

Condor Energy

Well Name: **Wickstrom 17-2H**

Surface Location: Wickstrom 17-1H Pad Sec.17-T6N-R60W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

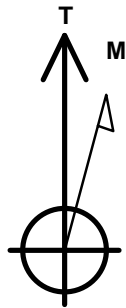
Ground Elevation: 4671.4

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1421322.23	3383434.20	40.481750	-104.121550	

Original Well Elev WELL @ 4683.9ft (Original Well Elev)

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
HARDLINE 600' BHL	1.0	-4876.3	600.0	Polygon
HARDLINE 600' SHL	1.0	-818.0	600.0	Polygon
SHL 220'FSL & 1739'FWL, Sec.17	1.0	0.0	0.0	Point
SECTION LINE	1.1	-218.9	600.0	Polygon
BHL 660'FSL & 1980'FWL, Sec.20	6030.0	-4816.3	247.6	Point
Landing Pt. 660'FNL & 1785'FWL, Sec.20	6030.0	-878.0	47.3	Point



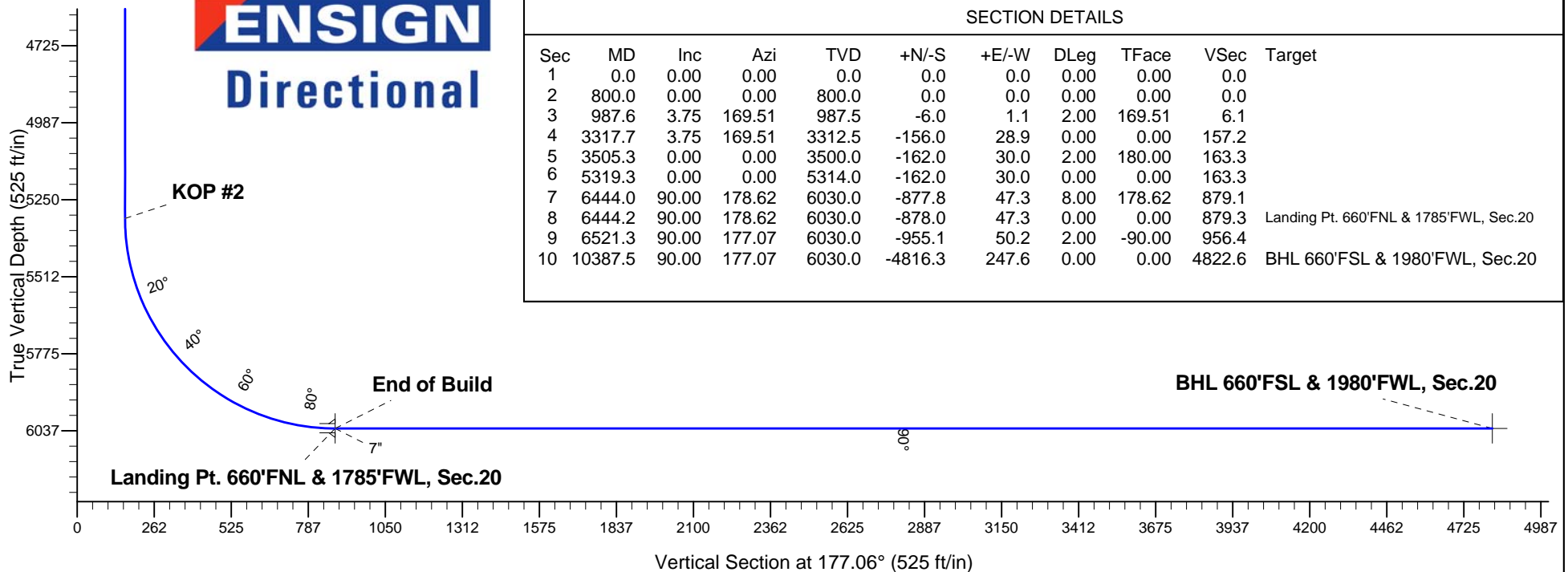
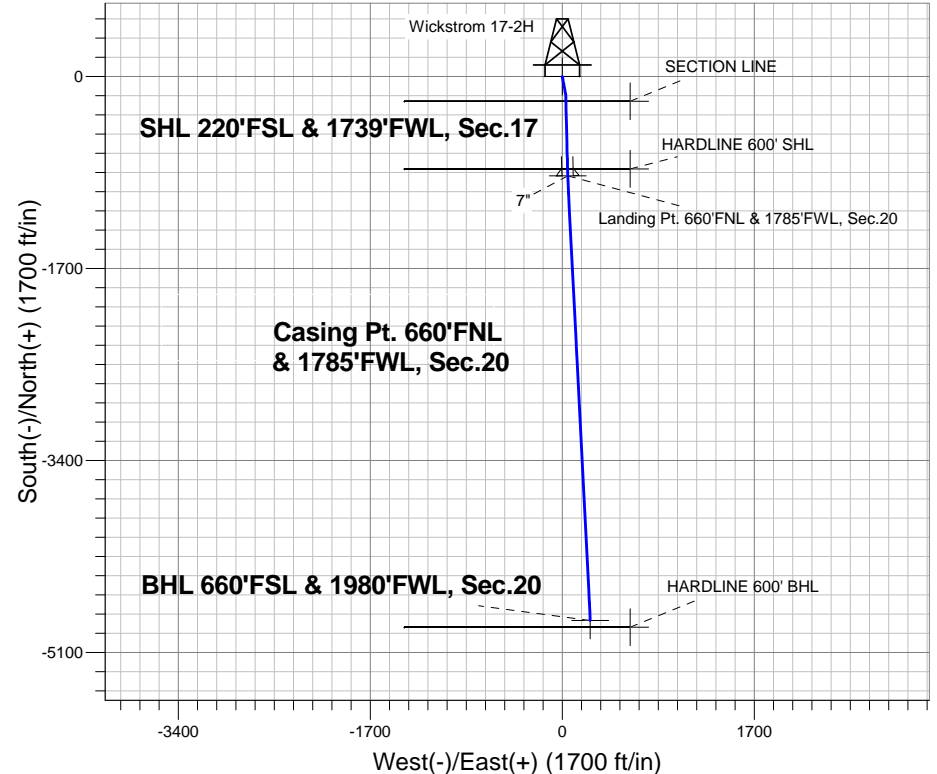
Azimuths to True North
Magnetic North: 8.24°

