



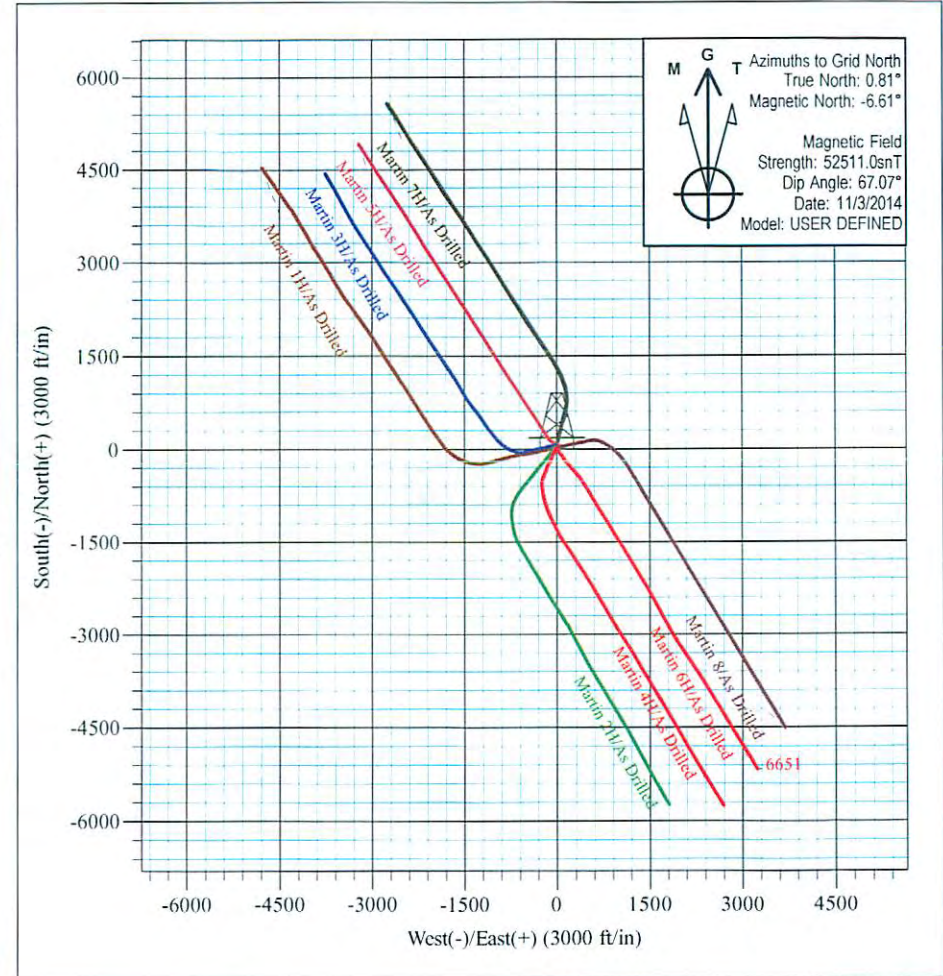
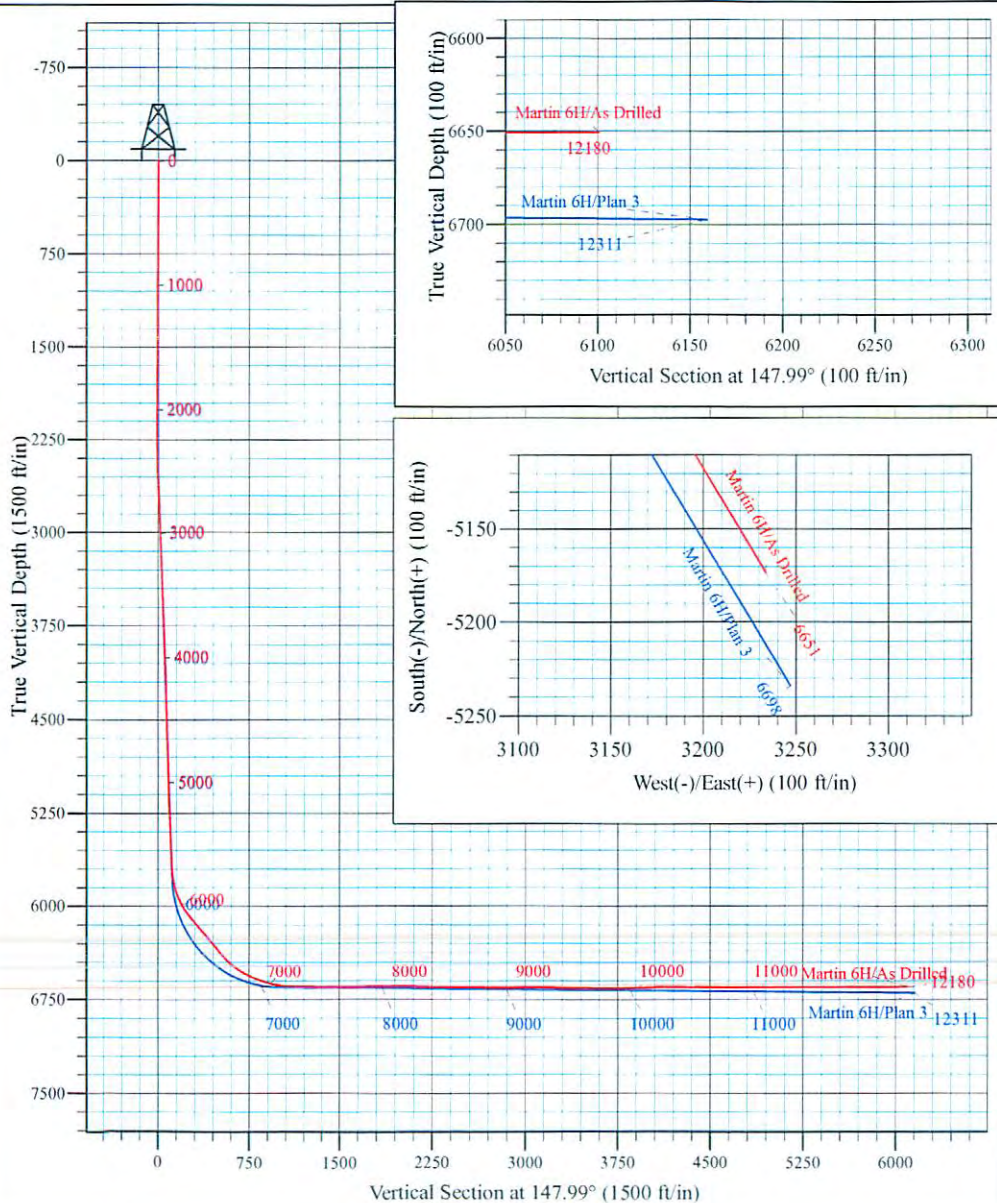
Martin Pad
 Martin 6H
 As Drilled
 GL 906 & KB 18 @ 924.00ft (Saxon 141)
 Heather Prospect (NAD 27)

