

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

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WV Department of
Environmental Protection

API 47-103-02907 County Wetzel District Magnolia
Quad New Martinsville Pad Name Smith Field/Pool Name Mary
Farm name Smith, Sonny and Charlotte Well Number #5H
Operator (as registered with the OOG) Stone Energy Corporation
Address 1300 Fort Pierpont Dr. - Suite 201 City Morgantown State WV Zip 26508

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,388,548 Easting 516,233
Landing Point of Curve Northing 4,388,820 Easting 516,034
Bottom Hole Northing 4,389,575 Easting 515,585

Elevation (ft) 1,321 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Saturated salt mud which includes Caustic Soda, Barite, Lime, New-Drill, Perma-Lose HT, Xan-Plex D, X-Cide 102, Soda Ash, and Sodium Chloride

Date permit issued 7/31/2013 Date drilling commenced 10/24/2013 Date drilling ceased 7/2/2014
Date completion activities began 9/29/2017 Date completion activities ceased 10/11/2017
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 100 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2,185 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,017 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed

Reviewed by:
Dmj
02/16/2018

API 47-103 - 02907 Farm name Smith, Sonny and Charlotte Well number #5H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	95'	New	LS - 94 ppf		N - GTS
Surface	17.5"	13.375"	1,318' KB - 1,304' GL	New	J55 - 54.5 ppf	117' & 193'	Y - CTS
Coal	17.5"	13.375"	1,318' KB - 1,304' GL	New	J55 - 54.5 ppf	117' & 193'	Y - CTS
Intermediate 1	12.25"	9.625"	2,552'	New	J55 - 36 ppf		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	10,136'	New	P110 - 20 ppf		N - TOC @ 1,537' Calculated
Tubing							
Packer type and depth set		TAM CAP Inflatable Packer On 9.625" Casing String @ 1,186'					

Comment Details Circulated 39 bbls cement to surface on 13.375" casing string. Circulated 25 bbls cement to surface on the 9.625" casing string. Circulated 25 bbls TunedSpacer to surface on the 5.5" casing string. TOC on 5.5" calculated to be @ 1,537'.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Type 1	34	15.6	1.18	40	Surface	24.0
Surface	Class "A"	1,020	15.6	1.20	1,224	Surface	8.0
Coal	Class "A"	1,020	15.6	1.20	1,224	Surface	8.0
Intermediate 1	Lead-10% Salt Tail-Class "A"	Lead-510 Tail-320	Lead-15.4 Tail 15.6	Lead-1.28 Tail-1.19	Lead-853 Tail-381	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-TunedSpacer3 Tail-VariCem	Lead-178 Tail-1,810	Lead- 14.5 Tail-15.2	Lead-2.37 Tail-1.20	Lead-422 Tail-2,172	1,537 Calculated	7.0
Tubing							

Drillers TD (ft) 10,157 MD / 6,738 TVD Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Shale Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 6,088 MD / 6,069' TVD

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING Surface casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28 and 30. Intermediate casing had bow spring centralizers placed on joints 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 35, 38, 41, 44, 47, 50, 53, 56, 59 and 62.
Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 96. Ran a total of 25 rigid spiral centralizers. Ran bow spring centralizers from joint 100 to joint 229 on every third joint. A total of 44 bow spring centralizers were run.

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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API 47-103 - 02907 Farm name Smith, Sonny and Charlotte Well number #5H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					Please See Attached

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
						Please	See	Attached

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PRODUCING FORMATION(S)

DEPTHS

<u>Marcellus</u>	<u>6,783</u>	<u>TVD</u>	<u>7,069</u>	<u>MD</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 850 psi Bottom Hole N/A psi DURATION OF TEST 145.50 hrs

OPEN FLOW Gas 8,147 mcfpd Oil N/A bpd NGL 2,677 bpd Water 777 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
-------------------------	--------------------------------	------------------------------	--------------------------	-----------------------------	------------------------------------------------------------------------------------------------------------------

	<u>0</u>		<u>0</u>		
<u>See Attached Sheet</u>					

Please insert additional pages as applicable.

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Drilling Contractor Nomac (top-hole) & Saxon Drilling (horizontal)

Address 2034 Martins Branch Rd /9303 New Trails Drive City Mount Morris / The Woodlands State PA / TX Zip 25312 / 77381

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Environmental Protection

Logging Company Scientific Drilling and Schlumberger

Address 124 Vista Drive / 1178 US HWY 33 East City Charleroi / Weston State PA / WV Zip 15022 / 26452

Cementing Company Schlumberger

Address 1178 US HWY 33 East City Weston State WV Zip 26452

Stimulating Company FTS International

Address 1432 Route 519 City Eighty Four State PA Zip 15330

Please insert additional pages as applicable.

Completed by Michael Rehl Telephone (412) 553-5815
Signature [Signature] Title Director Completions Date 1/2/2018

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

02/16/2018

Smith #5H
 API 47-103-02907
 Stone Energy Corporation

	Horizontal		Bottom (ft TVD)	Bottom (ft MD)	
	Top (ft TVD)	Top (ft MD)			
Sandstone & Shale	Surface	*	1,017		FW @ 100
Coal	1,017	*	1,020		
Sandstone & Shale	1,020	*	2,163		
Little Lime	2,163	*	2,193		SW @ 2,185
Big Lime	2,193	*	2,293		
Big Injun	2,293	*	2,393		
Sandstone & Shale	2,393	*	2,762		
Berea Sandstone	2,762	*	2,795		
Shale	2,795	*	2,986		
Gordon	2,983	*	3,033		
Undiff Devonian Shale	3,033	*	5,205	5,216	
Rhinestreet	5,205	5,216 ~	6,485	6,537	
Cashaqua	6,485	6,537 ~	6,622	6,718	
Middlesex	6,622	6,718 ~	6,641	6,746	
West River	6,641	6,746 ~	6,699	6,847	
Geneseo	6,699	6,847 ~	6,712	6,872	
Tully Limestone	6,712	6,872 ~	6,748	6,951	
Hamilton Shale	6,748	6,951 ~	6,783	7,069	
Marcellus	6,783	7,069 ~	6,738	10,157	
TD			6,738	10,157	

