

## Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 519133

API: 47 - 103 - 02791

Submission:  Initial  Amended

Notes: Following please find the WR-35, as prepared by EQT Corp. to include the required data related to the Stimulation operations that it performed on this well. Also attached is the original WR-35, as prepared by Stone Energy Corporation to include required data regarding the drilling operations that it performed. Attached to the original WR-35 submitted by Stone Energy Corp. is a copy of the Standard Survey Report materials and a copy of the Depths sheet. The Well's "As Drilled" plat is also included.

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Well Operator's Report of Well Work

API 47-103-02791 County Wetzel District Magnolia  
Quad New Martinsville Pad Name Smith Field/Pool Name Mary  
Farm name Smith, Sonny and Charlotte Well Number 519133  
Operator (as registered with the OOG) EQT Production Company  
Address 625 LIBERTY AVENUE, SUITE 1700 City PITTSBURGH State PA Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,388,541.757 Easting 516,232.160  
Landing Point of Curve Northing 4,388,930.058 Easting 516,231.279  
Bottom Hole Northing 4,389,617.882 Easting 515,821.593

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)

Date permit issued \_\_\_\_\_ Date drilling commenced \_\_\_\_\_ Date drilling ceased \_\_\_\_\_  
Date completion activities began 5/19/2018 Date completion activities ceased 5/25/2018  
Verbal plugging (Y/N) \_\_\_\_\_ Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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

Freshwater depth(s) ft \_\_\_\_\_ Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft \_\_\_\_\_ Void(s) encountered (Y/N) depths \_\_\_\_\_  
Coal depth(s) ft \_\_\_\_\_ Cavern(s) encountered (Y/N) depths \_\_\_\_\_  
Is coal being mined in area (Y/N) \_\_\_\_\_

Reviewed by

Reviewed by:

DMH

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API 47-103 - 02791 Farm name Smith, Sonny and Charlotte Well number 519133

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/fl	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) \_\_\_\_\_ Loggers TD (ft) \_\_\_\_\_

Deepest formation penetrated \_\_\_\_\_ Plug back to (ft) \_\_\_\_\_

Plug back procedure \_\_\_\_\_

Kick off depth (ft) \_\_\_\_\_

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 \_\_\_\_\_

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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PRODUCING FORMATION(S) DEPTHS  
MARCELLUS 6,784 TVD 7,166 MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 705 psi Bottom Hole N/A psi DURATION OF TEST 164 hrs

OPEN FLOW Gas 4,188 mcfd Oil N/A bpd NGL 43 bpd Water 1,540 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 <sub>2</sub> S, ETC)
	0		0		

Please insert additional pages as applicable.

Drilling Contractor \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Logging Company \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Stimulating Company ProFrac  
Address 777 Main Street, Suite 3900 City Fort Worth State TX Zip 76102

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Please insert additional pages as applicable.

Completed by Brad Maddox Telephone (412) 395-7053  
Signature \_\_\_\_\_ Title Completions Director Date 8/22/2018

**519133 47-103-02791-00-00 - Perforations**

<b>Stage Number</b>	<b>Perforation Date</b>	<b>Top Perf Depth (ftKB)</b>	<b>Bottom Perf Depth (ftKB)</b>	<b>Number of Shots</b>	<b>Formation</b>
1	5/5/2018	9782	9944	40	MARCELLUS
2	5/20/2018	9582	9744	40	MARCELLUS
3	5/20/2018	9382	9544	40	MARCELLUS
4	5/20/2018	9182	9344	40	MARCELLUS
5	5/20/2018	8982	9144	40	MARCELLUS
6	5/20/2018	8782	8944	40	MARCELLUS
7	5/23/2018	8582	8744	40	MARCELLUS
8	5/23/2018	8382	8544	40	MARCELLUS
9	5/23/2018	8182	8344	40	MARCELLUS
10	5/24/2018	7982	8144	40	MARCELLUS
11	5/24/2018	7782	7944	40	MARCELLUS
12	5/24/2018	7582	7744	40	MARCELLUS
13	5/25/2018	7382	7544	40	MARCELLUS
14	5/25/2018	7182	7344	40	MARCELLUS

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**519133-47-103-02791-00-00 - Stimulated Stages**

<b>Stage Number</b>	<b>Stimulation Date</b>	<b>Ave Pump Rate (BPM)</b>	<b>Ave Treatment Pressure (PSI)</b>	<b>Max Breakdown Pressure (PSI)</b>	<b>ISIP (PSI)</b>	<b>Amount of Proppant (lbs)</b>	<b>Amount of Water (bbls)</b>	<b>Amount of Nitrogen/other (units)</b>
1	5/19/2018	98	7,373.00	8,278.00	3,644.00	450,440.00	7624.6	0
2	5/20/2018	99	7,876.00	8,383.00	4,405.00	450,580.00	7084	0
3	5/20/2018	98	7,963.00	8,854.00	3,387.00	450,340.00	7164.4	0
4	5/20/2018	99	7,923.00	8,623.00	3,927.00	450,620.00	7225	0
5	5/20/2018	99	8,108.00	8,861.00	3,780.00	450,220.00	7210.5	0
6	5/23/2018	98	7,705.00	8,522.00	4,112.00	450,840.00	6682	0
7	5/23/2018	90	8,097.00	8,801.00	4,343.00	450,360.00	6497	0
8	5/23/2018	93	7,796.00	8,420.00	4,155.00	450,660.00	7059.2	0
9	5/24/2018	99	7,400.00	7,984.00	3,746.00	455,120.00	6607.4	0
10	5/24/2018	97	7,681.00	8,081.00	4,158.00	452,380.00	6967.8	0
11	5/24/2018	97	7,973.00	8,499.00	4,344.00	450,360.00	7048.8	0
12	5/24/2018	100	7,641.00	8,690.00	3,591.00	452,460.00	7073.1	0
13	5/25/2018	100	7,712.00	8,490.00	3,800.00	450,660.00	7038.2	0
14	5/25/2018	97	7,816.00	8,505.00	4,079.00	450,500.00	6891.3	0

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/19/2018
Job End Date:	5/25/2018
State:	West Virginia
County:	Wetzel
API Number:	47-103-02791-00-00
Operator Name:	EQT Production
Well Name and Number:	519133
Latitude:	39.64643400
Longitude:	-80.81099100
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,784
Total Base Water Volume (gal):	4,248,733
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	ProFrac	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	84.62834	None
ProFe 105	ProFrac	Iron control					
				Listed Below			

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Clearal 268	ChemStream	Biocide					
				Listed Below			
ProHib 100	ProFrac	Acid Inhibitor					
				Listed Below			
StimSTREAM SC-398	ChemStream	Scale Inhibitor					
				Listed Below			
Sand (Proppant)	ProFrac	Proppant					
				Listed Below			
Hydrochloric Acid (15%)	ProFrac	Acidizing					
				Listed Below			
Other Chemical (s)	Listed Above	See Trade Name (s) List					
				Listed Below			
StimSTREAM FR-9700	ChemStream	Friction reducer					
				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	15.07442	None
			Hydrochloric Acid	7647-01-0	15.00000	0.03058	None
			Non-hazardous substances	Proprietary	90.00000	0.01911	None
			Non-hazardous substances	Proprietary	90.00000	0.01911	