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 6H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	407720.00	1643296.00	39° 36' 45.096 N	80° 45' 58.171 W



Tim Bouman
 17:37, November 25 2014
 Scientific Drilling International
 124 Vista Drive
 Charleroi, PA 15022

Stone Energy Corporation

Heather Prospect (NAD 27)

Martin Pad

Martin 6H - Slot 6H

OH

Design: As Drilled

Standard Survey Report

01 December, 2014



www.scientificdrilling.com

06/02/2017

Scientific Drilling Survey Report

Company: Stone Energy Corporation	Local Co-ordinate Reference: Well Martin 6H - Slot 6H
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 6H	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 6H - Slot 6H					
Well Position	+N/-S	0.00 ft	Northing:	407,720.00 usft	Latitude:	39° 36' 45.096 N
	+E/-W	0.00 ft	Easting:	1,643,296.00 usft	Longitude:	80° 45' 58.171 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	3/27/2014	-8.59	67.11	52,440
	BGGM2013	4/15/2014	-8.59	67.10	52,433
	BGGM2014	6/11/2014	-8.54	67.12	52,420
	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		147.99

Survey Program	Date	12/1/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
18.00	2,228.00	Survey 1 - SDI Gyro (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	
2,305.00	12,180.00	Survey 2 - 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	
18.00	0.00	360.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ground Level										
108.00	0.08	277.50	108.00	0.01	-0.06	-0.04	0.09	0.09	0.00	
First SDI Gyro Survey										

Scientific Drilling Survey Report

Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well Martin 6H - Slot 6H
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 6H	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)	
208.00	0.02	239.08	208.00	0.01	-0.15	-0.08	0.07	-0.06	-38.42	
308.00	0.03	215.21	308.00	-0.02	-0.18	-0.07	0.01	0.01	-23.87	
408.00	0.14	237.45	408.00	-0.11	-0.29	-0.06	0.11	0.11	22.24	
508.00	0.15	266.90	508.00	-0.18	-0.53	-0.13	0.07	0.01	29.45	
608.00	0.19	301.68	608.00	-0.10	-0.80	-0.34	0.11	0.04	34.78	
708.00	0.19	337.67	708.00	0.14	-1.00	-0.65	0.12	0.00	35.99	
808.00	0.09	26.68	808.00	0.36	-1.03	-0.85	0.15	-0.10	49.01	
908.00	0.33	25.17	908.00	0.69	-0.87	-1.05	0.24	0.24	-1.51	
943.00	0.49	24.92	943.00	0.92	-0.77	-1.19	0.46	0.46	-0.71	
1,008.00	0.38	32.24	1,007.99	1.35	-0.54	-1.43	0.19	-0.17	11.26	
1,108.00	0.40	27.27	1,107.99	1.94	-0.20	-1.75	0.04	0.02	-4.97	
1,208.00	0.60	31.13	1,207.99	2.70	0.23	-2.17	0.20	0.20	3.86	
1,258.00	0.65	24.30	1,257.99	3.19	0.48	-2.45	0.18	0.10	-13.66	
1,308.00	0.39	25.43	1,307.98	3.60	0.67	-2.69	0.52	-0.52	2.26	
1,408.00	0.06	25.67	1,407.98	3.95	0.84	-2.91	0.33	-0.33	0.24	
1,508.00	0.19	32.12	1,507.98	4.14	0.95	-3.01	0.13	0.13	6.45	
1,608.00	0.35	36.98	1,607.98	4.52	1.22	-3.19	0.16	0.16	4.86	
1,708.00	0.40	33.76	1,707.98	5.06	1.60	-3.44	0.05	0.05	-3.22	
1,808.00	0.46	24.52	1,807.98	5.71	1.96	-3.81	0.09	0.06	-9.24	
1,908.00	0.54	27.55	1,907.97	6.50	2.35	-4.27	0.08	0.08	3.03	
2,008.00	0.79	25.44	2,007.97	7.54	2.86	-4.88	0.25	0.25	-2.11	
2,043.00	0.79	26.16	2,042.96	7.97	3.07	-5.13	0.03	0.00	2.06	
2,108.00	0.66	22.00	2,107.96	8.72	3.41	-5.59	0.22	-0.20	-6.40	
2,208.00	0.79	24.30	2,207.95	9.88	3.91	-6.31	0.13	0.13	2.30	
2,228.00	0.69	26.98	2,227.95	10.12	4.02	-6.45	0.53	-0.50	13.40	
Last SDI Gyro Survey										
2,305.00	0.49	19.51	2,304.94	10.84	4.34	-6.89	0.28	-0.26	-9.70	
First SDI MWD Survey										
2,399.00	1.35	105.43	2,398.93	10.92	5.54	-6.33	1.49	0.91	91.40	
2,494.00	1.97	118.53	2,493.89	9.85	8.06	-4.08	0.76	0.65	13.79	
2,588.00	2.58	132.40	2,587.82	7.65	11.04	-0.64	0.87	0.65	14.76	
2,682.00	2.91	152.19	2,681.71	4.11	13.71	3.78	1.06	0.35	21.05	
2,776.00	2.85	158.12	2,775.60	-0.17	15.70	8.46	0.32	-0.06	6.31	
2,870.00	2.52	150.63	2,869.49	-4.14	17.58	12.83	0.51	-0.35	-7.97	
2,965.00	2.35	139.49	2,964.41	-7.44	19.87	16.84	0.53	-0.18	-11.73	
3,059.00	2.15	161.10	3,058.34	-10.57	21.69	20.46	0.92	-0.21	22.99	
3,153.00	2.07	169.91	3,152.27	-13.91	22.56	23.75	0.36	-0.09	9.37	
3,247.00	1.84	168.10	3,246.22	-17.06	23.17	26.75	0.25	-0.24	-1.93	
3,341.00	2.15	161.80	3,340.16	-20.21	24.03	29.88	0.40	0.33	-6.70	
3,437.00	2.22	155.62	3,436.09	-23.62	25.36	33.47	0.26	0.07	-6.44	
3,531.00	2.25	150.01	3,530.02	-26.87	27.04	37.12	0.23	0.03	-5.97	
3,625.00	2.08	138.02	3,623.95	-29.74	29.10	40.64	0.51	-0.18	-12.76	
3,720.00	1.92	153.67	3,718.90	-32.45	30.96	43.92	0.60	-0.17	16.47	
3,814.00	2.02	164.38	3,812.84	-35.45	32.10	47.08	0.41	0.11	11.39	

