



Stone Energy

Mary Prospect
Smith Pad
4H

OH

Design: Smith 4H As Drilled

Standard Survey Report

28 July, 2014



www.scientificdrilling.com

06/02/2017



Project: Mary Prospect
 Site: Smith Pad
 Well: 4H
 Wellbore: OH
 Design: Smith 4H As Drilled



WELL DETAILS: 4H

+N/-S	+E/-W	Northing	Ground Level: Easting	1321.00	Latitude	Longitude
0.00	0.00	420212.00	1630824.00		39° 38' 46.782 N	80° 48' 39.853 W

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well 4H, Grid North
 Vertical (TVD) Reference: GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
 Calculation Method: Minimum Curvature

PROJECT DETAILS: Mary Prospect

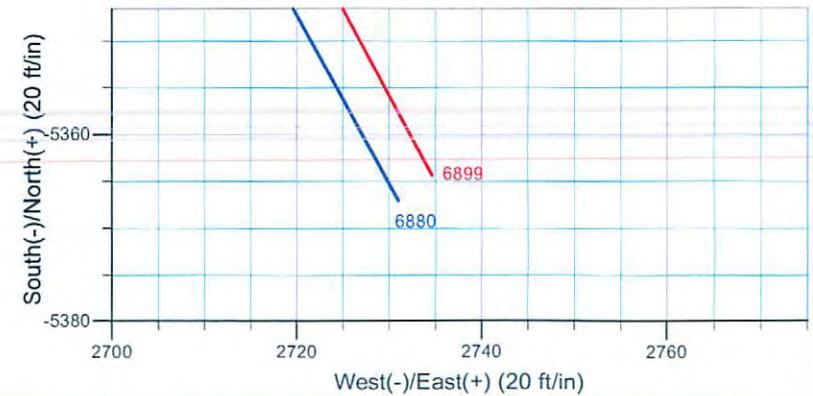
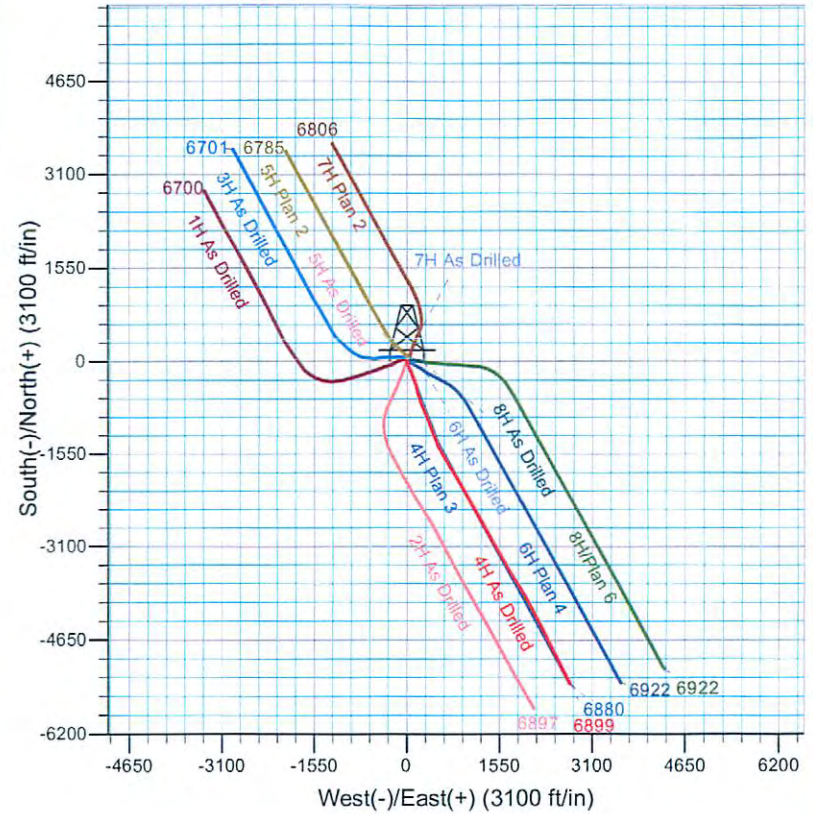
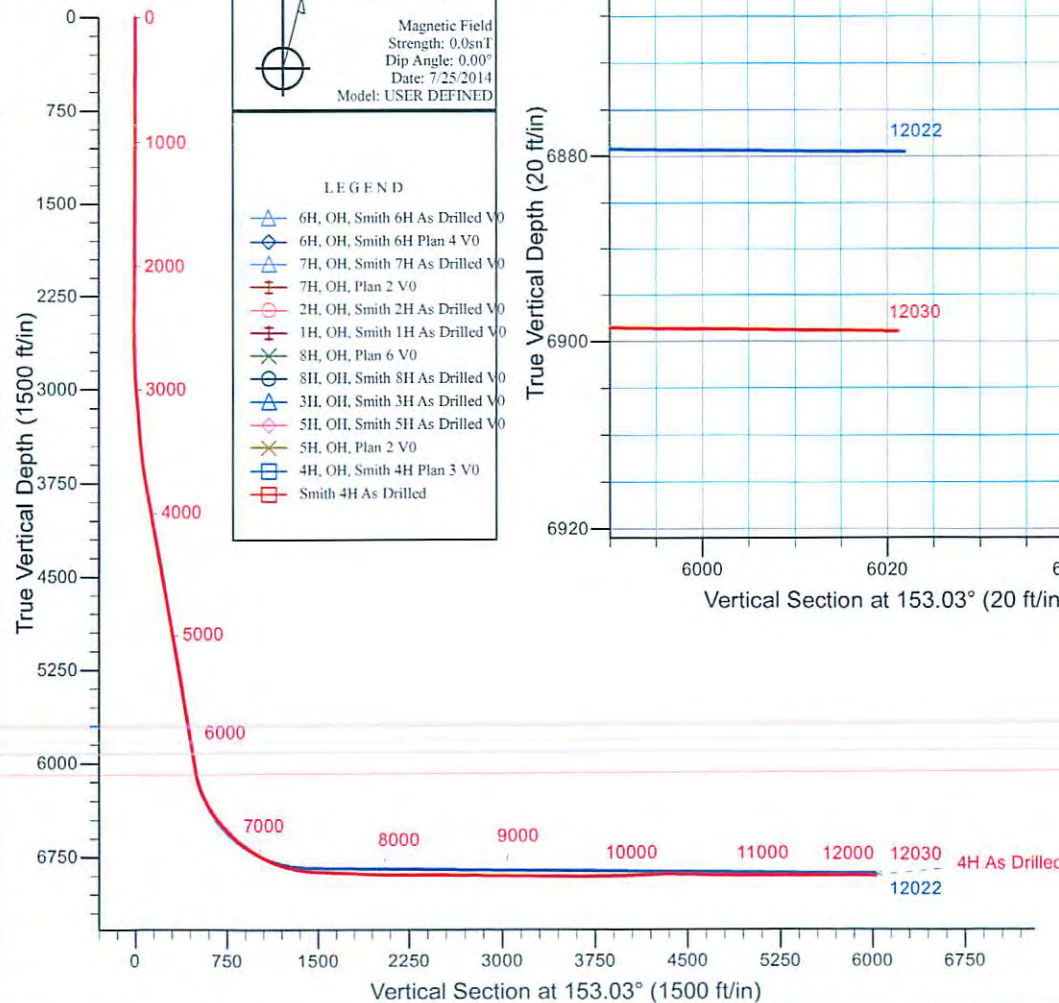
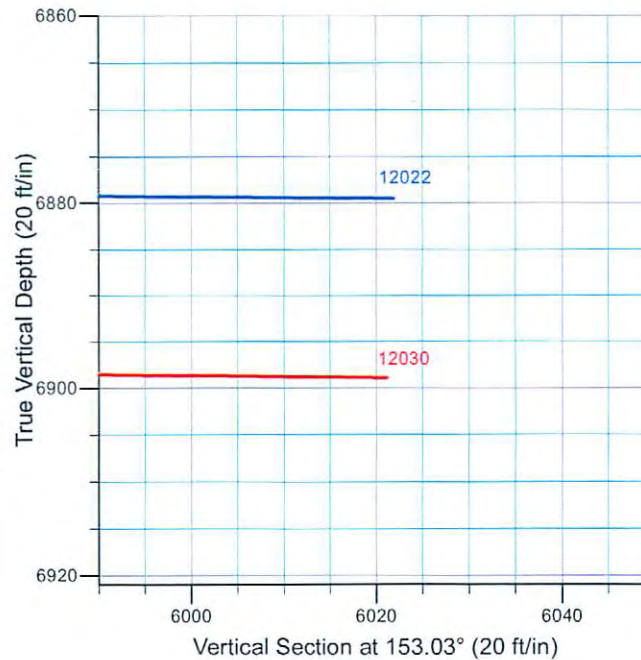
Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: West Virginia North 4701
 System Datum: Mean Sea Level