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			Non-hazardous substances	Proprietary	90.00000	0.01796	None
			Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.01527	None
			Glutaraldehyde	111-30-8	20.00000	0.00399	None
			Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	5.00000	0.00255	
			Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	5.00000	0.00255	None
			Bis(hexaMethylene Triamine Penta (Methylene Phosphonic Acid)(BHMT)	34690-00-1	10.00000	0.00212	
			Bis(hexaMethylene Triamine Penta (Methylene Phosphonic Acid)(BHMT)	34690-00-1	10.00000	0.00212	None
			Citric acid	77-92-9	100.00000	0.00086	
			Citric acid	77-92-9	100.00000	0.00086	None
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00060	None
			Alkyl dimethyl benzyl ammonium chloride	68391-01-5	3.00000	0.00060	None
			Methanol	67-56-1	90.00000	0.00038	None
			Methanol	67-56-1	90.00000	0.00038	
			Imidazoline	61790-69-0	5.00000	0.00002	
			Propargyl Alcohol	107-19-7	5.00000	0.00002	
			Propargyl Alcohol	107-19-7	5.00000	0.00002	None
			Imidazoline	61790-69-0	5.00000	0.00002	None
			Xylene	1330-20-7	5.00000	0.00002	None
			Alcohols, C7-9-ISO, C8-Rich	68526-83-0	5.00000	0.00002	None
			Xylene	1330-20-7	5.00000	0.00002	
			Isopropanol	67-63-0	5.00000	0.00002	
			Isopropanol	67-63-0	5.00000	0.00002	None
			Alcohols, C7-9-ISO, C8-Rich	68526-83-0	5.00000	0.00002	

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	Ethylbenzene	100-41-4	1.00000	0.00000
	Ethylbenzene	100-41-4	1.00000	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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Well Operator's Report of Well Work

API 47-103-02791 County Wetzel District Magnolia  
Quad New Martinsville Pad Name Smith Field/Pool Name Mary  
Farm name Smith, Sonny and Charlotte Well Number #7H  
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 4,388,542 Easting 516,232  
Landing Point of Curve Northing 4,388,905 Easting 516,246  
Bottom Hole Northing 4,389,618 Easting 515,822

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 10/12/2012 Date drilling commenced 12/12/2013 Date drilling ceased 8/25/2014  
Date completion activities began Not Yet Completed Date completion activities ceased Not Yet Completed  
Verbal plugging (Y/N) N Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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 1,733 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

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**APPROVED**  
NAME: Derek Haught  
DATE: 7/17/2017

WR-35  
Rev. 8/23/13

API 47-103 - 02791 Farm name Smith, Sonny and Charlotte Well number #7H

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"	90'	New	LS - 94 ppf		N - GTS
Surface	17.5"	13.375"	1,318 MB - 1,301' GL	New	J55 - 54.5 ppf	120' & 201'	Y - CTS
Coal	17.5"	13.375"	1,318 MB - 1,301' GL	New	J55 - 54.5 ppf	120' & 201'	Y - CTS
Intermediate 1	12.25"	9.625"	2,548'	New	J55 - 36 ppf		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	10,028'	New	P110 - 20 ppf		N - TOC @ 1,643' Calculated
Tubing							
Packer type and depth set		TAM CAP Inflatable Packer set on the 9.625" Casing String @ 1,021'.					

Comment Details Circulated 30 bbls cement to surface on 13.375" casing string. Circulated 20 bbls cement to surface on the 9.625" casing string. Did not circulate any cement to the surface on the 5.5" casing string. TOC on 5.5" calculates to be @ 1,643'.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Type 1	34	15.6	1.18	40	Surface	24.0
Surface	Class "A"	1,010	15.6	1.19	1,202	Surface	8.0
Coal	Class "A"	1,010	15.6	1.19	1,202	Surface	8.0
Intermediate 1	Lead-10% Soft Tail-Class "A"	Lead-512 Tail-320	Lead-15.4 Tail 15.6	Lead-1.28 Tail-1.19	Lead-653 Tail-391	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-Tuned-Spacer Tail-Var-Cem	Lead-178 Tail-1,765	Lead-14.5 Tail-15.2	Lead-2.37 Tail-1.20	Lead-422 Tail-2,118	1,643 Calculated	7.0
Tubing							

Drillers TD (ft) 10,047 MD / 6,738 TVD  
 Deepest formation penetrated Marcellus Shale  
 Plug back procedure \_\_\_\_\_

Loggers TD (ft) N/A  
 Plug back to (ft) \_\_\_\_\_

Kick off depth (ft) 6,167 MD / 6,128 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 1, 4, 6, 12, 16, 20 and 24. Intermediate casing had bow spring centralizers placed on joints 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56 and 59. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 172. Ran a total of 44 rigid spiral centralizers. Ran bow spring centralizers from joint 180 to joint 228 on every eighth joint. A total of 7 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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Rev. 8/23/13

API 47- 103 - 02791 Farm name Smith, Sonny and Charlotte Well number #7H

**PERFORATION RECORD**

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

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)

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Please insert additional pages as applicable.





## Stone Energy Corporation

Mary Prospect  
Smith Pad  
7H

OH

Design: As Drilled

## Standard Survey Report

26 August, 2014



[www.scientificdrilling.com](http://www.scientificdrilling.com)



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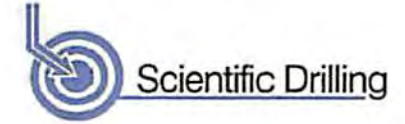
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Project: Mary Prospect  
 Site: Smith Pad  
 Well: 7H  
 Wellbore: OH  
 Design: As Drilled



WELL DETAILS: 7H

+N-S	+E-W	Northing	Ground Level: Easting	1321.00	Latitude	Longitude
0.00	0.00	420250.00	1650847.00		39° 38' 47.161 N	80° 48' 39.566 W

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well 7H, Grid North  
 Vertical (TVD) Reference: GL 1321' & KB 18' @ 1339.00ft (Saxon 141)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: GL 1321' & KB 18' @ 1339.00ft (Saxon 141)  
 Calculation Method: Minimum Curvature

