Condor Energy

Well Name: **Wickstrom 18-2H**

Surface Location: Wickstrom 18-2H Pad Sec.18-T6N-R60W

North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

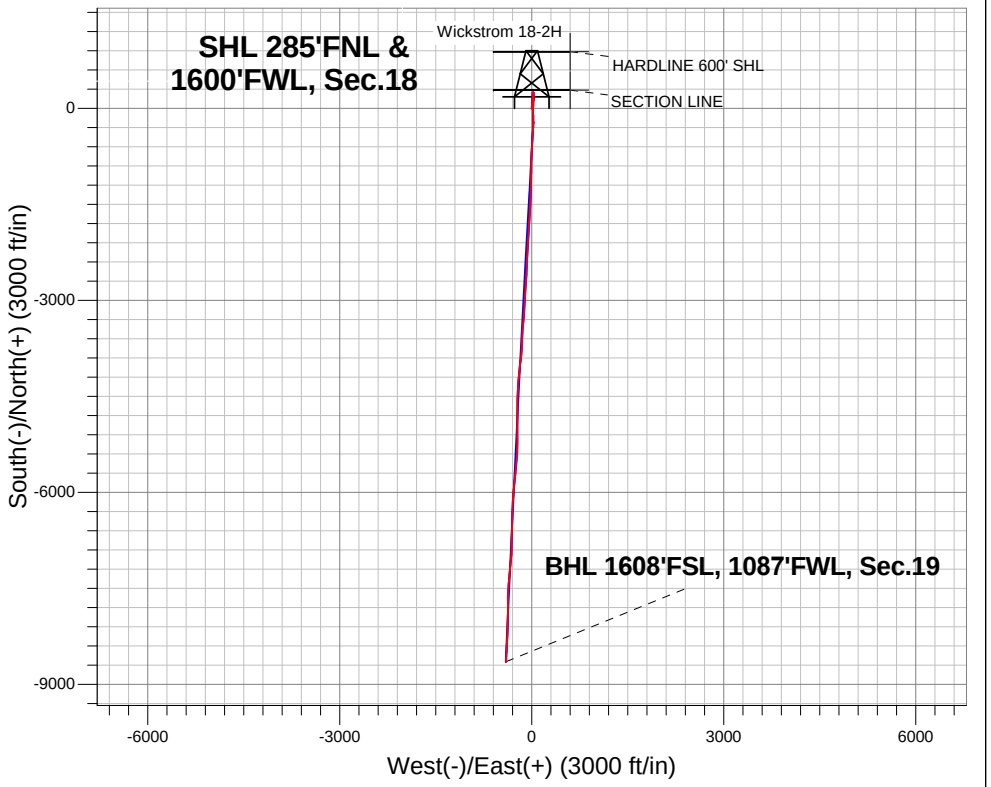
Ground Elevation: 4700.0

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.0	0.0	1426014.93	3377762.01	40.494870	-104.141680	

