



Project: Mary Prospect
 Site: Howell Pad
 Well: Howell 7H
 Wellbore: OH
 Design: As Drilled



WELL DETAILS: Howell 7H

+N/S 0.0 +E/W 0.0 Northing 401762.52 Easting 1635229.08 Ground Level: 1302.0 Latitude 39° 35' 45.083" N Longitude 80° 47' 40.144" W

REFERENCE INFORMATION

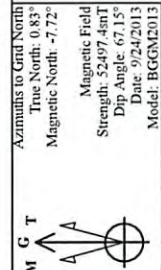
Co-ordinate (N/E) Reference: Well Howell 7H, Grid North
 Vertical (TVD) Reference: GL 1302 & KB 18' @ 1320 (usft) (Saxon 141)
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: GL 1302 & KB 18' @ 1320 (usft) (Saxon 141)
 Calculation Method: Minimum Curvature

PROJECT DETAILS: Mary Prospect

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: West Virginia North 4701
 System Datum: Mean Sea Level

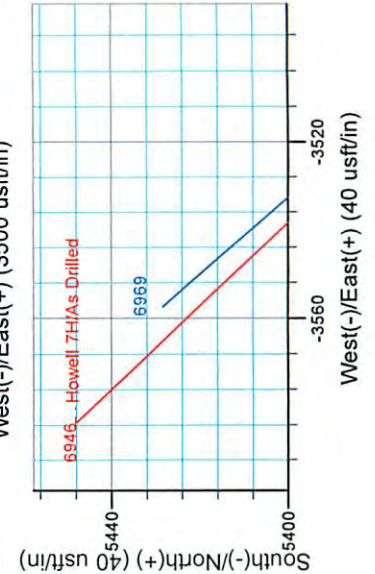
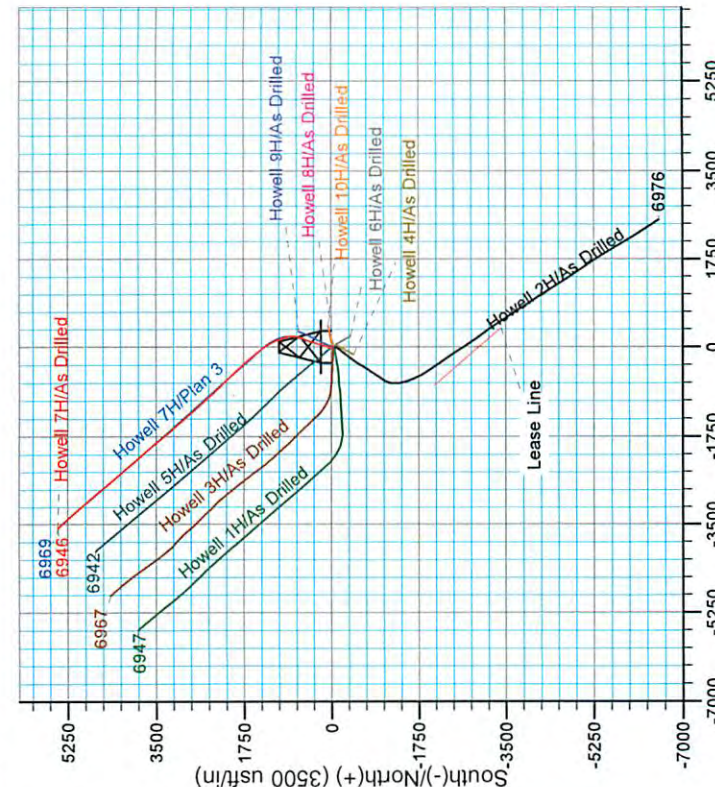
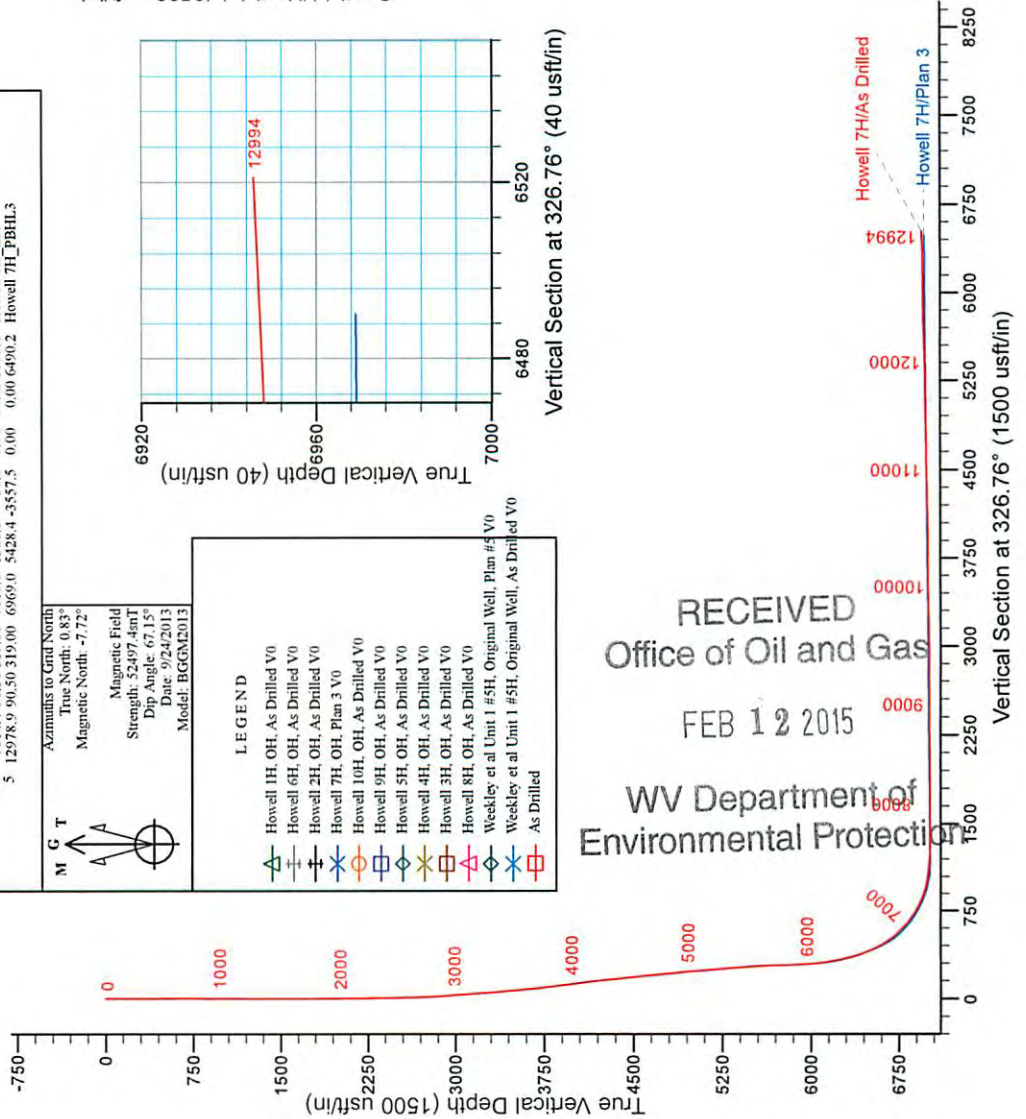
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	V Sect	Target
1	5853.0	3.13	22.37	5822.2	410.7	107.7	0.00	0.00	284.4	
2	5953.0	3.13	22.37	5922.1	415.7	109.8	0.00	0.00	287.5	
3	6730.3	40.17	17.56	6632.0	683.8	196.6	4.77	-5.15	464.2	
4	7614.4	90.50	319.00	7016.0	1380.0	-38.0	8.00	-64.65	1175.1	Howell 7H_LF3
5	12978.9	90.50	319.00	6969.0	5428.4	-3557.5	0.00	0.00	6490.2	Howell 7H_P8HLL3



