Condor Energy

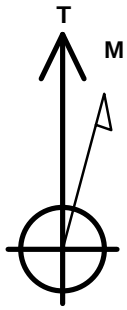
Well Name: **Wickstrom 17-4H**
Surface Location: Wickstrom 17-1H Pad Sec.17-T6N-R60W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4671.6

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1421355.02	3383433.69	40.481840	-104.121550	

RKB - 12.5' WELL @ 4684.1ft (RKB - 12.5')

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
SHL 250'FSL & 1739'FWL, Sec.17	1.0	0.0	0.0	Point
HARDLINE 600' BHL	1.2	-4909.1	600.0	Polygon
HARDLINE 600' SHL	1.2	-850.8	600.0	Polygon
SECTION LINE	1.3	-251.7	600.0	Polygon
BHL 660'FSL & 672'FWL, Sec.20	6030.0	-4838.1	-1060.1	Point
Landing Pt. 660'FNL & 737'FWL, Sec.20	6030.0	-903.5	-998.7	Point



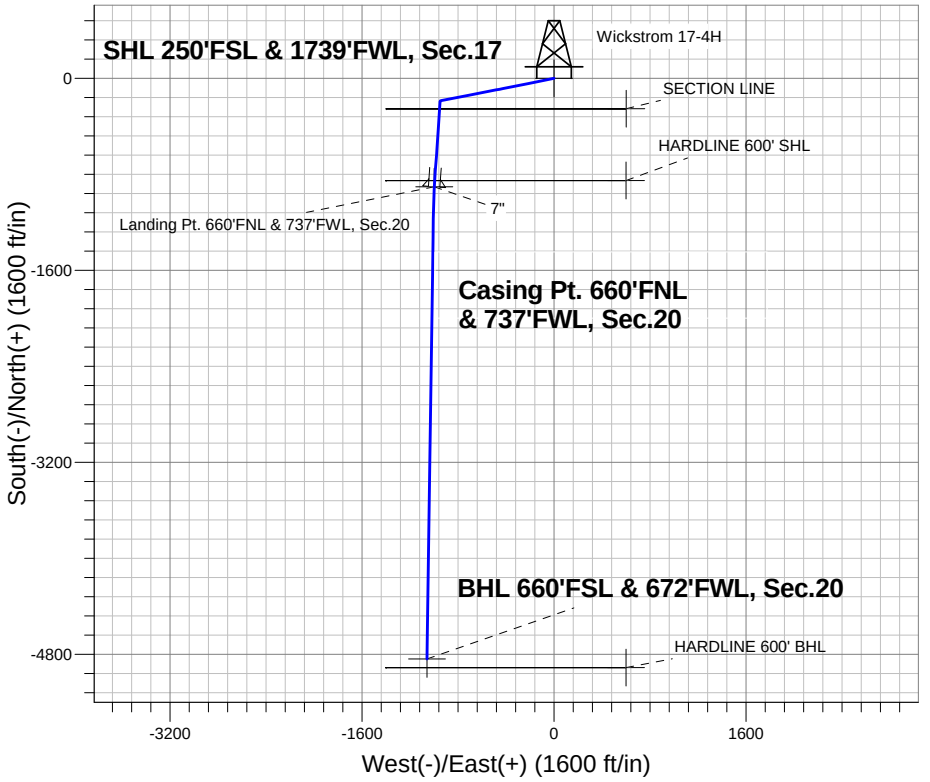
Azimuths to True North
Magnetic North: 8.24°

Magnetic Field
Strength: 53020.1snT
Dip Angle: 67.15°
Date: 7/23/2013
Model: IGRF2010

Wickstrom 17-1H Pad Sec.17-T6N-R60W
Wickstrom 17-4H
Plan #1 (7-23-13)
9:37, July 24 2013