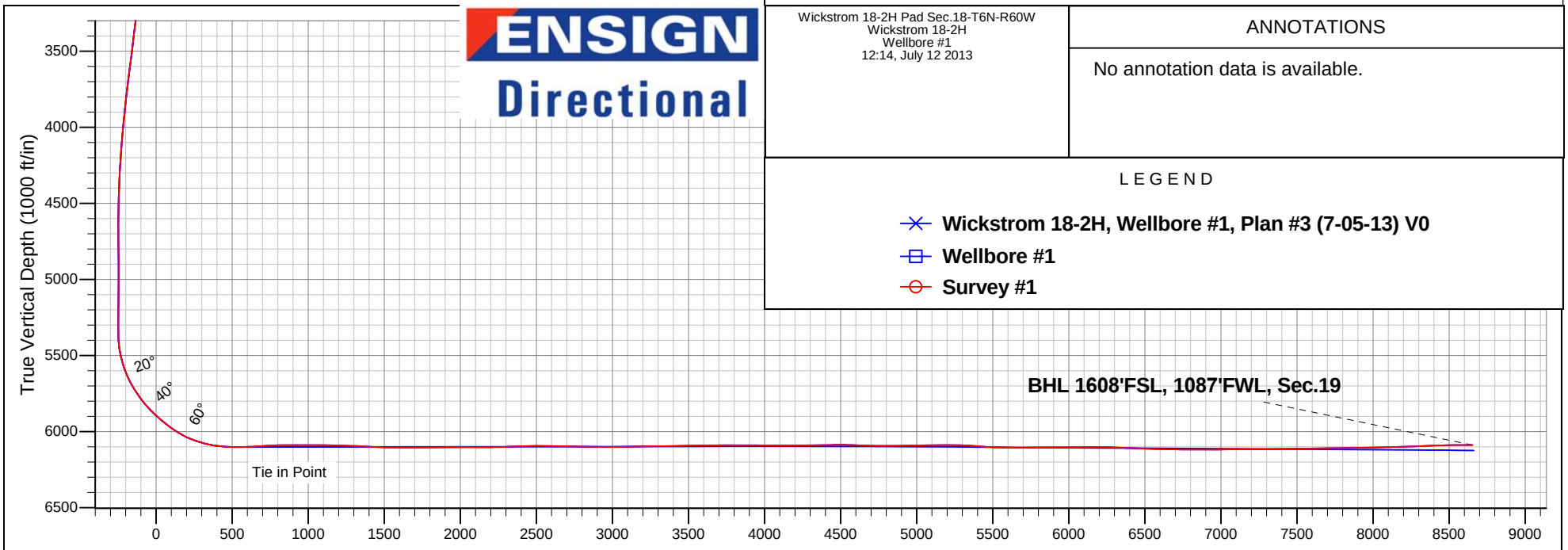
RKB - 18.5' WELL @ 4718.5ft (RKB - 18.5')

FINAL SURVEY

Projected Bottom Hole Location
14695'MD 6089'TVD 8644'S &
400'W of SHL 89.70 degree Incl
@ 181.80 degree AZM



ENSIGN Directional



Wickstrom 18-2H Pad Sec.18-T6N-R60W
Wickstrom 18-2H
Wellbore #1
12:14, July 12 2013

ANNOTATIONS

No annotation data is available.

LEGEND

- **Wickstrom 18-2H, Wellbore #1, Plan #3 (7-05-13) V0**
- **Wellbore #1**
- **Survey #1**

Condor Energy

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

Wellbore #1

Survey: Survey #1

Standard Survey Report

12 July, 2013

ENSIGN Directional

Survey Report

Company:	Condor Energy	**Local Co-ordinate Reference:**	Well Wickstrom 18-2H
Project:	SEC.18-T6N-R60W	**TVD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**MD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Well:	Wickstrom 18-2H	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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 18-2H

Well Position	**+N/-S**	0.0 ft	**Northing:**	1,426,014.93 ft	**Latitude:**	40.494870
	+E/-W	0.0 ft	**Easting:**	3,377,762.01 ft	**Longitude:**	-104.141680
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	4,700.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/25/2013	8.26	67.16	53,033

Design Wellbore #1

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	182.69

Survey Program **Date** 7/12/2013

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
216.0	14,695.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard

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'									
0.7	0.00	329.20	0.7	0.0	0.0	0.0	0.23	0.23	0.00
SECTION LINE									
1.0	0.00	329.20	1.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL 285'FNL & 1600'FWL, SEC.18									
8.9	0.02	329.20	8.9	0.0	0.0	0.0	0.23	0.23	0.00
HARDLINE 600' SHL									
216.0	0.50	329.20	216.0	0.8	-0.5	-0.8	0.23	0.23	0.00
472.0	0.20	344.50	472.0	2.2	-1.2	-2.1	0.12	-0.12	5.98
722.0	0.90	122.70	722.0	1.6	0.4	-1.6	0.42	0.28	55.28
972.0	0.90	89.30	972.0	0.5	4.0	-0.7	0.21	0.00	-13.36
1,222.0	1.10	338.20	1,221.9	2.8	5.0	-3.0	0.66	0.08	-44.44