LEGEND

- Howell 1H OH, As Drilled V0
- Howell 6H OH, As Drilled V0
- Howell 2H OH, As Drilled V0
- Howell 7H OH, Plan 3 V0
- Howell 10H OH, As Drilled V0
- Howell 9H OH, As Drilled V0
- Howell 5H OH, As Drilled V0
- Howell 4H OH, As Drilled V0
- Howell 3H OH, As Drilled V0
- Howell 8H OH, As Drilled V0
- Weekley et al Unit 1 #5H, Original Well, As Drilled V0
- As Drilled



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Stone Energy

Mary Prospect
Howell Pad
Howell 7H

OH

Design: As Drilled

Standard Survey Report

08 October, 2013

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Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well Howell 7H
Project:	Mary Prospect	TVD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Site:	Howell Pad	MD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Well:	Howell 7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Project	Mary Prospect, West Virginia		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	West Virginia North 4701		

Site	Howell Pad				
Site Position:		Northing:	401,702.68 usft	Latitude:	39° 35' 44.492 N
From:	Map	Easting:	1,635,235.83 usft	Longitude:	80° 47' 40.046 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.83 °

Well	Howell 7H					
Well Position	+N/-S	0.0 usft	Northing:	401,762.52 usft	Latitude:	39° 35' 45.083 N
	+E/-W	0.0 usft	Easting:	1,635,229.08 usft	Longitude:	80° 47' 40.144 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	1,302.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/27/2013	-8.49	67.17	52,599
	IGRF2010	7/29/2013	-8.50	67.14	52,558
	BGGM2013	9/24/2013	-8.55	67.15	52,497

Design	As Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	326.76	

Survey Program	Date	10/8/2013			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
18.0	2,303.0	Survey 1 - Gyro (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	
2,363.0	12,994.0	Survey 2 - MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
18.0	0.00	0.00	18.0	0.0	0.0	0.0	0.00	0.00	0.00	
Ground Level										
103.0	1.03	339.13	103.0	0.7	-0.3	1.21	1.21	0.00		
First SDI Gyro Survey										
203.0	0.46	335.13	203.0	1.9	-0.8	2.0	0.57	-0.57	-4.00	
303.0	0.10	294.31	303.0	2.3	-1.0	2.5	0.39	-0.36	-40.82	

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Survey Report



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Project:	Mary Prospect	TVD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Site:	Howell Pad	MD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Well:	Howell 7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