ANNOTATIONS

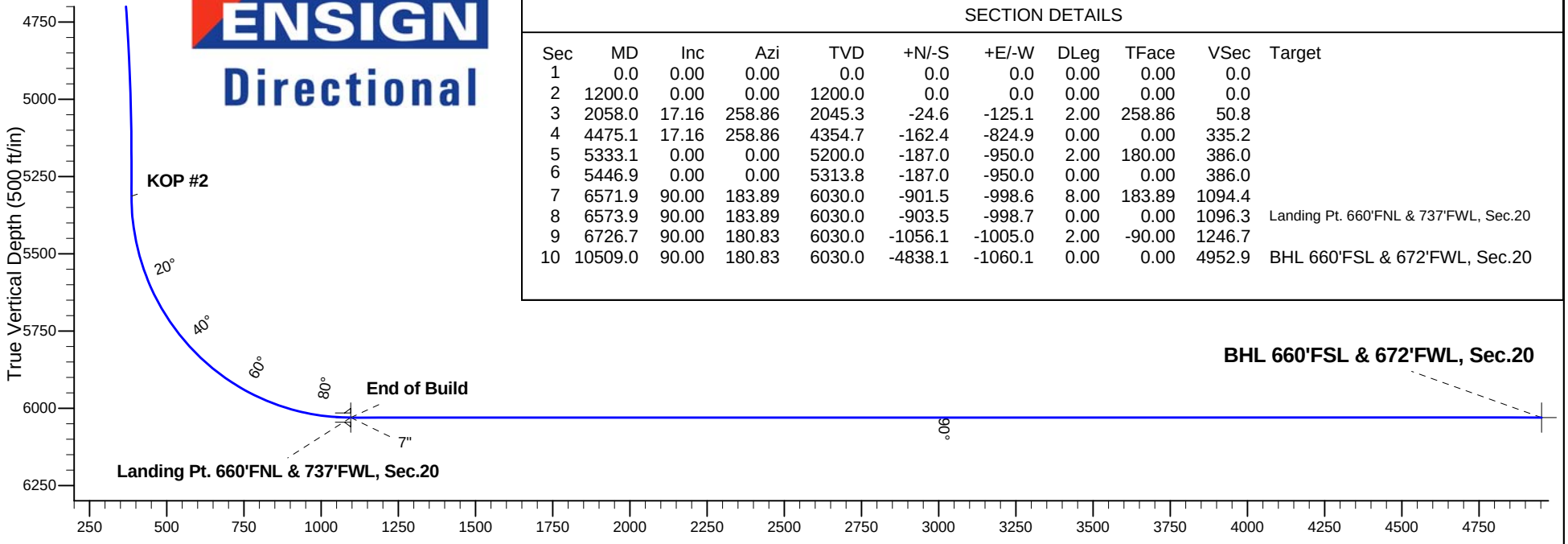
TVD	MD	Annotation
1200.0	1200.0	KOP #1
5313.8	5446.9	KOP #2
6030.0	6573.9	End of Build



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	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	2058.0	17.16	258.86	2045.3	-24.6	-125.1	2.00	258.86	50.8	
4	4475.1	17.16	258.86	4354.7	-162.4	-824.9	0.00	0.00	335.2	
5	5333.1	0.00	0.00	5200.0	-187.0	-950.0	2.00	180.00	386.0	
6	5446.9	0.00	0.00	5313.8	-187.0	-950.0	0.00	0.00	386.0	
7	6571.9	90.00	183.89	6030.0	-901.5	-998.6	8.00	183.89	1094.4	
8	6573.9	90.00	183.89	6030.0	-903.5	-998.7	0.00	0.00	1096.3	Landing Pt. 660'FNL & 737'FWL, Sec.20
9	6726.7	90.00	180.83	6030.0	-1056.1	-1005.0	2.00	-90.00	1246.7	
10	10509.0	90.00	180.83	6030.0	-4838.1	-1060.1	0.00	0.00	4952.9	BHL 660'FSL & 672'FWL, Sec.20



Condor Energy

SEC.17-T6N-R60W
Wickstrom 17-1H Pad Sec.17-T6N-R60W
Wickstrom 17-4H

Wellbore #1

Plan: Plan #1 (7-23-13)