Company:	Condor Energy	**Local Co-ordinate Reference:**	Well Wickstrom 18-2H
Project:	SEC.18-T6N-R60W	**TVD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**MD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Well:	Wickstrom 18-2H	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
1,472.0	1.10	320.10	1,471.9	6.8	2.6	-7.0	0.14	0.00	-7.24
1,712.0	0.40	68.60	1,711.9	8.9	1.9	-9.0	0.54	-0.29	45.21
1,786.0	0.70	145.70	1,785.9	8.6	2.4	-8.7	0.98	0.41	104.19
1,846.0	0.50	151.50	1,845.9	8.1	2.7	-8.2	0.35	-0.33	9.67
1,943.0	0.60	343.30	1,942.9	8.2	2.8	-8.3	1.13	0.10	-173.40
2,035.0	2.60	1.60	2,034.8	10.8	2.7	-10.9	2.22	2.17	19.89
2,128.0	2.00	3.90	2,127.7	14.5	2.9	-14.6	0.65	-0.65	2.47
2,221.0	3.30	0.20	2,220.6	18.8	3.0	-18.9	1.41	1.40	-3.98
2,315.0	4.60	0.00	2,314.4	25.3	3.0	-25.4	1.38	1.38	-0.21
2,409.0	6.20	6.00	2,408.0	34.1	3.6	-34.2	1.80	1.70	6.38
2,503.0	5.50	2.30	2,501.5	43.6	4.3	-43.8	0.85	-0.74	-3.94
2,596.0	6.70	9.70	2,594.0	53.4	5.4	-53.6	1.54	1.29	7.96
2,688.0	6.80	6.20	2,685.3	64.1	6.8	-64.4	0.46	0.11	-3.80
2,782.0	6.30	1.60	2,778.7	74.8	7.6	-75.1	0.77	-0.53	-4.89
2,875.0	7.40	9.30	2,871.1	85.8	8.7	-86.2	1.54	1.18	8.28
2,969.0	6.70	1.60	2,964.4	97.3	9.8	-97.6	1.25	-0.74	-8.19
3,061.0	5.80	355.80	3,055.8	107.3	9.6	-107.6	1.19	-0.98	-6.30
3,155.0	6.20	2.80	3,149.3	117.1	9.5	-117.4	0.89	0.43	7.45
3,249.0	6.50	1.20	3,242.7	127.5	9.9	-127.8	0.37	0.32	-1.70
3,341.0	6.70	1.60	3,334.1	138.1	10.2	-138.4	0.22	0.22	0.43
3,435.0	6.90	4.20	3,427.5	149.2	10.7	-149.5	0.39	0.21	2.77
3,528.0	7.10	2.50	3,519.8	160.5	11.4	-160.8	0.31	0.22	-1.83
3,621.0	7.10	4.90	3,612.0	172.0	12.1	-172.3	0.32	0.00	2.58
3,715.0	7.30	3.90	3,705.3	183.7	13.0	-184.1	0.25	0.21	-1.06
3,808.0	6.80	4.00	3,797.6	195.1	13.8	-195.5	0.54	-0.54	0.11
