



Project: Heather Prospect (NAD 27)
 Site: Stone
 Well: 7H
 Wellbore: OH
 Design: As Drilled



WELL DETAILS: 7H

+N/S 0.00 +E/W 0.00
 Northing 421807.00
 Ground Level 1215.00
 Easting 1638993.00
 Longitude 80° 46' 35.719 W

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well 7H, Grid North
 Vertical (TVD) Reference: GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
 Calculation Method: Minimum Curvature

PROJECT DETAILS: Heather Prospect (NAD 27)

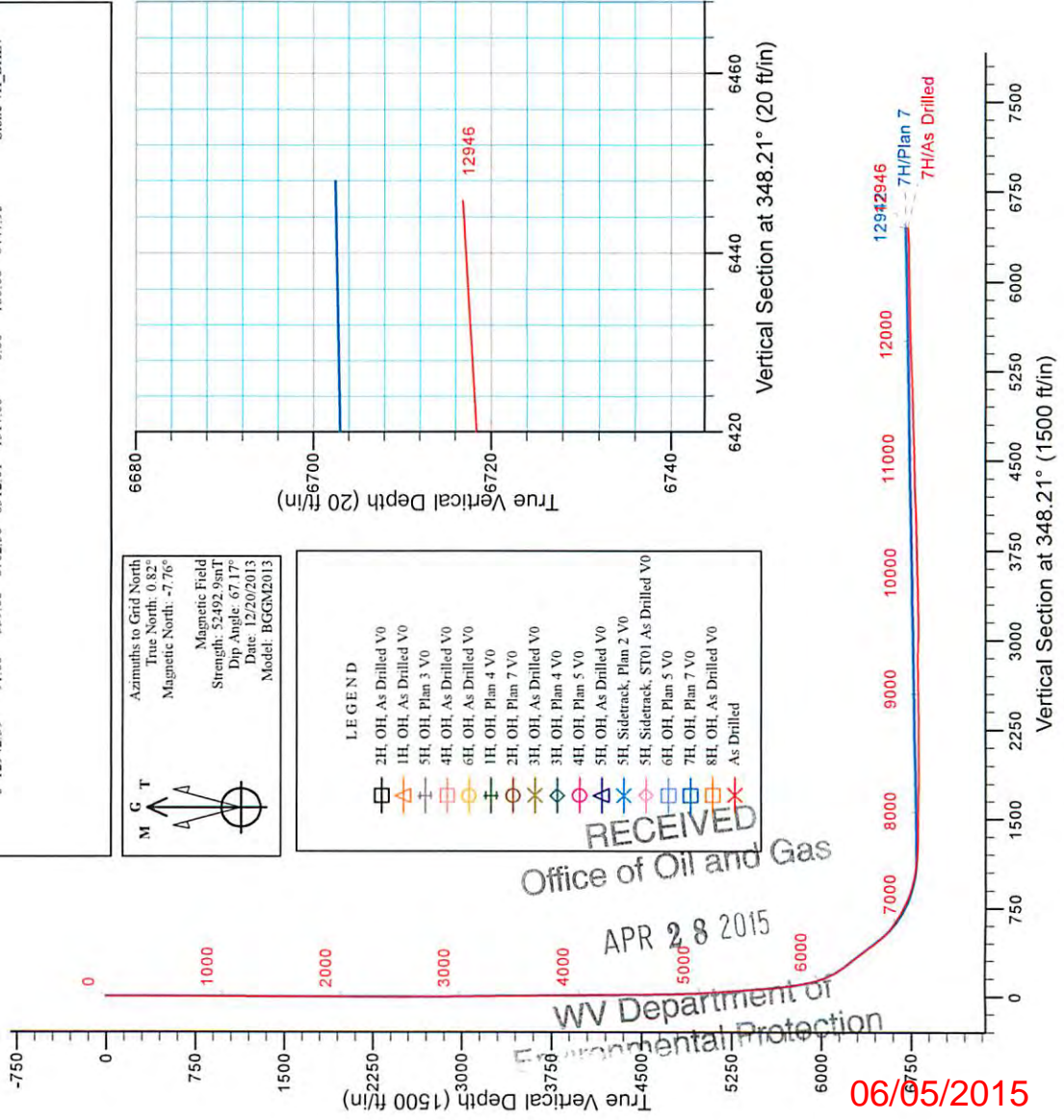
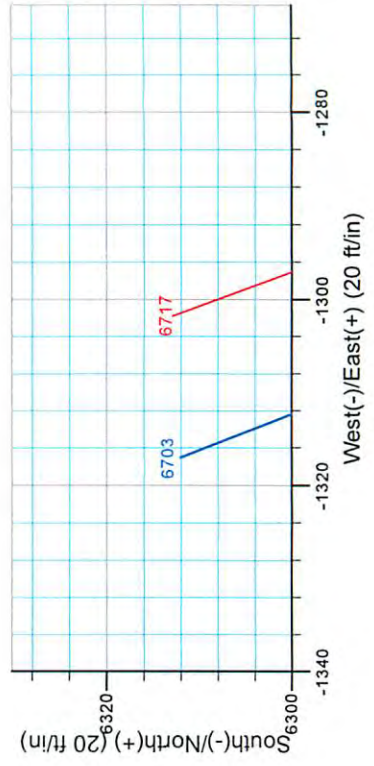
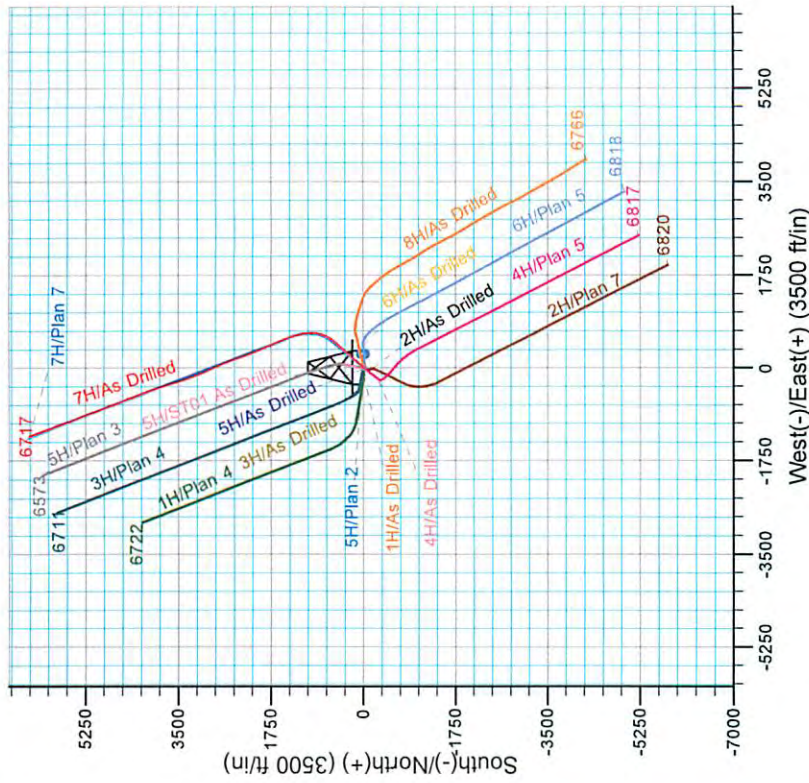
Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: West Virginia North 4701
 System Datum: Mean Sea Level