Standard Planning Report

24 July, 2013

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 17-4H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4684.1ft (RKB - 12.5')
Project:	SEC.17-T6N-R60W	**MD Reference:**	WELL @ 4684.1ft (RKB - 12.5')
Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 17-4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-23-13)		

Project SEC.17-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 17-1H Pad Sec.17-T6N-R60W

Site Position:		**Northing:**	1,421,413.31 ft	**Latitude:**	40.482000
From:	Lat/Long	**Easting:**	3,383,432.79 ft	**Longitude:**	-104.121550
Position Uncertainty:	0.0 ft	**Slot Radius:**	"	**Grid Convergence:**	0.89 °

Well Wickstrom 17-4H

Well Position	**+N/-S**	-58.3 ft	**Northing:**	1,421,355.02 ft	**Latitude:**	40.481840
	+E/-W	0.0 ft	**Easting:**	3,383,433.69 ft	**Longitude:**	-104.121550
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,671.6 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/23/2013	8.24	67.15	53,020

Design Plan #1 (7-23-13)

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	192.36

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,058.0	17.16	258.86	2,045.3	-24.6	-125.1	2.00	2.00	0.00	258.86	
4,475.1	17.16	258.86	4,354.7	-162.4	-824.9	0.00	0.00	0.00	0.00	
5,333.1	0.00	0.00	5,200.0	-187.0	-950.0	2.00	-2.00	0.00	180.00	
5,446.9	0.00	0.00	5,313.8	-187.0	-950.0	0.00	0.00	0.00	0.00	
6,571.9	90.00	183.89	6,030.0	-901.5	-998.6	8.00	8.00	0.00	183.89	
6,573.9	90.00	183.89	6,030.0	-903.5	-998.7	0.00	0.00	0.00	0.00	Landing Pt. 660'FN
6,726.7	90.00	180.83	6,030.0	-1,056.1	-1,005.0	2.00	0.00	-2.00	-90.00	
10,509.0	90.00	180.83	6,030.0	-4,838.1	-1,060.1	0.00	0.00	0.00	0.00	BHL 660'FSL & 672

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 17-4H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4684.1ft (RKB - 12.5')
Project:	SEC.17-T6N-R60W	**MD Reference:**	WELL @ 4684.1ft (RKB - 12.5')
Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 17-4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-23-13)		

