



Scientific Drilling

Stone Energy

Mary Prospect

Bowyers Pad - Wetzel County, West Virginia

Bowyers #2H - Slot Bowyers #2H

ST01

Design: As Drilled

Standard Survey Report

02 November, 2012





SDI
Survey Report

103.02771



Company:	Stone Energy	Local Co-ordinate Reference:	Well Bowyers #2H - Slot Bowyers #2H
Project:	Mary Prospect	TVD Reference:	18' RKB - 1156' GL @ 1174.0usft (Saxon 141)
Site:	Bowyers Pad - Wetzel County, West Virginia	MD Reference:	18' RKB - 1156' GL @ 1174.0usft (Saxon 141)
Well:	Bowyers #2H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	EDM-Chris Testa

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	Bowyers Pad - Wetzel County, West Virginia				
Site Position:		Northing:	429,490.00 usft	Latitude:	39° 40' 17.125 N
From:	Map	Easting:	1,621,591.00 usft	Longitude:	80° 50' 39.652 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.86 °

Well	Bowyers #2H - Slot Bowyers #2H					
Well Position	+N/-S	0.0 usft	Northing:	429,490.00 usft	Latitude:	39° 40' 17.125 N
	+E/-W	0.0 usft	Easting:	1,621,591.00 usft	Longitude:	80° 50' 39.652 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	1,156.0 usft

Wellbore	ST01				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/14/12	-8.45	67.28	52,699

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	183.55	

Survey Program	Date	10/29/12			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
103.0	2,555.0	SDI Keeper Gyro (ST01)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	
2,620.0	12,283.0	SDI MWD (ST01)	MWD SDI	MWD - Standard ver 1.0.1	

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
103.0	0.34	79.35	103.0	0.1	0.3	-0.1	0.33	0.33	0.00
203.0	0.30	23.80	203.0	0.4	0.7	-0.4	0.30	-0.04	-55.55
303.0	0.22	51.03	303.0	0.7	1.0	-0.8	0.15	-0.08	27.23
403.0	0.42	79.31	403.0	0.9	1.5	-1.0	0.25	0.20	28.28
503.0	0.34	71.02	503.0	1.1	2.1	-1.2	0.10	-0.08	-8.29
603.0	0.31	56.72	603.0	1.3	2.6	-1.5	0.09	-0.03	-14.30
703.0	0.27	60.71	703.0	1.6	3.0	-1.8	0.04	-0.04	3.99
803.0	0.30	24.81	803.0	1.9	3.4	-2.1	0.18	0.03	-35.90
903.0	0.28	27.48	903.0	2.4	3.6	-2.6	0.02	-0.02	2.67

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Well:	Bowyers #2H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	EDM-Chris Testa