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	5817.01	9.57	160.80	5779.68	-422.75	153.96	0.00	0.00	446.60	
2	6083.01	9.57	160.80	6041.98	-464.51	168.50	0.00	0.00	490.42	
3	7393.90	88.19	158.82	6838.00	-1316.38	493.74	6.00	-2.02	1397.14	
4	7492.96	89.50	151.00	6840.00	-1406.00	535.70	8.00	-80.60	1496.05	Smith 4H_LP4
	512021.81	89.50	151.00	6879.52	-5367.01	2731.01	0.00	0.00	6021.89	Smith 4H_BHL3

G/T/M Azimuths to Grid North
 True North: 0.84°
 Magnetic North: 0.84°
 Magnetic Field Strength: 0.05nT
 Dip Angle: 0.00°
 Date: 7/25/2014
 Model: USER DEFINED

LEGEND

- 6H, OH, Smith 6H As Drilled V0
- 6H, OH, Smith 6H Plan 4 V0
- 7H, OH, Smith 7H As Drilled V0
- 7H, OH, Plan 2 V0
- 2H, OH, Smith 2H As Drilled V0
- 1H, OH, Smith 1H As Drilled V0
- 8H, OH, Plan 6 V0
- 8H, OH, Smith 8H As Drilled V0
- 3H, OH, Smith 3H As Drilled V0
- 5H, OH, Smith 5H As Drilled V0
- 5H, OH, Plan 2 V0
- 4H, OH, Smith 4H Plan 3 V0
- Smith 4H As Drilled





Scientific Drilling
Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well 4H
Project:	Mary Prospect	TVD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Site:	Smith Pad	MD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Well:	4H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Smith 4H 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	Smith Pad				
Site Position:		Northing:	420,251.00 usft	Latitude:	39° 38' 47.168 N
From:	Map	Easting:	1,630,827.00 usft	Longitude:	80° 48' 39.822 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.84 °

Well	4H					
Well Position	+N/-S	0.00 ft	Northing:	420,212.00 usft	Latitude:	39° 38' 46.782 N
	+E/-W	0.00 ft	Easting:	1,630,824.00 usft	Longitude:	80° 48' 39.853 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	1,321.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	8/21/2013	-8.54	67.20	52,536
	BGGM2013	10/24/2013	-8.55	67.18	52,514
	BGGM2014	6/11/2014	-8.52	67.15	52,439
	User Defined	6/12/2014	-7.56	67.15	52,541
	User Defined	7/25/2014			

Design	Smith 4H As Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00		153.03

Survey Program	Date	7/28/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
103.00	2,548.01	Survey 1 - Vaughn Gyro (OH)	VES GyroFlex		
2,556.01	5,817.01	Survey 2 - SDI MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	
5,825.00	12,030.00	Survey 3 - SDI MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103.00	0.26	95.08	103.00	-0.02	0.23	0.12	0.25	0.25	0.00	0.00
First Vaughn Gyro Survey										
203.00	0.31	55.04	203.00	0.11	0.68	0.21	0.20	0.05	-40.04	
303.00	0.34	58.20	303.00	0.43	1.15	0.14	0.03	0.03	3.16	