403.0	0.09	347.45	403.0	2.4	-1.1	2.6	0.09	-0.01	53.14
503.0	0.06	75.09	503.0	2.5	-1.1	2.7	0.11	-0.03	87.64
603.0	0.07	95.63	603.0	2.5	-1.0	2.6	0.03	0.01	20.54
703.0	0.15	139.85	703.0	2.4	-0.8	2.5	0.11	0.08	44.22
803.0	0.21	143.45	803.0	2.2	-0.6	2.2	0.06	0.06	3.60
903.0	0.23	172.89	903.0	1.8	-0.5	1.8	0.11	0.02	29.44
1,003.0	0.05	118.77	1,003.0	1.6	-0.4	1.6	0.20	-0.18	-54.12
1,103.0	0.20	206.82	1,103.0	1.4	-0.5	1.5	0.20	0.15	88.05
1,203.0	0.18	179.94	1,203.0	1.1	-0.5	1.2	0.09	-0.02	-26.88
1,303.0	0.03	75.12	1,303.0	1.0	-0.5	1.1	0.19	-0.15	-104.82
1,403.0	0.21	120.43	1,403.0	0.9	-0.3	0.9	0.19	0.18	45.31
1,503.0	0.23	250.19	1,503.0	0.7	-0.4	0.8	0.40	0.02	129.76
1,603.0	0.62	272.70	1,603.0	0.7	-1.1	1.2	0.42	0.39	22.51
1,703.0	0.54	269.10	1,703.0	0.7	-2.1	1.7	0.09	-0.08	-3.60
1,803.0	0.69	261.09	1,803.0	0.6	-3.2	2.2	0.17	0.15	-8.01
1,903.0	0.78	274.16	1,903.0	0.6	-4.4	2.9	0.19	0.09	13.07
2,003.0	0.69	250.94	2,002.9	0.4	-5.7	3.5	0.31	-0.09	-23.22
2,103.0	0.99	252.63	2,102.9	0.0	-7.1	3.8	0.30	0.30	1.69
2,203.0	1.01	246.37	2,202.9	-0.7	-8.7	4.2	0.11	0.02	-6.26
2,303.0	0.66	246.89	2,302.9	-1.2	-10.1	4.5	0.35	-0.35	0.52
Last SDI Gyro Survey									
2,363.0	0.67	257.94	2,362.9	-1.4	-10.7	4.7	0.21	0.02	18.42
First SDI MWD Survey									
2,426.0	0.56	237.65	2,425.9	-1.7	-11.3	4.8	0.38	-0.17	-32.21
2,516.0	0.98	340.30	2,515.9	-1.2	-12.0	5.6	1.37	0.47	114.07
2,610.0	2.06	8.36	2,609.9	1.2	-12.0	7.6	1.36	1.15	29.85
2,703.0	3.27	8.09	2,702.8	5.5	-11.4	10.8	1.30	1.30	-0.29
2,794.0	4.32	11.19	2,793.6	11.4	-10.3	15.2	1.18	1.15	3.41
2,887.0	5.59	10.73	2,886.2	19.3	-8.8	21.0	1.37	1.37	-0.49
2,980.0	6.29	16.06	2,978.7	28.7	-6.6	27.6	0.96	0.75	5.73
3,072.0	6.08	13.79	3,070.2	38.2	-4.0	34.2	0.35	-0.23	-2.47
3,166.0	6.44	20.05	3,163.6	48.0	-1.0	40.7	0.82	0.38	6.66
3,259.0	6.51	18.94	3,256.0	57.9	2.5	47.1	0.15	0.08	-1.19
3,350.0	6.43	14.76	3,346.4	67.7	5.4	53.7	0.52	-0.09	-4.59
3,443.0	7.24	18.53	3,438.8	78.3	8.6	60.8	1.00	0.87	4.05
3,534.0	8.56	19.17	3,528.9	90.2	12.7	68.5	1.45	1.45	0.70
3,625.0	9.84	18.19	3,618.7	103.9	17.3	77.4	1.42	1.41	-1.08
3,720.0	10.25	15.88	3,712.3	119.8	22.2	88.0	0.61	0.43	-2.43
3,812.0	10.64	16.39	3,802.8	135.8	26.8	98.9	0.44	0.42	0.55
3,905.0	10.47	15.24	3,894.2	152.2	31.5	110.0	0.29	-0.18	-1.24
3,997.0	10.45	13.15	3,984.6	168.4	35.6	121.3	0.41	-0.02	-2.27
4,090.0	10.54	16.08	4,076.1	184.8	39.8	132.1	0.58	0.10	3.15
4,183.0	10.58	13.26	4,167.5	201.2	44.1	144.1	0.56	0.04	-3.03
4,275.0	9.54	16.89	4,258.1	216.8	48.3	154.8	1.32	-1.13	3.95