Scientific Drilling

Survey Report

Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well Martin 6H - Slot 6H
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 6H	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)
3,908.00	1.78	164.35	3,906.79	-38.45	32.94	50.07	0.26	-0.26	-0.03
4,002.00	2.03	150.67	4,000.74	-41.31	34.15	53.13	0.55	0.27	-14.55
4,096.00	2.32	151.16	4,094.67	-44.43	35.89	56.70	0.31	0.31	0.52
4,190.00	2.03	158.71	4,188.60	-47.65	37.41	60.23	0.43	-0.31	8.03
4,284.00	1.50	170.00	4,282.56	-50.41	38.23	63.01	0.67	-0.56	12.01
4,378.00	1.22	169.40	4,376.53	-52.61	38.62	65.08	0.30	-0.30	-0.64
4,472.00	0.98	111.48	4,470.52	-53.88	39.56	66.66	1.15	-0.26	-61.62
4,566.00	1.76	106.50	4,564.49	-54.59	41.69	68.39	0.84	0.83	-5.30
4,660.00	2.78	122.15	4,658.41	-56.21	45.00	71.52	1.26	1.09	16.65
4,756.00	2.63	146.39	4,754.31	-59.28	48.19	75.82	1.19	-0.16	25.25
4,850.00	2.11	154.98	4,848.23	-62.65	50.12	79.69	0.67	-0.55	9.14
4,944.00	1.80	159.11	4,942.18	-65.60	51.38	82.85	0.36	-0.33	4.39
5,038.00	1.49	169.40	5,036.14	-68.18	52.13	85.44	0.45	-0.33	10.95
5,132.00	1.79	173.15	5,130.10	-70.83	52.53	87.91	0.34	0.32	3.99
5,226.00	2.46	152.66	5,224.03	-74.08	53.63	91.25	1.07	0.71	-21.80
5,321.00	2.91	144.89	5,318.93	-77.87	55.95	95.69	0.61	0.47	-8.18
5,415.00	2.89	147.12	5,412.81	-81.81	58.61	100.44	0.12	-0.02	2.37
5,509.00	2.86	149.39	5,506.69	-85.82	61.09	105.15	0.13	-0.03	2.41
5,603.00	2.05	143.56	5,600.60	-89.19	63.29	109.17	0.90	-0.86	-6.20
Last SDI MWD Survey									
5,646.00	1.78	138.57	5,643.58	-90.31	64.18	110.60	0.74	-0.63	-11.60
5,674.00	2.74	137.26	5,671.56	-91.13	64.93	111.69	3.44	3.44	-4.69
Projection to Bit									
5,678.00	2.88	137.14	5,675.55	-91.27	65.06	111.88	3.44	3.44	-2.90
5,709.00	4.78	127.47	5,706.48	-92.63	66.61	113.85	6.45	6.13	-31.19
5,741.00	6.78	125.51	5,738.32	-94.54	69.21	116.85	6.28	6.25	-6.13
5,773.00	9.11	131.36	5,770.01	-97.31	72.65	121.02	7.70	7.28	18.28
5,805.00	11.55	139.32	5,801.49	-101.41	76.64	126.62	8.82	7.63	24.88
5,837.00	13.79	143.96	5,832.71	-106.93	80.97	133.59	7.68	7.00	14.50
5,868.00	16.57	146.63	5,862.63	-113.61	85.58	141.70	9.24	8.97	8.61
5,900.00	19.24	147.75	5,893.07	-121.88	90.90	151.53	8.41	8.34	3.50
5,932.00	21.76	147.87	5,923.04	-131.36	96.87	162.74	7.88	7.88	0.38
5,963.00	24.38	148.68	5,951.56	-141.70	103.26	174.88	8.51	8.45	2.61
5,995.00	27.75	146.73	5,980.30	-153.57	110.78	188.94	10.87	10.53	-6.09
6,027.00	31.02	146.15	6,008.18	-166.65	119.46	204.63	10.26	10.22	-1.81
6,059.00	34.41	144.62	6,035.10	-180.87	129.29	221.91	10.90	10.59	-4.78
6,091.00	38.26	144.10	6,060.88	-196.28	140.34	240.82	12.07	12.03	-1.63
6,122.00	40.29	142.18	6,084.87	-211.97	152.12	260.37	7.63	6.55	-6.19
6,154.00	40.17	142.30	6,109.31	-228.31	164.77	280.94	0.45	-0.38	0.38
6,214.00	41.05	141.51	6,154.85	-259.04	188.87	319.77	1.70	1.47	-1.32
6,275.00	41.44	138.66	6,200.72	-289.88	214.67	359.59	3.15	0.64	-4.67
6,336.00	41.71	137.80	6,246.36	-320.07	241.64	399.49	1.03	0.44	-1.41
6,397.00	41.55	138.38	6,291.95	-350.23	268.70	439.41	0.68	-0.26	0.95