PROJECT DETAILS: Mary Prospect

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

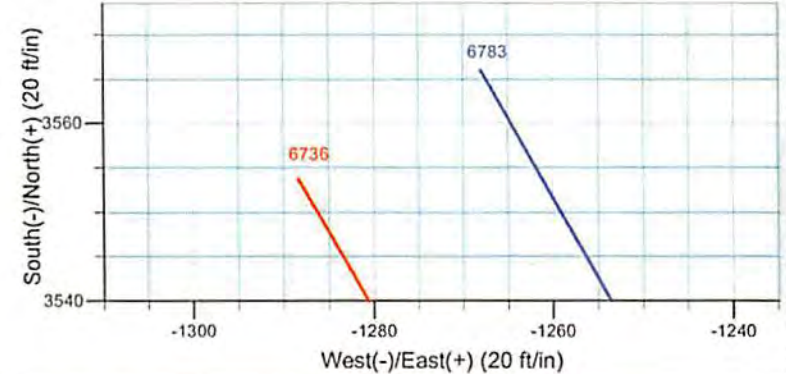
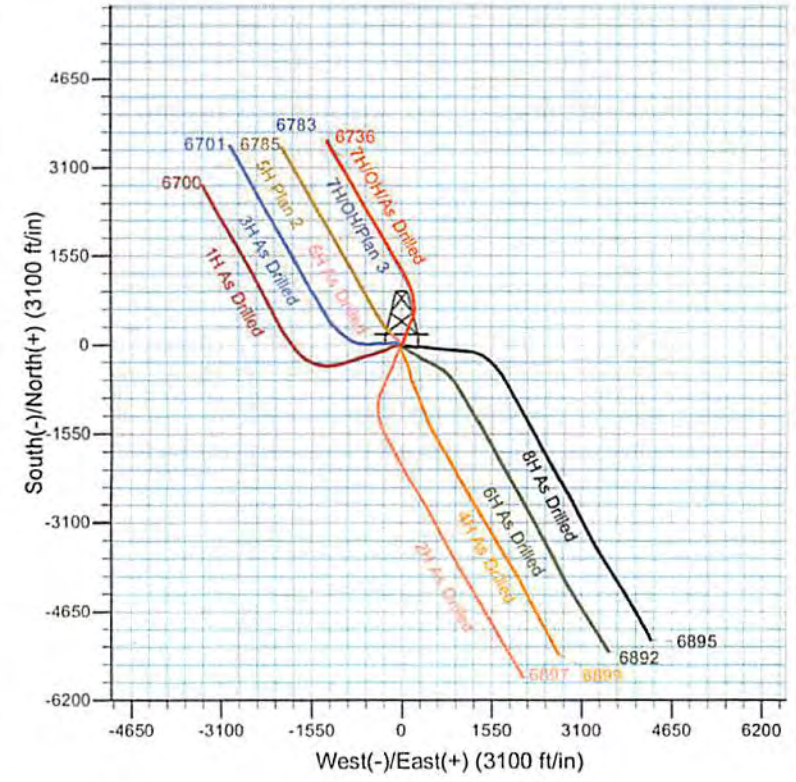
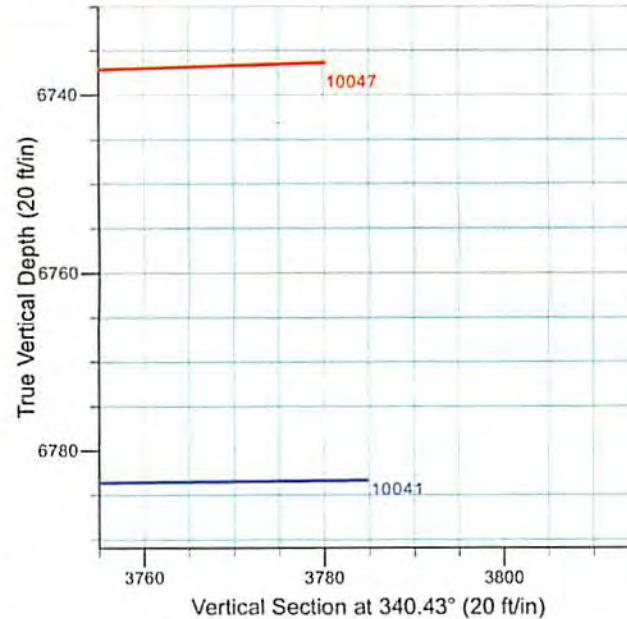
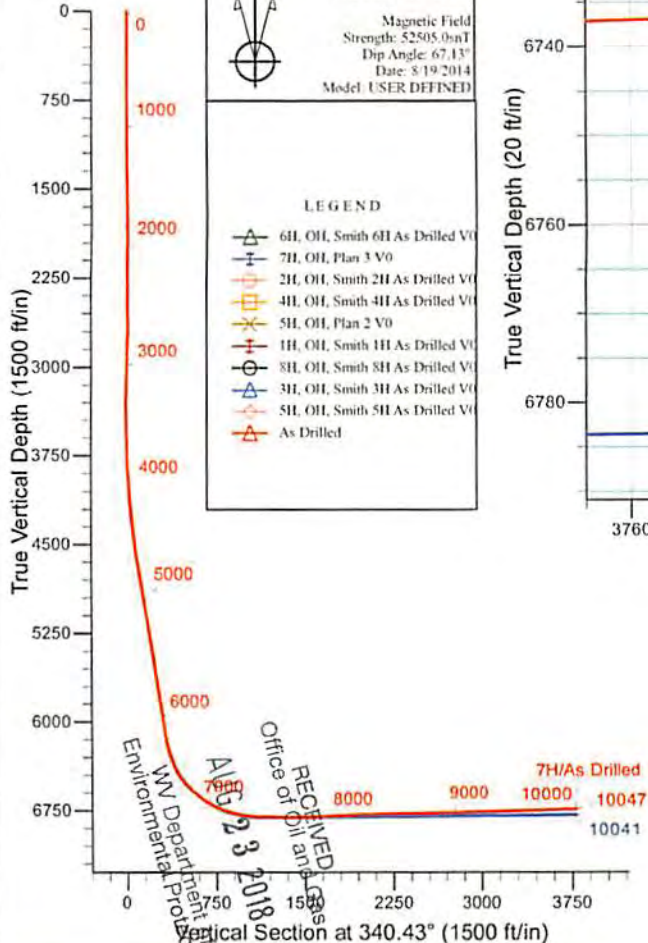
SECTION DETAILS

MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target
5892.00	11.10	21.21	5853.50	345.36	126.40	0.00	0.00	283.05	
6125.00	11.10	21.21	6087.14	387.18	142.63	0.00	0.00	317.02	
6430.93	31.88	23.99	6370.25	489.56	186.62	6.80	4.14	398.75	
7330.11	90.50	331.00	6807.00	1194.80	46.30	8.00	-57.14	1110.24	Smith 7H LP (rev 03)
10041.30	90.50	331.00	6783.34	3566.01	-1268.00	0.00	0.00	3784.74	Smith 7H_BHL (rev 03)

Azimuths to Grid North  
 True North: 0.84°  
 Magnetic North: -6.75°  
 Magnetic Field  
 Strength: 52505.0nT  
 Dip Angle: 67.13°  
 Date: 8/19/2014  
 Model: USER DEFINED

LEGEND

- △ 6H, OH, Smith 6H As Drilled VO
- 7H, OH, Plan 3 VO
- ◇ 2H, OH, Smith 2H As Drilled VO
- 4H, OH, Smith 4H As Drilled VO
- × 5H, OH, Plan 2 VO
- ⊕ 1H, OH, Smith 1H As Drilled VO
- ⊙ 8H, OH, Smith 8H As Drilled VO
- ⊖ 3H, OH, Smith 3H As Drilled VO
- ⊗ 5H, OH, Smith 5H As Drilled VO
- As Drilled

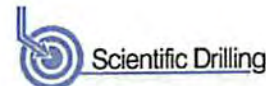


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Scientific Drilling International  
Survey Report



Company:	Stone Energy Corporation	Local Co-ordinate Reference:	Well 7H
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:	7H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Northeast District

Project	Mary Prospect, West Virginia		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	West Virginia North 4701		

Site	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	7H					
Well Position	+N/-S	0.00 ft	Northing:	420,250.00 usft	Latitude:	39° 38' 47.161 N
	+E/-W	0.00 ft	Easting:	1,630,847.00 usft	Longitude:	80° 48' 39.566 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	12/13/2013	-8.55	67.17	52,496
	BGGM2014	6/11/2014	-8.52	67.15	52,439
	User Defined	6/12/2014	-7.56	67.15	52,542
	User Defined	8/19/2014	-7.59	67.13	52,505

