79	6,100.0	929.6	-66.8	2.00	0.00	2.00	90.00	
15,676.4	90.00	359.79	6,100.0	10,088.0	-100.1	0.00	0.00	0.00	0.00	BHL 660'FNL & 144'FSI

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (1-7-14)		

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
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
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP #1									
2,100.0	2.00	343.28	2,100.0	1.7	-0.5	1.7	2.00	2.00	0.00
2,200.0	4.00	343.28	2,199.8	6.7	-2.0	6.7	2.00	2.00	0.00
2,229.5	4.59	343.28	2,229.2	8.8	-2.6	8.8	2.00	2.00	0.00
2,300.0	4.59	343.28	2,299.5	14.2	-4.3	14.2	0.00	0.00	0.00
2,400.0	4.59	343.28	2,399.2	21.9	-6.6	21.9	0.00	0.00	0.00
2,500.0	4.59	343.28	2,498.9	29.5	-8.9	29.6	0.00	0.00	0.00
2,600.0	4.59	343.28	2,598.6	37.2	-11.2	37.3	0.00	0.00	0.00
2,700.0	4.59	343.28	2,698.2	44.9	-13.5	45.0	0.00	0.00	0.00
2,800.0	4.59	343.28	2,797.9	52.5	-15.8	52.7	0.00	0.00	0.00
2,900.0	4.59	343.28	2,897.6	60.2	-18.1	60.4	0.00	0.00	0.00
3,000.0	4.59	343.28	2,997.3	67.8	-20.4	68.0	0.00	0.00	0.00
3,100.0	4.59	343.28	3,097.0	75.5	-22.7	75.7	0.00	0.00	0.00
3,200.0	4.59	343.28	3,196.6	83.2	-25.0	83.4	0.00	0.00	0.00
3,300.0	4.59	343.28	3,296.3	90.8	-27.3	91.1	0.00	0.00	0.00
3,400.0	4.59	343.28	3,396.0	98.5	-29.6	98.8	0.00	0.00	0.00
3,500.0	4.59	343.28	3,495.7	106.2	-31.9	106.5	0.00	0.00	0.00
3,600.0	4.59	343.28	3,595.4	113.8	-34.2	114.2	0.00	0.00	0.00
3,700.0	4.59	343.28	3,695.0	121.5	-36.5	121.9	0.00	0.00	0.00
3,800.0	4.59	343.28	3,794.7	129.2	-38.8	129.5	0.00	0.00	0.00
3,900.0	4.59	343.28	3,894.4	136.8	-41.1	137.2	0.00	0.00	0.00
4,000.0	4.59	343.28	3,994.1	144.5	-43.4	144.9	0.00	0.00	0.00
4,100.0	4.59	343.28	4,093.8	152.2	-45.7	152.6	0.00	0.00	0.00
4,200.0	4.59	343.28	4,193.4	159.8	-48.0	160.3	0.00	0.00	0.00
4,300.0	4.59	343.28	4,293.1	167.5	-50.3	168.0	0.00	0.00	0.00
4,400.0	4.59	343.28	4,392.8	175.1	-52.6	175.7	0.00	0.00	0.00
4,500.0	4.59	343.28	4,492.5	182.8	-54.9	183.3	0.00	0.00	0.00
4,600.0	4.59	343.28	4,592.2	190.5	-57.2	191.0	0.00	0.00	0.00
4,700.0	4.59	343.28	4,691.8	198.1	-59.5	198.7	0.00	0.00	0.00
4,779.2	4.59	343.28	4,770.8	204.2	-61.4	204.8	0.00	0.00	0.00
4,800.0	4.17	343.28	4,791.5	205.7	-61.8	206.3	2.00	-2.00	0.00
4,900.0	2.17	343.28	4,891.4	211.0	-63.4	211.6	2.00	-2.00	0.00
5,000.0	0.17	343.28	4,991.3	213.0	-64.0	213.6	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (1-7-14)		