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)
1,003.0	0.34	27.79	1,003.0	2.9	3.8	-3.1	0.06	0.06	0.31
1,103.0	0.34	19.19	1,103.0	3.4	4.1	-3.6	0.05	0.00	-8.60
1,203.0	0.46	8.56	1,203.0	4.1	4.2	-4.3	0.14	0.12	-10.63
1,303.0	0.27	353.94	1,303.0	4.7	4.3	-5.0	0.21	-0.19	-14.62
1,403.0	0.42	345.05	1,403.0	5.3	4.1	-5.5	0.16	0.15	-8.89
1,503.0	0.41	335.74	1,503.0	6.0	3.9	-6.2	0.07	-0.01	-9.31
1,603.0	0.40	334.04	1,603.0	6.6	3.6	-6.8	0.02	-0.01	-1.70
1,703.0	0.14	324.65	1,703.0	7.0	3.4	-7.2	0.26	-0.26	-9.39
1,803.0	0.02	145.44	1,803.0	7.1	3.3	-7.3	0.16	-0.12	-179.21
1,903.0	0.34	294.71	1,903.0	7.2	3.1	-7.4	0.36	0.32	149.27
2,003.0	0.04	294.28	2,003.0	7.4	2.8	-7.5	0.30	-0.30	-0.43
2,103.0	0.21	63.82	2,103.0	7.5	2.9	-7.6	0.24	0.17	129.54
2,203.0	0.26	89.04	2,203.0	7.5	3.3	-7.7	0.11	0.05	25.22
2,303.0	0.65	106.97	2,303.0	7.4	4.0	-7.6	0.41	0.39	17.93
2,333.0	0.49	106.50	2,333.0	7.3	4.3	-7.6	0.53	-0.53	-1.57
2,365.0	0.40	205.98	2,365.0	7.2	4.4	-7.4	2.13	-0.28	310.88
2,428.0	2.67	241.29	2,427.9	6.3	3.0	-6.4	3.74	3.60	56.05
2,492.0	4.56	262.68	2,491.8	5.2	-0.8	-5.2	3.58	2.95	33.42
2,555.0	5.51	267.11	2,554.6	4.7	-6.3	-4.3	1.63	1.51	7.03
2,620.0	7.28	264.37	2,619.2	4.2	-13.5	-3.3	2.76	2.72	-4.22
2,652.0	8.07	263.78	2,650.9	3.7	-17.8	-2.6	2.48	2.47	-1.84
2,716.0	9.89	267.60	2,714.1	3.0	-27.7	-1.3	2.99	2.84	5.97
2,780.0	9.31	268.81	2,777.2	2.7	-38.4	-0.3	0.96	-0.91	1.89
2,843.0	8.96	266.19	2,839.4	2.3	-48.4	0.7	0.86	-0.56	-4.16
2,907.0	9.69	266.05	2,902.5	1.6	-58.7	2.1	1.14	1.14	-0.22
2,970.0	9.87	268.06	2,964.6	1.0	-69.4	3.3	0.61	0.29	3.19
3,033.0	8.91	264.93	3,026.8	0.4	-79.7	4.5	1.73	-1.52	-4.97
3,097.0	7.71	259.55	3,090.1	-0.8	-88.8	6.3	2.23	-1.88	-8.41
3,158.0	7.23	258.21	3,150.6	-2.4	-96.6	8.3	0.84	-0.79	-2.20
3,222.0	6.98	259.45	3,214.1	-3.9	-104.4	10.3	0.46	-0.39	1.94
3,285.0	6.50	258.83	3,276.7	-5.3	-111.6	12.2	0.77	-0.76	-0.98
3,349.0	5.90	261.56	3,340.3	-6.5	-118.5	13.8	1.04	-0.94	4.27
3,412.0	5.36	264.86	3,403.0	-7.2	-124.6	14.9	1.00	-0.86	5.24
3,476.0	4.85	264.22	3,466.7	-7.7	-130.3	15.8	0.80	-0.80	-1.00
3,540.0	4.53	262.72	3,530.5	-8.3	-135.5	16.7	0.54	-0.50	-2.34
3,603.0	4.13	261.01	3,593.3	-9.0	-140.2	17.7	0.67	-0.63	-2.71
3,667.0	3.63	264.52	3,657.2	-9.6	-144.5	18.5	0.86	-0.78	5.48
3,731.0	3.24	266.54	3,721.1	-9.9	-148.3	19.0	0.64	-0.61	3.16
3,794.0	2.76	264.32	3,784.0	-10.1	-151.6	19.5	0.78	-0.76	-3.52
3,857.0	2.71	263.64	3,846.9	-10.4	-154.6	20.0	0.09	-0.08	-1.08
3,921.0	2.53	266.93	3,910.9	-10.7	-157.5	20.4	0.37	-0.28	5.14
3,984.0	2.23	271.50	3,973.8	-10.7	-160.1	20.6	0.56	-0.48	7.25
4,048.0	1.17	265.13	4,037.8	-10.7	-162.0	20.8	1.68	-1.66	-9.95