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 6H	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)
6,457.00	40.48	140.41	6,337.23	-380.11	294.33	478.33	2.85	-1.78	3.38
6,487.00	39.89	139.52	6,360.15	-394.93	306.78	497.50	2.74	-1.97	-2.97
6,517.00	40.70	138.86	6,383.03	-409.62	319.46	516.67	3.05	2.70	-2.20
6,547.00	42.97	138.52	6,405.38	-424.65	332.67	536.42	7.60	7.57	-1.13
6,577.00	45.88	140.14	6,426.80	-440.58	346.35	557.18	10.41	9.70	5.40
6,608.00	48.73	141.00	6,447.82	-458.18	360.82	579.77	9.42	9.19	2.77
6,638.00	51.70	142.52	6,467.02	-476.28	375.08	602.68	10.64	9.90	5.07
6,668.00	53.87	143.97	6,485.16	-495.43	389.37	626.49	8.19	7.23	4.83
6,698.00	55.86	145.83	6,502.43	-515.50	403.47	650.98	8.35	6.63	6.20
6,728.00	58.02	146.09	6,518.79	-536.33	417.54	676.11	7.24	7.20	0.87
6,759.00	60.10	146.62	6,534.73	-558.47	432.27	702.69	6.87	6.71	1.71
6,789.00	62.28	147.75	6,549.18	-580.56	446.52	728.97	7.98	7.27	3.77
6,820.00	64.40	148.01	6,563.09	-604.02	461.24	756.67	6.88	6.84	0.84
6,850.00	66.11	148.60	6,575.65	-627.20	475.56	783.91	5.97	5.70	1.97
6,880.00	68.26	148.99	6,587.28	-650.85	489.88	811.56	7.27	7.17	1.30
6,910.00	70.17	149.49	6,597.93	-674.95	504.23	839.60	6.55	6.37	1.67
6,941.00	72.29	149.68	6,607.90	-700.26	519.09	868.94	6.86	6.84	0.61
6,971.00	73.98	150.25	6,616.60	-725.12	533.45	897.63	5.92	5.63	1.90
7,001.00	75.72	150.68	6,624.44	-750.31	547.73	926.56	5.96	5.80	1.43
7,031.00	78.03	150.65	6,631.26	-775.78	562.04	955.74	7.70	7.70	-0.10
7,061.00	80.46	149.93	6,636.85	-801.38	576.65	985.19	8.44	8.10	-2.40
7,091.00	82.96	150.04	6,641.18	-827.08	591.50	1,014.86	8.34	8.33	0.37
7,121.00	85.26	149.36	6,644.26	-852.84	606.55	1,044.68	7.99	7.67	-2.27
7,182.00	88.35	148.63	6,647.66	-905.04	637.92	1,105.57	5.20	5.07	-1.20
7,246.00	89.36	146.71	6,648.94	-959.10	672.14	1,169.55	3.39	1.58	-3.00
7,309.00	89.16	147.21	6,649.75	-1,011.91	706.48	1,232.54	0.85	-0.32	0.79
7,372.00	89.36	148.52	6,650.56	-1,065.25	739.99	1,295.53	2.10	0.32	2.08
7,436.00	89.56	147.44	6,651.17	-1,119.51	773.92	1,359.53	1.72	0.31	-1.69
7,500.00	89.60	146.92	6,651.64	-1,173.30	808.61	1,423.52	0.81	0.06	-0.81
7,563.00	89.70	148.04	6,652.02	-1,226.42	842.48	1,486.51	1.78	0.16	1.78
7,627.00	89.60	149.07	6,652.41	-1,281.02	875.86	1,550.51	1.62	-0.16	1.61
7,691.00	90.13	148.84	6,652.56	-1,335.85	908.87	1,614.50	0.90	0.83	-0.36
7,754.00	90.87	148.15	6,652.01	-1,389.56	941.79	1,677.49	1.61	1.17	-1.10
7,818.00	90.64	148.40	6,651.17	-1,443.99	975.44	1,741.49	0.53	-0.36	0.39
7,881.00	91.11	148.30	6,650.21	-1,497.62	1,008.49	1,804.48	0.76	0.75	-0.16
7,945.00	91.01	148.80	6,649.02	-1,552.20	1,041.88	1,868.46	0.80	-0.16	0.78
8,009.00	91.04	148.33	6,647.88	-1,606.80	1,075.25	1,932.45	0.74	0.05	-0.73
8,072.00	90.17	148.32	6,647.21	-1,660.41	1,108.33	1,995.44	1.38	-1.38	-0.02
8,135.00	89.56	148.37	6,647.36	-1,714.04	1,141.40	2,058.44	0.97	-0.97	0.08
8,199.00	88.99	149.20	6,648.17	-1,768.77	1,174.56	2,122.43	1.57	-0.89	1.30
8,263.00	89.23	148.58	6,649.17	-1,823.56	1,207.62	2,186.42	1.04	0.38	-0.97
8,326.00	89.53	148.72	6,649.85	-1,877.36	1,240.40	2,249.41	0.53	0.48	0.22
8,390.00	89.30	149.53	6,650.50	-1,932.28	1,273.24	2,313.39	1.32	-0.36	1.27
8,453.00	89.09	149.48	6,651.39	-1,986.56	1,305.21	2,376.36	0.34	-0.33	-0.08

Scientific Drilling Survey Report

Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well Martin 6H - Slot 6H
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 6H	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)
8,517.00	88.92	149.61	6,652.50	-2,041.73	1,337.64	2,440.33	0.33	-0.27	0.20
8,580.00	89.06	149.00	6,653.61	-2,095.89	1,369.79	2,503.30	0.99	0.22	-0.97
8,644.00	88.56	148.28	6,654.94	-2,150.53	1,403.09	2,567.28	1.37	-0.78	-1.13
8,707.00	88.86	148.49	6,656.36	-2,204.17	1,436.11	2,630.27	0.58	0.48	0.33
8,771.00	90.13	150.95	6,656.92	-2,259.43	1,468.38	2,694.23	4.33	1.98	3.84
8,834.00	89.46	151.17	6,657.15	-2,314.56	1,498.86	2,757.14	1.12	-1.06	0.35
8,898.00	89.93	151.74	6,657.49	-2,370.78	1,529.44	2,821.02	1.15	0.73	0.89
8,962.00	90.03	150.96	6,657.51	-2,426.94	1,560.13	2,884.91	1.23	0.16	-1.22
9,025.00	91.58	150.76	6,656.62	-2,481.96	1,590.80	2,947.82	2.48	2.46	-0.32
9,089.00	91.27	151.12	6,655.03	-2,537.89	1,621.88	3,011.72	0.74	-0.48	0.56
9,153.00	90.34	151.16	6,654.13	-2,593.93	1,652.77	3,075.61	1.45	-1.45	0.06
9,216.00	90.20	151.47	6,653.84	-2,649.20	1,683.01	3,138.51	0.54	-0.22	0.49
9,279.00	89.30	152.71	6,654.11	-2,704.87	1,712.49	3,201.34	2.43	-1.43	1.97
9,342.00	88.83	152.72	6,655.14	-2,760.85	1,741.37	3,264.12	0.75	-0.75	0.02
9,403.00	88.96	152.26	6,656.32	-2,814.94	1,769.54	3,324.92	0.78	0.21	-0.75
9,467.00	89.56	151.29	6,657.14	-2,871.33	1,799.81	3,388.78	1.78	0.94	-1.52
9,531.00	90.07	151.06	6,657.35	-2,927.40	1,830.66	3,452.68	0.87	0.80	-0.36
9,594.00	89.63	148.99	6,657.51	-2,981.97	1,862.14	3,515.63	3.36	-0.70	-3.29
9,658.00	88.36	148.16	6,658.64	-3,036.57	1,895.50	3,579.62	2.37	-1.98	-1.30
9,721.00	88.56	148.22	6,660.33	-3,090.09	1,928.69	3,642.60	0.33	0.32	0.10
9,785.00	89.23	144.48	6,661.56	-3,143.35	1,964.14	3,706.55	5.94	1.05	-5.84
9,849.00	89.97	144.66	6,662.01	-3,195.49	2,001.24	3,770.43	1.19	1.16	0.28
9,913.00	92.42	145.85	6,660.68	-3,248.07	2,037.71	3,834.34	4.26	3.83	1.86
9,976.00	94.57	146.45	6,656.84	-3,300.29	2,072.73	3,897.18	3.54	3.41	0.95
10,040.00	92.31	145.68	6,653.00	-3,353.28	2,108.40	3,961.03	3.73	-3.53	-1.20
10,104.00	90.67	146.56	6,651.33	-3,406.40	2,144.06	4,024.97	2.91	-2.56	1.38
10,168.00	89.93	146.39	6,651.00	-3,459.75	2,179.41	4,088.95	1.19	-1.16	-0.27
10,231.00	89.73	145.86	6,651.18	-3,512.06	2,214.52	4,151.91	0.90	-0.32	-0.84
10,294.00	89.53	145.96	6,651.59	-3,564.23	2,249.83	4,214.87	0.35	-0.32	0.16
10,358.00	89.40	146.92	6,652.19	-3,617.56	2,285.21	4,278.84	1.51	-0.20	1.50
10,421.00	89.87	148.47	6,652.59	-3,670.80	2,318.88	4,341.84	2.57	0.75	2.46
10,484.00	90.47	148.85	6,652.40	-3,724.61	2,351.64	4,404.83	1.13	0.95	0.60
10,548.00	90.67	148.49	6,651.77	-3,779.28	2,384.92	4,468.82	0.64	0.31	-0.56
10,611.00	90.57	148.83	6,651.08	-3,833.08	2,417.68	4,531.82	0.56	-0.16	0.54
10,675.00	90.17	149.68	6,650.67	-3,888.08	2,450.40	4,595.80	1.47	-0.63	1.33
10,739.00	89.09	149.77	6,651.08	-3,943.35	2,482.67	4,659.77	1.69	-1.69	0.14
10,802.00	88.79	149.63	6,652.25	-3,997.74	2,514.44	4,722.73	0.53	-0.48	-0.22
10,865.00	89.46	149.20	6,653.21	-4,051.97	2,546.50	4,785.70	1.26	1.06	-0.68
10,929.00	89.87	149.00	6,653.59	-4,106.88	2,579.36	4,849.69	0.71	0.64	-0.31
10,992.00	89.73	149.21	6,653.81	-4,160.94	2,611.71	4,912.68	0.40	-0.22	0.33
11,056.00	89.93	148.90	6,653.99	-4,215.83	2,644.62	4,976.66	0.58	0.31	-0.48
11,120.00	90.13	148.52	6,653.96	-4,270.52	2,677.86	5,040.66	0.67	0.31	-0.59
11,184.00	90.54	148.34	6,653.59	-4,325.05	2,711.37	5,104.66	0.70	0.64	-0.28