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)
5,008.7	0.00	0.00	5,000.0	213.0	-64.0	213.6	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,091.3	213.0	-64.0	213.6	0.00	0.00	0.00
5,200.0	0.00	0.00	5,191.3	213.0	-64.0	213.6	0.00	0.00	0.00
5,300.0	0.00	0.00	5,291.3	213.0	-64.0	213.6	0.00	0.00	0.00
5,392.6	0.00	0.00	5,383.9	213.0	-64.0	213.6	0.00	0.00	0.00
KOP #2									
5,400.0	0.59	359.78	5,391.3	213.0	-64.0	213.7	7.95	7.95	0.00
5,500.0	8.59	359.78	5,490.9	221.0	-64.0	221.7	8.00	8.00	0.00
5,600.0	16.59	359.78	5,588.4	242.8	-64.1	243.4	8.00	8.00	0.00
5,700.0	24.59	359.78	5,682.0	278.0	-64.2	278.6	8.00	8.00	0.00
5,800.0	32.60	359.78	5,769.7	325.8	-64.4	326.4	8.00	8.00	0.00
5,900.0	40.60	359.78	5,849.9	385.4	-64.7	386.0	8.00	8.00	0.00
6,000.0	48.60	359.78	5,921.1	455.5	-64.9	456.1	8.00	8.00	0.00
6,100.0	56.60	359.78	5,981.8	534.9	-65.2	535.5	8.00	8.00	0.00
6,200.0	64.60	359.78	6,030.8	621.9	-65.6	622.6	8.00	8.00	0.00
6,300.0	72.61	359.78	6,067.3	715.0	-65.9	715.6	8.00	8.00	0.00
6,400.0	80.61	359.78	6,090.4	812.2	-66.3	812.8	8.00	8.00	0.00
6,500.0	88.61	359.78	6,099.8	911.6	-66.7	912.3	8.00	8.00	0.00
6,517.4	90.00	359.78	6,100.0	929.0	-66.7	929.7	7.99	7.99	0.00
End of Build - 7"									
6,517.9	90.00	359.79	6,100.0	929.6	-66.8	930.2	2.09	0.00	2.09
6,600.0	90.00	359.79	6,100.0	1,011.6	-67.0	1,012.3	0.00	0.00	0.00
6,700.0	90.00	359.79	6,100.0	1,111.6	-67.4	1,112.3	0.00	0.00	0.00
6,800.0	90.00	359.79	6,100.0	1,211.6	-67.8	1,212.3	0.00	0.00	0.00
6,900.0	90.00	359.79	6,100.0	1,311.6	-68.1	1,312.3	0.00	0.00	0.00
7,000.0	90.00	359.79	6,100.0	1,411.6	-68.5	1,412.3	0.00	0.00	0.00
7,100.0	90.00	359.79	6,100.0	1,511.6	-68.9	1,512.3	0.00	0.00	0.00
7,200.0	90.00	359.79	6,100.0	1,611.6	-69.2	1,612.2	0.00	0.00	0.00
7,300.0	90.00	359.79	6,100.0	1,711.6	-69.6	1,712.2	0.00	0.00	0.00
7,400.0	90.00	359.79	6,100.0	1,811.6	-70.0	1,812.2	0.00	0.00	0.00
7,500.0	90.00	359.79	6,100.0	1,911.6	-70.3	1,912.2	0.00	0.00	0.00
7,600.0	90.00	359.79	6,100.0	2,011.6	-70.7	2,012.2	0.00	0.00	0.00
7,700.0	90.00	359.79	6,100.0	2,111.6	-71.1	2,112.2	0.00	0.00	0.00
7,800.0	90.00	359.79	6,100.0	2,211.6	-71.4	2,212.2	0.00	0.00	0.00
7,900.0	90.00	359.79	6,100.0	2,311.6	-71.8	2,312.2	0.00	0.00	0.00
8,000.0	90.00	359.79	6,100.0	2,411.6	-72.1	2,412.2	0.00	0.00	0.00
8,100.0	90.00	359.79	6,100.0	2,511.6	-72.5	2,512.2	0.00	0.00	0.00
8,200.0	90.00	359.79	6,100.0	2,611.6	-72.9	2,612.2	0.00	0.00	0.00
8,300.0	90.00	359.79	6,100.0	2,711.6	-73.2	2,712.2	0.00	0.00	0.00
8,400.0	90.00	359.79	6,100.0	2,811.6	-73.6	2,812.2	0.00	0.00	0.00
8,500.0	90.00	359.79	6,100.0	2,911.6	-74.0	2,912.2	0.00	0.00	0.00
8,600.0	90.00	359.79	6,100.0	3,011.6	-74.3	3,012.2	0.00	0.00	0.00
8,700.0	90.00	359.79	6,100.0	3,111.6	-74.7	3,112.2	0.00	0.00	0.00
8,800.0	90.00	359.79	6,100.0	3,211.6	-75.1	3,212.2	0.00	0.00	0.00
8,900.0	90.00	359.79	6,100.0	3,311.6	-75.4	3,312.2	0.00	0.00	0.00
9,000.0	90.00	359.79	6,100.0	3,411.6	-75.8	3,412.2	0.00	0.00	0.00
9,100.0	90.00	359.79	6,100.0	3,511.6	-76.1	3,512.2	0.00	0.00	0.00
9,200.0	90.00	359.79	6,100.0	3,611.6	-76.5	3,612.2	0.00	0.00	0.00
9,300.0	90.00	359.79	6,100.0	3,711.6	-76.9	3,712.2	0.00	0.00	0.00
9,400.0	90.00	359.79	6,100.0	3,811.6	-77.2	3,812.2	0.00	0.00	0.00
9,500.0	90.00	359.79	6,100.0	3,911.6	-77.6	3,912.2	0.00	0.00	0.00
9,600.0	90.00	359.79	6,100.0	4,011.6	-78.0	4,012.2	0.00	0.00	0.00
9,700.0	90.00	359.79	6,100.0	4,111.6	-78.3	4,112.2	0.00	0.00	0.00
9,800.0	90.00	359.79	6,100.0	4,211.6	-78.7	4,212.2	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (1-7-14)		