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Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	EDM-Chris Testa

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)
4,112.0	0.79	259.57	4,101.8	-10.9	-163.1	21.0	0.61	-0.59	-8.69
4,176.0	0.63	279.94	4,165.8	-10.9	-163.8	21.0	0.46	-0.25	31.83
4,239.0	0.59	286.31	4,228.8	-10.7	-164.5	20.9	0.12	-0.06	10.11
4,302.0	0.14	78.85	4,291.8	-10.6	-164.7	20.8	1.14	-0.71	242.13
4,365.0	0.44	84.37	4,354.8	-10.6	-164.4	20.8	0.48	0.48	8.76
4,429.0	0.66	105.22	4,418.7	-10.7	-163.8	20.8	0.46	0.34	32.58
4,501.0	1.29	212.43	4,490.7	-11.5	-163.8	21.6	2.24	0.88	148.90
4,565.0	3.88	218.31	4,554.7	-13.8	-165.6	24.0	4.06	4.05	9.19
4,628.0	5.38	217.56	4,617.5	-17.8	-168.7	28.2	2.38	2.38	-1.19
4,692.0	6.76	217.76	4,681.1	-23.1	-172.8	33.8	2.16	2.16	0.31
4,755.0	8.69	215.90	4,743.5	-29.9	-177.9	40.9	3.09	3.06	-2.95
4,818.0	10.09	218.25	4,805.7	-38.1	-184.1	49.4	2.30	2.22	3.73
4,882.0	11.71	225.96	4,868.5	-47.0	-192.2	58.9	3.40	2.53	12.05
4,945.0	13.19	233.17	4,930.1	-55.8	-202.6	68.2	3.40	2.35	11.44
5,009.0	14.81	234.83	4,992.1	-64.9	-215.1	78.1	2.61	2.53	2.59
5,072.0	16.50	236.99	5,052.8	-74.4	-229.2	88.4	2.84	2.68	3.43
5,136.0	18.40	237.48	5,113.9	-84.8	-245.4	99.8	2.98	2.97	0.77
5,199.0	20.98	237.41	5,173.2	-96.2	-263.2	112.3	4.10	4.10	-0.11
5,263.0	23.94	235.72	5,232.3	-109.7	-283.6	127.0	4.73	4.63	-2.64
5,326.0	24.89	236.30	5,289.7	-124.2	-305.2	142.9	1.56	1.51	0.92
5,389.0	25.63	236.54	5,346.7	-139.1	-327.6	159.1	1.19	1.17	0.38
5,453.0	27.32	235.92	5,403.9	-155.0	-351.3	176.4	2.68	2.64	-0.97
5,517.0	30.15	235.14	5,460.1	-172.4	-376.7	195.4	4.46	4.42	-1.22
5,580.0	33.09	234.99	5,513.7	-191.3	-403.8	215.9	4.67	4.67	-0.24
5,644.0	34.09	234.93	5,567.0	-211.6	-432.8	238.0	1.56	1.56	-0.09
5,708.0	34.75	236.02	5,619.8	-232.1	-462.6	260.3	1.41	1.03	1.70
5,772.0	36.64	238.09	5,671.8	-252.4	-493.9	282.5	3.50	2.95	3.23
5,835.0	39.52	236.84	5,721.4	-273.3	-526.6	305.4	4.73	4.57	-1.98
5,899.0	42.47	236.53	5,769.7	-296.4	-561.7	330.6	4.62	4.61	-0.48
5,962.0	45.57	235.28	5,815.0	-320.9	-598.0	357.4	5.11	4.92	-1.98
6,026.0	48.12	235.94	5,858.7	-347.3	-636.5	386.1	4.05	3.98	1.03
6,090.0	49.38	235.46	5,900.9	-374.4	-676.2	415.6	2.05	1.97	-0.75
6,154.0	50.71	234.47	5,942.0	-402.6	-716.4	446.2	2.39	2.08	-1.55
6,218.0	53.37	233.43	5,981.4	-432.3	-757.2	478.3	4.35	4.16	-1.63
6,281.0	55.18	232.50	6,018.2	-463.1	-798.0	511.6	3.11	2.87	-1.48
6,345.0	56.76	231.64	6,054.0	-495.7	-839.8	546.8	2.71	2.47	-1.34
6,377.0	58.08	231.55	6,071.2	-512.5	-861.0	564.8	4.13	4.13	-0.28
6,408.0	58.00	230.67	6,087.6	-529.0	-881.4	582.5	2.42	-0.26	-2.84
6,440.0	57.52	228.12	6,104.7	-546.6	-902.0	601.4	6.90	-1.50	-7.97
6,471.0	57.16	225.33	6,121.4	-564.5	-921.0	620.4	7.67	-1.16	-9.00
6,503.0	57.16	222.17	6,138.8	-583.9	-939.6	640.9	8.30	0.00	-9.88
6,534.0	57.40	219.24	6,155.6	-603.6	-956.6	661.7	7.99	0.77	-9.45
6,566.0	58.27	217.09	6,172.6	-624.9	-973.3	684.0	6.30	2.72	-6.72