* From Pilot Hole Log and Driller's Log

~ From MWD Gamma Log

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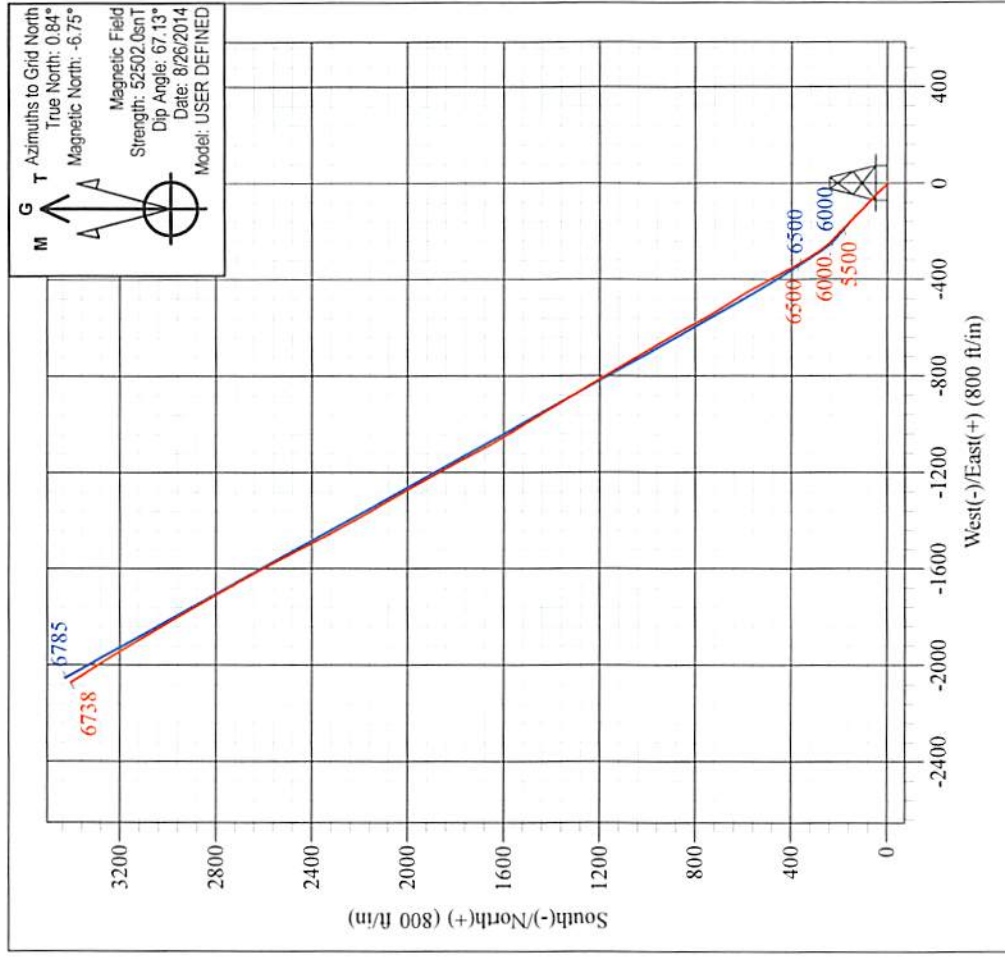
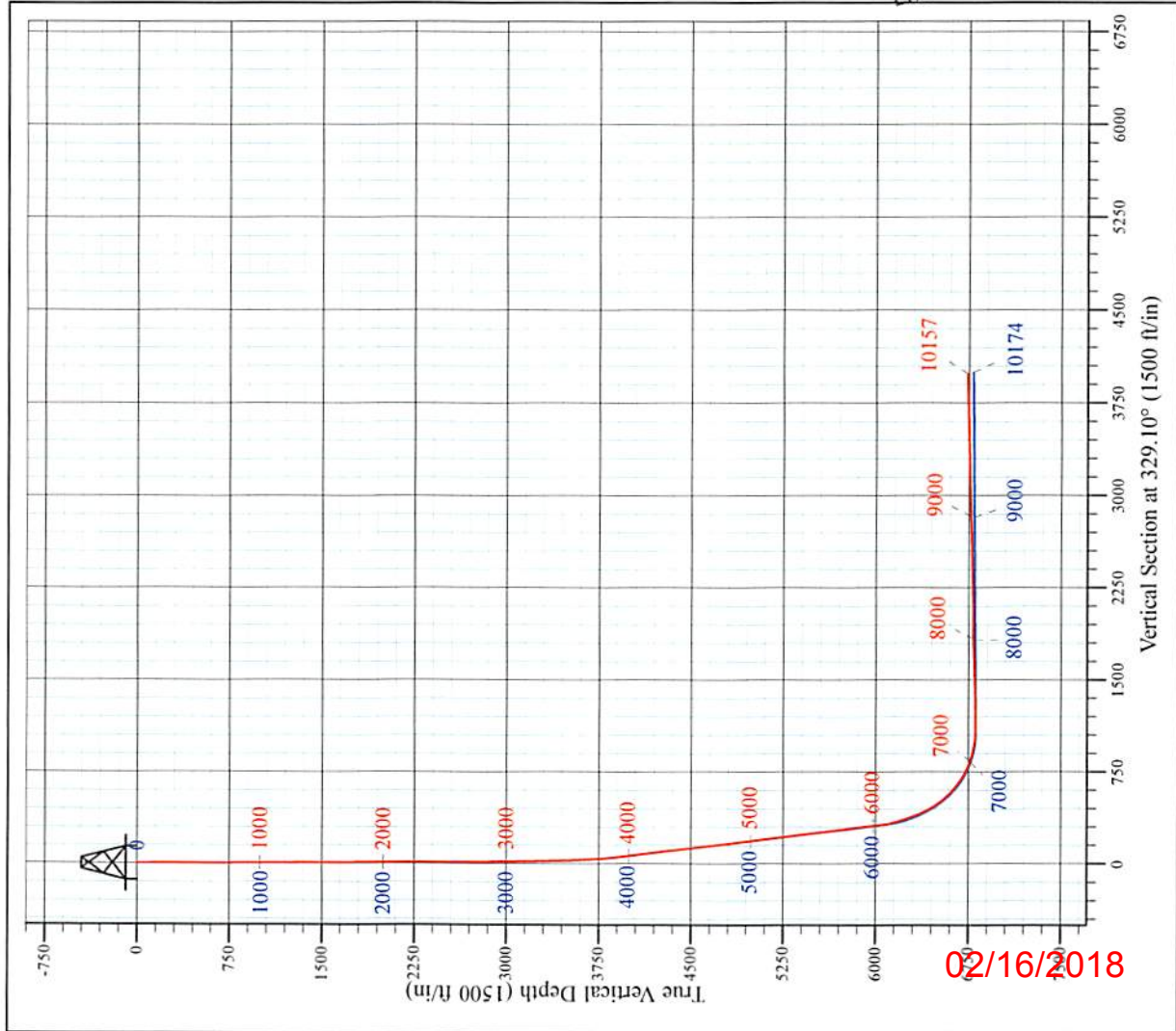