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)
9,900.0	90.00	359.79	6,100.0	4,311.6	-79.1	4,312.2	0.00	0.00	0.00
10,000.0	90.00	359.79	6,100.0	4,411.6	-79.4	4,412.2	0.00	0.00	0.00
10,100.0	90.00	359.79	6,100.0	4,511.6	-79.8	4,512.2	0.00	0.00	0.00
10,200.0	90.00	359.79	6,100.0	4,611.6	-80.2	4,612.2	0.00	0.00	0.00
10,300.0	90.00	359.79	6,100.0	4,711.6	-80.5	4,712.2	0.00	0.00	0.00
10,400.0	90.00	359.79	6,100.0	4,811.6	-80.9	4,812.2	0.00	0.00	0.00
10,500.0	90.00	359.79	6,100.0	4,911.6	-81.2	4,912.2	0.00	0.00	0.00
10,600.0	90.00	359.79	6,100.0	5,011.6	-81.6	5,012.2	0.00	0.00	0.00
10,700.0	90.00	359.79	6,100.0	5,111.6	-82.0	5,112.2	0.00	0.00	0.00
10,800.0	90.00	359.79	6,100.0	5,211.6	-82.3	5,212.2	0.00	0.00	0.00
10,900.0	90.00	359.79	6,100.0	5,311.6	-82.7	5,312.2	0.00	0.00	0.00
11,000.0	90.00	359.79	6,100.0	5,411.6	-83.1	5,412.2	0.00	0.00	0.00
11,100.0	90.00	359.79	6,100.0	5,511.6	-83.4	5,512.2	0.00	0.00	0.00
11,200.0	90.00	359.79	6,100.0	5,611.6	-83.8	5,612.2	0.00	0.00	0.00
11,300.0	90.00	359.79	6,100.0	5,711.6	-84.2	5,712.2	0.00	0.00	0.00
11,400.0	90.00	359.79	6,100.0	5,811.6	-84.5	5,812.2	0.00	0.00	0.00
11,500.0	90.00	359.79	6,100.0	5,911.6	-84.9	5,912.2	0.00	0.00	0.00
11,600.0	90.00	359.79	6,100.0	6,011.6	-85.2	6,012.2	0.00	0.00	0.00
11,700.0	90.00	359.79	6,100.0	6,111.6	-85.6	6,112.2	0.00	0.00	0.00
11,800.0	90.00	359.79	6,100.0	6,211.6	-86.0	6,212.2	0.00	0.00	0.00
11,900.0	90.00	359.79	6,100.0	6,311.6	-86.3	6,312.2	0.00	0.00	0.00
12,000.0	90.00	359.79	6,100.0	6,411.6	-86.7	6,412.2	0.00	0.00	0.00
12,100.0	90.00	359.79	6,100.0	6,511.6	-87.1	6,512.2	0.00	0.00	0.00
12,200.0	90.00	359.79	6,100.0	6,611.6	-87.4	6,612.1	0.00	0.00	0.00
12,300.0	90.00	359.79	6,100.0	6,711.6	-87.8	6,712.1	0.00	0.00	0.00
12,400.0	90.00	359.79	6,100.0	6,811.6	-88.2	6,812.1	0.00	0.00	0.00
12,500.0	90.00	359.79	6,100.0	6,911.6	-88.5	6,912.1	0.00	0.00	0.00