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		340.43

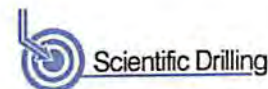
Survey Program	Date 8/26/2014				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
103.00	2,596.00	Survey 2 - Vaughn Gyro (OH)	VES GyroFlex		
2,642.00	5,746.00	Survey 3 - SDI MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	
5,829.00	10,047.00	Survey 4 - SDI MWD (OH)	MWD SDI	MWD - Standard ver 1.0.1	

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
103.00	0.23	280.35	103.00	0.04	-0.20	0.10	0.22	0.22	0.00
First Vaughn Gyro Survey									
203.00	0.29	317.20	203.00	0.26	-0.57	0.44	0.17	0.06	36.85
303.00	0.14	283.96	303.00	0.47	-0.86	0.74	0.19	-0.15	-33.24





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<b>Company:</b>	Stone Energy Corporation	<b>Local Co-ordinate Reference:</b>	Well 7H
<b>Project:</b>	Mary Prospect	<b>TVD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
<b>Site:</b>	Smith Pad	<b>MD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
<b>Well:</b>	7H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Northeast District

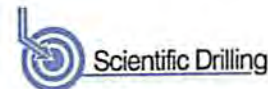
Survey

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)
403.00	0.18	306.66	403.00	0.60	-1.11	0.93	0.07	0.04	22.70
503.00	0.19	292.64	503.00	0.75	-1.39	1.18	0.05	0.01	-14.02
603.00	0.12	287.23	603.00	0.85	-1.64	1.35	0.07	-0.07	-5.41
703.00	0.19	294.72	703.00	0.95	-1.89	1.53	0.07	0.07	7.49
803.00	0.24	332.82	803.00	1.21	-2.14	1.85	0.15	0.05	38.10
903.00	0.43	316.13	902.99	1.66	-2.49	2.40	0.21	0.19	-16.69
1,003.00	0.19	299.20	1,002.99	2.01	-2.90	2.87	0.25	-0.24	-16.93
1,103.00	0.22	286.50	1,102.99	2.15	-3.23	3.11	0.05	0.03	-12.70
1,203.00	0.53	296.25	1,202.99	2.41	-3.83	3.55	0.32	0.31	9.75
1,303.00	0.61	293.11	1,302.98	2.82	-4.73	4.24	0.09	0.08	-3.14
1,403.00	0.74	296.83	1,402.98	3.32	-5.80	5.07	0.14	0.13	3.72
1,503.00	0.79	298.66	1,502.97	3.94	-6.98	6.05	0.06	0.05	1.83
1,603.00	0.63	293.02	1,602.96	4.49	-8.09	6.94	0.17	-0.16	-5.64
1,703.00	0.79	289.36	1,702.95	4.93	-9.24	7.75	0.17	0.16	-3.66
1,803.00	1.05	288.34	1,802.94	5.45	-10.76	8.74	0.26	0.26	-1.02
1,903.00	1.16	291.92	1,902.92	6.12	-12.57	9.98	0.13	0.11	3.58
2,003.00	0.98	285.74	2,002.90	6.73	-14.33	11.14	0.21	-0.18	-6.18
2,103.00	1.22	292.91	2,102.89	7.37	-16.14	12.35	0.28	0.24	7.17
2,203.00	1.09	301.34	2,202.87	8.28	-17.93	13.81	0.21	-0.13	8.43
2,303.00	1.05	316.19	2,302.85	9.44	-19.38	15.38	0.28	-0.04	14.85
2,403.00	0.87	315.57	2,402.83	10.64	-20.54	16.91	0.18	-0.18	-0.62
2,503.00	0.57	328.90	2,502.83	11.61	-21.33	18.09	0.34	-0.30	13.33
2,596.00	0.68	336.06	2,595.82	12.51	-21.80	19.09	0.14	0.12	7.70
<b>Last Vaughn Gyro Survey</b>									
2,642.00	1.02	93.75	2,641.82	12.73	-21.50	19.20	3.19	0.74	255.85
2,642.01	1.02	93.75	2,641.82	12.73	-21.50	19.20	0.02	0.00	0.00
<b>First SDI MWD Survey</b>									
2,732.00	3.54	117.87	2,731.74	11.38	-18.24	16.83	2.94	2.80	26.80
2,824.00	3.85	116.63	2,823.55	8.67	-12.97	12.51	0.35	0.34	-1.35
2,919.00	3.34	108.30	2,918.36	6.37	-7.49	8.51	0.77	-0.54	-8.77
3,012.00	3.17	103.59	3,011.21	4.92	-2.42	5.44	0.34	-0.18	-5.06
3,105.00	3.26	95.75	3,104.07	4.05	2.71	2.90	0.48	0.10	-8.43
3,196.00	1.97	93.80	3,194.97	3.68	6.85	1.18	1.42	-1.42	-2.14
3,291.00	0.93	59.33	3,289.94	3.97	9.14	0.68	1.38	-1.09	-36.28
3,381.00	0.96	49.21	3,379.93	4.83	10.34	1.09	0.19	0.03	-11.24
3,473.00	1.10	44.77	3,471.91	5.96	11.54	1.75	0.18	0.15	-4.83
3,567.00	1.74	25.03	3,565.88	7.90	12.78	3.16	0.85	0.68	-21.00
3,659.00	1.67	20.80	3,657.84	10.42	13.85	5.17	0.16	-0.08	-7.60
3,753.00	2.21	16.83	3,751.79	13.43	14.86	7.68	0.59	0.57	-4.22
3,845.00	2.63	10.25	3,843.71	17.21	15.75	10.94	0.55	0.46	-7.15
3,936.00	3.56	7.71	3,934.57	22.06	16.50	15.26	1.03	1.02	-2.79
4,028.00	4.81	8.46	4,026.33	28.71	17.45	21.20	1.36	1.36	0.00
4,121.00	5.95	8.78	4,118.92	37.33	18.76	28.89	1.23	1.23	0.34

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Scientific Drilling International  
Survey Report



<b>Company:</b>	Stone Energy Corporation	<b>Local Co-ordinate Reference:</b>	Well 7H
<b>Project:</b>	Mary Prospect	<b>TVD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
<b>Site:</b>	Smith Pad	<b>MD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
<b>Well:</b>	7H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Northeast District