Company:	Stone Energy	Local Co-ordinate Reference:	Well 4H
Project:	Mary Prospect	TVD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Site:	Smith Pad	MD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Well:	4H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Smith 4H As Drilled	Database:	Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
403.00	0.37	59.77	403.00	0.74	1.69	0.10	0.03	0.03	1.57	
503.00	0.29	346.51	502.99	1.15	1.91	-0.16	0.40	-0.08	-73.26	
603.00	0.33	317.31	602.99	1.61	1.65	-0.69	0.16	0.04	-29.20	
703.00	0.32	344.21	702.99	2.09	1.38	-1.24	0.15	-0.01	26.90	
803.00	0.31	288.90	802.99	2.45	1.05	-1.71	0.29	-0.01	-55.31	
903.00	0.28	275.94	902.99	2.56	0.55	-2.03	0.07	-0.03	-12.96	
1,003.00	0.10	273.17	1,002.99	2.59	0.22	-2.21	0.18	-0.18	-2.77	
1,103.00	0.30	272.10	1,102.99	2.61	-0.13	-2.38	0.20	0.20	-1.07	
1,203.00	0.47	280.76	1,202.99	2.69	-0.79	-2.76	0.18	0.17	8.66	
1,303.00	0.44	267.53	1,302.98	2.75	-1.58	-3.17	0.11	-0.03	-13.23	
1,403.00	0.56	263.05	1,402.98	2.68	-2.45	-3.50	0.13	0.12	-4.48	
1,503.00	0.63	267.47	1,502.98	2.59	-3.48	-3.89	0.08	0.07	4.42	
1,603.00	0.52	272.55	1,602.97	2.59	-4.49	-4.34	0.12	-0.11	5.08	
1,703.00	0.43	288.95	1,702.97	2.73	-5.29	-4.83	0.16	-0.09	16.40	
1,803.00	0.37	280.24	1,802.97	2.91	-5.97	-5.30	0.09	-0.06	-8.71	
1,903.00	0.38	292.54	1,902.96	3.09	-6.59	-5.75	0.08	0.01	12.30	
2,003.00	0.47	316.46	2,002.96	3.52	-7.18	-6.39	0.20	0.09	23.92	
2,103.00	0.52	317.34	2,102.96	4.15	-7.77	-7.22	0.05	0.05	0.88	
2,203.00	0.57	340.47	2,202.95	4.95	-8.24	-8.15	0.22	0.05	23.13	
2,303.00	0.54	343.24	2,302.95	5.87	-8.55	-9.11	0.04	-0.03	2.77	
2,403.00	0.33	1.19	2,402.95	6.61	-8.68	-9.83	0.25	-0.21	17.95	
2,503.01	0.44	6.62	2,502.94	7.28	-8.63	-10.40	0.12	0.11	5.43	
2,548.01	0.51	11.81	2,547.94	7.65	-8.57	-10.70	0.18	0.16	11.53	
Last Vaughn Gyro Survey										
2,556.01	0.50	29.86	2,555.94	7.71	-8.54	-10.75	1.98	-0.13	225.63	
First SDI MWD Survey										
2,649.01	0.78	173.87	2,648.94	7.44	-8.27	-10.38	1.31	0.30	154.85	
2,739.01	2.79	145.38	2,738.89	5.02	-6.96	-7.63	2.37	2.23	-31.66	
2,833.01	3.29	141.29	2,832.76	1.04	-3.97	-2.73	0.58	0.53	-4.35	
2,924.01	3.85	146.07	2,923.58	-3.54	-0.64	2.86	0.70	0.62	5.25	
3,016.01	4.11	143.48	3,015.36	-8.75	3.05	9.18	0.34	-0.28	-2.82	
3,107.01	4.91	155.47	3,106.08	-14.91	6.61	16.29	1.35	0.88	13.18	
3,197.01	5.62	175.72	3,195.71	-22.81	8.54	24.20	2.20	0.79	22.50	
3,289.01	5.48	174.69	3,287.28	-31.68	9.28	32.44	0.19	-0.15	-1.12	
3,382.01	5.04	171.74	3,379.89	-40.14	10.28	40.44	0.56	-0.47	-3.17	
3,473.01	6.04	164.97	3,470.46	-48.72	12.09	48.91	1.31	1.10	-7.44	
3,568.01	7.52	162.50	3,564.80	-59.48	15.26	59.93	1.59	1.56	-2.60	
3,661.01	8.99	158.70	3,656.83	-72.05	19.73	73.16	1.69	1.58	-4.09	
3,754.01	10.22	158.95	3,748.52	-86.52	25.33	88.60	1.32	1.32	0.27	
3,849.01	11.42	159.25	3,841.83	-103.18	31.69	106.34	1.26	1.26	0.32	
3,943.01	10.87	158.27	3,934.06	-120.12	38.27	124.41	0.62	-0.59	-1.04	
4,034.01	10.13	155.63	4,023.54	-135.38	44.75	140.95	0.97	-0.81	-2.90	
4,128.01	10.12	153.72	4,116.07	-150.32	51.82	157.47	0.36	-0.01	-2.03	

Company: Stone Energy
Project: Mary Prospect
Site: Smith Pad
Well: 4H
Wellbore: OH
Design: Smith 4H As Drilled

Local Co-ordinate Reference: Well 4H
TVD Reference: GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
MD Reference: GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Northeast District