12,600.0	90.00	359.79	6,100.0	7,011.6	-88.9	7,012.1	0.00	0.00	0.00
12,700.0	90.00	359.79	6,100.0	7,111.6	-89.3	7,112.1	0.00	0.00	0.00
12,800.0	90.00	359.79	6,100.0	7,211.6	-89.6	7,212.1	0.00	0.00	0.00
12,900.0	90.00	359.79	6,100.0	7,311.6	-90.0	7,312.1	0.00	0.00	0.00
13,000.0	90.00	359.79	6,100.0	7,411.6	-90.3	7,412.1	0.00	0.00	0.00
13,100.0	90.00	359.79	6,100.0	7,511.6	-90.7	7,512.1	0.00	0.00	0.00
13,200.0	90.00	359.79	6,100.0	7,611.6	-91.1	7,612.1	0.00	0.00	0.00
13,300.0	90.00	359.79	6,100.0	7,711.6	-91.4	7,712.1	0.00	0.00	0.00
13,400.0	90.00	359.79	6,100.0	7,811.6	-91.8	7,812.1	0.00	0.00	0.00
13,500.0	90.00	359.79	6,100.0	7,911.6	-92.2	7,912.1	0.00	0.00	0.00
13,600.0	90.00	359.79	6,100.0	8,011.6	-92.5	8,012.1	0.00	0.00	0.00
13,700.0	90.00	359.79	6,100.0	8,111.6	-92.9	8,112.1	0.00	0.00	0.00
13,800.0	90.00	359.79	6,100.0	8,211.6	-93.3	8,212.1	0.00	0.00	0.00
13,900.0	90.00	359.79	6,100.0	8,311.6	-93.6	8,312.1	0.00	0.00	0.00
14,000.0	90.00	359.79	6,100.0	8,411.6	-94.0	8,412.1	0.00	0.00	0.00
14,100.0	90.00	359.79	6,100.0	8,511.6	-94.3	8,512.1	0.00	0.00	0.00
14,200.0	90.00	359.79	6,100.0	8,611.6	-94.7	8,612.1	0.00	0.00	0.00
14,300.0	90.00	359.79	6,100.0	8,711.6	-95.1	8,712.1	0.00	0.00	0.00
14,400.0	90.00	359.79	6,100.0	8,811.6	-95.4	8,812.1	0.00	0.00	0.00
14,500.0	90.00	359.79	6,100.0	8,911.6	-95.8	8,912.1	0.00	0.00	0.00
14,600.0	90.00	359.79	6,100.0	9,011.6	-96.2	9,012.1	0.00	0.00	0.00
14,700.0	90.00	359.79	6,100.0	9,111.6	-96.5	9,112.1	0.00	0.00	0.00
14,800.0	90.00	359.79	6,100.0	9,211.6	-96.9	9,212.1	0.00	0.00	0.00
14,900.0	90.00	359.79	6,100.0	9,311.6	-97.3	9,312.1	0.00	0.00	0.00
15,000.0	90.00	359.79	6,100.0	9,411.6	-97.6	9,412.1	0.00	0.00	0.00
15,100.0	90.00	359.79	6,100.0	9,511.6	-98.0	9,512.1	0.00	0.00	0.00
15,200.0	90.00	359.79	6,100.0	9,611.6	-98.4	9,612.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (1-7-14)		