SDI
Survey Report



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Survey										
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6,598.0	59.56	216.08	6,189.1	-647.0	-989.7	707.0	4.85	4.03	-3.16	
6,630.0	61.43	214.96	6,204.9	-669.6	-1,005.8	730.6	6.59	5.84	-3.50	
6,661.0	63.35	213.57	6,219.2	-692.3	-1,021.3	754.2	7.36	6.19	-4.48	
6,693.0	64.84	210.80	6,233.2	-716.7	-1,036.6	779.5	9.07	4.66	-8.66	
6,725.0	65.68	207.96	6,246.6	-742.0	-1,050.9	805.6	8.48	2.63	-8.88	
6,756.0	66.39	205.90	6,259.2	-767.3	-1,063.7	831.6	6.49	2.29	-6.65	
6,787.0	67.46	203.38	6,271.4	-793.2	-1,075.6	858.3	8.24	3.45	-8.13	
6,817.0	68.36	200.37	6,282.6	-819.0	-1,085.9	884.6	9.77	3.00	-10.03	
6,848.0	69.34	197.12	6,293.8	-846.3	-1,095.2	912.5	10.28	3.16	-10.48	
6,879.0	69.58	193.83	6,304.7	-874.3	-1,103.0	940.9	9.97	0.77	-10.61	
6,910.0	70.21	191.41	6,315.4	-902.7	-1,109.3	969.7	7.61	2.03	-7.81	
6,940.0	71.05	189.34	6,325.3	-930.6	-1,114.4	997.8	7.09	2.80	-6.90	
6,971.0	72.90	187.05	6,334.9	-959.7	-1,118.6	1,027.2	9.22	5.97	-7.39	
7,001.0	75.10	184.67	6,343.2	-988.4	-1,121.6	1,056.0	10.58	7.33	-7.93	
7,032.0	76.60	183.48	6,350.8	-1,018.4	-1,123.7	1,086.0	6.10	4.84	-3.84	
7,062.0	79.49	182.83	6,357.0	-1,047.7	-1,125.3	1,115.4	9.86	9.63	-2.17	
7,093.0	82.09	181.87	6,361.9	-1,078.3	-1,126.6	1,146.0	8.93	8.39	-3.10	
7,123.0	84.89	182.29	6,365.3	-1,108.1	-1,127.7	1,175.8	9.44	9.33	1.40	
7,153.0	87.78	181.35	6,367.3	-1,138.0	-1,128.6	1,205.7	10.13	9.63	-3.13	
7,214.0	87.88	179.18	6,369.6	-1,198.9	-1,128.9	1,266.5	3.56	0.16	-3.56	
7,276.0	88.15	176.29	6,371.7	-1,260.8	-1,126.4	1,328.2	4.68	0.44	-4.66	
7,338.0	88.96	173.96	6,373.3	-1,322.6	-1,121.2	1,389.5	3.98	1.31	-3.76	
7,399.0	89.36	172.15	6,374.2	-1,383.1	-1,113.8	1,449.4	3.04	0.66	-2.97	
7,460.0	90.40	172.45	6,374.3	-1,443.6	-1,105.6	1,509.3	1.77	1.70	0.49	