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Scientific Drilling International
Survey Report



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Project:	Mary Prospect	TVD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Site:	Howell Pad	MD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Well:	Howell 7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,368.0	9.30	15.18	4,349.9	231.4	52.5	164.8	0.40	-0.26	-1.84
4,458.0	8.82	13.17	4,438.7	245.1	56.0	174.3	0.64	-0.53	-2.23
4,552.0	8.66	16.41	4,531.6	258.9	59.6	183.9	0.55	-0.17	3.45
4,647.0	8.63	21.40	4,625.6	272.4	64.2	192.6	0.79	-0.03	5.25
4,738.0	9.03	20.06	4,715.5	285.5	69.2	200.9	0.49	0.44	-1.47
4,830.0	8.73	18.16	4,806.4	298.9	73.8	209.5	0.46	-0.33	-2.07
4,924.0	8.10	15.35	4,899.4	312.1	77.8	218.4	0.80	-0.67	-2.99
5,016.0	8.03	17.36	4,990.5	324.5	81.4	226.7	0.32	-0.08	2.18
5,110.0	7.71	16.54	5,083.6	336.8	85.2	235.0	0.36	-0.34	-0.87
5,204.0	7.77	15.15	5,176.7	348.9	88.7	243.3	0.21	0.06	-1.48
5,297.0	7.40	11.66	5,268.9	360.9	91.5	251.7	0.64	-0.40	-3.75
5,387.0	7.28	18.29	5,358.2	372.0	94.5	259.3	0.95	-0.13	7.37
5,480.0	6.63	19.94	5,450.5	382.6	98.2	266.2	0.73	-0.70	1.77
5,574.0	5.80	16.80	5,543.9	392.3	101.4	272.5	0.95	-0.88	-3.34
5,665.0	4.51	17.53	5,634.6	400.1	103.8	277.7	1.42	-1.42	0.80
5,759.0	3.28	20.99	5,728.3	406.1	105.9	281.6	1.33	-1.31	3.68
5,791.0	2.84	22.52	5,760.3	407.7	106.5	282.6	1.40	-1.37	4.78
5,854.0	3.13	22.37	5,823.2	410.7	107.7	284.5	0.46	0.46	-0.24
5,886.0	3.02	23.43	5,855.2	412.3	108.4	285.4	0.39	-0.34	3.31
5,917.0	2.64	22.58	5,886.1	413.7	109.0	286.3	1.23	-1.23	-2.74
5,949.0	3.34	19.39	5,918.1	415.3	109.6	287.3	2.25	2.19	-9.97
5,981.0	5.05	20.31	5,950.0	417.5	110.4	288.7	5.35	5.34	2.88
6,013.0	6.64	21.24	5,981.8	420.5	111.6	290.6	4.98	4.97	2.91
6,044.0	8.37	21.83	6,012.6	424.3	113.0	292.9	5.59	5.58	1.90
6,076.0	10.24	20.40	6,044.1	429.1	114.9	295.9	5.89	5.84	-4.47
6,108.0	11.54	19.69	6,075.6	434.8	117.0	299.5	4.08	4.06	-2.22
6,140.0	12.51	17.42	6,106.9	441.1	119.1	303.7	3.37	3.03	-7.09
6,171.0	14.18	15.17	6,137.0	448.0	121.1	308.3	5.64	5.39	-7.26
6,203.0	16.24	15.43	6,167.9	456.1	123.3	313.9	6.44	6.44	0.81
6,235.0	17.43	17.11	6,198.5	465.0	125.9	319.9	4.02	3.72	5.25
6,266.0	18.75	18.72	6,228.0	474.1	128.9	325.9	4.55	4.26	5.19
6,298.0	20.92	19.66	6,258.1	484.4	132.4	332.5	6.85	6.78	2.94
6,330.0	22.10	20.32	6,287.9	495.4	136.5	339.6	3.76	3.69	2.06
6,361.0	23.67	20.58	6,316.4	506.7	140.7	346.7	5.08	5.06	0.84
6,393.0	25.63	20.69	6,345.5	519.2	145.4	354.6	6.13	6.13	0.34
6,424.0	27.62	21.05	6,373.2	532.2	150.3	362.7	6.44	6.42	1.16
6,454.0	28.95	21.07	6,399.6	545.4	155.4	371.0	4.43	4.43	0.07
6,484.0	30.41	20.60	6,425.7	559.3	160.7	379.7	4.93	4.87	-1.57
6,514.0	32.05	19.63	6,451.4	573.9	166.1	389.0	5.72	5.47	-3.23
6,545.0	33.36	18.88	6,477.4	589.7	171.6	399.2	4.42	4.23	-2.42
6,575.0	34.26	18.73	6,502.4	605.5	177.0	409.5	3.01	3.00	-0.50
6,606.0	34.75	18.66	6,527.9	622.2	182.6	420.9	1.59	1.58	-0.23
6,636.0	35.71	18.66	6,552.4	638.6	188.1	433.0	3.20	3.20	0.00