Smith Pad
5H
As Drilled
GL 1321' & KB 18' @ 1339.00ft (Saxom 141)
Mary Prospect

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: 5H					
+N/-S	+E/-W	Northing	Latitude	Longitude	Slot
0.00	0.00	420270.00	39° 38' 47.359 N	80° 48' 39.544 W	



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Robert Ebbecke
14:52, October 03 2014
Scientific Drilling International
124 Vista Drive
Charlton, PA 15022



Stone Energy Corporation

Mary Prospect
Smith Pad
5H

OH

Design: As Drilled

Standard Survey Report

03 October, 2014

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www.scientificdrilling.com

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Scientific Drilling International
Survey Report



Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well 5H
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:	5H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Project	Mary Prospect, 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	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	5H					
Well Position	+N/-S	0.00 ft	Northing:	420,270.00 usft	Latitude:	39° 38' 47.359 N
	+E/-W	0.00 ft	Easting:	1,630,849.00 usft	Longitude:	80° 48' 39.544 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	12/19/2013	-8.55	67.17	52,494
	BGGM2014	6/11/2014	-8.52	67.15	52,439
	User Defined	6/12/2014	-7.56	67.15	52,542
	User Defined	8/26/2014	-7.59	67.13	52,502

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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		329.10

Survey Program	Date 10/3/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
103.00	2,348.00	Survey #1 - VES Gyro Surveys in 9-5/8" C	VES GyroFlex	
2,579.00	5,077.01	Survey #2 - SDI MWD Surveys to KOP (O	SDI MWD	SDI MWD - Standard ver 1.0.1
5,077.01	10,157.00	Survey #3 - SDI MWD Curve and Lateral S	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
103.00	0.22	274.93	103.00	0.02	-0.20	0.12	0.21	0.21	0.00
First Vaughn Gyro Survey									
203.00	0.37	280.03	203.00	0.09	-0.71	0.44	0.15	0.15	5.10
303.00	0.39	320.87	303.00	0.41	-1.24	0.99	0.27	0.02	40.84



Scientific Drilling International

Survey Report



Company: Stone Energy Corporation	Local Co-ordinate Reference: Well 5H	RECEIVED Office of Oil and Gas JAN 5 2018
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: 5H	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)	Rate (°/100usft)	
403.00	0.32	310.25	403.00	0.85	-1.67	1.59	0.10	-0.07	-10.62	
503.00	0.26	303.89	502.99	1.16	-2.07	2.06	0.07	-0.06	-6.36	
603.00	0.32	316.12	602.99	1.49	-2.45	2.54	0.09	0.06	12.23	
703.00	0.22	316.37	702.99	1.83	-2.78	3.00	0.10	-0.10	0.25	
803.00	0.33	319.22	802.99	2.19	-3.10	3.47	0.11	0.11	2.85	
903.00	0.19	279.58	902.99	2.43	-3.45	3.86	0.22	-0.14	-39.64	
1,003.00	0.28	276.87	1,002.99	2.49	-3.85	4.12	0.09	0.09	-2.71	
1,103.00	0.41	289.52	1,102.99	2.64	-4.43	4.54	0.15	0.13	12.65	
1,203.00	0.24	306.38	1,202.99	2.88	-4.94	5.01	0.19	-0.17	16.86	
1,303.00	0.22	300.69	1,302.99	3.10	-5.27	5.37	0.03	-0.02	-5.69	
1,403.00	0.44	303.64	1,402.98	3.41	-5.76	5.89	0.22	0.22	2.95	
1,503.00	0.25	284.81	1,502.98	3.68	-6.29	6.39	0.22	-0.19	-18.83	
1,603.00	0.34	276.09	1,602.98	3.77	-6.80	6.72	0.10	0.09	-8.72	
1,703.00	0.36	303.62	1,702.98	3.98	-7.35	7.19	0.17	0.02	27.53	
1,803.00	0.42	307.18	1,802.98	4.37	-7.91	7.81	0.06	0.06	3.56	
1,903.00	0.51	307.00	1,902.98	4.86	-8.55	8.56	0.09	0.09	-0.18	
2,003.00	0.36	325.77	2,002.97	5.39	-9.09	9.29	0.21	-0.15	18.77	
2,103.00	0.53	324.34	2,102.97	6.02	-9.53	10.06	0.17	0.17	-1.43	
2,203.00	0.33	322.03	2,202.97	6.63	-9.98	10.81	0.20	-0.20	-2.31	
2,303.00	0.20	320.23	2,302.97	6.99	-10.27	11.27	0.13	-0.13	-1.80	
2,348.00	0.22	321.52	2,347.96	7.12	-10.37	11.43	0.05	0.04	2.87	
Last Vaughn Gyro Survey										
2,579.00	0.50	342.49	2,578.96	8.42	-10.95	12.85	0.13	0.12	9.08	
First SDI MWD (Air) Survey @ 2579.00 MD										
2,673.00	0.42	326.98	2,672.95	9.10	-11.26	13.59	0.16	-0.09	-16.50	
2,766.00	0.61	330.98	2,765.95	9.82	-11.69	14.43	0.21	0.20	4.30	
2,861.00	0.69	326.24	2,860.94	10.74	-12.25	15.51	0.10	0.08	-4.99	
2,953.00	0.62	319.32	2,952.94	11.58	-12.88	16.55	0.11	-0.08	-7.52	
3,044.00	0.73	322.52	3,043.93	12.41	-13.56	17.61	0.13	0.12	3.52	
3,137.00	0.79	314.86	3,136.92	13.33	-14.37	18.82	0.13	0.06	-8.24	
3,231.00	1.04	318.25	3,230.91	14.43	-15.40	20.29	0.27	0.27	3.61	
3,322.00	1.12	315.16	3,321.89	15.67	-16.58	21.96	0.11	0.09	-3.40	
3,413.00	1.63	317.61	3,412.87	17.26	-18.08	24.09	0.56	0.56	2.69	
3,503.00	2.22	314.79	3,502.82	19.43	-20.18	27.04	0.66	0.66	-3.13	
3,594.00	2.33	316.39	3,593.75	22.02	-22.70	30.55	0.14	0.12	1.76	
3,688.00	3.05	313.47	3,687.64	25.12	-25.84	34.82	0.78	0.77	-3.11	
3,782.00	4.60	316.91	3,781.43	29.59	-30.23	40.91	1.67	1.65	3.66	
3,875.00	6.31	320.69	3,874.00	36.27	-36.01	49.62	1.88	1.84	4.06	
3,965.00	7.56	317.48	3,963.34	44.46	-43.15	60.31	1.45	1.39	-3.57	
4,059.00	7.68	312.45	4,056.52	53.26	-51.96	72.38	0.72	0.13	-5.35	
4,152.00	7.60	310.67	4,148.69	61.46	-61.21	84.17	0.27	-0.09	-1.91	
4,245.00	7.44	309.64	4,240.89	69.31	-70.51	95.68	0.22	-0.17	-1.11	
4,336.00	7.08	313.32	4,331.16	76.92	-79.13	106.63	0.65	-0.40	4.04	