7,522.0	90.00	169.82	6,374.1	-1,504.8	-1,096.1	1,569.8	4.29	-0.65	-4.24	
7,583.0	90.74	168.83	6,373.7	-1,564.8	-1,084.8	1,628.9	2.03	1.21	-1.62	
7,644.0	88.86	166.75	6,373.9	-1,624.4	-1,071.9	1,687.6	4.60	-3.08	-3.41	
7,705.0	89.26	167.51	6,374.9	-1,683.8	-1,058.3	1,746.1	1.41	0.66	1.25	
7,766.0	89.93	168.00	6,375.3	-1,743.5	-1,045.3	1,804.8	1.36	1.10	0.80	
7,826.0	89.40	166.98	6,375.7	-1,802.0	-1,032.3	1,862.5	1.92	-0.88	-1.70	
7,890.0	89.73	167.71	6,376.2	-1,864.5	-1,018.3	1,924.0	1.25	0.52	1.14	
7,953.0	90.84	167.25	6,375.9	-1,926.0	-1,004.7	1,984.5	1.91	1.76	-0.73	
8,017.0	88.76	166.44	6,376.1	-1,988.3	-990.1	2,045.8	3.49	-3.25	-1.27	
8,080.0	87.10	166.64	6,378.4	-2,049.5	-975.5	2,106.0	2.65	-2.63	0.32	
8,143.0	87.75	167.25	6,381.2	-2,110.8	-961.2	2,166.3	1.41	1.03	0.97	
8,206.0	88.32	166.85	6,383.3	-2,172.2	-947.1	2,226.7	1.11	0.90	-0.63	
8,270.0	91.14	168.91	6,383.6	-2,234.8	-933.7	2,288.3	5.46	4.41	3.22	
8,333.0	92.55	168.81	6,381.6	-2,296.5	-921.5	2,349.2	2.24	2.24	-0.16	
8,397.0	90.44	168.19	6,379.9	-2,359.2	-908.8	2,411.0	3.44	-3.30	-0.97	
8,460.0	90.91	168.38	6,379.2	-2,420.9	-896.0	2,471.7	0.80	0.75	0.30	
8,524.0	90.74	168.38	6,378.3	-2,483.6	-883.1	2,533.5	0.27	-0.27	0.00	
8,587.0	91.57	168.19	6,377.0	-2,545.3	-870.3	2,594.3	1.35	1.32	-0.30	
8,650.0	90.07	166.61	6,376.1	-2,606.7	-856.6	2,654.8	3.46	-2.38	-2.51	
8,713.0	90.37	166.65	6,375.9	-2,668.0	-842.0	2,715.0	0.48	0.48	0.06	

103-02771



SDI
Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well Bowyers #2H - Slot Bowyers #2H
Project:	Mary Prospect	TVD Reference:	18' RKB - 1156' GL @ 1174.0usft (Saxon 141)
Site:	Bowyers Pad - Wetzel County, West Virginia	MD Reference:	18' RKB - 1156' GL @ 1174.0usft (Saxon 141)
Well:	Bowyers #2H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	EDM-Chris Testa