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSet	Target
1	5849.00	16.96	42.39	5837.34	125.06	111.68	0.00	0.00	99.62	
2	6284.09	51.73	39.01	6191.12	310.37	266.77	8.00	-4.65	249.34	
3	6793.33	51.73	39.01	6506.55	621.01	518.43	0.00	0.00	502.03	Stone 7H LP4
4	7637.97	91.00	339.00	6795.00	1360.62	583.55	8.00	-69.53	1212.75	Stone 7H_BHL4
5	12942.39	91.00	339.00	6702.50	6312.01	-1317.00	0.00	180.00	6447.95	

Azimuths to Grid North
 True North: 0.82°
 Magnetic North: -7.76°
 Magnetic Field
 Strength: 52.492.9nT
 Dip Angle: 67.17°
 Date: 12/20/2013
 Model: BGGM2013

LEGEND

- 2H, OH, As Drilled V0
- 1H, OH, As Drilled V0
- 5H, OH, Plan 3 V0
- 4H, OH, As Drilled V0
- 6H, OH, As Drilled V0
- 1H, OH, Plan 4 V0
- 2H, OH, Plan 7 V0
- 3H, OH, As Drilled V0
- 4H, OH, Plan 5 V0
- 5H, Sidetrack, Plan 2 V0
- 5H, Sidetrack, ST01 As Drilled V0
- 6H, OH, Plan 5 V0
- 7H, OH, Plan 7 V0
- 8H, OH, As Drilled V0
- As Drilled



06/05/2015



Stone Energy

Heather Prospect (NAD 27)