Survey

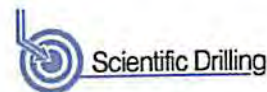
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,215.00	6.39	14.54	4,212.37	47.21	20.82	37.50	0.81	0.47	6.13
4,305.00	7.20	16.40	4,301.74	57.46	23.67	46.21	0.93	0.90	2.07
4,398.00	8.09	17.23	4,393.91	69.31	27.25	56.17	0.96	0.96	0.89
4,489.00	8.79	19.74	4,483.93	81.97	31.50	66.68	0.87	0.77	2.76
4,580.00	9.48	17.29	4,573.77	95.67	36.07	78.05	0.87	0.76	-2.69
4,673.00	10.48	18.38	4,665.36	111.01	41.02	90.85	1.09	1.08	1.17
4,766.00	11.38	19.32	4,756.68	127.69	46.72	104.66	0.99	0.97	1.01
4,858.00	12.25	19.33	4,846.73	145.47	52.95	119.32	0.95	0.95	0.01
4,950.00	12.23	17.20	4,936.63	163.99	59.06	134.72	0.49	-0.02	-2.32
5,042.00	12.28	16.77	5,026.54	182.66	64.77	150.41	0.11	0.05	-0.47
5,134.00	12.25	19.33	5,116.44	201.24	70.82	165.88	0.59	-0.03	2.78
5,227.00	11.93	24.37	5,207.38	219.31	78.05	180.48	1.19	-0.34	5.42
5,318.00	11.59	20.19	5,296.47	236.45	85.09	194.28	1.01	-0.37	-4.59
5,409.00	11.78	16.25	5,385.59	253.95	90.85	208.84	0.90	0.21	-4.33
5,500.00	11.92	20.23	5,474.65	271.69	96.69	223.59	0.91	0.15	4.37
5,593.00	12.28	20.88	5,565.58	289.94	103.54	238.49	0.41	0.39	0.70
5,685.00	11.79	24.22	5,655.56	307.65	110.88	252.72	0.93	-0.53	3.63
5,746.00	11.51	23.23	5,715.30	318.93	115.84	261.69	0.58	-0.46	-1.62
5,829.00	11.15	21.17	5,796.69	334.02	122.00	273.84	0.65	-0.43	-2.48
5,892.00	11.10	21.21	5,858.50	345.36	126.40	283.05	0.08	-0.08	0.06
5,956.00	10.72	19.73	5,921.35	356.70	130.64	292.32	0.74	-0.59	-2.31
6,019.00	10.20	16.04	5,983.30	367.58	134.16	301.39	1.35	-0.83	-5.86
6,083.00	10.88	16.84	6,046.22	378.81	137.47	310.86	1.09	1.06	1.25
6,115.00	11.21	18.22	6,077.63	384.65	139.32	315.75	1.32	1.03	4.31
6,147.00	12.47	20.79	6,108.94	390.84	141.52	320.84	4.27	3.94	8.03
6,179.00	14.46	22.72	6,140.06	397.75	144.29	326.42	6.37	6.22	6.03
6,211.00	15.49	24.42	6,170.98	405.33	147.60	332.45	3.50	3.22	5.31
6,243.00	17.09	24.44	6,201.69	413.50	151.31	338.91	5.00	5.00	0.06
6,275.00	19.23	25.17	6,232.10	422.55	155.50	346.04	6.73	6.69	2.28
6,306.00	21.72	25.49	6,261.13	432.35	160.14	353.71	8.04	8.03	1.03
6,338.00	23.92	25.66	6,290.63	443.55	165.50	362.47	6.88	6.88	0.53
6,370.00	26.89	25.50	6,319.53	455.93	171.42	372.15	9.28	9.28	-0.50
6,402.00	28.80	25.96	6,347.82	469.39	177.91	382.66	6.01	5.97	1.44
6,433.00	30.64	24.12	6,374.75	483.32	184.41	393.60	6.62	5.94	-5.94
6,465.00	33.15	21.07	6,401.91	498.93	190.89	406.14	9.32	7.84	-9.53
6,497.00	35.42	17.64	6,428.35	515.93	196.85	420.16	9.31	7.09	-10.72
6,529.00	37.78	14.44	6,454.05	534.26	202.10	435.68	9.48	7.38	-10.00
6,560.00	39.94	12.07	6,478.18	553.19	206.55	452.02	8.46	6.97	-7.65
6,592.00	42.37	10.27	6,502.28	573.85	210.62	470.12	8.45	7.59	-5.63
6,623.00	45.00	7.67	6,524.69	595.00	213.95	488.93	10.27	8.48	-8.39
6,655.00	46.91	4.59	6,546.94	617.86	216.39	509.66	9.14	5.97	
6,687.00	48.73	1.46	6,568.43	641.54	217.63	531.55	9.21	5.69	
6,718.00	49.97	359.27	6,588.63	665.05	217.78	553.66	6.69	4.00	
6,750.00	51.04	356.46	6,608.98	689.73	216.86	577.21	7.56	3.34	

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Survey Report



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<b>Project:</b>	Mary Prospect	<b>TVD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
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<b>Well:</b>	7H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	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)
6,782.00	51.92	352.82	6,628.92	714.64	214.51	601.47	9.31	2.75	-11.38
6,814.00	53.65	350.06	6,648.27	739.84	210.71	626.49	8.74	5.41	-8.63
6,846.00	55.44	349.30	6,666.83	765.48	206.04	652.21	5.92	5.59	-2.38
6,877.00	57.61	348.81	6,683.93	790.87	201.13	677.77	7.12	7.00	-1.58
6,909.00	60.16	347.87	6,700.47	817.69	195.59	704.91	8.36	7.97	-2.94
6,941.00	63.88	346.88	6,715.48	845.26	189.41	732.95	11.94	11.63	-3.09
6,973.00	67.01	345.68	6,728.77	873.53	182.51	761.91	10.36	9.78	-3.75
7,005.00	69.37	344.55	6,740.66	902.24	174.87	791.51	8.07	7.38	-3.53
7,036.00	71.47	344.36	6,751.05	930.38	167.05	820.65	6.80	6.77	-0.61
7,068.00	73.48	344.15	6,760.69	959.75	158.77	851.09	6.31	6.28	-0.66
7,100.00	75.27	342.91	6,769.30	989.30	150.03	881.86	6.72	5.59	-3.88
7,132.00	76.50	342.34	6,777.11	1,018.92	140.76	912.87	4.21	3.84	-1.78
7,164.00	78.46	341.35	6,784.04	1,048.60	131.03	944.10	6.83	6.13	-3.09
7,195.00	80.02	339.20	6,789.83	1,077.26	120.75	974.55	6.47	5.03	-6.94
7,227.00	82.00	336.18	6,794.83	1,106.50	108.75	1,006.12	11.19	6.19	-9.44
7,259.00	84.69	333.67	6,798.54	1,135.28	95.28	1,037.75	11.46	8.41	-7.84
7,291.00	86.52	331.86	6,800.99	1,163.65	80.68	1,069.37	8.03	5.72	-5.66
7,323.00	88.29	330.87	6,802.44	1,191.70	65.36	1,100.93	6.34	5.53	-3.09
7,354.00	89.46	330.16	6,803.05	1,218.68	50.10	1,131.47	4.41	3.77	-2.29
7,386.00	89.93	330.23	6,803.22	1,246.45	34.20	1,162.96	1.48	1.47	0.22
7,418.00	90.10	330.36	6,803.21	1,274.24	18.34	1,194.46	0.67	0.53	0.41
7,481.00	89.97	329.99	6,803.18	1,326.90	-12.99	1,256.45	0.62	-0.21	-0.59
7,545.00	89.30	329.30	6,803.58	1,384.12	-45.33	1,319.32	1.50	-1.05	-1.08
7,609.00	89.40	328.90	6,804.31	1,439.04	-78.20	1,382.07	0.64	0.16	-0.63
7,672.00	89.97	329.09	6,804.66	1,493.03	-110.65	1,443.82	0.95	0.90	0.30
7,735.00	91.10	329.45	6,804.07	1,547.18	-142.84	1,505.62	1.88	1.79	0.57
7,799.00	92.39	330.03	6,802.12	1,602.44	-175.07	1,568.48	2.21	2.02	0.91
7,863.00	92.58	331.38	6,799.34	1,658.20	-206.36	1,631.50	2.13	0.30	2.11
7,926.00	92.92	331.86	6,796.32	1,713.56	-236.27	1,693.69	0.93	0.54	0.76
7,989.00	92.79	331.96	6,793.18	1,769.07	-265.90	1,755.92	0.26	-0.21	0.16
8,053.00	92.78	331.35	6,790.07	1,825.33	-296.25	1,819.09	0.95	-0.02	-0.95
8,116.00	92.78	330.47	6,787.02	1,880.32	-326.84	1,881.15	1.40	0.00	-1.40
8,180.00	92.18	329.70	6,784.25	1,935.74	-358.73	1,944.05	1.52	-0.94	-1.20
8,244.00	90.97	329.13	6,782.49	1,990.81	-391.28	2,006.85	2.09	-1.89	-0.89
8,307.00	90.54	329.19	6,781.66	2,044.90	-423.57	2,068.63	0.69	-0.68	0.10
8,371.00	91.21	329.12	6,780.68	2,099.84	-456.38	2,131.39	1.05	1.05	-0.11
8,435.00	90.97	328.57	6,779.46	2,154.60	-489.49	2,194.08	0.94	-0.38	-0.86
8,498.00	91.14	329.26	6,778.30	2,208.55	-522.01	2,255.80	1.13	0.27	1.10
8,561.00	91.17	330.21	6,777.03	2,262.95	-553.75	2,317.69	1.51	0.05	1.51
8,625.00	91.11	330.52	6,775.76	2,318.56	-585.39	2,380.69	0.49	-0.09	0.48
8,688.00	91.18	330.70	6,774.50	2,373.45	-616.31	2,442.76	0.31	0.11	0.28
8,752.00	91.87	332.02	6,772.80	2,429.59	-646.97	2,505.94	2.33	1.08	2.06
8,815.00	91.68	331.53	6,770.85	2,485.08	-676.75	2,568.19	0.83	-0.30	-0.78