Magnetic Field
Strength: 53019.8snT
Dip Angle: 67.15°
Date: 7/24/2013
Model: IGRF2010

Wickstrom 17-1H Pad Sec.17-T6N-R60W
Wickstrom 17-2H
Plan #2 (7-23-13)
9:09, July 24 2013

ANNOTATIONS

TVD	MD	Annotation
999.8	1000.0	KOP #1
5314.0	5319.3	KOP #2
6030.0	6444.2	End of Build



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	800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.0	
3	987.6	3.75	169.51	987.5	-6.0	1.1	2.00	169.51	6.1	
4	3317.7	3.75	169.51	3312.5	-156.0	28.9	0.00	0.00	157.2	
5	3505.3	0.00	0.00	3500.0	-162.0	30.0	2.00	180.00	163.3	
6	5319.3	0.00	0.00	5314.0	-162.0	30.0	0.00	0.00	163.3	
7	6444.0	90.00	178.62	6030.0	-877.8	47.3	8.00	178.62	879.1	
8	6444.2	90.00	178.62	6030.0	-878.0	47.3	0.00	0.00	879.3	Landing Pt. 660'FNL & 1785'FWL, Sec.20
9	6521.3	90.00	177.07	6030.0	-955.1	50.2	2.00	-90.00	956.4	
10	10387.5	90.00	177.07	6030.0	-4816.3	247.6	0.00	0.00	4822.6	BHL 660'FSL & 1980'FWL, Sec.20



Condor Energy

SEC.17-T6N-R60W

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

Wickstrom 17-2H

Wellbore #1

Plan: Plan #2 (7-23-13)

Standard Planning Report

24 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	
800.0	0.00	0.00	800.0	0.0	0.0	0.00	0.00	0.00	0.00	
987.6	3.75	169.51	987.5	-6.0	1.1	2.00	2.00	0.00	169.51	
3,317.7	3.75	169.51	3,312.5	-156.0	28.9	0.00	0.00	0.00	0.00	
3,505.3	0.00	0.00	3,500.0	-162.0	30.0	2.00	-2.00	0.00	180.00	
5,319.3	0.00	0.00	5,314.0	-162.0	30.0	0.00	0.00	0.00	0.00	
6,444.0	90.00	178.62	6,030.0	-877.8	47.3	8.00	8.00	0.00	178.62	
6,444.2	90.00	178.62	6,030.0	-878.0	47.3	0.00	0.00	0.00	0.00	Landing Pt. 660'FN
6,521.3	90.00	177.07	6,030.0	-955.1	50.2	2.00	0.00	-2.00	-90.00	
10,387.5	90.00	177.07	6,030.0	-4,816.3	247.6	0.00	0.00	0.00	0.00	BHL 660'FSL & 198