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 250'FSL & 1739'FWL, Sec.17									
1.2	0.00	0.00	1.2	0.0	0.0	0.0	0.00	0.00	0.00
HARDLINE 600' BHL - HARDLINE 600' SHL									
1.3	0.00	0.00	1.3	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
KOP #1									
1,300.0	2.00	258.86	1,300.0	-0.3	-1.7	0.7	2.00	2.00	0.00
1,400.0	4.00	258.86	1,399.8	-1.3	-6.8	2.8	2.00	2.00	0.00
1,500.0	6.00	258.86	1,499.5	-3.0	-15.4	6.3	2.00	2.00	0.00
1,600.0	8.00	258.86	1,598.7	-5.4	-27.4	11.1	2.00	2.00	0.00
1,700.0	10.00	258.86	1,697.5	-8.4	-42.7	17.4	2.00	2.00	0.00
1,800.0	12.00	258.86	1,795.6	-12.1	-61.4	25.0	2.00	2.00	0.00
1,900.0	14.00	258.86	1,893.1	-16.4	-83.5	33.9	2.00	2.00	0.00
2,000.0	16.00	258.86	1,989.6	-21.4	-108.9	44.2	2.00	2.00	0.00
2,058.0	17.16	258.86	2,045.3	-24.6	-125.1	50.8	2.00	2.00	0.00
2,100.0	17.16	258.86	2,085.4	-27.0	-137.3	55.8	0.00	0.00	0.00
2,200.0	17.16	258.86	2,180.9	-32.7	-166.2	67.5	0.00	0.00	0.00
2,300.0	17.16	258.86	2,276.5	-38.4	-195.2	79.3	0.00	0.00	0.00
2,400.0	17.16	258.86	2,372.0	-44.1	-224.1	91.1	0.00	0.00	0.00
2,500.0	17.16	258.86	2,467.6	-49.8	-253.1	102.8	0.00	0.00	0.00
2,600.0	17.16	258.86	2,563.1	-55.5	-282.0	114.6	0.00	0.00	0.00
2,700.0	17.16	258.86	2,658.7	-61.2	-311.0	126.4	0.00	0.00	0.00
2,800.0	17.16	258.86	2,754.2	-66.9	-339.9	138.1	0.00	0.00	0.00
2,900.0	17.16	258.86	2,849.7	-72.6	-368.9	149.9	0.00	0.00	0.00
3,000.0	17.16	258.86	2,945.3	-78.3	-397.8	161.6	0.00	0.00	0.00
3,100.0	17.16	258.86	3,040.8	-84.0	-426.8	173.4	0.00	0.00	0.00
3,200.0	17.16	258.86	3,136.4	-89.7	-455.7	185.2	0.00	0.00	0.00
3,300.0	17.16	258.86	3,231.9	-95.4	-484.7	196.9	0.00	0.00	0.00
3,400.0	17.16	258.86	3,327.5	-101.1	-513.6	208.7	0.00	0.00	0.00
3,500.0	17.16	258.86	3,423.0	-106.8	-542.6	220.5	0.00	0.00	0.00
3,600.0	17.16	258.86	3,518.6	-112.5	-571.5	232.2	0.00	0.00	0.00
3,700.0	17.16	258.86	3,614.1	-118.2	-600.5	244.0	0.00	0.00	0.00
3,800.0	17.16	258.86	3,709.7	-123.9	-629.4	255.7	0.00	0.00	0.00
3,900.0	17.16	258.86	3,805.2	-129.6	-658.4	267.5	0.00	0.00	0.00
4,000.0	17.16	258.86	3,900.8	-135.3	-687.3	279.3	0.00	0.00	0.00
4,100.0	17.16	258.86	3,996.3	-141.0	-716.3	291.0	0.00	0.00	0.00
4,200.0	17.16	258.86	4,091.9	-146.7	-745.2	302.8	0.00	0.00	0.00
4,300.0	17.16	258.86	4,187.4	-152.4	-774.2	314.6	0.00	0.00	0.00
4,400.0	17.16	258.86	4,283.0	-158.1	-803.1	326.3	0.00	0.00	0.00
4,475.1	17.16	258.86	4,354.7	-162.4	-824.9	335.2	0.00	0.00	0.00

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Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 17-4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-23-13)		