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)
8,777.0	88.92	165.30	6,376.3	-2,730.1	-826.5	2,776.1	3.10	-2.27	-2.11
8,841.0	88.09	165.26	6,377.9	-2,792.0	-810.2	2,836.8	1.30	-1.30	-0.06
8,904.0	88.53	165.18	6,379.8	-2,852.9	-794.2	2,896.6	0.71	0.70	-0.13
8,968.0	89.46	165.64	6,380.9	-2,914.8	-778.0	2,957.4	1.62	1.45	0.72
9,031.0	90.27	166.18	6,381.1	-2,975.9	-762.7	3,017.4	1.55	1.29	0.86
9,095.0	91.11	166.00	6,380.3	-3,038.0	-747.3	3,078.5	1.34	1.31	-0.28
9,158.0	89.16	166.18	6,380.1	-3,099.2	-732.2	3,138.6	3.11	-3.10	0.29
9,222.0	89.60	165.96	6,380.8	-3,161.3	-716.8	3,199.6	0.77	0.69	-0.34
9,286.0	90.61	165.22	6,380.7	-3,223.3	-700.8	3,260.5	1.96	1.58	-1.16
9,349.0	91.27	165.11	6,379.7	-3,284.2	-684.7	3,320.3	1.06	1.05	-0.17
9,412.0	90.44	168.20	6,378.7	-3,345.5	-670.2	3,380.5	5.08	-1.32	4.90
9,476.0	88.76	167.27	6,379.2	-3,408.0	-656.6	3,442.1	3.00	-2.63	-1.45
9,540.0	88.83	165.81	6,380.5	-3,470.2	-641.7	3,503.3	2.28	0.11	-2.28
9,603.0	89.97	165.76	6,381.2	-3,531.3	-626.2	3,563.3	1.81	1.81	-0.08
9,667.0	89.09	167.08	6,381.7	-3,593.5	-611.2	3,624.4	2.48	-1.38	2.06
9,731.0	90.60	166.68	6,381.9	-3,655.8	-596.7	3,685.7	2.44	2.36	-0.63
9,794.0	91.61	167.25	6,380.7	-3,717.2	-582.5	3,746.1	1.84	1.60	0.90
9,858.0	90.03	165.79	6,379.8	-3,779.4	-567.5	3,807.3	3.36	-2.47	-2.28
9,922.0	90.44	166.08	6,379.5	-3,841.5	-552.0	3,868.3	0.78	0.64	0.45
9,985.0	89.63	167.41	6,379.5	-3,902.8	-537.5	3,928.6	2.47	-1.29	2.11
10,049.0	90.20	167.97	6,379.6	-3,965.3	-523.9	3,990.2	1.25	0.89	0.88
10,113.0	88.76	168.11	6,380.1	-4,027.9	-510.6	4,051.8	2.26	-2.25	0.22
10,176.0	89.06	168.23	6,381.3	-4,089.6	-497.7	4,112.6	0.51	0.48	0.19
10,240.0	89.63	167.78	6,382.1	-4,152.2	-484.4	4,174.2	1.13	0.89	-0.70
10,303.0	90.37	166.92	6,382.1	-4,213.7	-470.6	4,234.7	1.80	1.17	-1.37
10,366.0	88.99	167.56	6,382.4	-4,275.1	-456.7	4,295.2	2.41	-2.19	1.02
10,430.0	89.73	167.48	6,383.1	-4,337.6	-442.9	4,356.7	1.16	1.16	-0.13
10,493.0	90.87	166.39	6,382.8	-4,398.9	-428.6	4,417.1	2.50	1.81	-1.73
10,556.0	89.83	167.67	6,382.4	-4,460.3	-414.5	4,477.4	2.62	-1.65	2.03
10,620.0	90.57	167.47	6,382.2	-4,522.8	-400.7	4,539.0	1.20	1.16	-0.31
10,684.0	88.69	168.59	6,382.6	-4,585.4	-387.5	4,600.6	3.42	-2.94	1.75
10,747.0	88.86	168.91	6,384.0	-4,647.2	-375.2	4,661.5	0.58	0.27	0.51
10,810.0	88.29	169.37	6,385.5	-4,709.1	-363.3	4,722.5	1.16	-0.90	0.73
10,874.0	89.53	169.76	6,386.7	-4,772.0	-351.7	4,784.6	2.03	1.94	0.61
10,937.0	89.97	169.73	6,387.0	-4,834.0	-340.5	4,845.8	0.70	0.70	-0.05
11,001.0	88.42	170.44	6,387.9	-4,897.0	-329.5	4,908.0	2.66	-2.42	1.11
11,065.0	89.03	171.04	6,389.3	-4,960.2	-319.2	4,970.4	1.34	0.95	0.94
11,128.0	89.77	170.33	6,390.0	-5,022.3	-309.0	5,031.8	1.63	1.17	-1.13
11,192.0	90.77	170.84	6,389.7	-5,085.5	-298.5	5,094.2	1.75	1.56	0.80
11,255.0	90.00	171.36	6,389.3	-5,147.7	-288.8	5,155.7	1.47	-1.22	0.83
11,318.0	90.71	170.85	6,388.9	-5,210.0	-279.0	5,217.2	1.39	1.13	-0.81
11,381.0	90.07	170.13	6,388.5	-5,272.1	-268.6	5,278.6	1.53	-1.02	-1.14
11,445.0	88.69	169.64	6,389.2	-5,335.1	-257.4	5,340.8	2.29	-2.16	-0.77