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 17-2H
Company:	Condor Energy	TVD Reference:	WELL @ 4683.9ft (Original Well Elev)
Project:	SEC.17-T6N-R60W	MD Reference:	WELL @ 4683.9ft (Original Well Elev)
Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	North Reference:	True
Well:	Wickstrom 17-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (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
HARDLINE 600' BHL - SHL 220'FSL & 1739'FWL, Sec.17 - HARDLINE 600' SHL									
1.1	0.00	0.00	1.1	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	2.00	169.51	900.0	-1.7	0.3	1.7	2.00	2.00	0.00
987.6	3.75	169.51	987.5	-6.0	1.1	6.1	2.00	2.00	0.00
1,000.0	3.75	169.51	999.8	-6.8	1.3	6.9	0.00	0.00	0.00
KOP #1									
1,100.0	3.75	169.51	1,099.6	-13.3	2.5	13.4	0.00	0.00	0.00
1,200.0	3.75	169.51	1,199.4	-19.7	3.6	19.9	0.00	0.00	0.00
1,300.0	3.75	169.51	1,299.2	-26.1	4.8	26.4	0.00	0.00	0.00
1,400.0	3.75	169.51	1,399.0	-32.6	6.0	32.8	0.00	0.00	0.00
1,500.0	3.75	169.51	1,498.8	-39.0	7.2	39.3	0.00	0.00	0.00
1,600.0	3.75	169.51	1,598.6	-45.4	8.4	45.8	0.00	0.00	0.00
1,700.0	3.75	169.51	1,698.3	-51.9	9.6	52.3	0.00	0.00	0.00
1,800.0	3.75	169.51	1,798.1	-58.3	10.8	58.8	0.00	0.00	0.00
1,900.0	3.75	169.51	1,897.9	-64.7	12.0	65.3	0.00	0.00	0.00
2,000.0	3.75	169.51	1,997.7	-71.2	13.2	71.8	0.00	0.00	0.00
2,100.0	3.75	169.51	2,097.5	-77.6	14.4	78.2	0.00	0.00	0.00
2,200.0	3.75	169.51	2,197.3	-84.0	15.6	84.7	0.00	0.00	0.00
2,300.0	3.75	169.51	2,297.1	-90.5	16.8	91.2	0.00	0.00	0.00
2,400.0	3.75	169.51	2,396.8	-96.9	17.9	97.7	0.00	0.00	0.00
2,500.0	3.75	169.51	2,496.6	-103.4	19.1	104.2	0.00	0.00	0.00
2,600.0	3.75	169.51	2,596.4	-109.8	20.3	110.7	0.00	0.00	0.00
2,700.0	3.75	169.51	2,696.2	-116.2	21.5	117.2	0.00	0.00	0.00
2,800.0	3.75	169.51	2,796.0	-122.7	22.7	123.7	0.00	0.00	0.00
2,900.0	3.75	169.51	2,895.8	-129.1	23.9	130.1	0.00	0.00	0.00
3,000.0	3.75	169.51	2,995.6	-135.5	25.1	136.6	0.00	0.00	0.00
3,100.0	3.75	169.51	3,095.3	-142.0	26.3	143.1	0.00	0.00	0.00
3,200.0	3.75	169.51	3,195.1	-148.4	27.5	149.6	0.00	0.00	0.00
3,300.0	3.75	169.51	3,294.9	-154.8	28.7	156.1	0.00	0.00	0.00
3,317.7	3.75	169.51	3,312.5	-156.0	28.9	157.2	0.00	0.00	0.00
3,400.0	2.11	169.51	3,394.8	-160.1	29.6	161.4	2.00	-2.00	0.00
3,500.0	0.11	169.51	3,494.7	-162.0	30.0	163.3	2.00	-2.00	0.00
3,505.3	0.00	0.00	3,500.0	-162.0	30.0	163.3	2.00	-2.00	0.00
3,600.0	0.00	0.00	3,594.7	-162.0	30.0	163.3	0.00	0.00	0.00
3,700.0	0.00	0.00	3,694.7	-162.0	30.0	163.3	0.00	0.00	0.00
3,800.0	0.00	0.00	3,794.7	-162.0	30.0	163.3	0.00	0.00	0.00
3,900.0	0.00	0.00	3,894.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,000.0	0.00	0.00	3,994.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,100.0	0.00	0.00	4,094.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,200.0	0.00	0.00	4,194.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,300.0	0.00	0.00	4,294.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,400.0	0.00	0.00	4,394.7	-162.0	30.0	163.3	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 17-2H
Company:	Condor Energy	TVD Reference:	WELL @ 4683.9ft (Original Well Elev)
Project:	SEC.17-T6N-R60W	MD Reference:	WELL @ 4683.9ft (Original Well Elev)
Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	North Reference:	True