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Survey Report



Company: Stone Energy Corporation	Local Co-ordinate Reference: Well 5H
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: 5H	North Reference: Grid
Wellbore: OH	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Northeast District

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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Rate (°/100usft)	
4,428.00	6.82	313.22	4,422.49	84.55	-87.23	117.34	0.28	-0.28	-0.11	
4,522.00	7.31	313.86	4,515.77	92.51	-95.61	128.48	0.53	0.52	0.68	
4,617.00	7.03	316.05	4,610.03	100.89	-104.01	139.98	0.41	-0.29	2.31	
4,708.00	6.83	314.83	4,700.36	108.71	-111.71	150.65	0.27	-0.22	-1.34	
4,798.00	6.85	315.28	4,789.72	116.30	-119.28	161.04	0.06	0.02	0.50	
4,889.00	6.71	317.55	4,880.09	124.08	-126.69	171.52	0.33	-0.15	2.49	
4,985.00	7.08	316.83	4,975.39	132.53	-134.52	182.80	0.40	0.39	-0.75	
5,077.00	7.41	310.97	5,066.66	140.55	-142.88	193.98	0.88	0.36	-6.37	
Last SDI MWD (Air) Survey @ 5077.00 MD										
5,108.00	7.49	312.35	5,097.40	143.23	-145.88	197.81	0.63	0.26	4.45	
First SDI MWD (Fluid) Survey @ 5108.00 MD										
5,172.00	7.54	312.62	5,160.85	148.88	-152.05	205.83	0.10	0.08	0.42	
5,235.00	8.07	313.63	5,223.26	154.73	-158.30	214.06	0.87	0.84	1.60	
5,299.00	7.63	313.50	5,286.66	160.75	-164.63	222.48	0.69	-0.69	-0.20	
5,363.00	7.14	311.83	5,350.13	166.33	-170.68	230.37	0.84	-0.77	-2.61	
5,427.00	7.83	312.46	5,413.59	171.93	-176.86	238.34	1.09	1.08	0.98	
5,490.00	7.56	313.26	5,476.02	177.66	-183.04	246.44	0.46	-0.43	1.27	
5,554.00	6.88	312.11	5,539.51	183.12	-188.95	254.16	1.09	-1.06	-1.80	
5,617.00	7.46	315.25	5,602.02	188.55	-194.63	261.74	1.11	0.92	4.98	
5,681.00	7.42	316.69	5,665.48	194.51	-200.39	269.81	0.30	-0.06	2.25	
5,745.00	6.96	315.14	5,728.98	200.27	-205.96	277.61	0.78	-0.72	-2.42	
5,808.00	7.88	314.95	5,791.45	206.02	-211.71	285.50	1.46	1.46	-0.30	
5,872.00	7.87	314.65	5,854.85	212.20	-217.93	294.00	0.07	-0.02	-0.47	
5,935.00	7.13	313.66	5,917.31	217.93	-223.83	301.94	1.19	-1.17	-1.57	
5,999.00	6.18	312.94	5,980.87	223.02	-229.22	309.08	1.49	-1.48	-1.13	
6,030.00	6.00	312.27	6,011.70	225.25	-231.64	312.23	0.62	-0.58	-2.16	
6,062.00	6.69	310.05	6,043.50	227.57	-234.31	315.59	2.29	2.16	-6.94	
6,094.00	8.86	310.98	6,075.21	230.39	-237.59	319.70	6.79	6.78	2.91	
6,125.00	12.02	312.74	6,105.69	234.15	-241.77	325.07	10.24	10.19	5.68	
6,157.00	14.69	316.48	6,136.82	239.35	-247.01	332.22	8.77	8.34	11.69	
6,189.00	16.49	318.51	6,167.64	245.70	-252.81	340.65	5.88	5.63	6.34	
6,220.00	17.85	320.88	6,197.26	252.68	-258.73	349.68	4.93	4.39	7.65	
6,252.00	19.27	323.31	6,227.60	260.72	-264.98	359.78	5.05	4.44	7.59	
6,284.00	19.51	323.65	6,257.78	269.26	-271.30	370.36	0.83	0.75	1.06	
6,316.00	20.04	323.16	6,287.90	277.95	-277.75	381.13	1.74	1.66	-1.53	
6,348.00	20.78	323.66	6,317.89	286.91	-284.40	392.23	2.38	2.31	1.56	
6,379.00	22.28	325.47	6,346.72	296.18	-290.99	403.57	5.29	4.84	5.84	
6,411.00	25.33	327.01	6,376.00	306.92	-298.16	416.47	9.73	9.53	4.81	
6,443.00	27.66	327.82	6,404.63	318.95	-305.85	430.74	7.37	7.28	2.53	
6,475.00	29.29	328.71	6,432.76	331.93	-313.87	445.99	5.26	5.09	2.78	
6,506.00	30.93	329.95	6,459.58	345.30	-321.80	461.54	5.66	5.29	4.00	
6,538.00	33.43	331.08	6,486.66	360.14	-330.18	478.58	8.04	7.81	3.53	
6,570.00	36.05	332.32	6,512.95	376.20	-338.82	496.79	8.48	8.19	3.88	
6,601.00	38.63	332.97	6,537.60	392.90	-347.45	515.56	8.42	8.32	2.10	

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Survey Report



Company: Stone Energy Corporation	Local Co-ordinate Reference: Well 5H	RECEIVED Office of Oil and Gas JAN 5 2018
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: 5H	North Reference: Grid	
Wellbore: OH	Survey Calculation Method: Minimum Curvature	
Design: As Drilled	Database: Northeast District	