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AUG 23 2018  
WV Department of Environmental Protection



Scientific Drilling International

Survey Report



<b>Company:</b>	Stone Energy Corporation	<b>Local Co-ordinate Reference:</b>	Well 7H
<b>Project:</b>	Mary Prospect	<b>TVD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
<b>Site:</b>	Smith Pad	<b>MD Reference:</b>	GL 1321' & KB 18' @ 1339.00ft (Saxon 141)
<b>Well:</b>	7H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	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)
8,879.00	91.51	331.14	6,769.07	2,541.21	-707.44	2,631.36	0.66	-0.27	-0.61
8,942.00	91.98	331.64	6,767.15	2,596.49	-737.59	2,693.55	1.09	0.75	0.79
9,005.00	91.98	331.18	6,764.94	2,652.65	-768.20	2,756.72	0.72	0.00	-0.72
9,070.00	92.25	331.46	6,762.57	2,708.76	-798.89	2,819.87	0.61	0.42	0.44
9,133.00	91.91	330.75	6,760.29	2,763.88	-829.32	2,882.00	1.25	-0.54	-1.13
9,196.00	91.01	330.29	6,758.68	2,818.71	-860.31	2,944.04	1.60	-1.43	-0.73
9,260.00	90.77	329.95	6,757.69	2,874.19	-892.19	3,007.00	0.65	-0.38	-0.53
9,323.00	91.51	329.76	6,756.44	2,928.66	-923.82	3,068.92	1.21	1.17	-0.30
9,387.00	92.25	329.99	6,754.34	2,983.99	-955.92	3,131.80	1.21	1.16	0.36
9,451.00	91.61	329.75	6,752.18	3,039.31	-988.03	3,194.68	1.07	-1.00	-0.38
9,514.00	91.17	329.13	6,750.65	3,093.54	-1,020.05	3,256.51	1.21	-0.70	-0.98
9,578.00	91.94	328.98	6,748.92	3,148.41	-1,052.95	3,319.23	1.23	1.20	-0.23
9,642.00	91.51	329.16	6,746.99	3,203.29	-1,085.83	3,381.95	0.73	-0.67	0.28
9,705.00	91.44	329.37	6,745.37	3,257.42	-1,118.02	3,443.73	0.35	-0.11	0.33
9,767.00	91.34	329.55	6,743.86	3,310.80	-1,149.51	3,504.58	0.33	-0.16	0.29
9,831.00	91.64	329.84	6,742.20	3,366.04	-1,181.80	3,567.44	0.65	0.47	0.45
9,895.00	91.54	330.10	6,740.42	3,421.43	-1,213.81	3,630.36	0.44	-0.16	0.41
9,957.00	91.34	330.82	6,738.87	3,475.35	-1,244.37	3,691.40	1.20	-0.32	1.16
9,989.00	91.64	330.66	6,738.03	3,503.26	-1,260.01	3,722.93	1.06	0.94	-0.50
Last SDI MWD Survey @ 9989.00 MD									
10,047.00	91.64	330.66	6,736.37	3,553.80	-1,288.41	3,780.07	0.00	0.00	0.00
Projection to Bit @ 10047.00 MD									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
103.00	103.00	0.04	-0.20	First Vaughn Gyro Survey
2,596.00	2,595.82	12.51	-21.80	Last Vaughn Gyro Survey
2,642.01	2,641.82	12.73	-21.50	First SDI MWD Survey
9,989.00	6,738.03	3,503.26	-1,260.01	Last SDI MWD Survey @ 9989.00 MD
10,047.00	6,736.37	3,553.80	-1,288.41	Projection to Bit @ 10047.00 MD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas  
AUG 23 2018  
WV Department of  
Environmental Protection

Smith #7H API 47-103-02791 Stone Energy Corporation					
Horizontal					
	Top (ft TVD)	Top (ft MD)	Bottom (ft TVD)	Bottom (ft MD)	
Sandstone & Shale	Surface		*	1,017	FW @ 100
Coal	1,017		*	1,019	
Sandstone & Shale	1,019		*	2,163	SW @1,733
Little Lime	2,163		*	2,193	
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		*	5,757	5,788
Rhinestreet	5,757	5,788	~	6,436	6,571
Cashaqua	6,436	6,571	~	6,628	6,781
Middlesex	6,628	6,781	~	6,647	6,810
West River	6,647	6,810	~	6,699	6,906
Geneseo	6,699	6,906	~	6,714	6,938
Tully Limestone	6,714	6,938	~	6,747	7,030
Hamilton Shale	6,749	7,030	~	6,784	7,166
Marcellus	6,784	7,166	~	6,736	10,047
TD				6,736	10,047

\* From Pilot Hole Log and Driller's Log

~ From MWD Gamma Log

RECEIVED  
Office of Oil and Gas  
AUG 23 2018  
WV Department of  
Environmental Protection

