

Stone Energy Corporation

Heather Prospect (NAD 27)

Martin Pad

Martin 8H - Slot 8H

OH

Design: As Drilled

Standard Survey Report

25 November, 2014



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06/02/2017



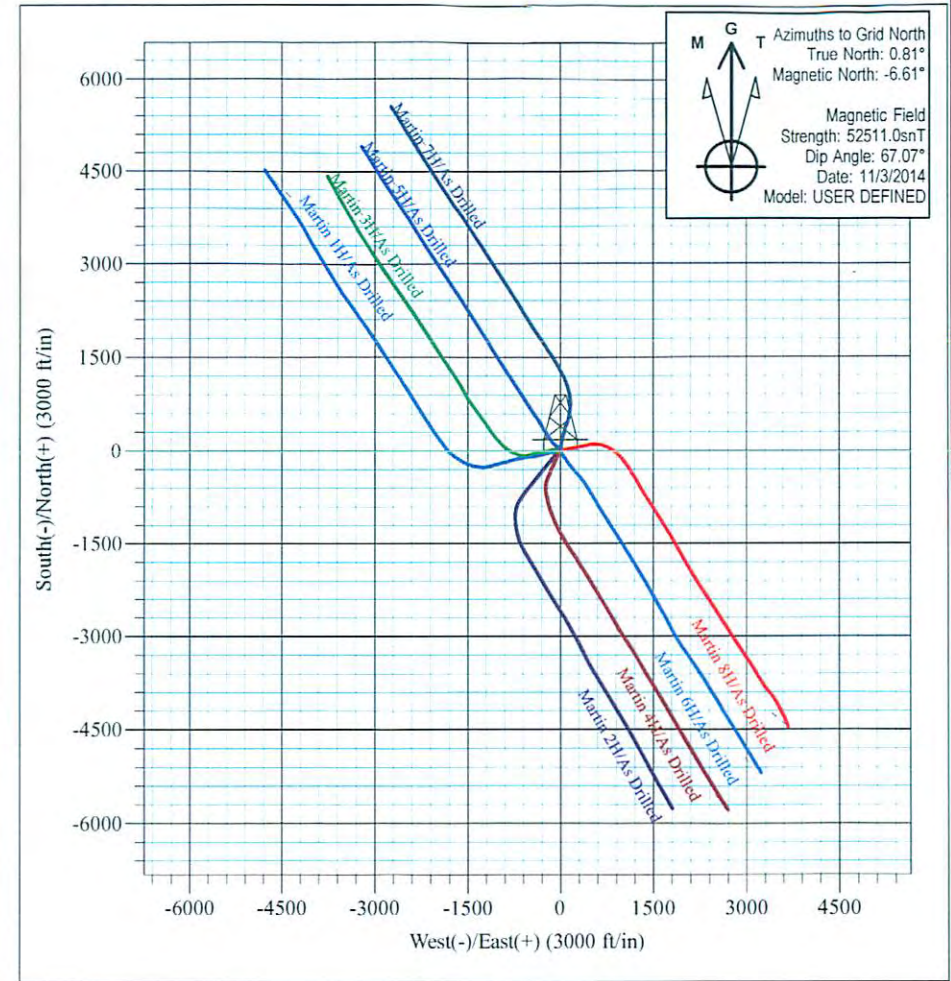
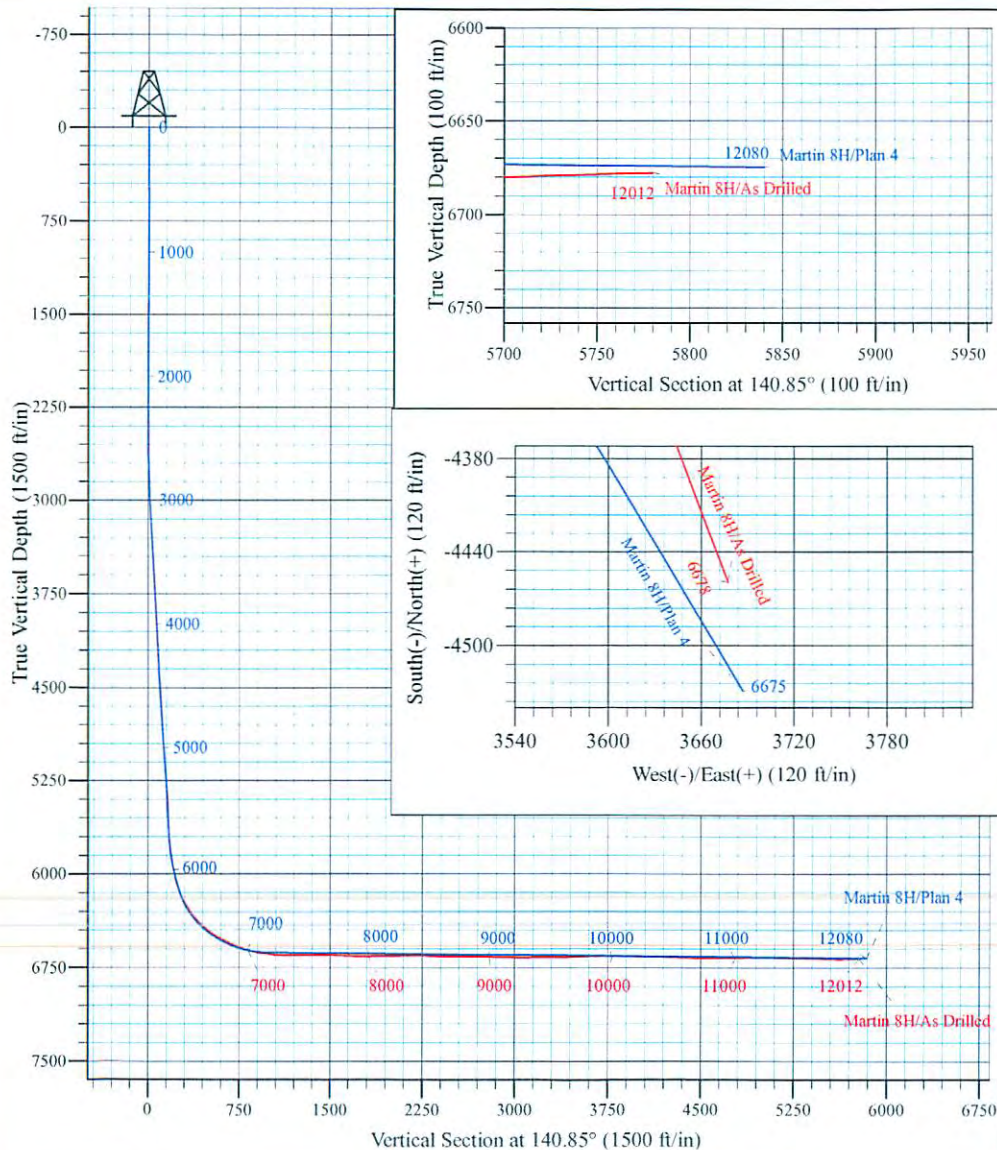
Martin Pad
 Martin 8H
 Plan 4
 GL 906 & KB 18 @ 924.00ft (Saxon 141)
 Heather Prospect (NAD 27)