Scientific Drilling Survey Report

Company: Stone Energy Corporation	Local Co-ordinate Reference: Well Martin 6H - Slot 6H
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 6H	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)
11,247.00	90.10	148.20	6,653.24	-4,378.63	2,744.50	5,167.65	0.73	-0.70	-0.22
11,310.00	89.73	148.00	6,653.33	-4,432.12	2,777.79	5,230.65	0.67	-0.59	-0.32
11,374.00	90.00	147.99	6,653.48	-4,486.39	2,811.71	5,294.65	0.42	0.42	-0.02
11,438.00	90.24	148.25	6,653.35	-4,540.73	2,845.51	5,358.65	0.55	0.38	0.41
11,502.00	90.81	147.71	6,652.76	-4,595.00	2,879.44	5,422.65	1.23	0.89	-0.84
11,565.00	90.17	148.41	6,652.22	-4,648.45	2,912.77	5,485.65	1.51	-1.02	1.11
11,629.00	89.83	148.65	6,652.22	-4,703.04	2,946.18	5,549.64	0.65	-0.53	0.38
11,692.00	90.20	148.07	6,652.20	-4,756.68	2,979.23	5,612.64	1.09	0.59	-0.92
11,756.00	90.03	148.01	6,652.08	-4,810.98	3,013.11	5,676.64	0.28	-0.27	-0.09
11,819.00	89.93	147.31	6,652.10	-4,864.20	3,046.81	5,739.64	1.12	-0.16	-1.11
11,883.00	90.00	147.83	6,652.14	-4,918.22	3,081.13	5,803.64	0.82	0.11	0.81
11,945.00	90.30	148.88	6,651.97	-4,971.00	3,113.66	5,865.64	1.76	0.48	1.69
12,008.00	90.20	149.76	6,651.70	-5,025.18	3,145.80	5,928.62	1.41	-0.16	1.40
12,072.00	90.60	149.36	6,651.25	-5,080.36	3,178.22	5,992.59	0.88	0.63	-0.63
12,135.00	90.47	149.13	6,650.66	-5,134.50	3,210.44	6,055.57	0.42	-0.21	-0.37
12,180.00	89.73	149.46	6,650.59	-5,173.19	3,233.42	6,100.56	1.80	-1.64	0.73

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (")	Hole Diameter (")	
85.00	85.00	93.00		20	20	
907.00	907.00	908.99		13-3/8	13-3/8	
2,227.00	2,226.95	2237.94		9-5/8	9-5/8	
12,180.00	6,650.59	6674.71		5-1/2	5-1/2	

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
18.00	18.00	0.00	0.00	Ground Level	
108.00	108.00	0.01	-0.06	First SDI Gyro Survey	
2,228.00	2,227.95	10.12	4.02	Last SDI Gyro Survey	
2,305.00	2,304.94	10.84	4.34	First SDI MWD Survey	
5,603.00	5,600.60	-89.19	63.29	Last SDI MWD Survey	
5,674.00	5,671.56	-91.13	64.93	Projection to Bit	

Checked By: _____	Approved By: _____	Date: _____
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Job Number: 231114HMP223289
Company: Stone Energy
Lease/Well: Martin 6H
Location: New Martinsville
Rig Name: Saxon 141
State/County: West Virginia/ Wetzel
Country: USA

Elev. GL: 906.00 ft **RKB:** 18.00 ft
System: US State Plane 1927 (Exact solution)
Group: West Virginia North 4701
Datum: CLARKE 1866
Mag. Decl.: 0.00° (C:\HawkEye\bggm2013.dat)
Grid Conv.: -0.80747 W
Date: Wednesday, November 19, 2014



Calculated by HawkEye Software
 Minimum Curvature Method
 Vertical Section Plane 148.19°
 Northing (US ft): 407720.00 Easting (US ft): 1643296.00
 Latitude: 39°36'45.0956" N Longitude: -80°45'58.1709" W
 Direction Reference: Grid North



Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS */100 Ft	Closure Dir Deg	Closure (Ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.00	0.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	0.00
108.00	0.08	277.50	108.00	0.01	-0.06	-0.04	0.09	277.50	0.06
208.00	0.02	239.08	208.00	0.01	-0.15	-0.08	0.07	273.26	0.15
308.00	0.03	215.21	308.00	-0.02	-0.18	-0.07	0.01	262.89	0.18
408.00	0.14	237.45	408.00	-0.11	-0.29	-0.06	0.11	249.67	0.31
508.00	0.15	266.90	508.00	-0.18	-0.53	-0.12	0.07	251.00	0.56
608.00	0.19	301.68	608.00	-0.10	-0.80	-0.34	0.11	262.74	0.81
708.00	0.19	337.67	708.00	0.14	-1.00	-0.65	0.12	277.85	1.01
808.00	0.09	26.68	808.00	0.36	-1.03	-0.85	0.15	289.33	1.09
908.00	0.33	25.17	908.00	0.69	-0.87	-1.05	0.24	308.40	1.12
943.00	0.49	24.92	942.99	0.92	-0.77	-1.19	0.46	320.13	1.20
1008.00	0.38	32.24	1007.99	1.35	-0.54	-1.43	0.19	338.40	1.46
1108.00	0.40	27.27	1107.99	1.94	-0.20	-1.76	0.04	354.15	1.96
1208.00	0.60	31.13	1207.99	2.70	0.23	-2.18	0.20	4.89	2.71
1258.00	0.65	24.30	1257.98	3.19	0.48	-2.45	0.18	8.63	3.22
1308.00	0.39	25.43	1307.98	3.60	0.67	-2.70	0.52	10.60	3.66
1408.00	0.06	25.67	1407.98	3.95	0.84	-2.92	0.33	12.02	4.04
1508.00	0.19	32.12	1507.98	4.14	0.95	-3.02	0.13	12.96	4.25
1608.00	0.35	36.98	1607.98	4.52	1.22	-3.20	0.16	15.14	4.69
1708.00	0.40	33.76	1707.98	5.06	1.60	-3.45	0.05	17.58	5.31
1808.00	0.46	24.52	1807.97	5.71	1.96	-3.82	0.09	18.96	6.04
1908.00	0.54	27.55	1907.97	6.50	2.35	-4.28	0.08	19.85	6.91
2008.00	0.79	25.44	2007.96	7.54	2.86	-4.90	0.25	20.79	8.06
2043.00	0.79	26.16	2042.96	7.97	3.07	-5.16	0.03	21.07	8.54
2108.00	0.66	22.00	2107.95	8.72	3.41	-5.61	0.22	21.35	9.36
2208.00	0.79	24.30	2207.94	9.88	3.91	-6.34	0.13	21.53	10.63
2228.00	0.69	26.98	2227.94	10.12	4.02	-6.48	0.53	21.67	10.89
2305.00	0.49	19.51	2304.94	10.84	4.34	-6.92	0.28	21.82	11.68
2399.00	1.35	105.43	2398.93	10.92	5.54	-6.36	1.49	26.90	12.25
2494.00	1.97	118.53	2493.89	9.85	8.06	-4.12	0.76	39.29	12.72
2587.99	2.58	132.40	2587.81	7.65	11.04	-0.68	0.87	55.28	13.43
2681.99	2.91	152.19	2681.71	4.11	13.71	3.73	1.06	73.31	14.32
2775.99	2.85	158.12	2775.59	-0.17	15.70	8.42	0.32	90.61	15.70
2869.99	2.52	150.63	2869.49	-4.14	17.58	12.78	0.51	103.24	18.06
2964.99	2.35	139.49	2964.40	-7.44	19.87	16.79	0.53	110.52	21.22
3058.99	2.15	161.10	3058.33	-10.57	21.69	20.42	0.92	115.98	24.13
3152.99	2.07	169.91	3152.27	-13.91	22.56	23.71	0.36	121.66	26.51
3246.99	1.84	168.10	3246.21	-17.06	23.17	26.71	0.25	126.36	28.77
3340.99	2.15	161.80	3340.15	-20.21	24.03	29.84	0.40	130.06	31.40
3436.99	2.22	155.62	3436.08	-23.62	25.36	33.44	0.26	132.96	34.65
3530.99	2.25	150.01	3530.01	-26.87	27.04	37.09	0.23	134.82	38.12
3624.99	2.08	138.02	3623.95	-29.74	29.10	40.61	0.51	135.62	41.61
3719.99	1.92	153.67	3718.89	-32.45	30.96	43.89	0.60	136.34	44.85
3813.99	2.02	164.38	3812.83	-35.45	32.10	47.05	0.41	137.84	47.83