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)
4,500.0	16.66	258.86	4,378.5	-163.8	-832.0	338.0	2.00	-2.00	0.00
4,600.0	14.66	258.86	4,474.8	-169.0	-858.5	348.8	2.00	-2.00	0.00
4,700.0	12.66	258.86	4,572.0	-173.5	-881.6	358.2	2.00	-2.00	0.00
4,800.0	10.66	258.86	4,669.9	-177.4	-901.5	366.3	2.00	-2.00	0.00
4,900.0	8.66	258.86	4,768.5	-180.7	-917.9	373.0	2.00	-2.00	0.00
5,000.0	6.66	258.86	4,867.6	-183.3	-931.0	378.3	2.00	-2.00	0.00
5,100.0	4.66	258.86	4,967.1	-185.2	-940.7	382.2	2.00	-2.00	0.00
5,200.0	2.66	258.86	5,066.9	-186.4	-947.0	384.8	2.00	-2.00	0.00
5,300.0	0.66	258.86	5,166.9	-187.0	-949.8	385.9	2.00	-2.00	0.00
5,333.1	0.00	0.00	5,200.0	-187.0	-950.0	386.0	2.00	-2.00	0.00
5,400.0	0.00	0.00	5,266.9	-187.0	-950.0	386.0	0.00	0.00	0.00
5,446.9	0.00	0.00	5,313.8	-187.0	-950.0	386.0	0.00	0.00	0.00
KOP #2									
5,500.0	4.24	183.89	5,366.8	-189.0	-950.1	387.9	7.99	7.99	0.00
5,600.0	12.24	183.89	5,465.7	-203.3	-951.1	402.1	8.00	8.00	0.00
5,700.0	20.24	183.89	5,561.6	-231.1	-953.0	429.8	8.00	8.00	0.00
5,800.0	28.24	183.89	5,652.7	-272.1	-955.8	470.3	8.00	8.00	0.00
5,900.0	36.24	183.89	5,737.2	-325.3	-959.4	523.1	8.00	8.00	0.00
6,000.0	44.24	183.89	5,813.5	-389.7	-963.8	586.9	8.00	8.00	0.00
6,100.0	52.24	183.89	5,880.0	-464.0	-968.8	660.6	8.00	8.00	0.00
6,200.0	60.24	183.89	5,935.6	-546.9	-974.5	742.8	8.00	8.00	0.00
6,300.0	68.24	183.89	5,979.0	-636.7	-980.6	831.8	8.00	8.00	0.00
6,400.0	76.24	183.89	6,009.5	-731.6	-987.0	925.9	8.00	8.00	0.00
6,500.0	84.24	183.89	6,026.4	-829.9	-993.7	1,023.3	8.00	8.00	0.00
6,571.9	90.00	183.89	6,030.0	-901.5	-998.6	1,094.4	8.00	8.00	0.00
6,573.9	90.00	183.89	6,030.0	-903.5	-998.7	1,096.3	0.00	0.00	0.00
End of Build - 7" - Landing Pt. 660'FNL & 737'FWL, Sec.20									
6,600.0	90.00	183.37	6,030.0	-929.5	-1,000.4	1,122.1	2.00	0.00	-2.00
6,700.0	90.00	181.37	6,030.0	-1,029.5	-1,004.5	1,220.6	2.00	0.00	-2.00
6,726.7	90.00	180.83	6,030.0	-1,056.1	-1,005.0	1,246.7	2.00	0.00	-2.00
6,800.0	90.00	180.83	6,030.0	-1,129.4	-1,006.1	1,318.6	0.00	0.00	0.00
6,900.0	90.00	180.83	6,030.0	-1,229.4	-1,007.5	1,416.6	0.00	0.00	0.00
7,000.0	90.00	180.83	6,030.0	-1,329.4	-1,009.0	1,514.6	0.00	0.00	0.00
7,100.0	90.00	180.83	6,030.0	-1,429.4	-1,010.5	1,612.6	0.00	0.00	0.00
7,200.0	90.00	180.83	6,030.0	-1,529.4	-1,011.9	1,710.5	0.00	0.00	0.00
7,300.0	90.00	180.83	6,030.0	-1,629.4	-1,013.4	1,808.5	0.00	0.00	0.00
7,400.0	90.00	180.83	6,030.0	-1,729.4	-1,014.8	1,906.5	0.00	0.00	0.00
7,500.0	90.00	180.83	6,030.0	-1,829.4	-1,016.3	2,004.5	0.00	0.00	0.00
7,600.0	90.00	180.83	6,030.0	-1,929.4	-1,017.7	2,102.5	0.00	0.00	0.00
7,700.0	90.00	180.83	6,030.0	-2,029.3	-1,019.2	2,200.5	0.00	0.00	0.00
7,800.0	90.00	180.83	6,030.0	-2,129.3	-1,020.6	2,298.4	0.00	0.00	0.00
7,900.0	90.00	180.83	6,030.0	-2,229.3	-1,022.1	2,396.4	0.00	0.00	0.00
8,000.0	90.00	180.83	6,030.0	-2,329.3	-1,023.6	2,494.4	0.00	0.00	0.00
8,100.0	90.00	180.83	6,030.0	-2,429.3	-1,025.0	2,592.4	0.00	0.00	0.00
8,200.0	90.00	180.83	6,030.0	-2,529.3	-1,026.5	2,690.4	0.00	0.00	0.00
8,300.0	90.00	180.83	6,030.0	-2,629.3	-1,027.9	2,788.4	0.00	0.00	0.00
8,400.0	90.00	180.83	6,030.0	-2,729.3	-1,029.4	2,886.3	0.00	0.00	0.00
8,500.0	90.00	180.83	6,030.0	-2,829.3	-1,030.8	2,984.3	0.00	0.00	0.00
8,600.0	90.00	180.83	6,030.0	-2,929.2	-1,032.3	3,082.3	0.00	0.00	0.00
8,700.0	90.00	180.83	6,030.0	-3,029.2	-1,033.7	3,180.3	0.00	0.00	0.00
8,800.0	90.00	180.83	6,030.0	-3,129.2	-1,035.2	3,278.3	0.00	0.00	0.00
8,900.0	90.00	180.83	6,030.0	-3,229.2	-1,036.7	3,376.3	0.00	0.00	0.00
9,000.0	90.00	180.83	6,030.0	-3,329.2	-1,038.1	3,474.2	0.00	0.00	0.00