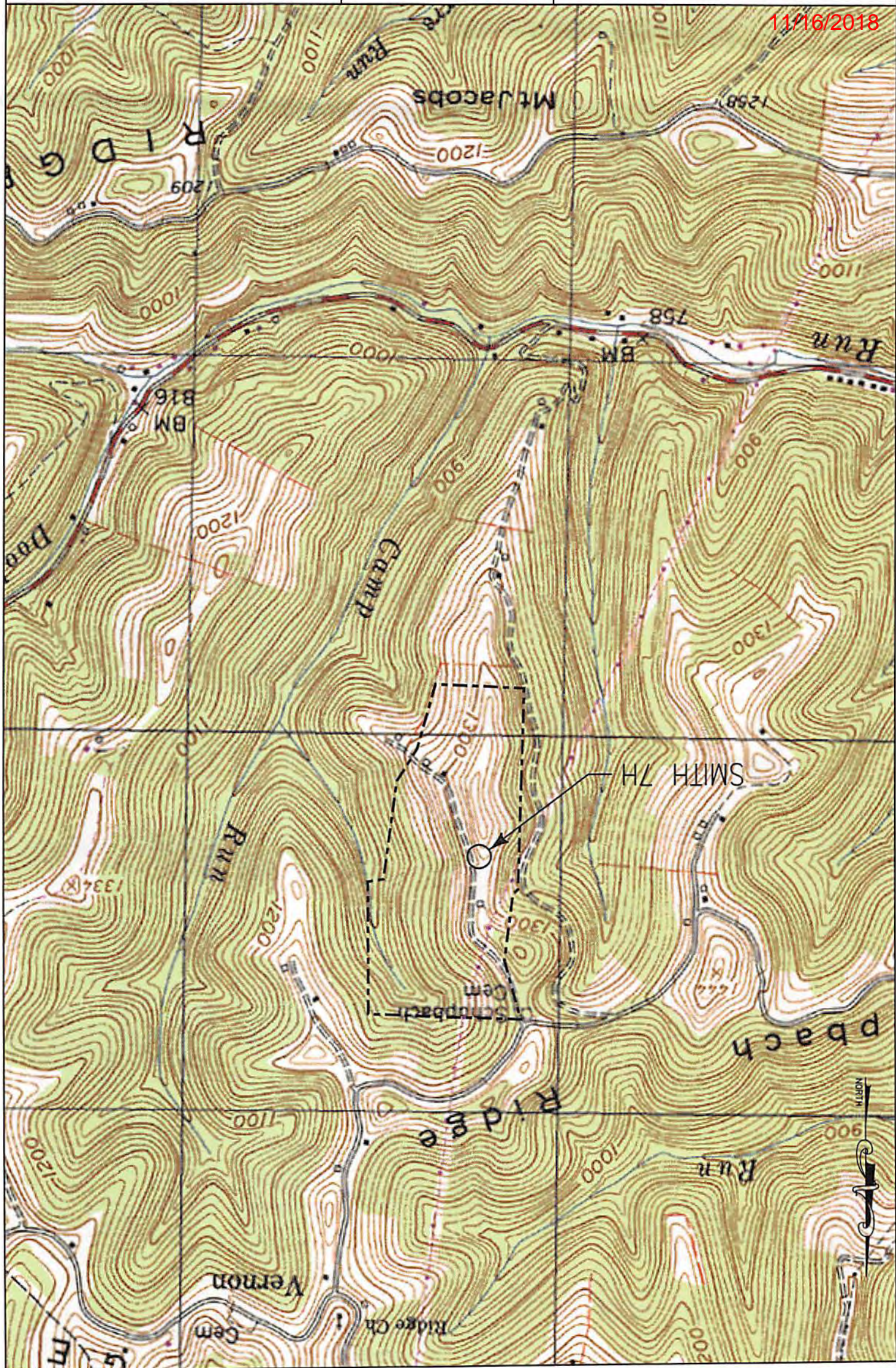


EOT PRODUCTION COMPANY  
115 PROFESSIONAL PLACE  
PO BOX 280  
BRIDGEPORT, WV 26330

NEW MARTINSVILLE 7.5'  
1" = 1000'

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

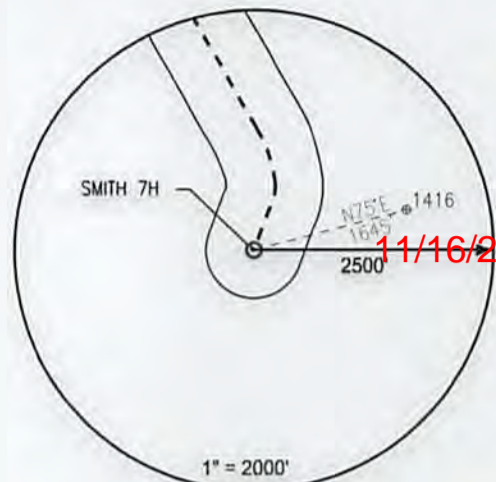
8102/9/11





**Smith 7H  
Smith  
EQT Production Company**

Tract ID	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	8	5	Wetzel	Magnolia	Charlotte Smith	38.9
2	5	32	Wetzel	Magnolia	Charlotte Smith	37.5
3	5	26.2	Wetzel	Magnolia	Franklin Ray Blake	17.73
4	5	26.1	Wetzel	Magnolia	Stone Energy Corporation	3.93
5	5	26.3	Wetzel	Magnolia	Stone Energy Corporation	10.95
6	5	26	Wetzel	Magnolia	Stone Energy Corporation	39.95
7	5	25	Wetzel	Magnolia	Stone Energy Corporation	17.64
8	5	12	Wetzel	Magnolia	Melvin E. & Wilda G. Schupbach	36.87
9	5	11	Wetzel	Magnolia	Ronald L. Schupbach	89.45
10	5	1.1	Wetzel	Magnolia	Ronald L. Schupbach	90.33
11	5	2	Wetzel	Magnolia	David E. & Jeanie L. Schupbach	96.43
12	5	N/A	Wetzel	Magnolia	N/A	2.52
13	5	13	Wetzel	Magnolia	Ronald L. & Monette Schupbach	9.48
14	5	19	Wetzel	Magnolia	Ronald L. & Monette Schupbach	68.49
15	5	16	Wetzel	Magnolia	Sharon L. Bearce	108.64
16	5	22	Wetzel	Magnolia	Sharon L. Bearce	37.5
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 D. Smith	58.15
20	8	12.1	Wetzel	Magnolia	Ralph Oscar & Jonee Kay Smith	1.23
21	8	4	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	15.28
22	8	3	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	72.86
23	5	31.1	Wetzel	Magnolia	Schupbach Cemetery	0.27
24	5	31	Wetzel	Magnolia	John William Burton	66.56
25	5	25.1	Wetzel	Magnolia	Stone Energy Corporation	4.19
26	5	24	Wetzel	Magnolia	Heaven Partnership	53.59
27	5	10	Wetzel	Magnolia	Herman L. & Sherman Richter	80.66
28	5	1	Wetzel	Magnolia	Mark Edwin Scheibelhood	327.66



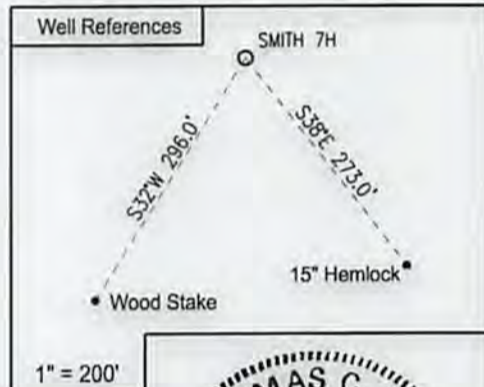
**Notes:**  
**SMITH 7H As-Built coordinates are**  
 NAD 27 N: 420,250.003 E: 1,630,847.000  
 NAD 27 Lat: 39.646434 Long: -80.810990  
 NAD 83 UTM N: 4,388,541.757 E: 516,232.160  
**SMITH 7H As-Built Landing Point coordinates are**  
 NAD 27 N: 421,524.243 E: 1,630,865.340  
 NAD 27 Lat: 39.649932 Long: -80.810991  
 NAD 83 UTM N: 4,388,930.058 E: 516,231.279  
**SMITH 7H As-Built Bottom Hole coordinates are**  
 NAD 27 N: 423,803.793 E: 1,629,558.590  
 NAD 27 Lat: 39.656138 Long: -80.815750  
 NAD 83 UTM N: 4,389,617.882 E: 515,821.593  
 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.