PROJECT DETAILS:
 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



WELL DETAILS: Martin 8H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	407740.00	1643295.00	39° 36' 45.293 N	80° 45' 58.187 W



Tim Bouman
 11:20, November 25 2014
 Scientific Drilling International
 124 Vista Drive
 Charleroi, PA 15022

Scientific Drilling Survey Report

Company: Stone Energy Corporation	Local Co-ordinate Reference: Well Martin 8H - Slot 8H
Project: Heather Prospect (NAD 27)	TVD Reference: GL 906 & KB 18 @ 924.00ft (Saxon 141)
Site: Martin Pad	MD Reference: GL 906 & KB 18 @ 924.00ft (Saxon 141)
Well: Martin 8H	North Reference: Grid
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Northeast District

Project: Heather Prospect (NAD 27), Wetzel County, 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: Martin Pad			
Site Position:	Northing: 407,759.00 usft	Latitude: 39° 36' 45.478 N	
From: Map	Easting: 1,643,274.00 usft	Longitude: 80° 45' 58.459 W	
Position Uncertainty: 0.00 ft	Slot Radius: 13-3/16 "	Grid Convergence: -0.81 °	

Well: Martin 8H - Slot 8H			
Well Position	+N/-S 0.00 ft	Northing: 407,740.00 usft	Latitude: 39° 36' 45.293 N
	+E/-W 0.00 ft	Easting: 1,643,295.00 usft	Longitude: 80° 45' 58.187 W
Position Uncertainty	0.00 ft	Wellhead Elevation: 0.00 ft	Ground Level: 906.00 ft

