

Condor Energy

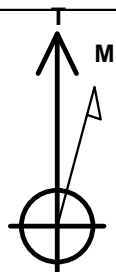
Well Name: **State 16-7-60-1H**

Surface Location: State 16-7-60-1H Pad Sec.16-T7N-R60W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4886.1

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1453076.53	3387458.40	40.568730	-104.105290	
RKB - 12.5' WELL @ 4898.6ft (RKB - 12.5')						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE 600'BHL	1.0	4391.8	-200.0	Polygon
HARDLINE 600'SHL	1.0	300.0	-200.0	Polygon
SECTION LINE	1.0	-300.0	-200.0	Polygon
SHL 300'FSL & 750'FWL	1.0	0.0	0.0	Point
BHL 660'FNL & 750'FWL	6263.0	4331.8	83.3	Point
WP1	6281.0	1502.0	3.2	Point



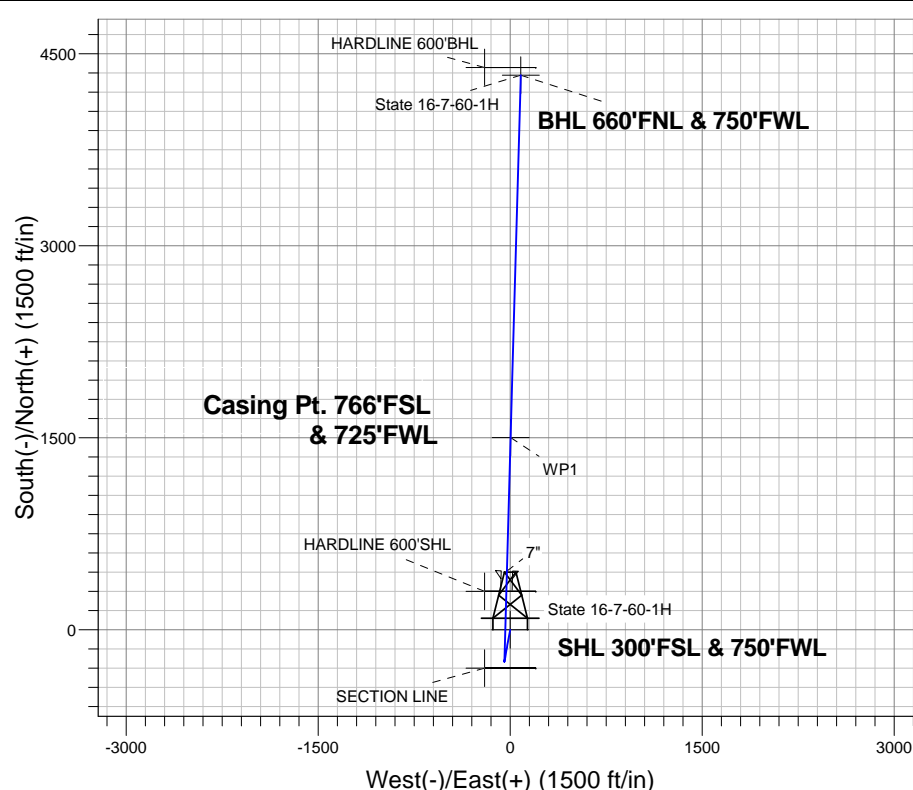
Azimuths to True North
Magnetic North: 8.29°

Magnetic Field
Strength: 53109.4snT
Dip Angle: 67.23°
Date: 2/21/2013
Model: IGRF2010