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,220.01	10.77	154.23	4,206.55	-165.30	59.13	174.14	0.71	0.71	0.55
4,313.01	10.42	158.30	4,297.97	-180.94	66.02	191.21	0.89	-0.38	4.38
4,406.01	10.62	162.88	4,389.40	-196.95	71.65	208.03	0.92	0.22	4.92
4,497.01	10.13	161.11	4,478.92	-212.53	76.71	224.21	0.64	-0.54	-1.95
4,590.01	9.37	159.06	4,570.57	-227.34	82.06	239.84	0.90	-0.82	-2.20
4,680.01	10.05	157.36	4,659.28	-241.43	87.71	254.95	0.82	0.76	-1.89
4,772.01	9.99	154.76	4,749.88	-256.06	94.20	270.93	0.50	-0.07	-2.83
4,863.01	9.53	152.81	4,839.56	-269.90	101.01	286.36	0.62	-0.51	-2.14
4,954.01	10.16	156.25	4,929.22	-283.95	107.68	301.90	0.95	0.69	3.78
5,047.01	10.63	164.96	5,020.70	-299.74	113.21	318.49	1.76	0.51	9.37
5,140.01	10.45	164.28	5,112.13	-316.14	117.72	335.15	0.24	-0.19	-0.73
5,232.01	9.88	163.80	5,202.69	-331.75	122.18	351.09	0.63	-0.62	-0.52
5,323.01	9.45	160.88	5,292.40	-346.31	126.81	366.16	0.72	-0.47	-3.21
5,417.01	9.25	158.79	5,385.15	-360.64	132.07	381.32	0.42	-0.21	-2.22
5,509.01	8.87	156.81	5,476.00	-374.06	137.54	395.75	0.53	-0.41	-2.15
5,602.01	9.79	162.84	5,567.77	-388.20	142.70	410.70	1.44	0.99	6.48
5,695.01	9.89	162.72	5,659.41	-403.39	147.40	426.36	0.11	0.11	-0.13
5,755.01	9.57	160.80	5,718.54	-413.02	150.57	436.39	0.76	-0.53	-3.20
5,817.01	9.57	160.80	5,779.68	-422.75	153.96	446.60	0.00	0.00	0.00
5,825.00	9.74	165.03	5,787.56	-424.03	154.35	447.92	9.13	2.13	52.95
5,885.00	9.99	168.37	5,846.67	-434.03	156.71	457.90	1.04	0.42	5.57
5,946.00	9.28	169.18	5,906.81	-444.04	158.70	467.73	1.18	-1.16	1.33
6,007.00	8.77	168.51	5,967.05	-453.43	160.55	476.93	0.85	-0.84	-1.10
6,037.00	8.57	171.80	5,996.71	-457.89	161.33	481.25	1.78	-0.67	10.97
6,067.00	9.02	173.03	6,026.36	-462.43	161.93	485.58	1.63	1.50	4.10
6,098.00	10.34	174.31	6,056.92	-467.61	162.50	490.46	4.31	4.26	4.13
6,128.00	12.00	175.17	6,086.35	-473.40	163.03	495.86	5.56	5.53	2.87
6,157.00	14.21	174.20	6,114.59	-479.95	163.65	501.97	7.66	7.62	-3.34
6,188.00	16.15	172.78	6,144.51	-488.01	164.57	509.57	6.37	6.26	-4.58
6,218.00	18.26	170.08	6,173.16	-496.78	165.91	518.00	7.52	7.03	-9.00
6,249.00	20.41	167.32	6,202.41	-506.84	167.93	527.88	7.53	6.94	-8.90
6,279.00	22.94	165.39	6,230.29	-517.60	170.55	538.66	8.76	8.43	-6.43
6,309.00	24.99	164.26	6,257.70	-529.36	173.75	550.59	7.00	6.83	-3.77
6,339.00	27.33	163.28	6,284.63	-542.06	177.45	563.58	7.93	7.80	-3.27
6,370.00	28.96	162.24	6,311.96	-556.02	181.79	577.99	5.49	5.26	-3.35
6,400.00	30.67	160.70	6,337.99	-570.16	186.53	592.75	6.24	5.70	-5.13
6,430.00	32.53	159.96	6,363.54	-584.96	191.82	608.34	6.33	6.20	-2.47
6,462.00	34.85	160.14	6,390.16	-601.64	197.88	625.96	7.26	7.25	0.56
6,494.00	36.43	160.31	6,416.17	-619.19	204.19	644.45	4.95	4.94	0.53
6,526.00	37.98	160.80	6,441.66	-637.44	210.63	663.64	4.93	4.84	1.53
6,557.00	39.54	160.73	6,465.83	-655.76	217.02	682.87	5.03	5.03	-0.23
6,589.00	41.50	159.96	6,490.15	-675.34	224.02	703.49	6.32	6.13	-2.41
6,621.00	42.99	159.40	6,513.84	-695.51	231.49	724.86	4.80	4.66	-1.75
6,653.00	44.27	159.21	6,537.00	-716.17	239.29	746.80	4.02	4.00	-0.59



Scientific Drilling
Survey Report

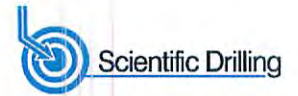


Company:	Stone Energy	Local Co-ordinate Reference:	Well 4H
Project:	Mary Prospect	TVD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Site:	Smith Pad	MD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Well:	4H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Smith 4H As Drilled	Database:	Northeast District