Stone

7H

OH

Design: As Drilled

Standard Survey Report

02 January, 2014



Scientific Drilling

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Survey Report



Company:	Stone Energy	Local Co-ordinate Reference:	Well 7H
Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Site:	Stone	MD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Well:	7H	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	Stone				
Site Position:		Northing:	421,797.00 usft	Latitude:	39° 39' 3.606 N
From:	Map	Easting:	1,638,950.00 usft	Longitude:	80° 46' 56.267 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.82 °

Well	7H					
Well Position	+N/-S	0.00 ft	Northing:	421,807.00 usft	Latitude:	39° 39' 3.711 N
	+E/-W	0.00 ft	Easting:	1,638,993.00 usft	Longitude:	80° 46' 55.719 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	1,215.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/15/2013	-8.51	67.21	52,620
	IGRF2010	5/29/2013	-8.51	67.19	52,606
	BGGM2013	11/26/2013	-8.57	67.17	52,501
	BGGM2013	12/20/2013	-8.58	67.17	52,493

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		348.21

Survey Program	Date	1/2/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
15.00	2,400.54	Survey 1 - Gyro (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3	
2,425.49	12,946.00	Survey 2 - MWD (OH)	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
15.00	0.00	0.00	15.00	0.00	0.00	0.00	0.00	0.00	0.00
Ground Level									
100.00	0.08	225.93	100.00	-0.04	-0.04	-0.03	0.09	0.09	0.00
First SDI Gyro Survey									
200.00	0.06	267.22	200.00	-0.09	-0.15	-0.06	0.05	-0.02	41.29
300.00	0.07	220.39	300.00	-0.14	-0.24	-0.09	0.05	0.01	-46.83

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WV Department of Environmental Protection
COMPLIANCE 5000.1 Build 70

Company:	Stone Energy	Local Co-ordinate Reference:	Well 7H
Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Site:	Stone	MD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Well:	7H	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)	
400.00	0.16	198.63	400.00	-0.32	-0.32	-0.25	0.10	0.09	-21.76	
500.00	0.15	208.79	500.00	-0.57	-0.43	-0.47	0.03	-0.01	10.16	
600.00	0.07	260.23	600.00	-0.69	-0.55	-0.57	0.12	-0.08	51.44	
700.00	0.24	158.82	700.00	-0.90	-0.54	-0.77	0.26	0.17	-101.41	
800.00	0.12	136.38	800.00	-1.17	-0.39	-1.07	0.14	-0.12	-22.44	
900.00	0.14	115.48	900.00	-1.30	-0.21	-1.23	0.05	0.02	-20.90	
1,000.00	0.13	32.76	1,000.00	-1.25	-0.03	-1.22	0.18	-0.01	-82.72	
1,100.00	0.14	180.59	1,100.00	-1.28	0.03	-1.26	0.26	0.01	147.83	
1,200.00	0.27	175.85	1,200.00	-1.64	0.04	-1.61	0.13	0.13	-4.74	
1,300.00	0.18	152.23	1,300.00	-2.01	0.13	-2.00	0.13	-0.09	-23.62	
1,400.00	0.29	179.43	1,400.00	-2.40	0.21	-2.40	0.15	0.11	27.20	
1,500.00	0.35	170.89	1,499.99	-2.96	0.26	-2.95	0.08	0.06	-8.54	
1,600.00	0.24	173.78	1,599.99	-3.47	0.33	-3.46	0.11	-0.11	2.89	
1,700.00	0.36	216.14	1,699.99	-3.93	0.17	-3.88	0.24	0.12	42.36	
1,800.00	0.12	233.34	1,799.99	-4.25	-0.10	-4.14	0.25	-0.24	17.20	
1,900.00	0.10	247.74	1,899.99	-4.34	-0.27	-4.20	0.03	-0.02	14.40	
2,000.00	0.12	224.81	1,999.99	-4.45	-0.42	-4.27	0.05	0.02	-22.93	
2,100.00	0.14	200.23	2,099.99	-4.64	-0.54	-4.43	0.06	0.02	-24.58	
2,200.00	0.20	274.82	2,199.99	-4.74	-0.75	-4.49	0.21	0.06	74.59	
2,300.00	0.06	276.97	2,299.99	-4.72	-0.98	-4.42	0.14	-0.14	2.15	
2,400.00	0.21	245.73	2,399.99	-4.79	-1.20	-4.44	0.16	0.15	-31.24	
2,400.54	0.22	244.88	2,400.53	-4.79	-1.20	-4.44	1.94	1.85	-157.41	
Last SDI Gyro Survey										
2,425.49	0.25	297.46	2,425.48	-4.78	-1.29	-4.42	0.84	0.12	210.74	
First SDI MWD Survey										
2,450.13	0.22	304.10	2,450.12	-4.73	-1.38	-4.35	0.16	-0.12	26.95	
2,482.40	0.17	288.58	2,482.39	-4.68	-1.48	-4.28	0.22	-0.15	-48.09	
2,543.00	0.03	13.73	2,542.99	-4.64	-1.56	-4.22	0.28	-0.23	140.51	
2,634.00	0.12	111.12	2,633.99	-4.65	-1.46	-4.25	0.14	0.10	107.02	
2,728.00	0.15	339.49	2,727.99	-4.57	-1.41	-4.18	0.26	0.03	-140.03	
2,821.00	0.72	8.04	2,820.99	-3.88	-1.38	-3.51	0.64	0.61	30.70	
2,913.00	1.32	16.86	2,912.97	-2.29	-0.99	-2.04	0.67	0.65	9.59	
3,007.00	1.17	18.56	3,006.95	-0.34	-0.37	-0.26	0.16	-0.16	1.81	
3,099.00	1.16	18.57	3,098.93	1.43	0.23	1.35	0.01	-0.01	0.01	
3,189.00	1.46	49.90	3,188.91	3.03	1.40	2.68	0.85	0.33	34.81	
3,279.00	1.46	60.72	3,278.88	4.33	3.27	3.57	0.31	0.00	12.02	
3,370.00	1.27	57.68	3,369.85	5.44	5.14	4.27	0.22	-0.21	-3.34	
3,461.00	1.27	61.36	3,460.83	6.46	6.87	4.92	0.09	0.00	4.04	
3,555.00	1.21	50.89	3,554.81	7.58	8.56	5.68	0.25	-0.06	-11.14	
3,649.00	1.23	57.05	3,648.79	8.76	10.17	6.50	0.14	0.02	6.55	
3,742.00	1.11	48.50	3,741.77	9.90	11.69	7.30	0.23	-0.13	-9.19	
3,835.00	0.93	52.32	3,834.75	10.96	12.96	8.08	0.21	-0.19	4.11	
3,929.00	1.00	56.03	3,928.74	11.88	14.24	8.72	0.10	0.07	3.95	