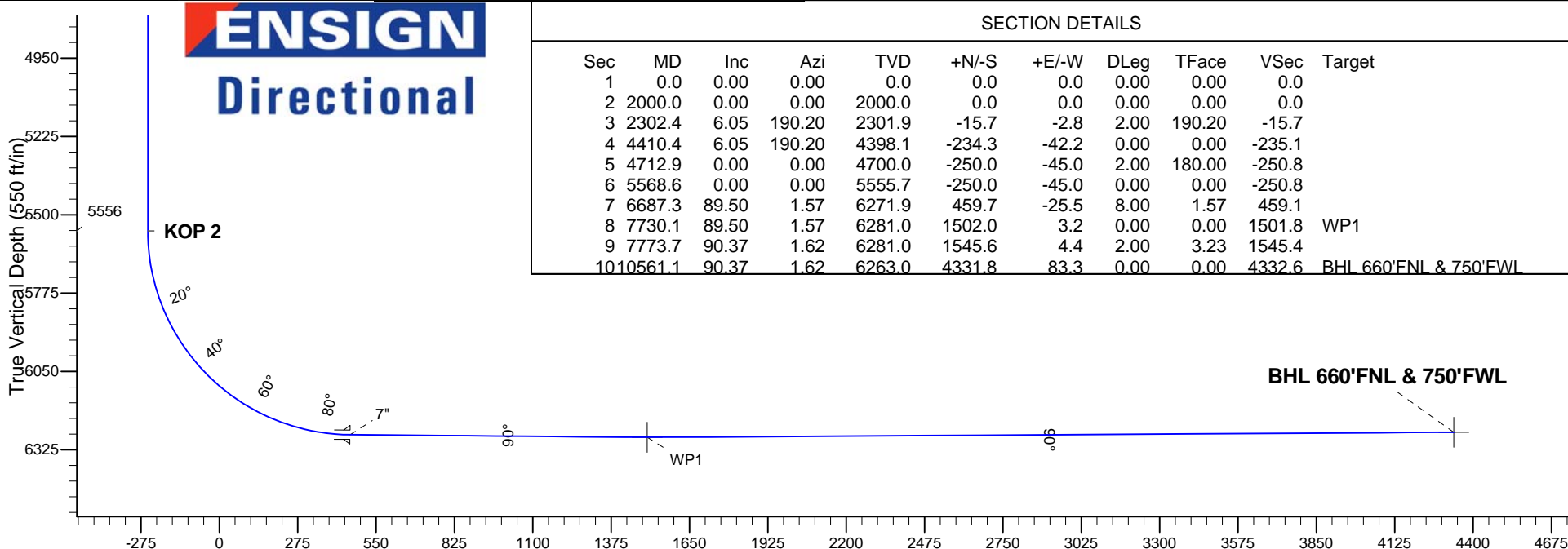
State 16-7-60-1H Pad Sec.16-T7N-R60W
State 16-7-60-1H
Plan #7 (2-22-13)
8:23, February 22 2013

ANNOTATIONS

TVD	MD	Annotation
2000.0	2000.0	KOP 1
5555.7	5568.6	KOP 2



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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	
3	2302.4	6.05	190.20	2301.9	-15.7	-2.8	2.00	190.20	-15.7	
4	4410.4	6.05	190.20	4398.1	-234.3	-42.2	0.00	0.00	-235.1	
5	4712.9	0.00	0.00	4700.0	-250.0	-45.0	2.00	180.00	-250.8	
6	5568.6	0.00	0.00	5555.7	-250.0	-45.0	0.00	0.00	-250.8	
7	6687.3	89.50	1.57	6271.9	459.7	-25.5	8.00	1.57	459.1	
8	7730.1	89.50	1.57	6281.0	1502.0	3.2	0.00	0.00	1501.8	WP1
9	7773.7	90.37	1.62	6281.0	1545.6	4.4	2.00	3.23	1545.4	
10	10561.1	90.37	1.62	6263.0	4331.8	83.3	0.00	0.00	4332.6	BHL 660'FNL & 750'FWL

Vertical Section at 1.10° (550 ft/in)



Condor Energy

SEC.16-T7N-R60W

State 16-7-60-1H Pad Sec.16-T7N-R60W

State 16-7-60-1H

Wellbore #1

Plan: Plan #7 (2-22-13)

Standard Planning Report

22 February, 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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,302.4	6.05	190.20	2,301.9	-15.7	-2.8	2.00	2.00	0.00	190.20	
4,410.4	6.05	190.20	4,398.1	-234.3	-42.2	0.00	0.00	0.00	0.00	
4,712.9	0.00	0.00	4,700.0	-250.0	-45.0	2.00	-2.00	0.00	180.00	
5,568.6	0.00	0.00	5,555.7	-250.0	-45.0	0.00	0.00	0.00	0.00	
6,687.3	89.50	1.57	6,271.9	459.7	-25.5	8.00	8.00	0.00	1.57	
7,730.1	89.50	1.57	6,281.0	1,502.0	3.2	0.00	0.00	0.00	0.00	WP1
7,773.7	90.37	1.62	6,281.0	1,545.6	4.4	2.00	2.00	0.11	3.23	
10,561.1	90.37	1.62	6,263.0	4,331.8	83.3	0.00	0.00	0.00	0.00	BHL 660'FNL & 750'