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
6,685.00	45.52	159.11	6,559.67	-737.27	247.33	769.26	3.91	3.91	-0.31	
6,716.00	47.20	158.13	6,581.07	-758.16	255.51	791.59	5.88	5.42	-3.16	
6,748.00	48.69	158.04	6,602.50	-780.20	264.37	815.25	4.66	4.66	-0.28	
6,780.00	50.15	156.60	6,623.32	-802.63	273.75	839.49	5.70	4.56	-4.50	
6,810.00	51.45	156.17	6,642.28	-823.93	283.06	862.70	4.47	4.33	-1.43	
6,840.00	53.21	156.73	6,660.61	-845.69	292.55	886.40	6.05	5.87	1.87	
6,872.00	54.99	157.23	6,679.37	-869.55	302.68	912.26	5.70	5.56	1.56	
6,903.00	56.86	157.66	6,696.74	-893.26	312.53	937.86	6.14	6.03	1.39	
6,935.00	58.44	157.99	6,713.86	-918.30	322.73	964.80	5.01	4.94	1.03	
6,967.00	60.27	158.23	6,730.17	-943.84	333.00	992.22	5.76	5.72	0.75	
6,998.00	61.72	158.47	6,745.20	-969.04	343.00	1,019.21	4.73	4.68	0.77	
7,030.00	63.45	158.63	6,759.94	-995.48	353.39	1,047.48	5.42	5.41	0.50	
7,062.00	65.01	158.74	6,773.85	-1,022.32	363.86	1,076.16	4.88	4.88	0.34	
7,094.00	66.87	158.77	6,786.89	-1,049.56	374.45	1,105.23	5.81	5.81	0.09	
7,124.00	68.49	158.33	6,798.29	-1,075.39	384.60	1,132.86	5.57	5.40	-1.47	
7,156.00	70.63	158.87	6,809.46	-1,103.30	395.54	1,162.70	6.87	6.69	1.69	
7,188.00	72.36	159.28	6,819.62	-1,131.65	406.37	1,192.87	5.54	5.41	1.28	
7,219.00	74.13	159.42	6,828.55	-1,159.42	416.84	1,222.38	5.73	5.71	0.45	
7,251.00	75.69	159.13	6,836.89	-1,188.32	427.77	1,253.09	4.95	4.88	-0.91	
7,283.00	77.48	159.45	6,844.31	-1,217.43	438.78	1,284.03	5.68	5.59	1.00	
7,315.00	78.95	159.88	6,850.84	-1,246.80	449.67	1,315.14	4.78	4.59	1.34	
7,347.00	80.27	159.94	6,856.62	-1,276.36	460.48	1,346.39	4.13	4.13	0.19	
7,378.00	81.86	159.48	6,861.43	-1,305.09	471.10	1,376.81	5.33	5.13	-1.48	
7,410.00	84.23	158.35	6,865.30	-1,334.72	482.52	1,408.40	8.19	7.41	-3.53	
7,442.00	86.01	156.92	6,868.03	-1,364.20	494.66	1,440.18	7.12	5.56	-4.47	
7,474.00	86.95	155.03	6,869.99	-1,393.38	507.66	1,472.08	6.59	2.94	-5.91	
7,496.32	87.54	153.28	6,871.07	-1,413.44	517.38	1,494.36	8.26	2.62	-7.85	
Smith 4H_LP4										
7,506.00	87.79	152.52	6,871.46	-1,422.05	521.78	1,504.04	8.26	2.63	-7.84	
7,570.00	88.19	150.37	6,873.71	-1,478.23	552.36	1,567.97	3.41	0.63	-3.36	
7,633.00	87.12	149.32	6,876.28	-1,532.65	583.97	1,630.82	2.38	-1.70	-1.67	
7,697.00	87.25	149.18	6,879.43	-1,587.59	616.66	1,694.60	0.30	0.20	-0.22	
7,761.00	87.75	148.64	6,882.22	-1,642.34	649.68	1,758.37	1.15	0.78	-0.84	
7,825.00	88.43	148.81	6,884.35	-1,697.01	682.88	1,822.16	1.10	1.06	0.27	
7,889.00	88.02	149.08	6,886.33	-1,751.81	715.88	1,885.96	0.77	-0.64	0.42	
7,952.00	88.22	149.50	6,888.40	-1,805.95	748.04	1,948.80	0.74	0.32	0.67	
8,016.00	88.45	149.68	6,890.26	-1,861.12	780.42	2,012.65	0.46	0.36	0.28	
8,079.00	88.66	148.91	6,891.85	-1,915.27	812.58	2,075.50	1.27	0.33	-1.22	
8,143.00	89.43	148.78	6,892.92	-1,970.03	845.68	2,139.32	1.22	1.20	-0.20	
8,207.00	89.26	150.01	6,893.65	-2,025.11	878.26	2,203.18	1.94	-0.27	1.92	
8,271.00	89.90	149.90	6,894.12	-2,080.51	910.31	2,267.09	1.01	1.00	-0.17	
8,334.00	90.81	150.65	6,893.73	-2,135.22	941.54	2,330.01	1.87	1.44	1.19	
8,397.00	90.84	150.66	6,892.82	-2,190.13	972.41	2,392.95	0.05	0.05	0.02	