3,900.0	5.80	2.60	3,889.0	205.2	14.4	-205.6	1.10	-1.09	-1.52
3,994.0	5.30	2.80	3,982.6	214.2	14.8	-214.7	0.53	-0.53	0.21
4,087.0	5.20	1.90	4,075.2	222.8	15.2	-223.2	0.14	-0.11	-0.97
4,181.0	4.30	354.50	4,168.9	230.5	15.0	-231.0	1.16	-0.96	-7.87
4,274.0	3.10	359.10	4,261.7	236.5	14.6	-236.9	1.33	-1.29	4.95
4,367.0	2.30	12.50	4,354.6	240.8	15.0	-241.3	1.09	-0.86	14.41
4,460.0	1.10	2.50	4,447.6	243.6	15.4	-244.0	1.32	-1.29	-10.75
4,554.0	1.80	33.40	4,541.5	245.7	16.3	-246.2	1.09	0.74	32.87
4,647.0	0.10	80.00	4,634.5	246.9	17.2	-247.5	1.86	-1.83	50.11
4,741.0	0.40	129.40	4,728.5	246.7	17.5	-247.3	0.37	0.32	52.55
4,835.0	0.60	142.00	4,822.5	246.1	18.1	-246.7	0.24	0.21	13.40
4,929.0	0.60	86.00	4,916.5	245.8	18.8	-246.4	0.60	0.00	-59.57
5,023.0	0.50	94.20	5,010.5	245.8	19.7	-246.4	0.14	-0.11	8.72
5,116.0	1.50	91.80	5,103.5	245.7	21.4	-246.4	1.08	1.08	-2.58
5,210.0	1.70	78.40	5,197.4	246.0	24.0	-246.8	0.45	0.21	-14.26
5,304.0	0.60	41.80	5,291.4	246.6	25.7	-247.5	1.35	-1.17	-38.94
5,335.0	0.70	48.20	5,322.4	246.8	25.9	-247.8	0.40	0.32	20.65
5,366.0	0.50	59.10	5,353.4	247.0	26.2	-248.0	0.74	-0.65	35.16
5,397.0	1.90	168.60	5,384.4	246.6	26.4	-247.6	6.84	4.52	353.23
5,426.0	5.80	179.10	5,413.3	244.7	26.5	-245.6	13.61	13.45	36.21
5,458.0	8.20	180.50	5,445.1	240.8	26.5	-241.8	7.52	7.50	4.38
5,489.0	9.80	177.50	5,475.7	235.9	26.6	-236.9	5.38	5.16	-9.68
5,520.0	12.10	176.30	5,506.2	230.0	26.9	-231.1	7.46	7.42	-3.87
5,551.0	15.40	176.80	5,536.3	222.7	27.4	-223.7	10.65	10.65	1.61
5,582.0	18.40	176.80	5,565.9	213.7	27.9	-214.8	9.68	9.68	0.00
5,614.0	20.70	178.40	5,596.1	203.0	28.3	-204.1	7.38	7.19	5.00
5,645.0	22.70	179.10	5,624.9	191.5	28.6	-192.7	6.51	6.45	2.26
5,676.0	24.80	178.90	5,653.2	179.1	28.8	-180.2	6.78	6.77	-0.65
5,707.0	28.00	181.60	5,681.0	165.3	28.7	-166.4	11.02	10.32	8.71