Well:	Wickstrom 17-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (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	0.00	0.00	4,494.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,600.0	0.00	0.00	4,594.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,700.0	0.00	0.00	4,694.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,800.0	0.00	0.00	4,794.7	-162.0	30.0	163.3	0.00	0.00	0.00
4,900.0	0.00	0.00	4,894.7	-162.0	30.0	163.3	0.00	0.00	0.00
5,000.0	0.00	0.00	4,994.7	-162.0	30.0	163.3	0.00	0.00	0.00
5,100.0	0.00	0.00	5,094.7	-162.0	30.0	163.3	0.00	0.00	0.00
5,200.0	0.00	0.00	5,194.7	-162.0	30.0	163.3	0.00	0.00	0.00
5,300.0	0.00	0.00	5,294.7	-162.0	30.0	163.3	0.00	0.00	0.00
5,319.3	0.00	0.00	5,314.0	-162.0	30.0	163.3	0.00	0.00	0.00
KOP #2									
5,400.0	6.46	178.62	5,394.6	-166.5	30.1	167.9	8.01	8.01	0.00
5,500.0	14.46	178.62	5,492.8	-184.7	30.5	186.0	8.00	8.00	0.00
5,600.0	22.47	178.62	5,587.6	-216.3	31.3	217.6	8.00	8.00	0.00
5,700.0	30.47	178.62	5,677.0	-260.8	32.4	262.2	8.00	8.00	0.00
5,800.0	38.47	178.62	5,759.4	-317.4	33.8	318.7	8.00	8.00	0.00
5,900.0	46.47	178.62	5,833.1	-384.8	35.4	386.1	8.00	8.00	0.00
6,000.0	54.47	178.62	5,896.7	-461.9	37.2	463.2	8.00	8.00	0.00
6,100.0	62.48	178.62	5,949.0	-547.0	39.3	548.3	8.00	8.00	0.00
6,200.0	70.48	178.62	5,988.8	-638.6	41.5	639.9	8.00	8.00	0.00
6,300.0	78.48	178.62	6,015.6	-734.8	43.8	736.1	8.00	8.00	0.00
6,400.0	86.48	178.62	6,028.7	-833.9	46.2	835.2	8.00	8.00	0.00
6,444.0	90.00	178.62	6,030.0	-877.8	47.3	879.1	8.00	8.00	0.00
6,444.2	90.00	178.62	6,030.0	-878.0	47.3	879.3	0.00	0.00	0.00
End of Build - 7" - Landing Pt. 660'FNL & 1785'FWL, Sec.20									
6,500.0	90.00	177.50	6,030.0	-933.8	49.2	935.1	2.00	0.00	-2.00
6,521.3	90.00	177.07	6,030.0	-955.1	50.2	956.4	2.00	0.00	-2.00
6,600.0	90.00	177.07	6,030.0	-1,033.7	54.2	1,035.1	0.00	0.00	0.00
6,700.0	90.00	177.07	6,030.0	-1,133.5	59.3	1,135.1	0.00	0.00	0.00
6,800.0	90.00	177.07	6,030.0	-1,233.4	64.4	1,235.1	0.00	0.00	0.00
6,900.0	90.00	177.07	6,030.0	-1,333.3	69.5	1,335.1	0.00	0.00	0.00
7,000.0	90.00	177.07	6,030.0	-1,433.2	74.6	1,435.1	0.00	0.00	0.00
7,100.0	90.00	177.07	6,030.0	-1,533.0	79.7	1,535.1	0.00	0.00	0.00
7,200.0	90.00	177.07	6,030.0	-1,632.9	84.9	1,635.1	0.00	0.00	0.00
7,300.0	90.00	177.07	6,030.0	-1,732.8	90.0	1,735.1	0.00	0.00	0.00
7,400.0	90.00	177.07	6,030.0	-1,832.6	95.1	1,835.1	0.00	0.00	0.00
7,500.0	90.00	177.07	6,030.0	-1,932.5	100.2	1,935.1	0.00	0.00	0.00
7,600.0	90.00	177.07	6,030.0	-2,032.4	105.3	2,035.1	0.00	0.00	0.00
7,700.0	90.00	177.07	6,030.0	-2,132.2	110.4	2,135.1	0.00	0.00	0.00
7,800.0	90.00	177.07	6,030.0	-2,232.1	115.5	2,235.1	0.00	0.00	0.00
7,900.0	90.00	177.07	6,030.0	-2,332.0	120.6	2,335.1	0.00	0.00	0.00
8,000.0	90.00	177.07	6,030.0	-2,431.9	125.7	2,435.1	0.00	0.00	0.00
8,100.0	90.00	177.07	6,030.0	-2,531.7	130.8	2,535.1	0.00	0.00	0.00
8,200.0	90.00	177.07	6,030.0	-2,631.6	135.9	2,635.1	0.00	0.00	0.00
8,300.0	90.00	177.07	6,030.0	-2,731.5	141.0	2,735.1	0.00	0.00	0.00
8,400.0	90.00	177.07	6,030.0	-2,831.3	146.1	2,835.1	0.00	0.00	0.00
8,500.0	90.00	177.07	6,030.0	-2,931.2	151.2	2,935.1	0.00	0.00	0.00
8,600.0	90.00	177.07	6,030.0	-3,031.1	156.3	3,035.1	0.00	0.00	0.00
8,700.0	90.00	177.07	6,030.0	-3,130.9	161.5	3,135.1	0.00	0.00	0.00
8,800.0	90.00	177.07	6,030.0	-3,230.8	166.6	3,235.1	0.00	0.00	0.00
8,900.0	90.00	177.07	6,030.0	-3,330.7	171.7	3,335.1	0.00	0.00	0.00
9,000.0	90.00	177.07	6,030.0	-3,430.5	176.8	3,435.1	0.00	0.00	0.00
9,100.0	90.00	177.07	6,030.0	-3,530.4	181.9	3,535.1	0.00	0.00	0.00
9,200.0	90.00	177.07	6,030.0	-3,630.3	187.0	3,635.1	0.00	0.00	0.00