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)
15,300.0	90.00	359.79	6,100.0	9,711.6	-98.7	9,712.1	0.00	0.00	0.00
15,400.0	90.00	359.79	6,100.0	9,811.6	-99.1	9,812.1	0.00	0.00	0.00
15,500.0	90.00	359.79	6,100.0	9,911.6	-99.4	9,912.1	0.00	0.00	0.00
15,600.0	90.00	359.79	6,100.0	10,011.6	-99.8	10,012.1	0.00	0.00	0.00
15,676.4	90.00	359.79	6,100.0	10,088.0	-100.1	10,088.5	0.00	0.00	0.00

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	1.0	268.1	800.0	1,426,340.49	3,381,024.28	40.495626	-104.129934
- hit/miss target									
- Shape									
- plan misses target center by 843.7ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,426,340.49	3,381,024.28		
Point 2			1.0	0.0	-2,700.0	1,426,298.86	3,378,324.69		
Heiser #1 (DA) 800' C	0.00	0.00	0.4	6,186.2	723.0	1,432,256.47	3,380,856.01	40.511870	-104.130210
- plan misses target center by 6153.0ft at 11771.6ft MD (6100.0 TVD, 6183.2 N, -85.9 E)									
- Circle (radius 800.0)									
Robinson #1 (DA) 800' C	0.00	0.00	0.4	7,505.0	709.0	1,433,574.89	3,380,821.74	40.515490	-104.130260
- plan misses target center by 6151.8ft at 13090.5ft MD (6100.0 TVD, 7502.1 N, -90.7 E)									
- Circle (radius 800.0)									
Landing Pt. 660'FSL & 1444'	0.00	0.00	6,100.0	929.0	-66.7	1,426,987.98	3,380,147.47	40.497440	-104.133050
- plan hits target center									
- Point									
HARDLINE 600' SHL, 1444'	0.00	0.00	0.9	896.1	760.9	1,426,967.78	3,380,975.50	40.497349	-104.130074
- plan misses target center by 1175.5ft at 0.9ft MD (0.9 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			0.9	0.0	0.0	1,426,967.78	3,380,975.50		
Point 2			0.9	0.0	-2,700.0	1,426,926.15	3,378,275.92		
Point 3			0.9	0.0	0.0	1,426,967.78	3,380,975.50		
Point 4			0.9	1,000.0	0.0	1,427,967.62	3,380,960.08		
BHL 660'FNL & 1444'	0.00	0.00	6,100.0	10,088.0	-100.1	1,436,145.04	3,379,972.94	40.522580	-104.133170
- plan hits target center									
- Point									
HARDLINE 600' BHL, 1444'	0.00	0.00	0.9	10,148.1	743.9	1,436,218.08	3,380,815.87	40.522745	-104.130134
- plan misses target center by 6157.5ft at 15676.4ft MD (6100.0 TVD, 10088.0 N, -100.1 E)									
- Polygon									
Point 1			0.9	0.0	0.0	1,436,218.08	3,380,815.87		
Point 2			0.9	0.0	-2,700.0	1,436,176.46	3,378,116.28		
Point 3			0.9	0.0	0.0	1,436,218.08	3,380,815.87		
Point 4			0.9	-1,000.0	0.0	1,435,218.24	3,380,831.28		
SHL 270'FNL & 1359'	0.00	0.00	1.0	0.0	0.0	1,426,060.14	3,380,228.53	40.494890	-104.132810
- plan hits target center									
- Point									