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Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**MD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Well:	Wickstrom 18-2H	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
5,739.0	31.30	183.50	5,708.8	149.5	28.0	-150.6	10.72	10.31	5.94
5,770.0	33.20	184.40	5,735.0	133.0	26.8	-134.1	6.32	6.13	2.90
5,801.0	34.60	184.20	5,760.8	115.7	25.5	-116.8	4.53	4.52	-0.65
5,830.0	36.10	182.10	5,784.4	99.0	24.6	-100.0	6.66	5.17	-7.24
5,862.0	39.00	181.60	5,809.8	79.5	24.0	-80.5	9.11	9.06	-1.56
5,893.0	41.10	182.10	5,833.5	59.6	23.4	-60.6	6.85	6.77	1.61
5,924.0	43.80	181.80	5,856.4	38.6	22.6	-39.7	8.73	8.71	-0.97
5,956.0	46.90	181.40	5,878.9	15.9	22.0	-16.9	9.73	9.69	-1.25
5,987.0	47.90	180.30	5,899.9	-6.9	21.7	5.9	4.15	3.23	-3.55
6,018.0	50.60	178.60	5,920.1	-30.4	21.9	29.3	9.65	8.71	-5.48
6,049.0	51.30	179.10	5,939.6	-54.5	22.4	53.4	2.58	2.26	1.61
6,080.0	52.00	180.70	5,958.9	-78.8	22.4	77.6	4.63	2.26	5.16
6,111.0	54.20	179.50	5,977.5	-103.6	22.4	102.4	7.74	7.10	-3.87
6,142.0	55.40	177.90	5,995.3	-128.9	23.0	127.7	5.72	3.87	-5.16
6,173.0	58.60	177.40	6,012.2	-154.9	24.0	153.6	10.41	10.32	-1.61
6,204.0	62.70	178.80	6,027.4	-181.9	24.9	180.5	13.80	13.23	4.52
6,235.0	66.70	178.90	6,040.7	-209.9	25.5	208.5	12.91	12.90	0.32
6,266.0	69.60	181.60	6,052.2	-238.7	25.4	237.2	12.36	9.35	8.71
6,298.0	71.10	182.80	6,063.0	-268.8	24.2	267.3	5.87	4.69	3.75
6,329.0	73.60	183.70	6,072.4	-298.3	22.5	296.9	8.53	8.06	2.90
6,360.0	75.40	184.70	6,080.6	-328.0	20.3	326.7	6.59	5.81	3.23
6,392.0	79.10	184.60	6,087.7	-359.1	17.8	357.9	11.57	11.56	-0.31
6,413.8	81.50	183.96	6,091.4	-380.6	16.2	379.4	11.34	10.97	-2.91
WP1 660'FNL & 1577'FWL									
6,423.0	82.50	183.70	6,092.7	-389.7	15.6	388.5	11.34	10.97	-2.88
6,455.0	84.20	183.70	6,096.4	-421.4	13.5	420.3	5.31	5.31	0.00
6,484.0	84.80	183.20	6,099.1	-450.2	11.8	449.1	2.69	2.07	-1.72
6,515.0	87.30	183.20	6,101.3	-481.1	10.1	480.1	8.06	8.06	0.00
6,565.0	90.00	183.20	6,102.5	-531.0	7.3	530.0	5.40	5.40	0.00
6,639.0	92.50	182.50	6,100.8	-604.9	3.6	604.0	3.51	3.38	-0.95
6,670.0	93.10	182.50	6,099.3	-635.8	2.3	635.0	1.94	1.94	0.00
6,701.0	93.60	182.50	6,097.5	-666.7	0.9	665.9	1.61	1.61	0.00
6,733.0	93.10	182.30	6,095.6	-698.6	-0.4	697.9	1.68	-1.56	-0.63
6,764.0	93.10	182.60	6,094.0	-729.6	-1.8	728.8	0.97	0.00	0.97
6,795.0	92.90	182.10	6,092.3	-760.5	-3.0	759.8	1.74	-0.65	-1.61
6,827.0	92.30	182.60	6,090.9	-792.4	-4.3	791.8	2.44	-1.88	1.56
6,858.0	92.20	182.50	6,089.7	-823.4	-5.7	822.7	0.46	-0.32	-0.32
6,889.0	90.80	181.10	6,088.9	-854.3	-6.7	853.7	6.39	-4.52	-4.52
6,920.0	90.00	180.30	6,088.6	-885.3	-7.1	884.7	3.65	-2.58	-2.58
6,952.0	89.40	178.80	6,088.8	-917.3	-6.8	916.6	5.05	-1.88	-4.69
6,983.0	89.30	179.80	6,089.2	-948.3	-6.4	947.6	3.24	-0.32	3.23
7,014.0	90.00	181.10	6,089.4	-979.3	-6.7	978.6	4.76	2.26	4.19
7,045.0	90.00	181.40	6,089.4	-1,010.3	-7.4	1,009.6	0.97	0.00	0.97
7,076.0	90.00	181.10	6,089.4	-1,041.3	-8.0	1,040.5	0.97	0.00	-0.97
7,107.0	89.90	181.20	6,089.4	-1,072.3	-8.7	1,071.5	0.46	-0.32	0.32
7,139.0	89.50	180.70	6,089.6	-1,104.3	-9.2	1,103.5	2.00	-1.25	-1.56
7,170.0	89.30	180.90	6,089.9	-1,135.3	-9.6	1,134.5	0.91	-0.65	0.65
7,201.0	88.60	180.70	6,090.4	-1,166.3	-10.1	1,165.5	2.35	-2.26	-0.65
7,232.0	88.50	180.70	6,091.2	-1,197.3	-10.4	1,196.4	0.32	-0.32	0.00
7,264.0	88.10	181.20	6,092.2	-1,229.3	-11.0	1,228.4	2.00	-1.25	1.56
7,295.0	87.80	181.20	6,093.3	-1,260.2	-11.6	1,259.4	0.97	-0.97	0.00
7,327.0	87.80	182.50	6,094.5	-1,292.2	-12.6	1,291.4	4.06	0.00	4.06
7,358.0	87.40	182.80	6,095.8	-1,323.1	-14.1	1,322.3	1.61	-1.29	0.97
7,389.0	87.10	183.50	6,097.3	-1,354.0	-15.8	1,353.3	2.45	-0.97	2.26