Scientific Drilling
Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well 4H
Project:	Mary Prospect	TVD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Site:	Smith Pad	MD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Well:	4H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Smith 4H As Drilled	Database:	Northeast District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,460.00	90.17	150.50	6,892.26	-2,245.00	1,003.36	2,455.89	1.09	-1.06	-0.25
8,524.00	88.83	150.01	6,892.82	-2,300.57	1,035.11	2,519.81	2.23	-2.09	-0.77
8,587.00	89.06	150.68	6,893.98	-2,355.30	1,066.28	2,582.73	1.12	0.37	1.06
8,650.00	90.44	151.62	6,894.26	-2,410.48	1,096.67	2,645.70	2.65	2.19	1.49
8,714.00	90.00	151.20	6,894.01	-2,466.68	1,127.30	2,709.67	0.95	-0.69	-0.66
8,778.00	88.46	150.76	6,894.87	-2,522.64	1,158.34	2,773.62	2.50	-2.41	-0.69
8,841.00	88.29	150.38	6,896.66	-2,577.48	1,189.29	2,836.54	0.66	-0.27	-0.60
8,905.00	89.43	150.69	6,897.93	-2,633.19	1,220.76	2,900.46	1.85	1.78	0.48
8,968.00	90.13	150.31	6,898.17	-2,688.03	1,251.78	2,963.40	1.26	1.11	-0.60
9,032.00	89.56	150.20	6,898.35	-2,743.59	1,283.53	3,027.33	0.91	-0.89	-0.17
9,096.00	88.93	149.46	6,899.19	-2,798.92	1,315.70	3,091.22	1.52	-0.98	-1.16
9,159.00	89.80	149.25	6,899.89	-2,853.12	1,347.81	3,154.09	1.42	1.38	-0.33
9,224.00	89.43	148.97	6,900.32	-2,908.89	1,381.18	3,218.93	0.71	-0.57	-0.43
9,286.00	88.76	149.04	6,901.30	-2,962.03	1,413.10	3,280.77	1.09	-1.08	0.11
9,350.00	89.53	148.75	6,902.26	-3,016.83	1,446.16	3,344.60	1.29	1.20	-0.45
9,413.00	89.16	148.92	6,902.98	-3,070.73	1,478.76	3,407.42	0.65	-0.59	0.27
9,477.00	88.63	149.01	6,904.21	-3,125.56	1,511.75	3,471.25	0.84	-0.83	0.14
9,540.00	88.83	149.57	6,905.61	-3,179.71	1,543.91	3,534.10	0.94	0.32	0.89
9,604.00	89.60	150.18	6,906.49	-3,235.06	1,576.03	3,598.00	1.53	1.20	0.95
9,667.00	90.30	150.25	6,906.54	-3,289.74	1,607.33	3,660.92	1.12	1.11	0.11
9,731.00	91.84	153.36	6,905.35	-3,346.12	1,637.55	3,724.88	5.42	2.41	4.86
9,795.00	92.05	152.22	6,903.17	-3,403.01	1,666.80	3,788.85	1.81	0.33	-1.78
9,859.00	90.70	149.24	6,901.64	-3,458.81	1,698.06	3,852.77	5.11	-2.11	-4.66
9,922.00	90.77	147.39	6,900.83	-3,512.42	1,731.17	3,915.55	2.94	0.11	-2.94
9,986.00	91.61	147.65	6,899.50	-3,566.39	1,765.53	3,979.24	1.37	1.31	0.41
10,050.00	91.88	148.22	6,897.55	-3,620.60	1,799.49	4,042.95	0.99	0.42	0.89
10,113.00	92.95	147.96	6,894.90	-3,674.04	1,832.76	4,105.66	1.75	1.70	-0.41
10,177.00	93.05	148.50	6,891.55	-3,728.37	1,866.41	4,169.35	0.86	0.16	0.84
10,240.00	91.64	148.92	6,888.97	-3,782.16	1,899.10	4,232.12	2.34	-2.24	0.67
10,303.00	90.87	149.05	6,887.59	-3,836.14	1,931.55	4,294.94	1.24	-1.22	0.21
10,367.00	90.07	148.31	6,887.06	-3,890.81	1,964.82	4,358.76	1.70	-1.25	-1.16
10,430.00	89.33	149.17	6,887.39	-3,944.66	1,997.51	4,421.58	1.80	-1.17	1.37
10,492.00	88.42	150.15	6,888.61	-3,998.16	2,028.82	4,483.46	2.16	-1.47	1.58
10,555.00	88.49	150.92	6,890.31	-4,052.99	2,059.80	4,546.37	1.23	0.11	1.22
10,619.00	87.82	152.37	6,892.37	-4,109.28	2,090.18	4,610.32	2.49	-1.05	2.27
10,683.00	88.59	152.90	6,894.38	-4,166.09	2,119.58	4,674.29	1.46	1.20	0.83
10,746.00	89.53	153.25	6,895.41	-4,222.25	2,148.11	4,737.28	1.59	1.49	0.56
10,810.00	90.44	153.36	6,895.43	-4,279.43	2,176.86	4,801.28	1.43	1.42	0.17
10,873.00	90.03	153.33	6,895.17	-4,335.74	2,205.12	4,864.27	0.65	-0.65	-0.05
10,937.00	89.43	152.77	6,895.47	-4,392.79	2,234.13	4,928.27	1.28	-0.94	-0.88
11,001.00	90.54	153.03	6,895.49	-4,449.76	2,263.28	4,992.27	1.78	1.73	0.41
11,064.00	90.34	152.92	6,895.00	-4,505.88	2,291.91	5,055.27	0.36	-0.32	-0.17
11,128.00	89.43	152.18	6,895.13	-4,562.67	2,321.41	5,119.27	1.83	-1.42	-1.16
11,191.00	90.07	151.74	6,895.41	-4,618.27	2,351.02	5,182.25	1.23	1.02	-0.70