Scientific Drilling International
Survey Report



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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,666.0	37.27	17.52	6,576.5	655.5	193.7	442.1	5.67	5.20	-3.80
6,697.0	39.71	15.09	6,600.8	674.1	199.1	454.7	9.26	7.87	-7.84
6,727.0	42.50	12.26	6,623.4	693.2	203.7	468.1	11.18	9.30	-9.43
6,757.0	43.71	9.79	6,645.3	713.3	207.6	482.8	6.92	4.03	-8.23
6,787.0	44.25	6.63	6,666.9	733.9	210.6	498.4	7.53	1.80	-10.53
6,818.0	44.46	3.57	6,689.1	755.5	212.5	515.4	6.93	0.68	-9.87
6,849.0	45.66	359.70	6,711.0	777.5	213.1	533.4	9.65	3.87	-12.48
6,879.0	46.93	357.16	6,731.7	799.1	212.5	551.9	7.44	4.23	-8.47
6,910.0	47.90	354.24	6,752.7	821.9	210.8	571.9	7.61	3.13	-9.42
6,940.0	48.58	351.12	6,772.7	844.1	208.0	592.0	8.08	2.27	-10.40
6,970.0	48.89	347.91	6,792.4	866.2	203.9	612.8	8.11	1.03	-10.70
7,000.0	50.13	344.69	6,811.9	888.4	198.5	634.3	9.15	4.13	-10.73
7,031.0	52.29	342.93	6,831.3	911.6	191.7	657.4	8.25	6.97	-5.68
7,061.0	54.35	341.62	6,849.3	934.5	184.4	680.6	7.71	6.87	-4.37
7,091.0	56.93	340.58	6,866.2	957.9	176.4	704.5	9.06	8.60	-3.47
7,122.0	59.37	340.08	6,882.6	982.7	167.5	730.1	7.99	7.87	-1.61
7,151.0	60.22	339.87	6,897.1	1,006.3	158.9	754.5	3.00	2.93	-0.72
7,181.0	61.30	339.77	6,911.8	1,030.9	149.9	780.0	3.61	3.60	-0.33
7,212.0	63.66	339.07	6,926.1	1,056.6	140.2	806.9	7.87	7.61	-2.26
7,242.0	67.00	338.71	6,938.6	1,082.0	130.4	833.5	11.19	11.13	-1.20
7,272.0	69.83	338.64	6,949.7	1,108.0	120.3	860.8	9.44	9.43	-0.23
7,302.0	72.18	337.93	6,959.4	1,134.4	109.8	888.6	8.15	7.83	-2.37
7,333.0	74.13	336.79	6,968.4	1,161.7	98.4	917.8	7.21	6.29	-3.68
7,363.0	76.26	334.79	6,976.1	1,188.2	86.5	946.4	9.59	7.10	-6.67
7,394.0	77.86	332.61	6,983.0	1,215.3	73.1	976.4	8.58	5.16	-7.03
7,424.0	79.74	330.14	6,988.9	1,241.1	59.0	1,005.7	10.22	6.27	-8.23
7,454.0	81.41	328.51	6,993.8	1,266.5	43.9	1,035.3	7.73	5.57	-5.43
7,486.0	83.28	326.75	6,998.0	1,293.3	26.9	1,067.0	7.99	5.84	-5.50
7,518.0	84.07	325.17	7,001.6	1,319.7	9.1	1,098.8	5.49	2.47	-4.94
7,549.0	84.75	324.29	7,004.6	1,344.9	-8.7	1,129.6	3.58	2.19	-2.84
7,581.0	85.29	323.48	7,007.4	1,370.6	-27.5	1,161.5	3.03	1.69	-2.53
7,612.0	85.70	322.58	7,009.8	1,395.3	-46.1	1,192.3	3.18	1.32	-2.90
7,644.0	86.24	321.64	7,012.0	1,420.5	-65.7	1,224.1	3.38	1.69	-2.94
7,675.0	87.52	320.67	7,013.7	1,444.6	-85.1	1,254.9	5.18	4.13	-3.13
7,707.0	88.12	320.44	7,014.9	1,469.3	-105.4	1,286.7	2.01	1.88	-0.72
7,770.0	89.09	320.59	7,016.5	1,517.9	-145.5	1,349.3	1.56	1.54	0.24
7,833.0	90.20	320.20	7,016.9	1,566.4	-185.6	1,411.9	1.87	1.76	-0.62
7,896.0	90.87	319.12	7,016.3	1,614.5	-226.4	1,474.4	2.02	1.06	-1.71
7,959.0	90.17	317.65	7,015.7	1,661.6	-268.3	1,536.8	2.58	-1.11	-2.33
8,022.0	89.83	318.16	7,015.7	1,708.3	-310.5	1,599.0	0.97	-0.54	0.81
8,086.0	89.90	318.56	7,015.9	1,756.1	-353.0	1,662.3	0.63	0.11	0.63
8,149.0	90.03	318.81	7,015.9	1,803.5	-394.6	1,724.7	0.15	0.21	0.40
8,212.0	89.60	318.95	7,016.1	1,850.9	-436.0	1,787.1	0.72	-0.68	0.22
8,276.0	90.54	318.65	7,016.0	1,899.1	-478.2	1,850.5	1.54	1.47	-0.47