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Well:	Wickstrom 18-2H	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
7,420.0	87.00	183.30	6,098.9	-1,385.0	-17.6	1,384.3	0.72	-0.32	-0.65
7,451.0	87.10	183.20	6,100.5	-1,415.9	-19.4	1,415.2	0.46	0.32	-0.32
7,481.0	87.20	183.50	6,102.0	-1,445.8	-21.1	1,445.2	1.05	0.33	1.00
7,575.0	89.50	184.00	6,104.7	-1,539.5	-27.3	1,539.1	2.50	2.45	0.53
7,669.0	89.90	183.30	6,105.2	-1,633.3	-33.2	1,633.1	0.86	0.43	-0.74
7,763.0	90.70	183.00	6,104.7	-1,727.2	-38.4	1,727.1	0.91	0.85	-0.32
7,856.0	90.00	183.00	6,104.1	-1,820.1	-43.3	1,820.1	0.75	-0.75	0.00
7,950.0	90.60	182.50	6,103.6	-1,913.9	-47.8	1,914.1	0.83	0.64	-0.53
8,043.0	90.20	182.30	6,103.0	-2,006.9	-51.7	2,007.1	0.48	-0.43	-0.22
8,137.0	89.70	182.80	6,103.1	-2,100.8	-55.9	2,101.1	0.75	-0.53	0.53
8,230.0	90.10	184.40	6,103.2	-2,193.6	-61.7	2,194.1	1.77	0.43	1.72
8,323.0	92.30	184.40	6,101.3	-2,286.3	-68.8	2,287.0	2.37	2.37	0.00
8,416.0	92.40	183.20	6,097.5	-2,379.0	-75.0	2,379.9	1.29	0.11	-1.29
8,509.0	90.70	181.40	6,094.9	-2,471.9	-78.7	2,472.9	2.66	-1.83	-1.94
8,601.0	89.70	181.80	6,094.6	-2,563.8	-81.3	2,564.8	1.17	-1.09	0.43
8,695.0	88.10	183.90	6,096.4	-2,657.7	-86.0	2,658.8	2.81	-1.70	2.23
8,788.0	89.40	183.70	6,098.5	-2,750.5	-92.1	2,751.8	1.41	1.40	-0.22
8,881.0	88.70	183.90	6,100.0	-2,843.3	-98.3	2,844.7	0.78	-0.75	0.22
8,972.0	90.00	183.70	6,101.0	-2,934.1	-104.3	2,935.7	1.45	1.43	-0.22
9,064.0	90.00	183.30	6,101.0	-3,025.9	-109.9	3,027.7	0.43	0.00	-0.43
9,156.0	91.60	183.20	6,099.7	-3,117.7	-115.2	3,119.7	1.74	1.74	-0.11
9,250.0	90.70	184.40	6,097.9	-3,211.5	-121.4	3,213.6	1.60	-0.96	1.28
9,342.0	90.70	185.40	6,096.7	-3,303.1	-129.2	3,305.6	1.09	0.00	1.09
9,434.0	91.30	184.90	6,095.1	-3,394.8	-137.5	3,397.5	0.85	0.65	-0.54
9,526.0	91.20	183.70	6,093.1	-3,486.5	-144.4	3,489.4	1.31	-0.11	-1.30
9,618.0	90.70	182.60	6,091.6	-3,578.3	-149.4	3,581.4	1.31	-0.54	-1.20