Database:	Landmark	Local Co-ordinate Reference:	Well State 16-7-60-1H
Company:	Condor Energy	TVD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Project:	SEC.16-T7N-R60W	MD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Site:	State 16-7-60-1H Pad Sec.16-T7N-R60W	North Reference:	True
Well:	State 16-7-60-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #7 (2-22-13)		

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
HARDLINE 600'SHL - HARDLINE 600'BHL - SHL 300'FSL & 750'FWL - 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
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	190.20	2,100.0	-1.7	-0.3	-1.7	2.00	2.00	0.00
2,200.0	4.00	190.20	2,199.8	-6.9	-1.2	-6.9	2.00	2.00	0.00
2,300.0	6.00	190.20	2,299.5	-15.4	-2.8	-15.5	2.00	2.00	0.00
2,302.4	6.05	190.20	2,301.9	-15.7	-2.8	-15.7	2.00	2.00	0.00
2,400.0	6.05	190.20	2,398.9	-25.8	-4.6	-25.9	0.00	0.00	0.00
2,500.0	6.05	190.20	2,498.3	-36.2	-6.5	-36.3	0.00	0.00	0.00
2,600.0	6.05	190.20	2,597.8	-46.6	-8.4	-46.7	0.00	0.00	0.00
2,700.0	6.05	190.20	2,697.2	-56.9	-10.2	-57.1	0.00	0.00	0.00
2,800.0	6.05	190.20	2,796.7	-67.3	-12.1	-67.5	0.00	0.00	0.00
2,900.0	6.05	190.20	2,896.1	-77.7	-14.0	-77.9	0.00	0.00	0.00
3,000.0	6.05	190.20	2,995.6	-88.0	-15.8	-88.3	0.00	0.00	0.00
3,100.0	6.05	190.20	3,095.0	-98.4	-17.7	-98.7	0.00	0.00	0.00
3,200.0	6.05	190.20	3,194.4	-108.8	-19.6	-109.1	0.00	0.00	0.00
3,300.0	6.05	190.20	3,293.9	-119.1	-21.4	-119.5	0.00	0.00	0.00
3,400.0	6.05	190.20	3,393.3	-129.5	-23.3	-129.9	0.00	0.00	0.00
3,500.0	6.05	190.20	3,492.8	-139.9	-25.2	-140.3	0.00	0.00	0.00
3,600.0	6.05	190.20	3,592.2	-150.3	-27.0	-150.8	0.00	0.00	0.00
3,700.0	6.05	190.20	3,691.7	-160.6	-28.9	-161.2	0.00	0.00	0.00
3,800.0	6.05	190.20	3,791.1	-171.0	-30.8	-171.6	0.00	0.00	0.00
3,900.0	6.05	190.20	3,890.5	-181.4	-32.6	-182.0	0.00	0.00	0.00
4,000.0	6.05	190.20	3,990.0	-191.7	-34.5	-192.4	0.00	0.00	0.00
4,100.0	6.05	190.20	4,089.4	-202.1	-36.4	-202.8	0.00	0.00	0.00
4,200.0	6.05	190.20	4,188.9	-212.5	-38.2	-213.2	0.00	0.00	0.00
4,300.0	6.05	190.20	4,288.3	-222.9	-40.1	-223.6	0.00	0.00	0.00
4,400.0	6.05	190.20	4,387.8	-233.2	-42.0	-234.0	0.00	0.00	0.00
4,410.4	6.05	190.20	4,398.1	-234.3	-42.2	-235.1	0.00	0.00	0.00
4,500.0	4.26	190.20	4,487.3	-242.2	-43.6	-243.0	2.00	-2.00	0.00
4,600.0	2.26	190.20	4,587.2	-247.8	-44.6	-248.6	2.00	-2.00	0.00
4,700.0	0.26	190.20	4,687.1	-250.0	-45.0	-250.8	2.00	-2.00	0.00
4,712.9	0.00	0.00	4,700.0	-250.0	-45.0	-250.8	2.00	-2.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well State 16-7-60-1H
Company:	Condor Energy	TVD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Project:	SEC.16-T7N-R60W	MD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Site:	State 16-7-60-1H Pad Sec.16-T7N-R60W	North Reference:	True
Well:	State 16-7-60-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #7 (2-22-13)		