Database:	Landmark	Local Co-ordinate Reference:	Well Wickstrom 17-2H
Company:	Condor Energy	TVD Reference:	WELL @ 4683.9ft (Original Well Elev)
Project:	SEC.17-T6N-R60W	MD Reference:	WELL @ 4683.9ft (Original Well Elev)
Site:	Wickstrom 17-1H Pad Sec.17-T6N-R60W	North Reference:	True
Well:	Wickstrom 17-2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (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)	
9,300.0	90.00	177.07	6,030.0	-3,730.2	192.1	3,735.1	0.00	0.00	0.00	
9,400.0	90.00	177.07	6,030.0	-3,830.0	197.2	3,835.1	0.00	0.00	0.00	
9,500.0	90.00	177.07	6,030.0	-3,929.9	202.3	3,935.1	0.00	0.00	0.00	
9,600.0	90.00	177.07	6,030.0	-4,029.8	207.4	4,035.1	0.00	0.00	0.00	
9,700.0	90.00	177.07	6,030.0	-4,129.6	212.5	4,135.1	0.00	0.00	0.00	
9,800.0	90.00	177.07	6,030.0	-4,229.5	217.6	4,235.1	0.00	0.00	0.00	
9,900.0	90.00	177.07	6,030.0	-4,329.4	222.7	4,335.1	0.00	0.00	0.00	
10,000.0	90.00	177.07	6,030.0	-4,429.2	227.8	4,435.1	0.00	0.00	0.00	
10,100.0	90.00	177.07	6,030.0	-4,529.1	232.9	4,535.1	0.00	0.00	0.00	
10,200.0	90.00	177.07	6,030.0	-4,629.0	238.1	4,635.1	0.00	0.00	0.00	
10,300.0	90.00	177.07	6,030.0	-4,728.9	243.2	4,735.1	0.00	0.00	0.00	
10,387.5	90.00	177.07	6,030.0	-4,816.3	247.6	4,822.6	0.00	0.00	0.00	
BHL 660'FSL & 1980'FWL, Sec.20										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
6,444.2	6,030.0	7"	7	7-1/2	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.0	999.8	-6.8	1.3	KOP #1	
5,319.3	5,314.0	-162.0	30.0	KOP #2	
6,444.2	6,030.0	-878.0	47.3	End of Build	