Database:	Landmark	**Local Co-ordinate Reference:**	Well Wickstrom 17-4H
Company:	Condor Energy	**TVD Reference:**	WELL @ 4684.1ft (RKB - 12.5')
Project:	SEC.17-T6N-R60W	**MD Reference:**	WELL @ 4684.1ft (RKB - 12.5')
Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	**North Reference:**	True
Well:	Wickstrom 17-4H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 (7-23-13)		

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	180.83	6,030.0	-3,429.2	-1,039.6	3,572.2	0.00	0.00	0.00
9,200.0	90.00	180.83	6,030.0	-3,529.2	-1,041.0	3,670.2	0.00	0.00	0.00
9,300.0	90.00	180.83	6,030.0	-3,629.2	-1,042.5	3,768.2	0.00	0.00	0.00
9,400.0	90.00	180.83	6,030.0	-3,729.2	-1,043.9	3,866.2	0.00	0.00	0.00
9,500.0	90.00	180.83	6,030.0	-3,829.2	-1,045.4	3,964.2	0.00	0.00	0.00
9,600.0	90.00	180.83	6,030.0	-3,929.1	-1,046.9	4,062.2	0.00	0.00	0.00
9,700.0	90.00	180.83	6,030.0	-4,029.1	-1,048.3	4,160.1	0.00	0.00	0.00
9,800.0	90.00	180.83	6,030.0	-4,129.1	-1,049.8	4,258.1	0.00	0.00	0.00
9,900.0	90.00	180.83	6,030.0	-4,229.1	-1,051.2	4,356.1	0.00	0.00	0.00
10,000.0	90.00	180.83	6,030.0	-4,329.1	-1,052.7	4,454.1	0.00	0.00	0.00
10,100.0	90.00	180.83	6,030.0	-4,429.1	-1,054.1	4,552.1	0.00	0.00	0.00
10,200.0	90.00	180.83	6,030.0	-4,529.1	-1,055.6	4,650.1	0.00	0.00	0.00
10,300.0	90.00	180.83	6,030.0	-4,629.1	-1,057.0	4,748.0	0.00	0.00	0.00
10,400.0	90.00	180.83	6,030.0	-4,729.1	-1,058.5	4,846.0	0.00	0.00	0.00
10,500.0	90.00	180.83	6,030.0	-4,829.0	-1,060.0	4,944.0	0.00	0.00	0.00
10,509.0	90.00	180.83	6,030.0	-4,838.1	-1,060.1	4,952.9	0.00	0.00	0.00
BHL 660'FSL & 672'FWL, Sec.20									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,573.9	6,030.0	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
1,200.0	1,200.0	0.0	0.0	KOP #1
5,446.9	5,313.8	-187.0	-950.0	KOP #2
6,573.9	6,030.0	-903.5	-998.7	End of Build