Company:	Stone Energy	Local Co-ordinate Reference:	Well 7H
Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Site:	Stone	MD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Well:	7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	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)
4,022.00	0.74	54.77	4,021.73	12.68	15.41	9.27	0.28	-0.28	-1.35
4,114.00	0.53	59.57	4,113.72	13.24	16.26	9.64	0.24	-0.23	5.22
4,209.00	0.43	16.85	4,208.72	13.80	16.74	10.09	0.38	-0.11	-44.97
4,300.00	0.72	8.60	4,299.71	14.70	16.92	10.93	0.33	0.32	-9.07
4,391.00	1.22	15.25	4,390.70	16.20	17.27	12.33	0.56	0.55	7.31
4,486.00	0.96	25.92	4,485.68	17.89	17.88	13.86	0.35	-0.27	11.23
4,578.00	0.87	32.77	4,577.67	19.17	18.59	14.97	0.15	-0.10	7.45
4,673.00	0.62	59.05	4,672.66	20.04	19.43	15.65	0.44	-0.26	27.66
4,764.00	1.15	42.87	4,763.65	20.96	20.47	16.34	0.64	0.58	-17.78
4,858.00	2.24	35.21	4,857.61	23.15	22.17	18.14	1.18	1.16	-8.15
4,951.00	3.25	34.30	4,950.50	26.82	24.70	21.21	1.09	1.09	-0.98
5,043.00	4.54	30.32	5,042.29	32.11	28.01	25.72	1.43	1.40	-4.33
5,136.00	5.61	34.36	5,134.92	39.04	32.43	31.60	1.21	1.15	4.34
5,232.00	6.83	40.18	5,230.36	47.28	38.77	38.36	1.43	1.27	6.06
5,322.00	8.06	43.26	5,319.60	55.96	46.54	45.28	1.44	1.37	3.42
5,412.00	8.20	43.58	5,408.69	65.21	55.29	52.54	0.16	0.16	0.36
5,505.00	8.22	43.17	5,500.74	74.86	64.41	60.13	0.07	0.02	-0.44
5,599.00	8.63	43.52	5,593.72	84.88	73.87	68.00	0.44	0.44	0.37
5,690.00	11.74	44.53	5,683.28	96.43	85.06	77.02	3.42	3.42	1.11
5,784.00	14.61	42.39	5,774.80	112.01	99.77	89.27	3.10	3.05	-2.28
5,849.00	16.96	42.39	5,837.34	125.06	111.68	99.62	3.62	3.62	0.00
5,866.00	17.97	42.86	5,853.56	128.82	115.14	102.58	6.00	5.94	2.76
5,898.00	21.08	42.76	5,883.71	136.66	122.41	108.78	9.72	9.72	-0.31
5,930.00	23.80	42.65	5,913.29	145.64	130.69	115.88	8.50	8.50	-0.34
5,962.00	26.65	41.78	5,942.23	155.74	139.85	123.89	8.98	8.91	-2.72
5,994.00	29.28	41.82	5,970.49	166.93	149.85	132.80	8.22	8.22	0.13
6,025.00	32.27	42.07	5,997.13	178.72	160.45	142.18	9.65	9.65	0.81
6,057.00	34.09	43.08	6,023.91	191.62	172.30	152.38	5.94	5.69	3.16
6,089.00	36.54	42.33	6,050.02	205.21	184.84	163.13	7.78	7.66	-2.34
6,121.00	39.49	40.56	6,075.23	219.99	197.88	174.93	9.83	9.22	-5.53
6,153.00	43.19	39.99	6,099.25	236.11	211.54	187.93	11.62	11.56	-1.78
6,185.00	46.31	40.70	6,121.97	253.28	226.12	201.75	9.87	9.75	2.22
6,217.00	47.98	41.20	6,143.74	270.99	241.50	215.95	5.34	5.22	1.56
6,249.00	50.24	41.12	6,164.68	289.21	257.42	230.53	7.07	7.06	-0.25
6,312.00	51.51	41.27	6,204.43	325.98	289.61	259.96	2.02	2.02	0.24
6,376.00	51.32	41.77	6,244.35	363.44	322.77	289.85	0.68	-0.30	0.78
6,440.00	51.64	41.36	6,284.21	400.90	355.99	319.74	0.71	0.50	-0.64
6,502.00	51.96	41.51	6,322.55	437.43	388.23	348.91	0.55	0.52	0.24
6,566.00	52.28	40.69	6,361.85	475.50	421.44	379.39	1.13	0.50	-1.28
6,629.00	52.58	40.22	6,400.26	513.49	453.84	409.97	0.76	0.48	-0.75
6,693.00	52.49	39.45	6,439.19	552.50	486.38	441.51	0.97	-0.14	-1.20
6,756.00	52.68	38.68	6,477.47	591.35	517.91	473.10	1.02	0.30	-1.22
6,788.00	52.90	38.75	6,496.82	611.24	533.85	489.31	0.71	0.69	0.22
6,820.00	53.47	36.85	6,516.00	631.48	549.55	505.92	5.08	1.78	-5.94