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)
4,800.0	0.00	0.00	4,787.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
4,900.0	0.00	0.00	4,887.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,000.0	0.00	0.00	4,987.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,100.0	0.00	0.00	5,087.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,200.0	0.00	0.00	5,187.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,300.0	0.00	0.00	5,287.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,400.0	0.00	0.00	5,387.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,500.0	0.00	0.00	5,487.1	-250.0	-45.0	-250.8	0.00	0.00	0.00
5,568.6	0.00	0.00	5,555.7	-250.0	-45.0	-250.8	0.00	0.00	0.00
KOP 2									
5,600.0	2.51	1.57	5,587.1	-249.3	-45.0	-250.1	8.00	8.00	0.00
5,700.0	10.51	1.57	5,686.4	-238.0	-44.7	-238.8	8.00	8.00	0.00
5,800.0	18.51	1.57	5,783.1	-213.0	-44.0	-213.8	8.00	8.00	0.00
5,900.0	26.51	1.57	5,875.4	-174.7	-42.9	-175.5	8.00	8.00	0.00
6,000.0	34.51	1.57	5,961.5	-124.0	-41.5	-124.8	8.00	8.00	0.00
6,100.0	42.51	1.57	6,039.7	-61.8	-39.8	-62.6	8.00	8.00	0.00
6,200.0	50.51	1.57	6,108.5	10.7	-37.8	9.9	8.00	8.00	0.00
6,300.0	58.51	1.57	6,166.5	92.0	-35.6	91.3	8.00	8.00	0.00
6,400.0	66.51	1.57	6,212.6	180.6	-33.2	179.9	8.00	8.00	0.00
6,500.0	74.51	1.57	6,245.9	274.8	-30.6	274.1	8.00	8.00	0.00
6,600.0	82.51	1.57	6,265.8	372.6	-27.9	372.0	8.00	8.00	0.00
6,687.3	89.50	1.57	6,271.9	459.6	-25.5	459.1	8.00	8.00	0.00
7"									
6,700.0	89.50	1.57	6,272.0	472.3	-25.1	471.8	0.02	0.02	0.00
6,800.0	89.50	1.57	6,272.9	572.3	-22.4	571.8	0.00	0.00	0.00
6,900.0	89.50	1.57	6,273.8	672.3	-19.7	671.8	0.00	0.00	0.00
7,000.0	89.50	1.57	6,274.6	772.2	-16.9	771.7	0.00	0.00	0.00
7,100.0	89.50	1.57	6,275.5	872.2	-14.2	871.7	0.00	0.00	0.00
7,200.0	89.50	1.57	6,276.4	972.1	-11.4	971.7	0.00	0.00	0.00
7,300.0	89.50	1.57	6,277.2	1,072.1	-8.7	1,071.7	0.00	0.00	0.00
7,400.0	89.50	1.57	6,278.1	1,172.0	-5.9	1,171.7	0.00	0.00	0.00
7,500.0	89.50	1.57	6,279.0	1,272.0	-3.2	1,271.7	0.00	0.00	0.00
7,600.0	89.50	1.57	6,279.9	1,372.0	-0.4	1,371.7	0.00	0.00	0.00
7,700.0	89.50	1.57	6,280.7	1,471.9	2.3	1,471.7	0.00	0.00	0.00
7,730.1	89.50	1.57	6,281.0	1,502.0	3.2	1,501.8	0.00	0.00	0.00
WP1									
7,773.7	90.37	1.62	6,281.0	1,545.6	4.4	1,545.4	2.00	2.00	0.11
7,800.0	90.37	1.62	6,280.9	1,571.9	5.1	1,571.7	0.00	0.00	0.00
7,900.0	90.37	1.62	6,280.2	1,671.8	7.9	1,671.7	0.00	0.00	0.00
8,000.0	90.37	1.62	6,279.6	1,771.8	10.8	1,771.7	0.00	0.00	0.00
8,100.0	90.37	1.62	6,278.9	1,871.8	13.6	1,871.7	0.00	0.00	0.00
8,200.0	90.37	1.62	6,278.3	1,971.7	16.4	1,971.7	0.00	0.00	0.00
8,300.0	90.37	1.62	6,277.6	2,071.7	19.3	2,071.7	0.00	0.00	0.00
8,400.0	90.37	1.62	6,277.0	2,171.6	22.1	2,171.6	0.00	0.00	0.00
8,500.0	90.37	1.62	6,276.3	2,271.6	24.9	2,271.6	0.00	0.00	0.00
8,600.0	90.37	1.62	6,275.7	2,371.5	27.8	2,371.6	0.00	0.00	0.00
8,700.0	90.37	1.62	6,275.1	2,471.5	30.6	2,471.6	0.00	0.00	0.00
8,800.0	90.37	1.62	6,274.4	2,571.5	33.4	2,571.6	0.00	0.00	0.00
8,900.0	90.37	1.62	6,273.8	2,671.4	36.3	2,671.6	0.00	0.00	0.00
9,000.0	90.37	1.62	6,273.1	2,771.4	39.1	2,771.6	0.00	0.00	0.00
9,100.0	90.37	1.62	6,272.5	2,871.3	41.9	2,871.6	0.00	0.00	0.00
9,200.0	90.37	1.62	6,271.8	2,971.3	44.8	2,971.6	0.00	0.00	0.00
9,300.0	90.37	1.62	6,271.2	3,071.2	47.6	3,071.6	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well State 16-7-60-1H
Company:	Condor Energy	TVD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Project:	SEC.16-T7N-R60W	MD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Site:	State 16-7-60-1H Pad Sec.16-T7N-R60W	North Reference:	True
Well:	State 16-7-60-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #7 (2-22-13)		