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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)
6,633.00	41.44	332.26	6,562.10	411.17	-356.92	536.10	8.90	8.78	-2.22
6,665.00	44.06	331.43	6,585.59	430.32	-367.17	557.80	8.37	8.19	-2.59
6,697.00	46.25	331.33	6,608.16	450.23	-378.04	580.47	6.85	6.84	-0.31
6,729.00	49.26	331.45	6,629.67	471.03	-389.38	604.13	9.41	9.41	0.38
6,761.00	52.31	330.98	6,649.90	492.75	-401.32	628.91	9.60	9.53	-1.47
6,793.00	54.49	331.46	6,668.98	515.27	-413.69	654.58	6.92	6.81	1.50
6,825.00	56.65	331.42	6,687.07	538.45	-426.31	680.95	6.75	6.75	-0.13
6,857.00	58.83	331.18	6,704.15	562.18	-439.30	707.99	6.84	6.81	-0.75
6,887.00	60.94	329.77	6,719.20	584.76	-452.09	733.93	8.12	7.03	-4.70
6,921.00	63.11	328.84	6,735.15	610.58	-467.42	763.95	6.82	6.38	-2.74
6,953.00	66.37	327.39	6,748.80	635.15	-482.71	792.88	10.98	10.19	-4.53
6,985.00	69.88	327.01	6,760.72	660.10	-498.79	822.56	11.02	10.97	-1.19
7,017.00	74.37	327.68	6,770.54	685.74	-515.22	852.99	14.17	14.03	2.09
7,048.00	75.71	329.40	6,778.55	711.28	-530.85	882.94	6.89	4.32	5.55
7,080.00	76.05	329.68	6,786.35	738.03	-546.58	913.97	1.36	1.06	0.88
7,112.00	77.84	330.37	6,793.58	765.04	-562.15	945.14	5.98	5.59	2.16
7,144.00	80.81	331.06	6,799.51	792.46	-577.53	976.57	9.52	9.28	2.16
7,176.00	83.31	332.03	6,803.93	820.32	-592.63	1,008.23	8.37	7.81	3.03
7,208.00	86.03	332.04	6,806.90	848.46	-607.57	1,040.04	8.50	8.50	0.03
7,240.00	88.72	331.34	6,808.37	876.60	-622.73	1,071.98	8.69	8.41	-2.19
7,271.00	89.90	331.24	6,808.74	903.79	-637.62	1,102.95	3.82	3.81	-0.32
7,335.00	89.90	330.25	6,808.85	959.62	-668.90	1,166.92	1.55	0.00	-1.55
7,398.00	90.24	329.86	6,808.77	1,014.21	-700.34	1,229.91	0.82	0.54	-0.62
7,461.00	90.74	329.26	6,808.24	1,068.53	-732.26	1,292.91	1.24	0.79	-0.95
7,525.00	91.61	328.58	6,806.92	1,123.33	-765.29	1,356.89	1.73	1.36	-1.06
7,589.00	92.45	328.35	6,804.66	1,177.84	-798.74	1,420.85	1.36	1.31	-0.36
7,652.00	93.30	328.56	6,801.50	1,231.46	-831.66	1,483.77	1.39	1.35	0.33
7,716.00	92.82	329.11	6,798.08	1,286.15	-864.73	1,547.67	1.14	-0.75	0.86
7,780.00	91.85	330.14	6,795.47	1,341.32	-897.07	1,611.62	2.21	-1.52	1.61
7,843.00	91.88	329.58	6,793.42	1,395.77	-928.69	1,674.58	0.89	0.05	-0.89
7,907.00	91.38	328.95	6,791.60	1,450.76	-961.38	1,738.55	1.26	-0.78	-0.98
7,971.00	91.14	328.69	6,790.19	1,505.50	-994.51	1,802.53	0.55	-0.38	-0.41
8,035.00	90.50	329.37	6,789.28	1,560.37	-1,027.44	1,866.53	1.46	-1.00	1.06
8,099.00	90.64	329.46	6,788.64	1,615.46	-1,060.00	1,930.52	0.26	0.22	0.14
8,163.00	90.27	331.23	6,788.13	1,671.08	-1,091.66	1,994.50	2.83	-0.58	2.77
8,226.00	90.70	332.59	6,787.60	1,726.65	-1,121.33	2,057.42	2.26	0.68	2.16
8,290.00	90.97	331.69	6,786.67	1,783.23	-1,151.23	2,121.33	1.47	0.42	-1.41
8,353.00	91.54	331.88	6,785.29	1,838.73	-1,181.01	2,184.24	0.95	0.90	0.30
8,415.00	91.55	331.08	6,783.62	1,893.18	-1,210.60	2,246.16	1.29	0.02	-1.29
8,479.00	91.11	330.57	6,782.13	1,949.05	-1,241.79	2,310.12	1.05	-0.69	-0.80
8,543.00	91.78	330.66	6,780.52	2,004.80	-1,273.18	2,374.08	1.06	1.05	0.14
8,606.00	91.18	329.96	6,778.89	2,059.51	-1,304.38	2,437.04	1.46	-0.95	-1.11
8,670.00	91.18	330.18	6,777.57	2,114.96	-1,336.30	2,501.02	0.34	0.00	0.34



Scientific Drilling International

Survey Report



Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well 5H
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:	5H	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)	
8,734.00	91.95	330.50	6,775.82	2,170.55	-1,367.96	2,564.98	1.30	1.20	0.50	
8,798.00	91.58	330.63	6,773.85	2,226.27	-1,399.40	2,628.93	0.61	-0.58	0.20	
8,861.00	91.68	330.88	6,772.06	2,281.21	-1,430.16	2,691.87	0.43	0.16	0.40	
8,925.00	90.94	332.51	6,770.60	2,337.54	-1,460.50	2,755.79	2.80	-1.16	2.55	
8,988.00	91.01	332.90	6,769.52	2,393.52	-1,489.39	2,818.66	0.63	0.11	0.62	
9,052.00	91.55	331.74	6,768.09	2,450.18	-1,519.11	2,882.54	2.00	0.84	-1.81	
9,115.00	91.85	332.46	6,766.23	2,505.83	-1,548.57	2,945.42	1.24	0.48	1.14	
9,179.00	91.91	332.30	6,764.13	2,562.51	-1,578.23	3,009.28	0.27	0.09	-0.25	
9,243.00	92.08	332.48	6,761.90	2,619.19	-1,607.87	3,073.14	0.39	0.27	0.28	
9,306.00	91.28	331.89	6,760.05	2,674.88	-1,637.26	3,136.02	1.58	-1.27	-0.94	
9,370.00	90.94	329.96	6,758.81	2,730.81	-1,668.35	3,199.97	3.06	-0.53	-3.02	
9,434.00	91.38	330.03	6,757.52	2,786.22	-1,700.35	3,263.95	0.70	0.69	0.11	
9,497.00	91.95	330.36	6,755.68	2,840.86	-1,731.65	3,326.91	1.05	0.90	0.52	
9,561.00	92.52	329.50	6,753.19	2,896.20	-1,763.69	3,390.86	1.61	0.89	-1.34	
9,625.00	92.02	329.93	6,750.65	2,951.43	-1,795.94	3,454.80	1.03	-0.78	0.67	
9,688.00	90.67	329.95	6,749.18	3,005.94	-1,827.49	3,517.78	2.14	-2.14	0.03	
9,752.00	90.60	329.89	6,748.47	3,061.31	-1,859.56	3,581.77	0.14	-0.11	-0.09	
9,816.00	90.64	329.41	6,747.77	3,116.54	-1,891.90	3,645.76	0.75	0.06	-0.75	
9,880.00	91.28	329.25	6,746.70	3,171.58	-1,924.54	3,709.75	1.03	1.00	-0.25	
9,943.00	92.22	328.12	6,744.78	3,225.38	-1,957.27	3,772.72	2.33	1.49	-1.79	
10,005.00	92.22	328.27	6,742.38	3,278.03	-1,989.92	3,834.66	0.24	0.00	0.24	
10,067.00	91.65	328.49	6,740.28	3,330.79	-2,022.41	3,896.62	0.99	-0.92	0.35	
10,099.00	91.78	327.57	6,739.32	3,357.93	-2,039.34	3,928.60	2.90	0.41	-2.88	
Last SDI MWD (Fluid) Survey @ 10099.00 MD										
10,157.00	91.78	327.57	6,737.52	3,406.86	-2,070.43	3,986.55	0.00	0.00	0.00	
Projection to Bit @ 10157.00 MD										