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6,852.00	56.33	32.37	6,534.40	653.02	564.40	523.98	14.53	8.94	-14.00
6,884.00	58.73	29.06	6,551.58	676.23	578.18	543.88	11.51	7.50	-10.34
6,914.00	60.40	26.05	6,566.78	699.16	590.13	563.89	10.29	5.57	-10.03
6,943.00	60.67	24.35	6,581.05	722.01	600.88	584.06	5.19	0.93	-5.86
6,974.00	60.50	21.79	6,596.27	746.85	611.46	606.21	7.21	-0.55	-8.26
7,004.00	60.83	19.19	6,610.97	771.34	620.62	628.32	7.63	1.10	-8.67
7,035.00	61.52	17.48	6,625.92	797.12	629.16	651.81	5.32	2.23	-5.52
7,065.00	62.49	15.59	6,640.00	822.52	636.70	675.13	6.43	3.23	-6.30
7,096.00	63.20	12.90	6,654.15	849.25	643.48	699.91	8.05	2.29	-8.68
7,126.00	63.43	10.65	6,667.63	875.49	648.95	724.48	6.74	0.77	-7.50
7,156.00	63.89	7.07	6,680.94	902.05	653.09	749.63	10.80	1.53	-11.93
7,186.00	64.76	4.45	6,693.94	928.94	655.80	775.41	8.39	2.90	-8.73
7,217.00	66.62	1.62	6,706.70	957.15	657.29	802.72	10.26	6.00	-9.13
7,247.00	67.77	0.07	6,718.33	984.80	657.69	829.70	6.11	3.83	-5.17
7,276.00	69.66	356.94	6,728.86	1,011.81	656.99	856.29	11.98	6.52	-10.79
7,307.00	71.14	354.54	6,739.26	1,040.93	654.81	885.24	8.72	4.77	-7.74
7,337.00	72.95	352.96	6,748.51	1,069.29	651.70	913.64	7.84	6.03	-5.27
7,367.00	74.54	351.70	6,756.91	1,097.84	647.86	942.37	6.66	5.30	-4.20
7,398.00	75.96	350.10	6,764.80	1,127.43	643.12	972.31	6.77	4.58	-5.16
7,428.00	77.38	348.26	6,771.72	1,156.11	637.64	1,001.49	7.62	4.73	-6.13
7,458.00	79.03	346.96	6,777.85	1,184.79	631.33	1,030.86	6.95	5.50	-4.33
7,489.00	81.36	345.48	6,783.13	1,214.45	624.06	1,061.38	8.87	7.52	-4.77
7,519.00	82.62	344.71	6,787.31	1,243.16	616.42	1,091.05	4.91	4.20	-2.57
7,549.00	83.04	344.69	6,791.05	1,271.87	608.56	1,120.76	1.40	1.40	-0.07
7,580.00	84.58	343.94	6,794.40	1,301.54	600.23	1,151.50	5.52	4.97	-2.42
7,610.00	86.07	343.29	6,796.84	1,330.22	591.80	1,181.30	5.42	4.97	-2.17
7,640.00	86.70	343.13	6,798.73	1,358.89	583.15	1,211.13	2.17	2.10	-0.53
7,670.00	87.41	343.30	6,800.27	1,387.57	574.50	1,240.98	2.43	2.37	0.57
7,701.00	88.39	342.51	6,801.41	1,417.18	565.39	1,271.82	4.06	3.16	-2.55
7,731.00	89.19	341.33	6,802.04	1,445.69	556.08	1,301.63	4.75	2.67	-3.93
7,761.00	89.70	341.31	6,802.33	1,474.11	546.47	1,331.42	1.70	1.70	-0.07
7,792.00	89.93	340.56	6,802.43	1,503.41	536.35	1,362.17	2.53	0.74	-2.42
7,822.00	90.64	339.28	6,802.29	1,531.58	526.05	1,391.85	4.88	2.37	-4.27
7,852.00	90.71	337.60	6,801.93	1,559.48	515.02	1,421.41	5.60	0.23	-5.60
7,882.00	89.33	335.94	6,801.92	1,587.05	503.19	1,450.81	7.20	-4.60	-5.53
7,913.00	87.95	335.18	6,802.66	1,615.26	490.37	1,481.05	5.08	-4.45	-2.45
7,944.00	87.62	334.74	6,803.86	1,643.33	477.26	1,511.20	1.77	-1.06	-1.42
7,975.00	88.08	334.77	6,805.02	1,671.35	464.05	1,541.33	1.49	1.48	0.10
8,039.00	88.39	335.26	6,806.99	1,729.33	437.03	1,603.61	0.91	0.48	0.77
8,102.00	89.06	336.10	6,808.39	1,786.72	411.09	1,665.09	1.71	1.06	1.33
8,166.00	90.20	336.33	6,808.80	1,845.29	385.28	1,727.69	1.82	1.78	0.36
8,229.00	89.83	337.45	6,808.79	1,903.23	360.55	1,789.46	1.87	-0.59	1.78
8,292.00	89.76	338.26	6,809.01	1,961.58	336.80	1,851.44	1.29	-0.11	1.29