Wellbore: OH					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	4/3/2014	-8.59	67.11	52,437
	BGGM2013	4/15/2014	-8.59	67.10	52,433
	BGGM2014	6/8/2014	-8.54	67.12	52,421
	User Defined	9/10/2014	-7.69	67.13	52,532
	User Defined	9/29/2014	-7.69	67.12	52,524
	User Defined	11/3/2014	-7.42	67.07	52,511

Design: 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	140.85	

Survey Program		Date: 11/25/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
108.00	2,223.00	Survey 1 - SDI Gyro (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	
2,337.00	5,601.00	Survey 2 - SDI MWD (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	
5,670.00	12,012.02	Survey #3 - SDI MWD (OH)	SDI MWD	SDI MWD - Standard ver 1.0.1	

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
100.00	0.22	173.12	100.00	-0.19	0.02	0.16	0.22	0.22	0.00
108.00	0.24	173.12	108.00	-0.22	0.03	0.19	0.22	0.22	0.00
First SDI Gyro Survey									

Scientific Drilling Survey Report

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Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 906 & KB 18 @ 924.00ft (Saxon 141)
Site:	Martin Pad	MD Reference:	GL 906 & KB 18 @ 924.00ft (Saxon 141)
Well:	Martin 8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	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)	
200.00	0.22	167.43	200.00	-0.59	0.09	0.51	0.03	-0.02	-6.19	
300.00	0.28	169.67	300.00	-1.01	0.18	0.89	0.05	0.05	2.24	
400.00	0.40	188.28	400.00	-1.58	0.18	1.34	0.16	0.12	18.60	
500.00	0.19	222.06	499.99	-2.08	0.01	1.62	0.26	-0.21	33.79	
600.00	0.09	298.08	599.99	-2.16	-0.18	1.56	0.19	-0.11	76.02	
700.00	0.17	248.81	699.99	-2.16	-0.37	1.44	0.13	0.08	-49.27	
800.00	0.07	115.80	799.99	-2.25	-0.47	1.45	0.23	-0.10	-133.01	
900.00	0.22	79.66	899.99	-2.25	-0.22	1.60	0.16	0.15	-36.13	
1,000.00	0.38	36.10	999.99	-1.84	0.25	1.59	0.27	0.17	-43.56	
1,100.00	0.31	37.47	1,099.99	-1.36	0.59	1.43	0.07	-0.07	1.37	
1,200.00	0.48	24.50	1,199.99	-0.78	0.93	1.19	0.19	0.17	-12.97	
1,300.00	0.39	37.60	1,299.98	-0.10	1.31	0.91	0.14	-0.10	13.09	
1,400.00	0.54	53.80	1,399.98	0.43	1.89	0.86	0.20	0.15	16.20	
1,500.00	0.71	62.48	1,499.98	0.99	2.81	1.00	0.19	0.17	8.68	
1,600.00	0.54	55.39	1,599.97	1.56	3.83	1.21	0.18	-0.17	-7.10	
1,700.00	0.42	39.07	1,699.97	2.10	4.43	1.16	0.18	-0.12	-16.32	
1,800.00	0.42	33.91	1,799.96	2.69	4.85	0.98	0.04	0.00	-5.16	
1,900.00	0.40	27.29	1,899.96	3.30	5.22	0.73	0.05	-0.02	-6.63	
2,000.00	0.51	20.87	1,999.96	4.02	5.53	0.37	0.12	0.11	-6.42	
2,100.00	0.64	23.04	2,099.95	4.95	5.91	-0.11	0.13	0.13	2.17	
2,200.00	0.61	29.51	2,199.95	5.94	6.39	-0.58	0.08	-0.03	6.47	
2,223.00	0.66	31.33	2,222.94	6.16	6.52	-0.66	0.22	0.20	7.92	
Last SDI Gyro Survey										
2,238.00	0.66	30.79	2,237.94	6.31	6.61	-0.72	0.05	-0.03	-3.59	
9 5/8"										
2,300.00	0.64	28.49	2,299.94	6.92	6.95	-0.98	0.05	-0.03	-3.71	
2,337.00	0.63	27.06	2,336.94	7.28	7.14	-1.14	0.05	-0.03	-3.86	
First SDI MWD Survey										
2,400.00	1.14	41.08	2,399.93	8.06	7.71	-1.38	0.87	0.81	22.25	
2,500.00	1.91	61.99	2,499.89	9.71	9.78	-1.36	0.94	0.77	20.91	
2,600.00	2.50	83.24	2,599.82	10.84	13.46	0.09	1.00	0.59	21.26	
2,700.00	3.38	85.03	2,699.69	11.22	18.53	3.00	0.88	0.88	1.79	
2,800.00	4.65	77.52	2,799.44	12.29	25.39	6.50	1.37	1.27	-7.51	
2,900.00	5.99	71.59	2,899.01	14.81	34.30	10.17	1.45	1.34	-5.93	
3,000.00	7.24	76.72	2,998.34	17.94	45.43	14.76	1.39	1.26	5.14	
3,100.00	7.29	83.69	3,097.53	20.00	57.93	21.07	0.88	0.04	6.96	
3,200.00	6.82	81.52	3,196.78	21.49	70.10	27.59	0.54	-0.47	-2.17	
3,300.00	6.60	77.00	3,296.10	23.82	81.47	32.96	0.57	-0.22	-4.51	
3,400.00	6.70	78.94	3,395.43	26.15	92.81	38.31	0.25	0.10	1.93	
3,500.00	6.48	76.43	3,494.75	28.53	104.20	43.66	0.36	-0.22	-2.50	
3,600.00	6.08	73.29	3,594.17	31.50	114.56	47.90	0.53	-0.40	-3.14	
3,700.00	6.30	76.83	3,693.59	34.36	124.88	52.19	0.44	0.22	3.54	
3,800.00	6.48	81.21	3,792.96	36.44	135.93	57.56	0.52	0.18	4.38	
3,900.00	6.38	78.52	3,892.33	38.17	147.00	63.20	0.32	-0.09	-2.69	