103.02771



SDI
Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well Bowyers #2H - Slot Bowyers #2H
Project:	Mary Prospect	TVD Reference:	18' RKB - 1156' GL @ 1174.0usft (Saxon 141)
Site:	Bowyers Pad - Wetzel County, West Virginia	MD Reference:	18' RKB - 1156' GL @ 1174.0usft (Saxon 141)
Well:	Bowyers #2H	North Reference:	Grid
Wellbore:	ST01	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	EDM-Chris Testa

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)	
11,508.0	89.43	170.40	6,390.2	-5,397.1	-246.5	5,402.0	1.68	1.17	1.21	
11,572.0	90.70	170.76	6,390.1	-5,460.3	-236.0	5,464.4	2.06	1.98	0.56	
11,636.0	88.42	170.29	6,390.6	-5,523.4	-225.5	5,526.7	3.64	-3.56	-0.73	
11,699.0	88.86	170.58	6,392.1	-5,585.5	-215.0	5,588.1	0.84	0.70	0.46	
11,763.0	87.04	169.97	6,394.4	-5,648.5	-204.2	5,650.3	3.00	-2.84	-0.95	
11,827.0	87.66	169.51	6,397.3	-5,711.4	-192.8	5,712.4	1.21	0.97	-0.72	
11,890.0	87.91	169.33	6,399.8	-5,773.3	-181.2	5,773.5	0.49	0.40	-0.29	
11,953.0	88.25	169.23	6,401.9	-5,835.2	-169.5	5,834.5	0.56	0.54	-0.16	
12,016.0	89.60	170.05	6,403.1	-5,897.1	-158.2	5,895.6	2.51	2.14	1.30	
12,080.0	90.23	168.66	6,403.2	-5,960.0	-146.4	5,957.7	2.38	0.98	-2.17	
12,143.0	90.91	169.15	6,402.5	-6,021.9	-134.3	6,018.6	1.33	1.08	0.78	
12,207.0	91.84	168.36	6,401.0	-6,084.6	-121.8	6,080.5	1.91	1.45	-1.23	
12,283.0	91.84	168.36	6,398.6	-6,159.0	-106.5	6,153.8	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Top of Fish	0.00	360.00	2,460.0	6.9	5.7	429,496.86	1,621,596.75	39° 40' 17.193 N	80° 50' 39.580 W	
- actual wellpath misses target center by 4.5usft at 2459.8usft MD (2459.7 TVD, 5.6 N, 1.4 E)										
- Point										

Checked By: _____ Approved By: _____ Date: _____