Company:	Stone Energy	Local Co-ordinate Reference:	Well 7H
Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Site:	Stone	MD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Well:	7H	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)	
8,355.00	90.71	338.35	6,808.75	2,020.12	313.52	1,913.49	1.51	1.51	0.14	
8,419.00	90.64	338.25	6,808.00	2,079.58	289.85	1,976.53	0.19	-0.11	-0.16	
8,483.00	89.63	338.35	6,807.85	2,139.04	266.19	2,039.58	1.59	-1.58	0.16	
8,546.00	89.80	339.16	6,808.16	2,197.76	243.36	2,101.72	1.31	0.27	1.29	
8,610.00	90.74	339.42	6,807.86	2,257.62	220.73	2,164.94	1.52	1.47	0.41	
8,673.00	90.07	339.88	6,807.42	2,316.69	198.82	2,227.24	1.29	-1.06	0.73	
8,737.00	90.23	340.77	6,807.25	2,376.95	177.28	2,290.63	1.41	0.25	1.39	
8,800.00	90.47	339.91	6,806.86	2,436.28	156.08	2,353.04	1.42	0.38	-1.37	
8,864.00	90.77	340.23	6,806.17	2,496.44	134.27	2,416.39	0.69	0.47	0.50	
8,928.00	90.97	339.24	6,805.20	2,556.47	112.10	2,479.68	1.58	0.31	-1.55	
8,991.00	89.97	337.81	6,804.68	2,615.09	89.04	2,541.78	2.77	-1.59	-2.27	
9,054.00	90.54	336.65	6,804.40	2,673.18	64.66	2,603.62	2.05	0.90	-1.84	
9,117.00	90.24	336.13	6,803.97	2,730.91	39.43	2,665.28	0.95	-0.48	-0.83	
9,181.00	90.71	335.67	6,803.44	2,789.33	13.29	2,727.81	1.03	0.73	-0.72	
9,245.00	90.37	335.02	6,802.84	2,847.49	-13.40	2,790.20	1.15	-0.53	-1.02	
9,309.00	88.92	334.86	6,803.24	2,905.46	-40.51	2,852.48	2.28	-2.27	-0.25	
9,373.00	89.06	335.42	6,804.36	2,963.52	-67.41	2,914.81	0.90	0.22	0.88	
9,436.00	89.56	335.91	6,805.12	3,020.92	-93.37	2,976.30	1.11	0.79	0.78	
9,500.00	89.56	337.01	6,805.61	3,079.59	-118.93	3,038.96	1.72	0.00	1.72	
9,563.00	89.87	337.77	6,805.93	3,137.75	-143.15	3,100.84	1.30	0.49	1.21	
9,627.00	90.34	339.15	6,805.81	3,197.28	-166.65	3,163.91	2.28	0.73	2.16	
9,691.00	90.91	340.26	6,805.11	3,257.30	-188.84	3,227.20	1.95	0.89	1.73	
9,755.00	91.71	340.71	6,803.65	3,317.60	-210.22	3,290.60	1.43	1.25	0.70	
9,818.00	91.35	341.83	6,801.97	3,377.25	-230.44	3,353.12	1.87	-0.57	1.78	
9,882.00	90.67	342.61	6,800.84	3,438.18	-249.98	3,416.76	1.62	-1.06	1.22	
9,945.00	90.67	342.13	6,800.10	3,498.22	-269.06	3,479.42	0.76	0.00	-0.76	
10,009.00	91.61	341.87	6,798.83	3,559.07	-288.83	3,543.03	1.52	1.47	-0.41	
10,072.00	91.55	342.31	6,797.09	3,618.99	-308.20	3,605.65	0.70	-0.10	0.70	
10,136.00	90.91	342.36	6,795.72	3,679.96	-327.61	3,669.30	1.00	-1.00	0.08	
10,199.00	91.18	342.28	6,794.57	3,739.98	-346.74	3,731.96	0.45	0.43	-0.13	
10,262.00	90.24	341.80	6,793.79	3,799.90	-366.17	3,794.58	1.68	-1.49	-0.76	
10,325.00	90.64	342.64	6,793.31	3,859.89	-385.41	3,857.24	1.48	0.63	1.33	
10,389.00	93.02	344.68	6,791.26	3,921.27	-403.40	3,920.99	4.90	3.72	3.19	
10,453.00	93.33	343.43	6,787.72	3,982.71	-420.96	3,984.73	2.01	0.48	-1.95	
10,516.00	92.73	341.49	6,784.39	4,042.69	-439.91	4,047.32	3.22	-0.95	-3.08	
10,580.00	92.18	339.65	6,781.64	4,102.99	-461.18	4,110.69	3.00	-0.86	-2.88	
10,642.00	92.59	338.49	6,779.06	4,160.85	-483.31	4,171.85	1.98	0.66	-1.87	
10,707.00	92.42	337.63	6,776.22	4,221.08	-507.58	4,235.77	1.35	-0.26	-1.32	
10,770.00	91.01	336.83	6,774.34	4,279.14	-531.95	4,297.58	2.57	-2.24	-1.27	
10,833.00	89.73	337.20	6,773.93	4,337.14	-556.55	4,359.38	2.11	-2.03	0.59	
10,896.00	90.94	337.78	6,773.56	4,395.34	-580.67	4,421.28	2.13	1.92	0.92	
10,959.00	90.74	338.34	6,772.64	4,453.77	-604.20	4,483.28	0.94	-0.32	0.89	
11,022.00	90.37	338.23	6,772.03	4,512.29	-627.51	4,545.34	0.61	-0.59	-0.17	