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
103.00	103.00	0.02	-0.20	First Vaughn Gyro Survey
2,348.00	2,347.96	7.12	-10.37	Last Vaughn Gyro Survey
2,579.00	2,578.96	8.42	-10.95	First SDI MWD (Air) Survey @ 2579.00 MD
5,077.00	5,066.66	140.55	-142.88	Last SDI MWD (Air) Survey @ 5077.00 MD
5,108.00	5,097.40	143.23	-145.88	First SDI MWD (Fluid) Survey @ 5108.00 MD
10,099.00	6,739.32	3,357.93	-2,039.34	Last SDI MWD (Fluid) Survey @ 10099.00 MD
10,157.00	6,737.52	3,406.86	-2,070.43	Projection to Bit @ 10157.00 MD

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Checked By: _____ Approved By: _____ Date: _____

519167 47-103-02907-0000 - Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
1	9/23/2017	9,906	10,068	40	MARCELLUS
2	9/30/2017	9,706	9,868	40	MARCELLUS
3	10/3/2017	9,506	9,668	40	MARCELLUS
4	10/4/2017	9,306	9,468	40	MARCELLUS
5	10/4/2017	9,106	9,268	40	MARCELLUS
6	10/5/2017	8,906	9,068	40	MARCELLUS
7	10/6/2017	8,706	8,868	40	MARCELLUS
8	10/6/2017	8,506	8,668	40	MARCELLUS
9	10/7/2017	8,306	8,468	40	MARCELLUS
10	10/7/2017	8,106	8,268	40	MARCELLUS
11	10/8/2017	7,906	8,068	40	MARCELLUS
12	10/9/2017	7,706	7,868	40	MARCELLUS
13	10/9/2017	7,506	7,668	40	MARCELLUS
14	10/10/2017	7,306	7,468	40	MARCELLUS
15	10/11/2017	7,106	7,268	40	MARCELLUS

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519167 47-103-02907-0000 - Stimulated Stages

Stage Number	Stimulation Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	9/29/2017	95	7,854	8,386	4,027	450298	7,838	0
2	10/3/2017	99	8,013	9,539	3,467	451880	8,311	0
3	10/3/2017	99	7,803	8,672	4,451	450089	7,756	0
4	10/4/2017	99	7,763	8,704	3,933	452560	7,503	0
5	10/5/2017	99	7,854	8,802	4,782	449314	7,528	0
6	10/5/2017	98	7,695	8,623	4,720	450733	7,504	0
7	10/6/2017	100	7,583	7,995	4,683	448851	7,305	0
8	10/7/2017	98	7,614	8,487	4,704	450051	7,456	0
9	10/7/2017	100	7,512	8,469	4,274	449730	7,444	0
10	10/8/2017	98	7,722	9,164	4,742	449223	7,350	0
11	10/9/2017	100	7,295	7,711	4,596	449179	7,518	0
12	10/9/2017	97	7,483	8,304	4,218	450074	7,237	0
13	10/10/2017	98	7,622	8,626	4,569	452221	7,256	0
14	10/11/2017	100	7,522	8,280	4,782	451693	7,824	0
15	10/11/2017	100	7,394	8,101	4,432	450420	7,328	0

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/29/2017
Job End Date:	10/11/2017
State:	West Virginia
County:	Wetzel
API Number:	47-103-02907-00-00
Operator Name:	EQT Production
Well Name and Number:	519167
Latitude:	39.64649000
Longitude:	-80.81098000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,738
Total Base Water Volume (gal):	4,752,636
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	FTS International	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	85.14005	None
HVG-1	FTS International	Water Gelling Agent					
				Listed Below			

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CS-500-SI	FTS International	Scale inhibitor					
				Listed Below			
FRW-900	FTS International	Friction Reducer					
				Listed Below			
MC MX 5-3886	Multi-Chem Group	Specialty Brine					
				Listed Below			
MC MX 8-2544	Multi-Chem Group	Live Culture - Nitrate Reducing Bacteria					
				Listed Below			
CI-150	FTS International	Acid corrosion inhibitor					
				Listed Below			
Other Chemical (s)	Listed Above	See Trade Name (s) List					
				Listed Below			
Sand (Proppant)	FTS International	Proppant					
				Listed Below			
APB-1	FTS International	Gel Breaker					
				Listed Below			
Hydrochloric Acid (15%)	FTS International	Acidizing					