Scientific Drilling Survey Report

Company: Stone Energy Corporation	Local Co-ordinate Reference: Well Martin 8H - Slot 8H
Project: Heather Prospect (NAD 27)	TVD Reference: GL 906 & KB 18 @ 924.00ft (Saxon 141)
Site: Martin Pad	MD Reference: GL 906 & KB 18 @ 924.00ft (Saxon 141)
Well: Martin 8H	North Reference: Grid
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: 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)	
4,000.00	6.97	74.92	3,991.67	40.92	158.09	68.07	0.72	0.59	-3.60	
4,100.00	7.48	78.77	4,090.86	43.97	170.40	73.48	0.70	0.51	3.85	
4,200.00	6.85	77.68	4,190.05	46.36	182.86	79.49	0.65	-0.63	-1.08	
4,300.00	6.56	77.32	4,289.38	48.93	194.14	84.62	0.30	-0.29	-0.36	
4,400.00	6.87	83.48	4,388.70	50.93	205.59	90.30	0.78	0.31	6.16	
4,500.00	7.38	84.07	4,487.93	52.23	217.92	97.08	0.51	0.51	0.59	
4,600.00	6.78	82.88	4,587.17	53.61	230.15	103.73	0.62	-0.60	-1.18	
4,700.00	6.96	79.98	4,686.45	55.44	241.99	109.79	0.39	0.18	-2.90	
4,800.00	6.89	80.80	4,785.72	57.44	253.87	115.73	0.12	-0.08	0.81	
4,900.00	6.99	80.63	4,885.00	59.31	265.71	121.76	0.10	0.10	-0.16	
5,000.00	7.73	79.43	4,984.19	61.66	278.22	127.83	0.76	0.74	-1.20	
5,100.00	8.51	81.79	5,083.16	63.92	292.35	135.00	0.85	0.78	2.36	
5,200.00	8.64	81.33	5,182.04	66.01	307.13	142.70	0.15	0.13	-0.46	
5,300.00	8.31	80.38	5,280.91	68.49	321.86	150.09	0.36	-0.33	-0.95	
5,400.00	7.09	80.57	5,379.99	70.70	335.24	156.82	1.22	-1.22	0.20	
5,500.00	6.08	76.79	5,479.35	72.75	346.29	162.21	1.10	-1.01	-3.79	
5,600.00	5.90	73.21	5,578.82	75.53	356.23	166.33	0.41	-0.18	-3.58	
5,601.00	5.90	73.19	5,579.81	75.56	356.33	166.37	0.16	0.03	-1.53	
Last SDI MWD Survey										
5,700.00	8.66	77.44	5,678.04	78.48	368.27	171.64	2.84	2.79	4.30	
5,800.00	13.90	77.68	5,776.03	82.91	387.52	180.36	5.24	5.24	0.24	
5,900.00	17.96	80.70	5,872.24	87.92	414.25	193.35	4.14	4.05	3.02	
6,000.00	23.70	78.66	5,965.93	94.11	448.51	210.18	5.79	5.74	-2.03	
6,100.00	28.67	78.57	6,055.31	103.23	492.36	230.79	4.97	4.97	-0.10	
6,200.00	35.94	85.94	6,139.52	111.82	545.41	257.61	8.25	7.26	7.37	
6,300.00	37.74	97.11	6,219.28	109.39	605.59	297.49	6.92	1.80	11.17	
6,400.00	40.76	104.87	6,296.94	97.33	667.35	345.84	5.76	3.02	7.76	
6,500.00	46.95	111.32	6,369.25	75.91	732.91	403.84	7.63	6.20	6.45	
6,600.00	51.84	118.88	6,434.40	43.94	801.60	472.00	7.53	4.88	7.56	
6,700.00	58.76	128.44	6,491.82	-1.85	869.26	550.23	10.46	6.92	9.56	
6,800.00	63.38	134.83	6,539.73	-60.04	934.88	636.78	7.25	4.62	6.38	
6,900.00	68.01	140.52	6,580.69	-127.66	996.02	727.82	6.95	4.62	5.69	
7,000.00	74.92	143.96	6,612.69	-202.42	1,054.08	822.45	7.63	6.91	3.43	
7,100.00	80.11	146.99	6,634.80	-283.01	1,108.93	919.58	5.98	5.20	3.03	
7,200.00	83.17	146.73	6,647.77	-366.16	1,162.91	1,018.15	3.06	3.05	-0.26	
7,300.00	89.02	149.44	6,654.55	-450.17	1,216.62	1,117.21	6.45	5.85	2.71	
7,400.00	90.43	151.67	6,654.11	-537.95	1,264.50	1,215.51	2.64	1.42	2.23	
7,500.00	90.46	149.01	6,653.55	-624.56	1,314.47	1,314.22	2.66	0.03	-2.66	
7,600.00	90.50	148.23	6,652.47	-709.88	1,366.61	1,413.31	0.78	0.04	-0.78	
7,700.00	88.49	146.95	6,653.16	-794.57	1,419.77	1,512.55	2.38	-2.01	-1.28	
7,800.00	87.68	147.02	6,656.85	-878.21	1,474.46	1,611.93	0.81	-0.81	0.06	
7,900.00	87.85	146.30	6,660.69	-961.84	1,529.14	1,711.32	0.73	0.16	-0.72	
8,000.00	91.27	148.68	6,660.85	-1,046.33	1,582.57	1,810.57	4.17	3.42	2.38	