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Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well Howell 7H
Project:	Mary Prospect	TVD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Site:	Howell Pad	MD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Well:	Howell 7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
8,340.0	90.23	317.82	7,015.6	1,946.8	-520.8	1,913.8	1.38	-0.48	-1.30	
8,402.0	89.97	317.86	7,015.5	1,992.8	-562.4	1,975.0	0.42	-0.42	0.06	
8,465.0	91.14	317.29	7,014.9	2,039.3	-604.9	2,037.2	2.07	1.86	-0.90	
8,529.0	90.87	316.00	7,013.8	2,085.8	-648.9	2,100.2	2.06	-0.42	-2.02	
8,593.0	90.40	316.43	7,013.0	2,132.0	-693.1	2,163.1	1.00	-0.73	0.67	
8,656.0	91.51	316.47	7,012.0	2,177.6	-736.5	2,225.1	1.76	1.76	0.06	
8,719.0	91.68	316.57	7,010.2	2,223.3	-779.9	2,287.1	0.31	0.27	0.16	
8,783.0	89.63	317.20	7,009.5	2,270.1	-823.6	2,350.1	3.35	-3.20	0.98	
8,846.0	89.36	317.92	7,010.1	2,316.5	-866.1	2,412.3	1.22	-0.43	1.14	
8,910.0	90.67	317.64	7,010.1	2,363.9	-909.1	2,475.5	2.09	2.05	-0.44	
8,974.0	90.64	317.34	7,009.3	2,411.1	-952.4	2,538.7	0.47	-0.05	-0.47	
9,037.0	89.83	318.07	7,009.1	2,457.7	-994.8	2,600.9	1.73	-1.29	1.16	
9,100.0	90.97	318.34	7,008.6	2,504.7	-1,036.8	2,663.2	1.86	1.81	0.43	
9,163.0	91.07	318.50	7,007.5	2,551.8	-1,078.6	2,725.5	0.30	0.16	0.25	
9,226.0	90.17	319.74	7,006.8	2,599.4	-1,119.8	2,787.9	2.43	-1.43	1.97	
9,290.0	90.74	318.88	7,006.3	2,648.0	-1,161.5	2,851.4	1.61	0.89	-1.34	
9,353.0	90.40	318.91	7,005.7	2,695.4	-1,202.9	2,913.8	0.54	-0.54	0.05	
9,417.0	90.37	319.12	7,005.3	2,743.7	-1,244.9	2,977.2	0.33	-0.05	0.33	
9,481.0	89.03	319.66	7,005.6	2,792.3	-1,286.6	3,040.7	2.26	-2.09	0.84	
9,544.0	90.17	320.00	7,006.0	2,840.5	-1,327.2	3,103.2	1.89	1.81	0.54	
9,607.0	91.58	319.80	7,005.1	2,888.6	-1,367.8	3,165.8	2.26	2.24	-0.32	
9,671.0	91.71	319.96	7,003.2	2,937.6	-1,409.0	3,229.3	0.32	0.20	0.25	
9,734.0	90.27	319.70	7,002.1	2,985.7	-1,449.6	3,291.8	2.32	-2.29	-0.41	
9,797.0	90.17	319.15	7,001.9	3,033.5	-1,490.6	3,354.3	0.89	-0.16	-0.87	
9,861.0	90.27	318.75	7,001.7	3,081.8	-1,532.6	3,417.7	0.64	0.16	-0.63	
9,924.0	89.16	318.63	7,002.0	3,129.1	-1,574.2	3,480.1	1.77	-1.76	-0.19	
9,987.0	90.07	318.11	7,002.4	3,176.2	-1,616.1	3,542.4	1.66	1.44	-0.83	
10,051.0	90.67	319.10	7,002.0	3,224.2	-1,658.4	3,605.7	1.81	0.94	1.55	
10,114.0	90.57	320.38	7,001.3	3,272.3	-1,699.1	3,668.3	2.04	-0.16	2.03	
10,178.0	91.04	321.48	7,000.4	3,322.0	-1,739.4	3,731.9	1.87	0.73	1.72	
10,242.0	89.97	322.51	6,999.8	3,372.4	-1,778.8	3,795.7	2.32	-1.67	1.61	
10,305.0	89.97	322.24	6,999.9	3,422.3	-1,817.3	3,858.5	0.43	0.00	-0.43	
10,369.0	90.81	321.65	6,999.4	3,472.7	-1,856.7	3,922.3	1.60	1.31	-0.92	
10,433.0	90.54	319.18	6,998.7	3,522.0	-1,897.5	3,985.9	3.88	-0.42	-3.86	
10,496.0	90.71	318.96	6,998.0	3,569.6	-1,938.8	4,048.3	0.44	0.27	-0.35	
10,560.0	92.22	318.78	6,996.4	3,617.8	-1,980.9	4,111.7	2.38	2.36	-0.28	
10,623.0	92.75	318.20	6,993.6	3,664.9	-2,022.6	4,174.0	1.25	0.84	-0.92	
10,687.0	91.85	318.01	6,991.1	3,712.5	-2,065.3	4,237.2	1.44	-1.41	-0.30	
10,750.0	91.78	318.32	6,989.1	3,759.4	-2,107.3	4,299.4	0.50	-0.11	0.49	
10,814.0	90.03	318.81	6,988.0	3,807.4	-2,149.6	4,362.8	2.84	-2.73	0.77	
10,877.0	91.14	319.06	6,987.4	3,854.9	-2,191.0	4,425.2	1.81	1.76	0.40	
10,940.0	91.38	319.14	6,986.0	3,902.5	-2,232.3	4,487.6	0.40	0.38	0.13	
11,004.0	90.54	319.17	6,984.9	3,950.9	-2,274.1	4,551.0	1.31	-1.31	0.05	