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				Listed Below			
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.							
			Silica Substrate	14808-60-7	100.00000	14.50384	None
			Calcium Nitrate.4H2O	13477-34-4	100.00000	0.10461	
			Calcium Nitrate.4H2O	13477-34-4	100.00000	0.10461	None
			Hydrochloric Acid	7647-01-0	15.00000	0.02300	None
			Hydrotreated Light Distillate	64742-47-8	30.00000	0.01935	
			Hydrotreated Light Distillate	64742-47-8	30.00000	0.01935	None
			Sodium chloride	7647-14-5	100.00000	0.00938	None
			Sodium chloride	7647-14-5	100.00000	0.00938	
			Alkyl Alcohol	Proprietary	10.00000	0.00645	None
			Alkyl Alcohol	Proprietary	10.00000	0.00645	
			Oxyalkylated alcohol A	Proprietary	5.00000	0.00322	None
			Oxyalkylated alcohol A	Proprietary	5.00000	0.00322	
			Ethylene glycol	107-21-1	10.00000	0.00239	None
			Sodium nitrate	7631-99-4	5.00000	0.00047	None
			Sodium nitrate	7631-99-4	5.00000	0.00047	
			Organic amine resin salt	Proprietary	30.00000	0.00009	None
			Isopropanol	67-63-0	30.00000	0.00009	None
			Ethylene glycol	107-21-1	30.00000	0.00009	None
			Petroleum Distillate	64742-47-8	55.00000	0.00005	None
			Petroleum Distillate	64742-47-8	55.00000	0.00005	
			Guar gum	9000-30-0	50.00000	0.00005	
			Guar gum	9000-30-0	50.00000	0.00005	None
			Quaternary ammonium compound	Proprietary	10.00000	0.00003	None
			Dimethylformamide	68-12-2	10.00000	0.00003	None
			Aromatic aldehyde	Proprietary	10.00000	0.00003	None
			Ammonium Persulfate	7727-54-0	95.00000	0.00000	
			Ammonium Persulfate	7727-54-0	95.00000	0.00000	None

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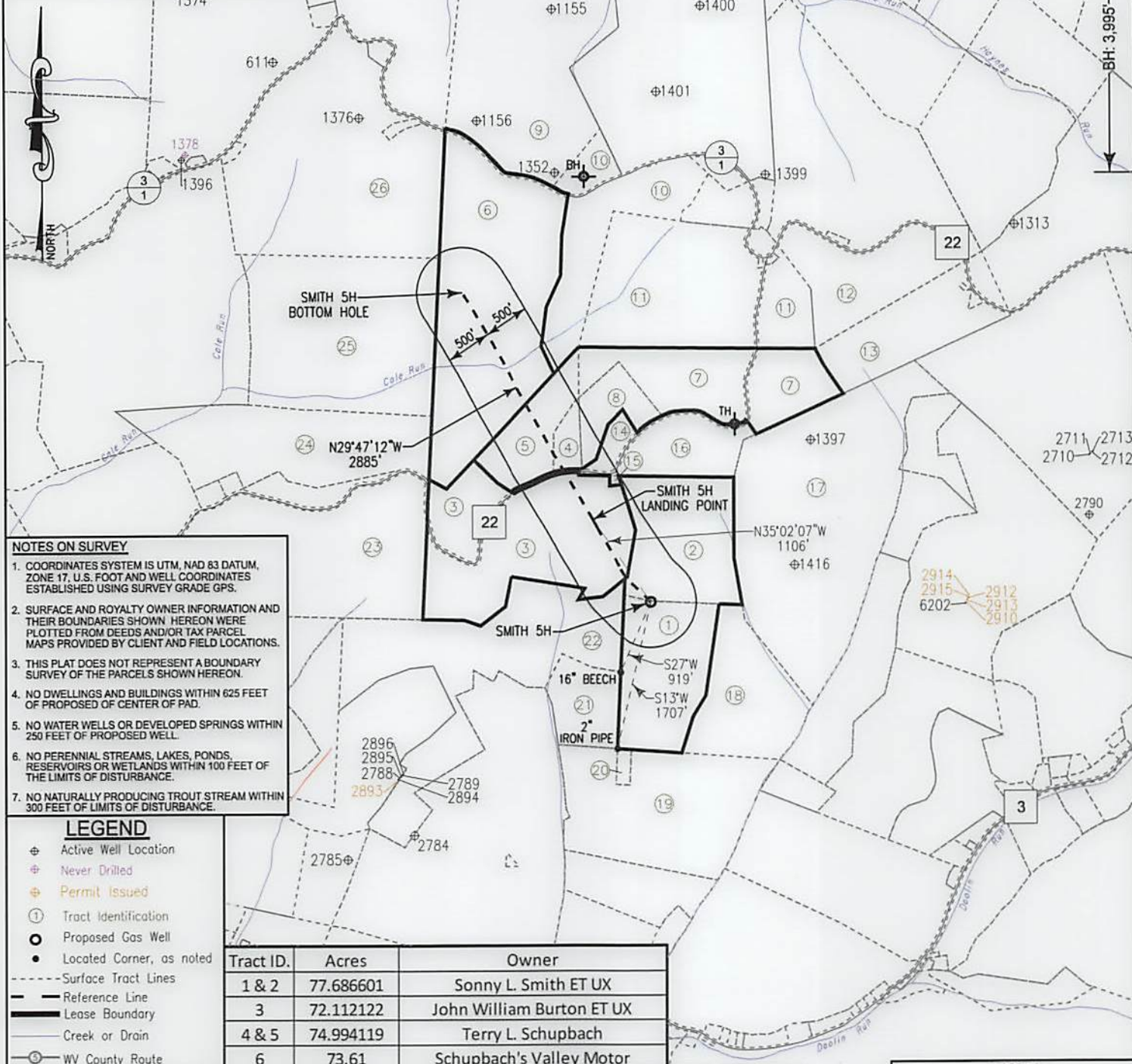
			Clay	14808-60-7	2.00000	0.00000
			Clay	14808-60-7	2.00000	0.00000
			Surfactant	68439-51-0	2.00000	0.00000
			Surfactant	68439-51-0	2.00000	0.00000

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
 ** Information is based on the maximum potential for concentration and thus the total may be over 100%
 *** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
 Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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**Smith 5H
Smith
EQT Production Company**



- NOTES ON SURVEY**
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
 - SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
 - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 - NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
 - NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
 - NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
 - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

- LEGEND**
- ⊕ Active Well Location
 - ⊕ Never Drilled
 - ⊕ Permit Issued
 - ① Tract Identification
 - Proposed Gas Well
 - Located Corner, as noted
 - Surface Tract Lines
 - Reference Line
 - Lease Boundary
 - Creek or Drain
 - ⊙ WV County Route
 - ⊠ WV State Route

Tract ID.	Acres	Owner
1 & 2	77.686601	Sonny L. Smith ET UX
3	72.112122	John William Burton ET UX
4 & 5	74.994119	Terry L. Schupbach
6	73.61	Schupbach's Valley Motor

(⊕) Denotes Location of Well on United States Topographic Maps



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

Thomas C. Smollus

L. L. S. 687



FILE NO: W2032 (BK 49-6)
 DRAWING NO:
 SCALE: 1" = 1600'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: NGS CORS Station