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Company:	Condor Energy	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Project:	SEC.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	North Reference:	True
Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (1-7-14)		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name		Casing Diameter (")	Hole Diameter (")
6,517.4	6,100.0	7"		7	7-1/2

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,000.0	2,000.0	0.0	0.0	KOP #1	
5,392.6	5,383.9	213.0	-64.0	KOP #2	
6,517.4	6,100.0	929.0	-66.7	End of Build	



Condor Energy

SEC.18-T6N-R60W

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

Wickstrom 18-13H

Wellbore #1

Plan #2 (1-7-14)

Anticollision Report

07 January, 2014

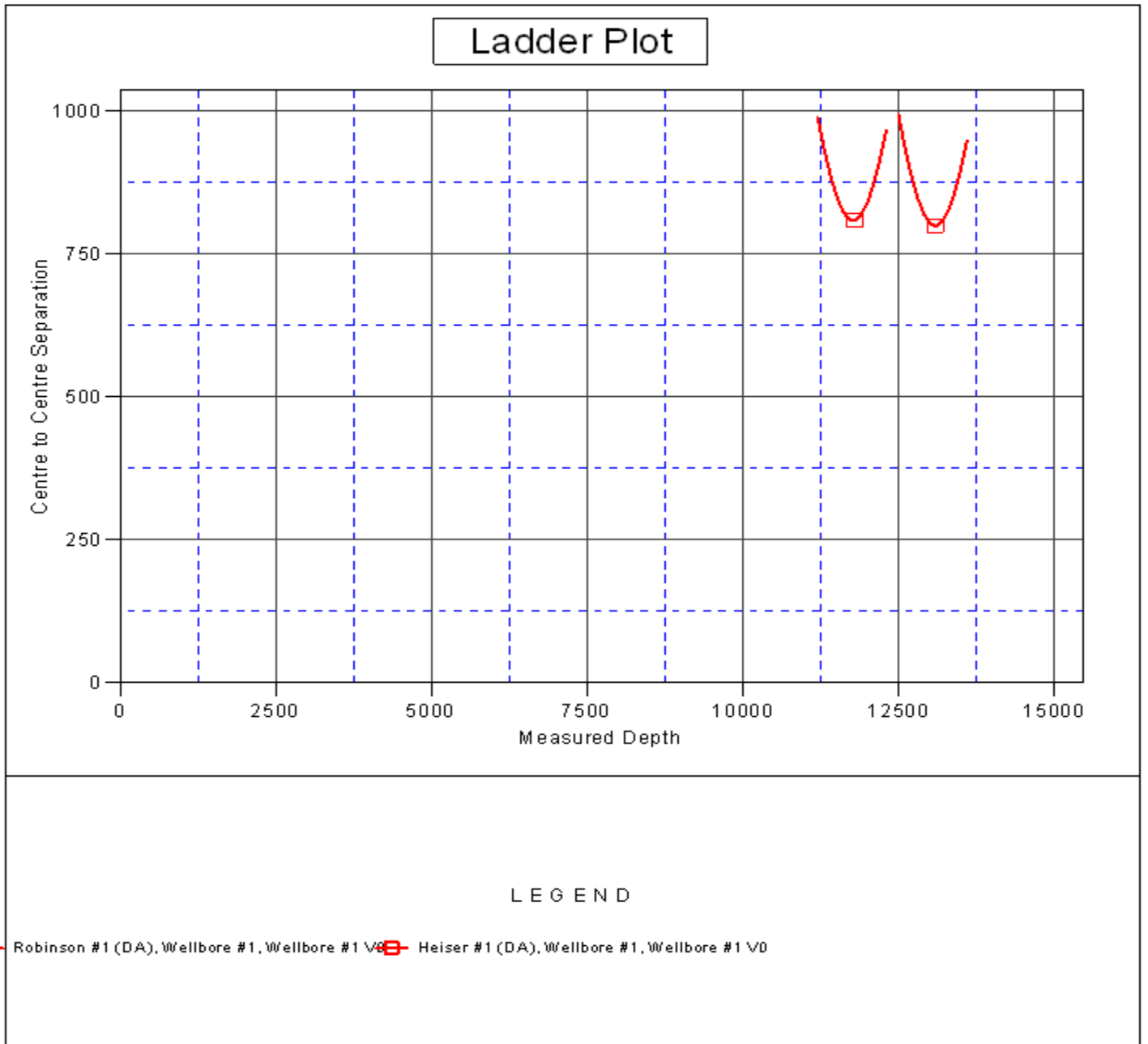
Company:	Condor Energy	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Project:	SEC.18-T6N-R60W	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Reference Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (1-7-14)	Offset TVD Reference:	Offset Datum