Company:	Stone Energy	Local Co-ordinate Reference:	Well 7H
Project:	Heather Prospect (NAD 27)	TVD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Site:	Stone	MD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Well:	7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	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)
11,086.00	91.48	338.62	6,771.00	4,571.80	-651.04	4,608.40	1.84	1.73	0.61
11,149.00	92.79	338.65	6,768.65	4,630.43	-673.98	4,670.47	2.08	2.08	0.05
11,213.00	93.09	338.43	6,765.37	4,689.91	-697.36	4,733.48	0.58	0.47	-0.34
11,276.00	92.05	338.25	6,762.54	4,748.41	-720.59	4,795.48	1.68	-1.65	-0.29
11,337.00	91.91	338.70	6,760.43	4,805.12	-742.96	4,855.57	0.77	-0.23	0.74
11,401.00	92.05	338.44	6,758.22	4,864.66	-766.33	4,918.63	0.46	0.22	-0.41
11,463.00	91.75	338.94	6,756.17	4,922.39	-788.84	4,979.74	0.94	-0.48	0.81
11,526.00	92.65	339.28	6,753.75	4,981.20	-811.29	5,041.90	1.53	1.43	0.54
11,590.00	91.51	339.11	6,751.43	5,040.99	-834.01	5,105.06	1.80	-1.78	-0.27
11,653.00	91.21	339.31	6,749.93	5,099.87	-856.36	5,167.27	0.57	-0.48	0.32
11,716.00	92.35	339.13	6,747.97	5,158.74	-878.70	5,229.46	1.83	1.81	-0.29
11,779.00	91.61	338.71	6,745.80	5,217.49	-901.35	5,291.60	1.35	-1.17	-0.67
11,843.00	90.71	338.15	6,744.50	5,276.99	-924.87	5,354.65	1.66	-1.41	-0.88
11,906.00	91.71	338.60	6,743.17	5,335.55	-948.09	5,416.71	1.74	1.59	0.71
11,968.00	92.32	338.65	6,740.99	5,393.24	-970.67	5,477.81	0.99	0.98	0.08
12,031.00	91.71	339.00	6,738.78	5,451.95	-993.41	5,539.92	1.12	-0.97	0.56
12,095.00	91.78	339.53	6,736.83	5,511.78	-1,016.06	5,603.12	0.83	0.11	0.83
12,159.00	91.48	339.85	6,735.01	5,571.78	-1,038.26	5,666.38	0.69	-0.47	0.50
12,223.00	90.37	340.77	6,733.97	5,632.03	-1,059.82	5,729.76	2.25	-1.73	1.44
12,286.00	90.07	340.54	6,733.73	5,691.47	-1,080.69	5,792.22	0.60	-0.48	-0.37
12,350.00	91.18	340.38	6,733.03	5,751.78	-1,102.10	5,855.63	1.75	1.73	-0.25
12,414.00	91.68	341.08	6,731.44	5,812.17	-1,123.21	5,919.06	1.34	0.78	1.09
12,477.00	90.91	341.45	6,730.01	5,871.82	-1,143.44	5,981.58	1.36	-1.22	0.59
12,540.00	91.04	341.12	6,728.94	5,931.48	-1,163.65	6,044.11	0.56	0.21	-0.52
12,604.00	90.44	340.39	6,728.11	5,991.90	-1,184.75	6,107.56	1.48	-0.94	-1.14
12,668.00	91.58	340.50	6,726.99	6,052.20	-1,206.16	6,170.97	1.79	1.78	0.17
12,731.00	91.61	339.69	6,725.23	6,111.41	-1,227.60	6,233.31	1.29	0.05	-1.29
12,795.00	91.14	339.48	6,723.70	6,171.37	-1,249.92	6,296.57	0.80	-0.73	-0.33
12,859.00	92.52	340.18	6,721.65	6,231.41	-1,271.98	6,359.85	2.42	2.16	1.09
12,890.00	93.30	339.85	6,720.08	6,260.51	-1,282.56	6,390.49	2.73	2.52	-1.06
Last SDI MWD Survey									
12,946.00	93.30	339.85	6,716.85	6,312.99	-1,301.82	6,445.80	0.00	0.00	0.00
Projection to Bit									

Company:	Stone Energy	Local Co-ordinate Reference:	Well 7H
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Site:	Stone	MD Reference:	GL 1215' & KB 18' @ 1233.00ft (Saxon 141)
Well:	7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
15.00	15.00	0.00	0.00	Ground Level
100.00	100.00	-0.04	-0.04	First SDI Gyro Survey
2,400.54	2,400.53	-4.79	-1.20	Last SDI Gyro Survey
2,425.49	2,425.48	-4.78	-1.29	First SDI MWD Survey
12,890.00	6,720.08	6,260.51	-1,282.56	Last SDI MWD Survey
12,946.00	6,716.85	6,312.99	-1,301.82	Projection to Bit

Checked By: _____ Approved By: _____ Date: _____