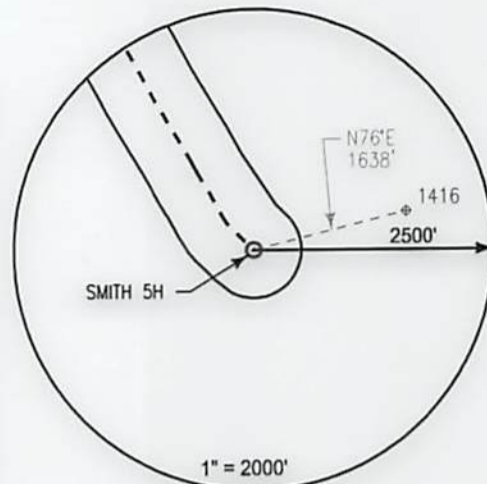
STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OIL AND GAS DIVISION

DATE: DECEMBER 4 20 17
 OPERATORS WELL NO: SMITH 5H
 API WELL NO
 47 - 103 - 02907
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION ELEVATION: 1335' WATERSHED: TRIBUTARY OF DOOLIN RUN QUADRANGLE: NEW MARTINSVILLE 7.5'
 DISTRICT: Magnolia COUNTY: Wetzel
 SURFACE OWNER: Sonny & Charlotte Smith ACREAGE: 02/16/2018
 ROYALTY OWNER: Sonny & Charlotte Smith, ET AL LEASE NO: 873632 ACREAGE: 77.69 ±
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6,740'
 WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson
 ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280
 Bridgeport, WV 26330 Bridgeport, WV 26330

**Smith 5H
Smith
EQT Production Company**

Tract ID.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	8	5	Wetzel	Magnolia	Sonny L. & Charlotte Smith	38.9
2	5	32	Wetzel	Magnolia	Sonny L. & Charlotte L. Smith	37.5
3	5	31	Wetzel	Magnolia	John William Burton	66.56
4	5	25.1	Wetzel	Magnolia	Stone Energy Corporation	4.17
5	5	25	Wetzel	Magnolia	Stone Energy Corporation	17.64
6	5	11	Wetzel	Magnolia	Ronald L. Schupbach	89.45
7	5	26	Wetzel	Magnolia	Stone Energy Corporation	39.95
8	5	26.3	Wetzel	Magnolia	Stone Energy Corporation	10.95
9	5	1.1	Wetzel	Magnolia	Ronald L. Schupbach	90.33
10	5	12	Wetzel	Magnolia	Melvin E. & Wilda G. Schupbach	36.87
11	5	19	Wetzel	Magnolia	Ronald L. & Monette Schupbach	68.49
12	5	16	Wetzel	Magnolia	Sharon L. Bearce	108.64
13	5	22	Wetzel	Magnolia	Sharon L. Bearce	37.5
14	5	26.1	Wetzel	Magnolia	Stone Energy Corporation	3.93
15	5	31.1	Wetzel	Magnolia	Schupbach Cemetery	0.27
16	5	26.2	Wetzel	Magnolia	Franklin Ray Blake	17.73
17	5	33	Wetzel	Magnolia	Franklin Ray Blake	108.47
18	8	6	Wetzel	Magnolia	Kocher Albert HRS	33.01
19	8	12	Wetzel	Magnolia	David L. & Ralph O. Smith	58.15
20	8	12.1	Wetzel	Magnolia	Ralph Oscar & Jonee Kay Smith	1.37
21	8	4	Wetzel	Magnolia	Lawrence E. Zumpetta ETAL	15.28
22	8	3	Wetzel	Magnolia	Lawrence E. Zumpetta ETAL	72.86
23	5	30	Wetzel	Magnolia	Wayne A. & Virginia L. Schupbach	93.83
24	5	24	Wetzel	Magnolia	Heaven Partnership	53.59
25	5	10	Wetzel	Magnolia	Herman L. & Sherman Richter	80.66
26	5	1	Wetzel	Magnolia	Mark Edwin Scheibelhood	327.66



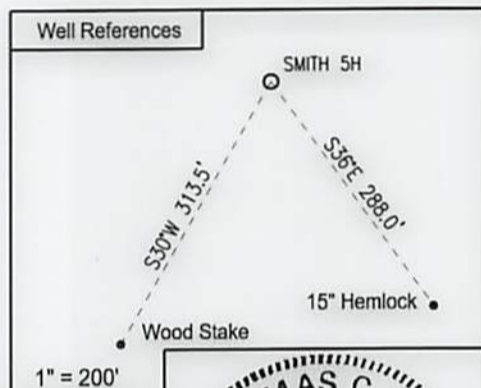
Notes:
SMITH 5H As-Built coordinates are
 NAD 27 N: 420,269.843 E: 1,630,848.994
 NAD 27 Lat: 39.646488 Long: -80.810984
 NAD 83 UTM N: 4,388,547.812 E: 516,232.667
SMITH 5H As-Built Landing Point coordinates are
 NAD 27 N: 421,173.633 E: 1,630,211.374
 NAD 27 Lat: 39.648944 Long: -80.813295
 NAD 83 UTM N: 4,388,819.910 E: 516,033.822
SMITH 5H As-Built Bottom Hole coordinates are
 NAD 27 N: 423,676.693 E: 1,628,778.564
 NAD 27 Lat: 39.655758 Long: -80.818514
 NAD 83 UTM N: 4,389,575.186 E: 515,584.597
 West Virginia Coordinates system of 1927 (North Zone) based upon Differential GPS Measurements
 Plat orientation, Corner and well ties are based upon the grid north meridian
 Well location references are based upon the grid north meridian.
 UTM coordinates are NAD83, Zone 17, Meters.

LEGEND

- ⊕ Active Well Location
- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- ▬ Lease Boundary
- ~ Creek or Drain
- ⊙ WV County Route
- ⊠ WV State Route

SMITH PAD

- SMITH 3H ○ ○ SMITH 5H
- SMITH 1H ○ ○ SMITH 7H
- SMITH 2H ○ ○ SMITH 8H
- SMITH 4H ○ ○ SMITH 6H



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

Thomas C. Smalls
 L. L. S. 687



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 DRAWING NO:
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STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 OIL AND GAS DIVISION

DATE: DECEMBER 4 20 17
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 API WELL NO
 47 - 103 - 02907
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
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 SURFACE OWNER: Sonny & Charlotte Smith ACREAGE: 33.9 ±
 ROYALTY OWNER: Sonny & Charlotte Smith, ETAL LEASE NO: 873632 ACREAGE: 77.69 ±
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 ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280
 Bridgeport, WV 26330 Bridgeport, WV 26330

EOT PRODUCTION COMPANY
115 PROFESSIONAL PLACE
PO BOX 280
BRIDGEPORT, WV 26330

NEW MARTINSVILLE 7.5'
1" = 1000'

KEYSTONE CONSULTANTS, INC.
32 EAST MAIN STREET,
CARNEGIE, PA 15106
412-278-2100