9,711.0	90.30	181.20	6,090.8	-3,671.3	-152.5	3,674.4	1.57	-0.43	-1.51
9,804.0	89.90	183.20	6,090.6	-3,764.2	-156.1	3,767.4	2.19	-0.43	2.15
9,896.0	90.30	185.80	6,090.5	-3,855.9	-163.3	3,859.3	2.86	0.43	2.83
9,988.0	89.20	186.90	6,090.9	-3,947.3	-173.5	3,951.1	1.69	-1.20	1.20
10,081.0	89.40	186.70	6,092.0	-4,039.7	-184.5	4,043.9	0.30	0.22	-0.22
10,172.0	90.20	186.20	6,092.3	-4,130.1	-194.7	4,134.7	1.04	0.88	-0.55
10,264.0	90.70	185.80	6,091.6	-4,221.6	-204.3	4,226.5	0.70	0.54	-0.43
10,357.0	90.60	184.20	6,090.5	-4,314.2	-212.4	4,319.4	1.72	-0.11	-1.72
10,449.0	91.50	183.90	6,088.9	-4,406.0	-218.9	4,411.4	1.03	0.98	-0.33
10,542.0	90.10	180.90	6,087.6	-4,498.9	-222.8	4,504.4	3.56	-1.51	-3.23
10,548.9	89.87	180.78	6,087.6	-4,505.7	-222.9	4,511.2	3.79	-3.37	-1.74
WP3									
10,549.4	89.85	180.77	6,087.6	-4,506.3	-222.9	4,511.8	3.79	-3.37	-1.74
WP2									
10,634.0	87.00	179.30	6,089.9	-4,590.8	-223.0	4,596.2	3.79	-3.37	-1.74
10,726.0	89.00	179.60	6,093.1	-4,682.8	-222.1	4,688.0	2.20	2.17	0.33
10,818.0	89.60	180.90	6,094.2	-4,774.8	-222.5	4,779.9	1.56	0.65	1.41
10,909.0	90.70	181.80	6,094.0	-4,865.7	-224.7	4,870.9	1.56	1.21	0.99
11,001.0	91.50	180.70	6,092.2	-4,957.7	-226.7	4,962.9	1.48	0.87	-1.20
11,093.0	91.20	180.30	6,090.0	-5,049.7	-227.5	5,054.8	0.54	-0.33	-0.43
11,185.0	89.50	178.60	6,089.5	-5,141.6	-226.6	5,146.6	2.61	-1.85	-1.85
11,277.0	90.00	180.90	6,089.9	-5,233.6	-226.2	5,238.5	2.56	0.54	2.50
11,369.0	87.40	180.90	6,092.0	-5,325.6	-227.6	5,330.4	2.83	-2.83	0.00
11,461.0	85.00	182.30	6,098.1	-5,417.3	-230.2	5,422.2	3.02	-2.61	1.52
11,553.0	87.60	185.40	6,104.0	-5,508.9	-236.4	5,514.0	4.39	2.83	3.37
11,645.0	90.10	185.60	6,105.9	-5,600.5	-245.2	5,605.8	2.73	2.72	0.22
11,737.0	90.20	186.00	6,105.6	-5,692.0	-254.5	5,697.7	0.45	0.11	0.43
11,828.0	90.50	186.70	6,105.1	-5,782.4	-264.5	5,788.5	0.84	0.33	0.77