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS %/100 Ft	Closure Dir Deg	Closure (Ft)
3907.99	1.78	164.35	3906.78	-38.45	32.94	50.04	0.26	139.41	50.64
4001.99	2.03	150.67	4000.73	-41.31	34.15	53.11	0.55	140.42	53.60
4095.99	2.32	151.16	4094.66	-44.43	35.89	56.67	0.31	141.07	57.11
4189.99	2.03	158.71	4188.59	-47.65	37.41	60.21	0.43	141.86	60.58
4283.99	1.50	170.00	4282.55	-50.41	38.23	62.99	0.67	142.83	63.26
4377.99	1.22	169.40	4376.52	-52.61	38.62	65.06	0.30	143.71	65.26
4471.99	0.98	111.48	4470.51	-53.88	39.56	66.64	1.15	143.72	66.84
4565.99	1.76	106.50	4564.48	-54.59	41.69	68.36	0.84	142.63	68.69
4659.99	2.78	122.15	4658.40	-56.21	45.00	71.49	1.26	141.32	72.01
4755.99	2.63	146.39	4754.30	-59.28	48.19	75.78	1.19	140.89	76.40
4849.99	2.11	154.98	4848.22	-62.65	50.12	79.66	0.67	141.34	80.23
4943.99	1.80	159.11	4942.17	-65.60	51.38	82.82	0.36	141.93	83.32
5037.99	1.49	169.40	5036.13	-68.18	52.13	85.41	0.45	142.60	85.82
5131.99	1.79	173.15	5130.09	-70.83	52.53	87.88	0.34	143.44	88.19
5225.99	2.46	152.66	5224.02	-74.08	53.63	91.23	1.07	144.10	91.46
5320.99	2.91	144.89	5318.92	-77.87	55.95	95.67	0.61	144.30	95.89
5414.99	2.89	147.12	5412.80	-81.81	58.61	100.42	0.12	144.38	100.64
5508.99	2.86	149.39	5506.68	-85.82	61.09	105.13	0.13	144.55	105.34
5602.99	2.05	143.56	5600.59	-89.19	63.29	109.15	0.90	144.64	109.36
5646.00	1.78	138.57	5643.58	-90.31	64.18	110.58	0.74	144.60	110.79
5678.00	2.88	137.14	5675.55	-91.27	65.06	111.86	3.44	144.52	112.09
5709.00	4.78	127.47	5706.48	-92.63	66.61	113.83	6.45	144.28	114.09
5741.00	6.78	125.51	5738.32	-94.54	69.21	116.82	6.28	143.79	117.16
5773.00	9.11	131.36	5770.01	-97.31	72.65	120.99	7.70	143.25	121.44
5805.00	11.55	139.32	5801.49	-101.41	76.64	126.58	8.82	142.92	127.12
5837.00	13.79	143.96	5832.71	-106.93	80.97	133.55	7.68	142.86	134.13
5868.00	16.57	146.63	5862.63	-113.61	85.58	141.65	9.24	143.01	142.23
5900.00	19.24	147.75	5893.07	-121.88	90.90	151.49	8.41	143.28	152.05
5932.00	21.76	147.87	5923.04	-131.36	96.87	162.69	7.88	143.59	163.22
5963.00	24.38	148.68	5951.56	-141.70	103.26	174.84	8.51	143.92	175.33
5995.00	27.75	146.73	5980.30	-153.57	110.78	188.90	10.86	144.20	189.36
6027.00	31.02	146.15	6008.18	-166.65	119.46	204.59	10.26	144.37	205.04
6059.00	34.41	144.62	6035.10	-180.87	129.29	221.86	10.90	144.44	222.33
6091.00	38.26	144.10	6060.88	-196.28	140.34	240.77	12.07	144.43	241.29
6122.00	40.29	142.18	6084.87	-211.97	152.12	260.32	7.63	144.34	260.91
6154.00	40.17	142.30	6109.31	-228.31	164.77	280.87	0.45	144.18	281.56
6214.00	41.05	141.51	6154.85	-259.05	188.87	319.69	1.70	143.90	320.59
6275.00	41.44	138.66	6200.72	-289.88	214.67	359.50	3.15	143.48	360.71
6336.00	41.71	137.80	6246.36	-320.07	241.64	399.36	1.03	142.95	401.04
6397.00	41.55	138.38	6291.95	-350.23	268.70	439.26	0.68	142.50	441.43
6457.00	40.48	140.41	6337.23	-380.11	294.33	478.17	2.85	142.25	480.75
6487.00	39.89	139.52	6360.15	-394.93	306.78	497.32	2.74	142.16	500.09
6517.00	40.70	138.86	6383.03	-409.62	319.46	516.49	3.05	142.05	519.47
6547.00	42.97	138.52	6405.38	-424.65	332.67	536.22	7.60	141.92	539.44
6577.00	45.88	140.14	6426.80	-440.58	346.35	556.97	10.41	141.83	560.42
6608.00	48.73	141.00	6447.82	-458.18	360.82	579.55	9.42	141.78	583.19
6638.00	51.70	142.52	6467.02	-476.28	375.08	602.45	10.64	141.78	606.24
6668.00	53.87	143.97	6485.16	-495.43	389.37	626.25	8.19	141.84	630.12
6698.00	55.86	145.83	6502.43	-515.50	403.47	650.74	8.35	141.95	654.62
6728.00	58.02	146.09	6518.79	-536.33	417.54	675.87	7.24	142.10	679.70
6759.00	60.10	146.62	6534.73	-558.47	432.27	702.44	6.87	142.26	706.22
6789.00	62.28	147.75	6549.18	-580.56	446.52	728.72	7.98	142.44	732.41
6820.00	64.40	148.01	6563.09	-604.02	461.24	756.42	6.88	142.63	759.99
6850.00	66.11	148.60	6575.65	-627.20	475.56	783.67	5.97	142.83	787.11
6880.00	68.26	148.99	6587.28	-650.85	489.88	811.32	7.27	143.03	814.61
6910.00	70.17	149.49	6597.93	-674.95	504.23	839.36	6.55	143.24	842.50

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS ¹ /100 Ft	Closure Dir Deg	Closure (Ft)
6941.00	72.29	149.68	6607.90	-700.26	519.09	868.70	6.86	143.45	871.68
6971.00	73.98	150.25	6616.60	-725.12	533.45	897.39	5.92	143.66	900.21
7001.00	75.72	150.68	6624.44	-750.31	547.73	926.33	5.96	143.87	928.96
7031.00	78.03	150.65	6631.26	-775.78	562.04	955.51	7.70	144.08	957.98
7061.00	80.46	149.93	6636.85	-801.38	576.65	984.96	8.44	144.26	987.28
7091.00	82.96	150.04	6641.18	-827.08	591.50	1014.63	8.34	144.43	1016.82
7121.00	85.26	149.36	6644.26	-852.84	606.55	1044.46	7.99	144.58	1046.54
7182.00	88.35	148.63	6647.66	-905.04	637.92	1105.35	5.20	144.82	1107.27
7246.00	89.36	146.71	6648.94	-959.10	672.14	1169.33	3.39	144.98	1171.18
7309.00	89.16	147.21	6649.75	-1011.91	706.48	1232.31	0.85	145.08	1234.13
7372.00	89.36	148.52	6650.56	-1065.25	739.99	1295.31	2.10	145.21	1297.06
7436.00	89.56	147.44	6651.17	-1119.51	773.92	1359.30	1.72	145.34	1360.98
7500.00	89.60	146.92	6651.64	-1173.30	808.61	1423.29	0.81	145.43	1424.95
7563.00	89.70	148.04	6652.02	-1226.42	842.48	1486.28	1.78	145.51	1487.91
7627.00	89.60	149.07	6652.41	-1281.02	875.86	1550.28	1.62	145.64	1551.82
7691.00	90.13	148.84	6652.56	-1335.85	908.87	1614.27	0.90	145.77	1615.72
7754.00	90.87	148.15	6652.01	-1389.56	941.79	1677.27	1.61	145.87	1678.64
7818.00	90.64	148.40	6651.17	-1443.99	975.44	1741.26	0.53	145.96	1742.58
7881.00	91.11	148.30	6650.21	-1497.62	1008.49	1804.26	0.76	146.04	1805.52
7945.00	91.01	148.80	6649.02	-1552.20	1041.88	1868.24	0.80	146.13	1869.45
8009.00	91.04	148.33	6647.88	-1606.80	1075.25	1932.23	0.74	146.21	1933.39
8072.00	90.17	148.32	6647.21	-1660.41	1108.33	1995.23	1.38	146.28	1996.34
8135.00	89.56	148.37	6647.36	-1714.04	1141.40	2058.23	0.97	146.34	2059.30
8199.00	88.99	149.20	6648.17	-1768.77	1174.56	2122.22	1.57	146.41	2123.24
8263.00	89.23	148.58	6649.17	-1823.56	1207.62	2186.20	1.04	146.49	2187.17
8326.00	89.53	148.72	6649.85	-1877.36	1240.40	2249.20	0.53	146.55	2250.12
8390.00	89.30	149.53	6650.50	-1932.28	1273.24	2313.19	1.32	146.62	2314.06
8453.00	89.09	149.48	6651.39	-1986.56	1305.21	2376.16	0.34	146.69	2376.97
8517.00	88.92	149.61	6652.50	-2041.73	1337.64	2440.14	0.33	146.77	2440.89
8580.00	89.06	149.00	6653.61	-2095.89	1369.79	2503.11	0.99	146.83	2503.82
8644.00	88.56	148.28	6654.94	-2150.53	1403.09	2567.10	1.37	146.88	2567.77
8707.00	88.86	148.49	6656.36	-2204.17	1436.11	2630.08	0.58	146.91	2630.73
8771.00	90.13	150.95	6656.92	-2259.43	1468.38	2694.05	4.33	146.98	2694.65
8834.00	89.46	151.17	6657.15	-2314.56	1498.86	2756.97	1.12	147.07	2757.49
8898.00	89.93	151.74	6657.49	-2370.78	1529.44	2820.86	1.15	147.17	2821.31
8962.00	90.03	150.96	6657.51	-2426.94	1560.13	2884.77	1.23	147.27	2885.14
9025.00	91.58	150.76	6656.62	-2481.96	1590.80	2947.69	2.48	147.34	2948.01
9089.00	91.27	151.12	6655.03	-2537.89	1621.88	3011.60	0.74	147.42	3011.87
9153.00	90.34	151.16	6654.13	-2593.93	1652.77	3075.50	1.45	147.50	3075.73
9216.00	90.20	151.47	6653.84	-2649.20	1683.01	3138.41	0.54	147.57	3138.59
9279.00	89.30	152.71	6654.11	-2704.87	1712.49	3201.26	2.43	147.66	3201.40
9342.00	88.83	152.72	6655.14	-2760.85	1741.37	3264.06	0.75	147.76	3264.15
9403.00	88.96	152.26	6656.31	-2814.94	1769.54	3324.87	0.78	147.85	3324.93
9467.00	89.56	151.29	6657.14	-2871.33	1799.81	3388.74	1.78	147.92	3388.78
9531.00	90.07	151.06	6657.35	-2927.40	1830.66	3452.66	0.87	147.98	3452.68
9594.00	89.63	148.99	6657.51	-2981.97	1862.14	3515.62	3.36	148.02	3515.63
9658.00	88.36	148.16	6658.64	-3036.57	1895.50	3579.61	2.37	148.03	3579.62
9721.00	88.56	148.22	6660.33	-3090.09	1928.69	3642.58	0.33	148.03	3642.60
9785.00	89.23	144.48	6661.56	-3143.35	1964.14	3706.53	5.94	148.00	3706.55
9849.00	89.97	144.66	6662.01	-3195.49	2001.24	3770.40	1.19	147.94	3770.43
9913.00	92.42	145.85	6660.68	-3248.07	2037.71	3834.29	4.26	147.90	3834.34
9976.00	94.57	146.45	6656.84	-3300.29	2072.73	3897.13	3.54	147.87	3897.19
10040.00	92.31	145.68	6653.00	-3353.28	2108.40	3960.97	3.73	147.84	3961.04
10104.00	90.67	146.56	6651.33	-3406.40	2144.06	4024.90	2.91	147.81	4024.99
10168.00	89.93	146.39	6651.00	-3459.75	2179.41	4088.87	1.19	147.79	4088.97
10231.00	89.73	145.86	6651.18	-3512.06	2214.52	4151.83	0.90	147.77	4151.94