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	90.37	1.62	6,270.5	3,171.2	50.4	3,171.6	0.00	0.00	0.00
9,500.0	90.37	1.62	6,269.9	3,271.2	53.3	3,271.6	0.00	0.00	0.00
9,600.0	90.37	1.62	6,269.2	3,371.1	56.1	3,371.6	0.00	0.00	0.00
9,700.0	90.37	1.62	6,268.6	3,471.1	58.9	3,471.6	0.00	0.00	0.00
9,800.0	90.37	1.62	6,267.9	3,571.0	61.8	3,571.6	0.00	0.00	0.00
9,900.0	90.37	1.62	6,267.3	3,671.0	64.6	3,671.6	0.00	0.00	0.00
10,000.0	90.37	1.62	6,266.6	3,771.0	67.4	3,771.6	0.00	0.00	0.00
10,100.0	90.37	1.62	6,266.0	3,870.9	70.3	3,871.5	0.00	0.00	0.00
10,200.0	90.37	1.62	6,265.3	3,970.9	73.1	3,971.5	0.00	0.00	0.00
10,300.0	90.37	1.62	6,264.7	4,070.8	75.9	4,071.5	0.00	0.00	0.00
10,400.0	90.37	1.62	6,264.0	4,170.8	78.8	4,171.5	0.00	0.00	0.00
10,500.0	90.37	1.62	6,263.4	4,270.7	81.6	4,271.5	0.00	0.00	0.00
10,561.1	90.37	1.62	6,263.0	4,331.8	83.3	4,332.6	0.00	0.00	0.00
BHL 660'FNL & 750'FWL									

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
HARDLINE 600'SHL	0.00	0.00	1.0	300.0	-200.0	1,453,373.34	3,387,253.71	40.569553	-104.106010
- plan misses target center by 360.6ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,453,373.34	3,387,253.71		
Point 2			1.0	0.0	400.0	1,453,379.63	3,387,653.65		
WP1	0.00	0.00	6,281.0	1,502.0	3.2	1,454,578.35	3,387,437.92	40.572853	-104.105279
- plan hits target center									
- Point									
HARDLINE 600'BHL	0.00	0.00	1.0	4,391.8	-200.0	1,457,464.51	3,387,189.36	40.580785	-104.106010
- plan misses target center by 4396.4ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,457,464.51	3,387,189.36		
Point 2			1.0	0.0	400.0	1,457,470.80	3,387,589.29		
BHL 660'FNL & 750'F	0.00	0.00	6,263.0	4,331.8	83.3	1,457,408.99	3,387,473.59	40.580620	-104.104990
- plan hits target center									
- Point									
SHL 300'FSL & 750'F	0.00	0.00	1.0	0.0	0.0	1,453,076.53	3,387,458.40	40.568730	-104.105290
- plan hits target center									
- Point									
SECTION LINE	0.00	0.00	1.0	-300.0	-200.0	1,452,773.43	3,387,263.15	40.567907	-104.106010
- plan misses target center by 360.6ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,452,773.43	3,387,263.15		
Point 2			1.0	0.0	400.0	1,452,779.72	3,387,663.08		

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
6,687.3	6,271.9	7"	7	8-3/4

Database:	Landmark	Local Co-ordinate Reference:	Well State 16-7-60-1H
Company:	Condor Energy	TVD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Project:	SEC.16-T7N-R60W	MD Reference:	WELL @ 4898.6ft (RKB - 12.5')
Site:	State 16-7-60-1H Pad Sec.16-T7N-R60W	North Reference:	True
Well:	State 16-7-60-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #7 (2-22-13)		

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	
5,568.6	5,555.7	-250.0	-45.0	KOP 2	