Company:	Stone Energy	Local Co-ordinate Reference:	Well 4H
Project:	Mary Prospect	TVD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Site:	Smith Pad	MD Reference:	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
Well:	4H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Smith 4H As Drilled	Database:	Northeast District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,255.00	90.07	152.48	6,895.33	-4,674.84	2,380.96	5,246.25	1.16	0.00	1.16
11,319.00	89.70	153.34	6,895.46	-4,731.82	2,410.10	5,310.24	1.46	-0.58	1.34
11,382.00	90.54	153.54	6,895.32	-4,788.17	2,438.27	5,373.24	1.37	1.33	0.32
11,446.00	90.10	153.80	6,894.97	-4,845.53	2,466.66	5,437.24	0.80	-0.69	0.41
11,510.00	89.30	153.62	6,895.30	-4,902.91	2,495.01	5,501.23	1.28	-1.25	-0.28
11,573.00	89.87	153.29	6,895.76	-4,959.26	2,523.16	5,564.23	1.05	0.90	-0.52
11,636.00	90.67	152.60	6,895.46	-5,015.37	2,551.81	5,627.23	1.68	1.27	-1.10
11,700.00	90.60	152.96	6,894.75	-5,072.28	2,581.09	5,691.22	0.57	-0.11	0.56
11,763.00	89.87	152.86	6,894.49	-5,128.36	2,609.78	5,754.22	1.17	-1.16	-0.16
11,826.00	89.09	152.39	6,895.06	-5,184.31	2,638.74	5,817.22	1.45	-1.24	-0.75
11,889.00	88.42	152.24	6,896.43	-5,240.08	2,668.01	5,880.20	1.09	-1.06	-0.24
11,952.00	88.93	151.64	6,897.89	-5,295.66	2,697.63	5,943.17	1.25	0.81	-0.95
11,972.00	89.36	151.72	6,898.19	-5,313.26	2,707.12	5,963.16	2.19	2.15	0.40
Last SDI MWD Survey									
12,030.00	89.36	151.72	6,898.84	-5,364.34	2,734.60	6,021.14	0.00	0.00	0.00
Projection to Bit - Smith 4H_BHL3									

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
103.00	103.00	-0.02	0.23	First Vaughn Gyro Survey
2,548.01	2,547.94	7.65	-8.57	Last Vaughn Gyro Survey
2,556.01	2,555.94	7.71	-8.54	First SDI MWD Survey
11,972.00	6,898.19	-5,313.26	2,707.12	Last SDI MWD Survey
12,030.00	6,898.84	-5,364.34	2,734.60	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____