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Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well Howell 7H
Project:	Mary Prospect	TVD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Site:	Howell Pad	MD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Well:	Howell 7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,067.0	90.47	318.41	6,984.4	3,998.3	-2,315.6	4,613.4	1.21	-0.11	-1.21
11,131.0	90.23	318.39	6,984.0	4,046.2	-2,358.1	4,676.7	0.38	-0.38	-0.03
11,195.0	90.64	318.87	6,983.5	4,094.2	-2,400.4	4,740.1	0.99	0.64	0.75
11,259.0	91.31	319.47	6,982.4	4,142.6	-2,442.2	4,803.5	1.41	1.05	0.94
11,322.0	91.27	319.59	6,981.0	4,190.5	-2,483.1	4,866.0	0.20	-0.06	0.19
11,386.0	91.07	319.79	6,979.7	4,239.3	-2,524.5	4,929.5	0.44	-0.31	0.31
11,449.0	91.44	320.38	6,978.3	4,287.6	-2,564.9	4,992.1	1.11	0.59	0.94
11,513.0	91.18	320.32	6,976.9	4,336.9	-2,605.7	5,055.6	0.42	-0.41	-0.09
11,576.0	91.81	320.17	6,975.2	4,385.3	-2,646.0	5,118.2	1.03	1.00	-0.24
11,629.0	90.47	319.61	6,974.2	4,425.8	-2,680.2	5,170.8	2.74	-2.53	-1.06
11,703.0	88.93	320.05	6,974.5	4,482.4	-2,727.9	5,244.3	2.16	-2.08	0.59
11,766.0	90.10	320.06	6,975.1	4,530.7	-2,768.3	5,306.8	1.86	1.86	0.02
11,830.0	91.71	319.81	6,974.1	4,579.7	-2,809.5	5,370.4	2.55	2.52	-0.39
11,892.0	92.01	319.48	6,972.1	4,626.9	-2,849.7	5,431.9	0.72	0.48	-0.53
11,956.0	90.77	319.51	6,970.5	4,675.5	-2,891.2	5,495.3	1.94	-1.94	0.05
12,019.0	92.01	319.71	6,969.0	4,723.5	-2,932.0	5,557.8	1.99	1.97	0.32
12,083.0	92.59	319.30	6,966.4	4,772.1	-2,973.5	5,621.3	1.11	0.91	-0.64
12,146.0	91.17	318.81	6,964.3	4,819.7	-3,014.8	5,683.7	2.38	-2.25	-0.78
12,209.0	91.34	318.21	6,963.0	4,866.9	-3,056.5	5,746.0	0.99	0.27	-0.95
12,273.0	91.68	317.52	6,961.3	4,914.3	-3,099.5	5,809.2	1.20	0.53	-1.08
12,336.0	91.04	316.80	6,959.8	4,960.5	-3,142.3	5,871.3	1.53	-1.02	-1.14
12,397.0	91.74	317.25	6,958.3	5,005.1	-3,183.8	5,931.4	1.36	1.15	0.74
12,460.0	90.97	318.69	6,956.8	5,051.9	-3,226.0	5,993.6	2.59	-1.22	2.29
12,524.0	90.94	318.75	6,955.7	5,100.0	-3,268.2	6,057.0	0.10	-0.05	0.09
12,588.0	90.10	318.43	6,955.2	5,148.0	-3,310.6	6,120.4	1.40	-1.31	-0.50
12,651.0	91.31	318.19	6,954.4	5,195.0	-3,352.5	6,182.7	1.96	1.92	-0.38
12,714.0	91.61	317.49	6,952.8	5,241.7	-3,394.7	6,244.9	1.21	0.48	-1.11
12,778.0	90.13	318.12	6,951.8	5,289.1	-3,437.7	6,308.1	2.51	-2.31	0.98
12,841.0	91.07	318.00	6,951.1	5,336.0	-3,479.8	6,370.4	1.50	1.49	-0.19
12,905.0	91.97	317.36	6,949.5	5,383.3	-3,522.9	6,433.5	1.73	1.41	-1.00
12,937.0	92.55	316.73	6,948.2	5,406.7	-3,544.7	6,465.1	2.67	1.81	-1.97
Last SDI MWD Survey									
12,994.0	92.55	316.73	6,945.7	5,448.1	-3,583.7	6,521.1	0.00	0.00	0.00
Projection to Bit									

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Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well Howell 7H
Project:	Mary Prospect	TVD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Site:	Howell Pad	MD Reference:	GL 1302' & KB 18' @ 1320.0usft (Saxon 141)
Well:	Howell 7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
18.0	18.0	0.0	0.0	Ground Level
103.0	103.0	0.7	-0.3	First SDI Gyro Survey
2,303.0	2,302.9	-1.2	-10.1	Last SDI Gyro Survey
2,363.0	2,362.9	-1.4	-10.7	First SDI MWD Survey
12,937.0	6,948.2	5,406.7	-3,544.7	Last SDI MWD Survey
12,994.0	6,945.7	5,448.1	-3,583.7	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____

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