Scientific Drilling Survey Report

Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well Martin 8H - Slot 8H
Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 906 & KB 18 @ 924.00ft (Saxon 141)
Site:	Martin Pad	MD Reference:	GL 906 & KB 18 @ 924.00ft (Saxon 141)
Well:	Martin 8H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	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)
8,100.00	91.21	148.30	6,658.61	-1,131.66	1,634.66	1,909.63	0.38	-0.06	-0.38
8,200.00	90.87	147.51	6,656.60	-1,216.07	1,688.24	2,008.92	0.86	-0.34	-0.79
8,300.00	90.16	148.12	6,655.76	-1,300.69	1,741.53	2,108.18	0.93	-0.71	0.61
8,400.00	89.93	149.90	6,655.69	-1,386.28	1,793.22	2,207.20	1.80	-0.24	1.79
8,500.00	88.55	149.53	6,657.26	-1,472.72	1,843.46	2,305.96	1.42	-1.37	-0.38
8,600.00	90.02	151.55	6,658.82	-1,559.38	1,893.33	2,404.64	2.50	1.46	2.02
8,700.00	89.06	151.18	6,659.31	-1,647.24	1,941.07	2,502.92	1.03	-0.96	-0.37
8,800.00	89.48	152.36	6,661.17	-1,735.11	1,988.76	2,601.17	1.25	0.42	1.18
8,900.00	88.42	150.17	6,662.65	-1,822.96	2,036.51	2,699.44	2.43	-1.06	-2.18
9,000.00	88.69	150.95	6,665.65	-1,909.66	2,086.24	2,798.07	0.82	0.27	0.77
9,100.00	88.68	149.96	6,667.41	-1,997.02	2,134.87	2,896.52	0.99	-0.01	-0.99
9,200.00	88.69	148.12	6,670.09	-2,082.61	2,186.49	2,995.50	1.84	0.01	-1.84
9,300.00	91.99	148.50	6,670.09	-2,167.44	2,239.42	3,094.70	3.32	3.30	0.39
9,400.00	90.45	146.36	6,667.58	-2,252.09	2,292.58	3,193.91	2.64	-1.54	-2.14
9,500.00	89.88	144.38	6,667.85	-2,333.92	2,350.05	3,293.65	2.06	-0.57	-1.98
9,600.00	91.45	148.35	6,667.10	-2,416.39	2,406.56	3,393.28	4.27	1.57	3.97
9,700.00	92.08	148.94	6,663.60	-2,502.37	2,457.50	3,492.12	0.86	0.62	0.59
9,800.00	91.67	147.46	6,660.40	-2,587.26	2,510.25	3,591.26	1.53	-0.41	-1.48
9,900.00	90.89	148.30	6,658.16	-2,671.71	2,563.75	3,690.53	1.14	-0.78	0.84
10,000.00	90.40	148.47	6,657.09	-2,757.20	2,615.62	3,789.57	0.51	-0.48	0.17
10,100.00	88.94	147.69	6,657.65	-2,842.00	2,668.61	3,888.79	1.66	-1.47	-0.78
10,200.00	88.60	146.38	6,660.13	-2,925.95	2,722.89	3,988.16	1.35	-0.34	-1.31
10,300.00	89.50	147.15	6,661.72	-3,009.53	2,777.77	4,087.62	1.19	0.90	0.77
10,400.00	88.96	146.47	6,662.82	-3,093.33	2,832.32	4,187.05	0.87	-0.54	-0.69
10,500.00	88.92	145.76	6,665.09	-3,176.30	2,888.09	4,286.61	0.71	-0.04	-0.71
10,600.00	88.78	145.54	6,666.82	-3,258.90	2,944.42	4,386.23	0.26	-0.14	-0.22
10,700.00	88.62	146.76	6,669.37	-3,341.60	3,000.59	4,485.82	1.23	-0.17	1.22
10,800.00	88.66	146.11	6,672.03	-3,424.41	3,056.58	4,585.39	0.65	0.05	-0.65
10,900.00	90.60	148.20	6,672.89	-3,508.35	3,110.91	4,684.78	2.85	1.93	2.10
11,000.00	91.73	150.55	6,670.40	-3,594.58	3,161.46	4,783.58	2.61	1.14	2.35
11,100.00	89.59	146.09	6,669.49	-3,679.60	3,213.99	4,882.67	4.94	-2.15	-4.46
11,200.00	90.66	146.72	6,669.35	-3,762.71	3,269.60	4,982.23	1.24	1.07	0.62
11,300.00	89.12	143.14	6,668.87	-3,845.37	3,325.84	5,081.85	3.89	-1.53	-3.58
11,400.00	88.09	141.37	6,672.13	-3,923.12	3,388.63	5,181.78	2.05	-1.03	-1.77
11,500.00	88.83	145.60	6,675.12	-4,002.46	3,449.39	5,281.67	4.29	0.74	4.23
11,600.00	89.41	151.48	6,676.32	-4,088.32	3,500.55	5,380.55	5.90	0.57	5.88
11,700.00	88.48	149.72	6,678.24	-4,175.48	3,549.53	5,479.07	1.99	-0.93	-1.76
11,800.00	88.98	154.01	6,680.84	-4,263.30	3,597.20	5,577.27	4.31	0.50	4.28
11,900.00	91.26	159.01	6,680.64	-4,354.71	3,637.64	5,673.70	5.50	2.27	5.00
12,000.00	91.51	159.16	6,677.88	-4,448.30	3,672.76	5,768.45	0.29	0.25	0.15

Scientific Drilling Survey Report

Company: Stone Energy Corporation	Local Co-ordinate Reference: Well Martin 8H - Slot 8H
Project: Heather Prospect (NAD 27)	TVD Reference: GL 906 & KB 18 @ 924.00ft (Saxon 141)
Site: Martin Pad	MD Reference: GL 906 & KB 18 @ 924.00ft (Saxon 141)
Well: Martin 8H	North Reference: Grid
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Northeast District

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
2,238.00	2,237.94	9 5/8"	9-5/8	12-1/4	
12,075.00		5 1/2"	5-1/2	8-3/4	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
108.00	108.00	-0.22	0.03	First SDI Gyro Survey	
2,223.00	2,222.94	6.16	6.52	Last SDI Gyro Survey	
2,337.00	2,336.94	7.28	7.14	First SDI MWD Survey	
5,601.00	5,579.81	75.56	356.33	Last SDI MWD Survey	

Checked By: _____ Approved By: _____ Date: _____