Company:	Condor Energy	**Local Co-ordinate Reference:**	Well Wickstrom 18-2H
Project:	SEC.18-T6N-R60W	**TVD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Site:	Wickstrom 18-2H Pad Sec.18-T6N-R60W	**MD Reference:**	WELL @ 4718.5ft (RKB - 18.5')
Well:	Wickstrom 18-2H	**North Reference:**	True
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	Landmark

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)
11,920.0	89.70	185.40	6,104.9	-5,873.9	-274.2	5,880.3	1.66	-0.87	-1.41
12,013.0	90.30	185.30	6,104.9	-5,966.5	-282.9	5,973.2	0.65	0.65	-0.11
12,110.0	91.90	183.70	6,103.0	-6,063.2	-290.5	6,070.2	2.33	1.65	-1.65
12,203.0	89.70	183.50	6,101.7	-6,156.0	-296.4	6,163.1	2.38	-2.37	-0.22
12,295.0	88.10	182.10	6,103.5	-6,247.9	-300.8	6,255.1	2.31	-1.74	-1.52
12,387.0	87.90	181.20	6,106.7	-6,339.8	-303.5	6,347.0	1.00	-0.22	-0.98
12,481.0	88.00	180.70	6,110.1	-6,433.7	-305.1	6,440.9	0.54	0.11	-0.53
12,575.0	87.80	181.40	6,113.5	-6,527.6	-306.8	6,534.8	0.77	-0.21	0.74
12,669.0	88.90	181.60	6,116.2	-6,621.6	-309.2	6,628.8	1.19	1.17	0.21
12,763.0	89.30	181.40	6,117.7	-6,715.5	-311.7	6,722.7	0.48	0.43	-0.21
12,856.0	89.20	180.90	6,118.9	-6,808.5	-313.6	6,815.7	0.55	-0.11	-0.54
12,949.0	90.50	181.90	6,119.2	-6,901.4	-315.8	6,908.7	1.76	1.40	1.08
13,043.0	91.00	184.20	6,117.9	-6,995.3	-320.8	7,002.7	2.50	0.53	2.45
13,137.0	90.80	185.30	6,116.5	-7,089.0	-328.6	7,096.6	1.19	-0.21	1.17
13,231.0	89.70	185.60	6,116.1	-7,182.5	-337.5	7,190.5	1.21	-1.17	0.32
13,324.0	90.00	185.30	6,116.3	-7,275.1	-346.4	7,283.4	0.46	0.32	-0.32
13,418.0	91.00	185.30	6,115.5	-7,368.7	-355.1	7,377.3	1.06	1.06	0.00
13,511.0	91.30	184.40	6,113.6	-7,461.4	-362.9	7,470.2	1.02	0.32	-0.97
13,605.0	91.20	183.00	6,111.6	-7,555.1	-369.0	7,564.1	1.49	-0.11	-1.49
13,699.0	89.90	180.50	6,110.7	-7,649.1	-371.9	7,658.1	3.00	-1.38	-2.66
13,793.0	90.70	180.20	6,110.2	-7,743.1	-372.4	7,752.0	0.91	0.85	-0.32
13,886.0	90.80	180.30	6,108.9	-7,836.1	-372.8	7,844.9	0.15	0.11	0.11
13,980.0	91.60	179.80	6,107.0	-7,930.0	-372.9	7,938.8	1.00	0.85	-0.53
14,074.0	91.50	180.90	6,104.4	-8,024.0	-373.5	8,032.7	1.17	-0.11	1.17
14,168.0	91.20	182.10	6,102.2	-8,117.9	-375.9	8,126.6	1.32	-0.32	1.28
14,262.0	92.50	183.20	6,099.2	-8,211.8	-380.3	8,220.6	1.81	1.38	1.17
14,355.0	92.20	182.30	6,095.4	-8,304.6	-384.7	8,313.5	1.02	-0.32	-0.97
14,448.0	91.90	182.60	6,092.0	-8,397.5	-388.7	8,406.5	0.46	-0.32	0.32
14,541.0	91.60	183.50	6,089.2	-8,490.3	-393.7	8,499.4	1.02	-0.32	0.97
14,641.0	89.70	181.80	6,088.1	-8,590.2	-398.3	8,599.4	2.55	-1.90	-1.70
14,695.0	89.70	181.80	6,088.4	-8,644.1	-400.0	8,653.4	0.00	0.00	0.00
BHL 1600'FSL & 1080'FWL, SEC.19									

Design Targets

Target Name - hit/miss target - Shape	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	285.0	600.0	1,426,309.08	3,378,357.55	40.495652	-104.139523
- survey misses target center by 664.2ft at 1.0ft MD (1.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			1.0	0.0	0.0	1,426,309.08	3,378,357.55		
Point 2			1.0	0.0	-1,200.0	1,426,290.70	3,377,157.73		
HARDLINE 600' SHL	0.00	0.00	6.9	883.6	600.0	1,426,907.56	3,378,348.38	40.497295	-104.139523
- survey misses target center by 1068.0ft at 7.0ft MD (7.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			6.9	0.0	0.0	1,426,907.56	3,378,348.38		
Point 2			6.9	0.0	-1,200.0	1,426,889.18	3,377,148.56		

Checked By: _____ Approved By: _____ Date: _____