Offset Design Wickstrom 18-9H Pad Sec.18-T6N-R60W - Robinson #1 (DA) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 6200-UNKNOWN												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
12,500.0	6,100.0	6,100.6	6,100.6	132.9	122.0	90.00	7,505.0	709.0	994.1	739.2	254.90	3.900	
12,600.0	6,100.0	6,100.6	6,100.6	134.8	122.0	90.00	7,505.0	709.0	938.1	681.3	256.81	3.653	
12,700.0	6,100.0	6,100.6	6,100.6	136.7	122.0	90.00	7,505.0	709.0	889.9	631.2	258.72	3.440	
12,800.0	6,100.0	6,100.6	6,100.6	138.6	122.0	90.00	7,505.0	709.0	850.8	590.2	260.64	3.264	
12,900.0	6,100.0	6,100.6	6,100.6	140.5	122.0	90.00	7,505.0	709.0	822.1	559.5	262.55	3.131	
13,000.0	6,100.0	6,100.6	6,100.6	142.5	122.0	90.00	7,505.0	709.0	804.8	540.3	264.47	3.043	
13,090.5	6,100.0	6,100.6	6,100.6	144.2	122.0	90.00	7,505.0	709.0	799.7	533.5	266.20	3.004 CC	
13,100.0	6,100.0	6,100.6	6,100.6	144.4	122.0	90.00	7,505.0	709.0	799.8	533.4	266.39	3.002 ES, SF	
13,200.0	6,100.0	6,100.6	6,100.6	146.3	122.0	90.00	7,505.0	709.0	807.2	538.9	268.30	3.008	
13,300.0	6,100.0	6,100.6	6,100.6	148.2	122.0	90.00	7,505.0	709.0	826.7	556.5	270.22	3.059	
13,400.0	6,100.0	6,100.6	6,100.6	150.1	122.0	90.00	7,505.0	709.0	857.5	585.4	272.13	3.151	
13,500.0	6,100.0	6,100.6	6,100.6	152.0	122.0	90.00	7,505.0	709.0	898.5	624.4	274.05	3.278	
13,600.0	6,100.0	6,100.6	6,100.6	154.0	122.0	90.00	7,505.0	709.0	948.2	672.3	275.97	3.436	

Company:	Condor Energy	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Project:	SEC.18-T6N-R60W	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Reference Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (1-7-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4721.2ft (RKB - 12.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Wickstrom 18-13H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.88°



Company:	Condor Energy	Local Co-ordinate Reference:	Well Wickstrom 18-13H
Project:	SEC.18-T6N-R60W	TVD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Reference Site:	Wickstrom 18-9H Pad Sec.18-T6N-R60W	MD Reference:	WELL @ 4721.2ft (RKB - 12.5')
Site Error:	0.0ft	North Reference:	True
Reference Well:	Wickstrom 18-13H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	Landmark
Reference Design:	Plan #2 (1-7-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4721.2ft (RKB - 12.5')
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Wickstrom 18-13H
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.88°