Measured Depth (Ft)	INC Deg	AZM Deg	TVD (Ft)	NS (Ft)	EW (Ft)	VS (Ft)	DLS *100 Ft	Closure Dir Deg	Closure (Ft)
10294.00	89.53	145.96	6651.59	-3564.23	2249.83	4214.78	0.35	147.74	4214.91
10358.00	89.40	146.92	6652.19	-3617.56	2285.21	4278.75	1.51	147.72	4278.89
10421.00	89.87	148.47	6652.59	-3670.80	2318.88	4341.74	2.57	147.72	4341.89
10484.00	90.47	148.85	6652.40	-3724.61	2351.64	4404.74	1.13	147.73	4404.88
10548.00	90.67	148.49	6651.76	-3779.28	2384.92	4468.73	0.64	147.75	4468.87
10611.00	90.57	148.83	6651.08	-3833.08	2417.68	4531.73	0.56	147.76	4531.85
10675.00	90.17	149.68	6650.67	-3888.08	2450.40	4595.71	1.47	147.78	4595.83
10739.00	89.09	149.77	6651.08	-3943.35	2482.67	4659.69	1.69	147.81	4659.79
10802.00	88.79	149.63	6652.25	-3997.74	2514.44	4722.65	0.53	147.83	4722.75
10865.00	89.46	149.20	6653.21	-4051.97	2546.50	4785.63	1.26	147.85	4785.72
10929.00	89.87	149.00	6653.58	-4106.88	2579.36	4849.62	0.71	147.87	4849.70
10992.00	89.73	149.21	6653.80	-4160.94	2611.71	4912.61	0.40	147.88	4912.68
11056.00	89.93	148.90	6653.99	-4215.83	2644.62	4976.61	0.58	147.90	4976.67
11120.00	90.13	148.52	6653.96	-4270.52	2677.86	5040.60	0.67	147.91	5040.66
11184.00	90.54	148.34	6653.59	-4325.05	2711.37	5104.60	0.70	147.92	5104.66
11247.00	90.10	148.20	6653.24	-4378.63	2744.50	5167.60	0.73	147.92	5167.66
11310.00	89.73	148.00	6653.33	-4432.12	2777.79	5230.60	0.67	147.92	5230.66
11374.00	90.00	147.99	6653.48	-4486.39	2811.71	5294.60	0.42	147.92	5294.66
11438.00	90.24	148.25	6653.35	-4540.74	2845.51	5358.60	0.55	147.93	5358.66
11502.00	90.81	147.71	6652.76	-4595.00	2879.44	5422.60	1.23	147.93	5422.65
11565.00	90.17	148.41	6652.22	-4648.45	2912.77	5485.59	1.51	147.93	5485.65
11629.00	89.83	148.65	6652.22	-4703.04	2946.18	5549.59	0.65	147.94	5549.65
11692.00	90.20	148.07	6652.20	-4756.68	2979.23	5612.59	1.09	147.94	5612.64
11756.00	90.03	148.01	6652.08	-4810.98	3013.11	5676.59	0.28	147.94	5676.64
11819.00	89.93	147.31	6652.10	-4864.20	3046.81	5739.59	1.12	147.94	5739.64
11883.00	90.00	147.83	6652.14	-4918.22	3081.13	5803.58	0.82	147.93	5803.64
11945.00	90.30	148.88	6651.97	-4971.00	3113.66	5865.58	1.76	147.94	5865.64
12008.00	90.20	149.76	6651.70	-5025.18	3145.80	5928.57	1.41	147.95	5928.62
12072.00	90.60	149.36	6651.25	-5080.36	3178.22	5992.55	0.88	147.97	5992.59
12135.00	90.47	149.13	6650.66	-5134.50	3210.44	6055.54	0.42	147.98	6055.57
12180.00	89.73	149.46	6650.59	-5173.19	3233.42	6100.53	1.80	147.99	6100.56
Straight Line Projection									
12238.00	89.73	149.46	6650.86	-5223.14	3262.89	6158.51	0.00	148.01	6158.54