*L. L. S.*  
 L. L. S. 687



FILE NO: W2032 (BK 49-6)  
 DRAWING NO:  
 SCALE: 1" = 1000'  
 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

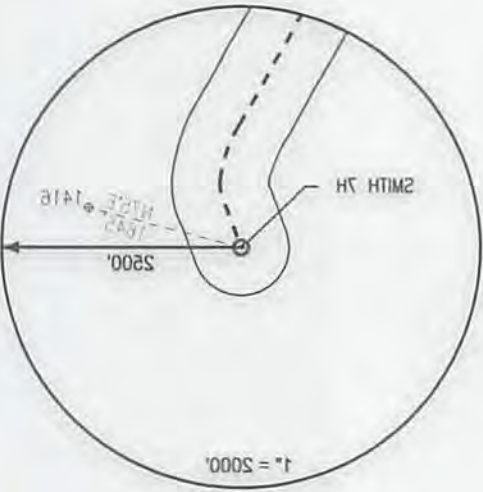
DATE: DECEMBER 4 20 17  
 OPERATORS WELL NO: SMITH 7H  
 API WELL NO  
 47 - 103 - 02791  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION ELEVATION: 1,335' WATERSHED: TRIBUTARY OF DOLLIN RUN QUADRANGLE: NEW MARTINSVILLE 7.5'  
 DISTRICT: Magnolia COUNTY: Wetzel  
 SURFACE OWNER: Charlotte Smith ACREAGE: 38.9 ±  
 ROYALTY OWNER: Charlotte Smith, ET AL LEASE NO: 873632 ACREAGE: 76.4 ±  
 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

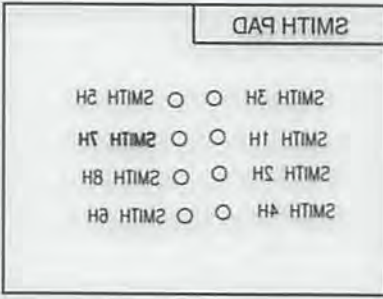
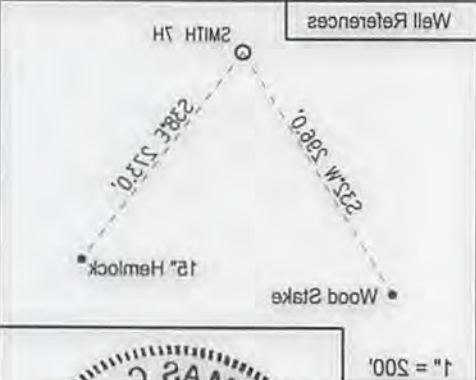


Tract ID	Tax Map No.	Parcel No.	County	District	Surface Tract Owner
28	2	1	Wetzel	Magnolia	Mark Edwin Scheidelhood
27	2	10	Wetzel	Magnolia	Herman L. & Sherman Richter
26	2	24	Wetzel	Magnolia	Heaven Partnership
25	2	25.1	Wetzel	Magnolia	Stone Energy Corporation
24	2	31	Wetzel	Magnolia	John William Burton
23	2	31.1	Wetzel	Magnolia	Schubach Cermery
22	8	3	Wetzel	Magnolia	Lawrence E. Zumbetta ET AL
21	8	4	Wetzel	Magnolia	Lawrence E. Zumbetta ET AL
20	8	12.1	Wetzel	Magnolia	Ralph Oscar & Jones Kay Smith
19	8	12	Wetzel	Magnolia	David L. & Ralph O. Smith
18	8	6	Wetzel	Magnolia	Kocher Albert HRS
17	2	33	Wetzel	Magnolia	Franklin Ray Blake
16	2	32	Wetzel	Magnolia	Sharon L. Bearce
15	2	16	Wetzel	Magnolia	Sharon L. Bearce
14	2	19	Wetzel	Magnolia	Ronald L. & Monette Schubach
13	2	13	Wetzel	Magnolia	Ronald L. & Monette Schubach
12	2	N/A	Wetzel	Magnolia	N/A
11	2	2	Wetzel	Magnolia	David E. & Jeanie L. Schubach
10	2	1.1	Wetzel	Magnolia	Ronald L. Schubach
9	2	11	Wetzel	Magnolia	Ronald L. Schubach
8	2	12	Wetzel	Magnolia	Melvin E. & Wilga G. Schubach
7	2	25	Wetzel	Magnolia	Stone Energy Corporation
6	2	26	Wetzel	Magnolia	Stone Energy Corporation
5	2	26.3	Wetzel	Magnolia	Stone Energy Corporation
4	2	26.1	Wetzel	Magnolia	Stone Energy Corporation
3	2	26.2	Wetzel	Magnolia	Franklin Ray Blake
2	2	32	Wetzel	Magnolia	Chahotte Smith
1	8	2	Wetzel	Magnolia	Chahotte Smith
Acres					Surface Tract Owner

11/16/2018



**Notes:**  
 UTM coordinates are NAD83, Zone 17, Meters.  
 Well location references are based upon the grid north meridian.  
 Plat orientation, Corner and Well ties are based upon the grid north meridian.  
 West Virginia Coordinates system of 1927 (North Zone) based upon Differential GPS Measurements.  
 SMITH 7H As-Built Bottom Hole coordinates are  
 NAD 27 N: 433,803.793 E: 1,829,528.590  
 NAD 27 Lat: 39.66138 Long: -80.81250  
 SMITH 7H As-Built Hole coordinates are  
 NAD 83 UTM N: 4,388,930.058 E: 218,231.278  
 NAD 27 N: 421,524.243 E: 1,830,882.340  
 NAD 27 Lat: 39.64932 Long: -80.81091  
 SMITH 7H As-Built Landing Point coordinates are  
 NAD 83 UTM N: 4,388,541.757 E: 218,232.160  
 NAD 27 Lat: 39.64634 Long: -80.81090  
 SMITH 7H As-Built coordinates are  
 NAD 27 N: 420,250.003 E: 1,830,847.000  
 NAD 27 Lat: 39.64634 Long: -80.81090



**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



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.  
 L.L.S. 687  
 Thomas C. Smith, L.L.S.



FILE NO: W2032 (BK 48-6)  
 DRAWING NO:  
 SCALE: 1" = 100'  
 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

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION ELEVATION: 1,335' WATERSHED: QUADRANGLE: NEW MARTINSVILLE 7.5.  
 DISTRICT: Magnolia COUNTY: Wetzel

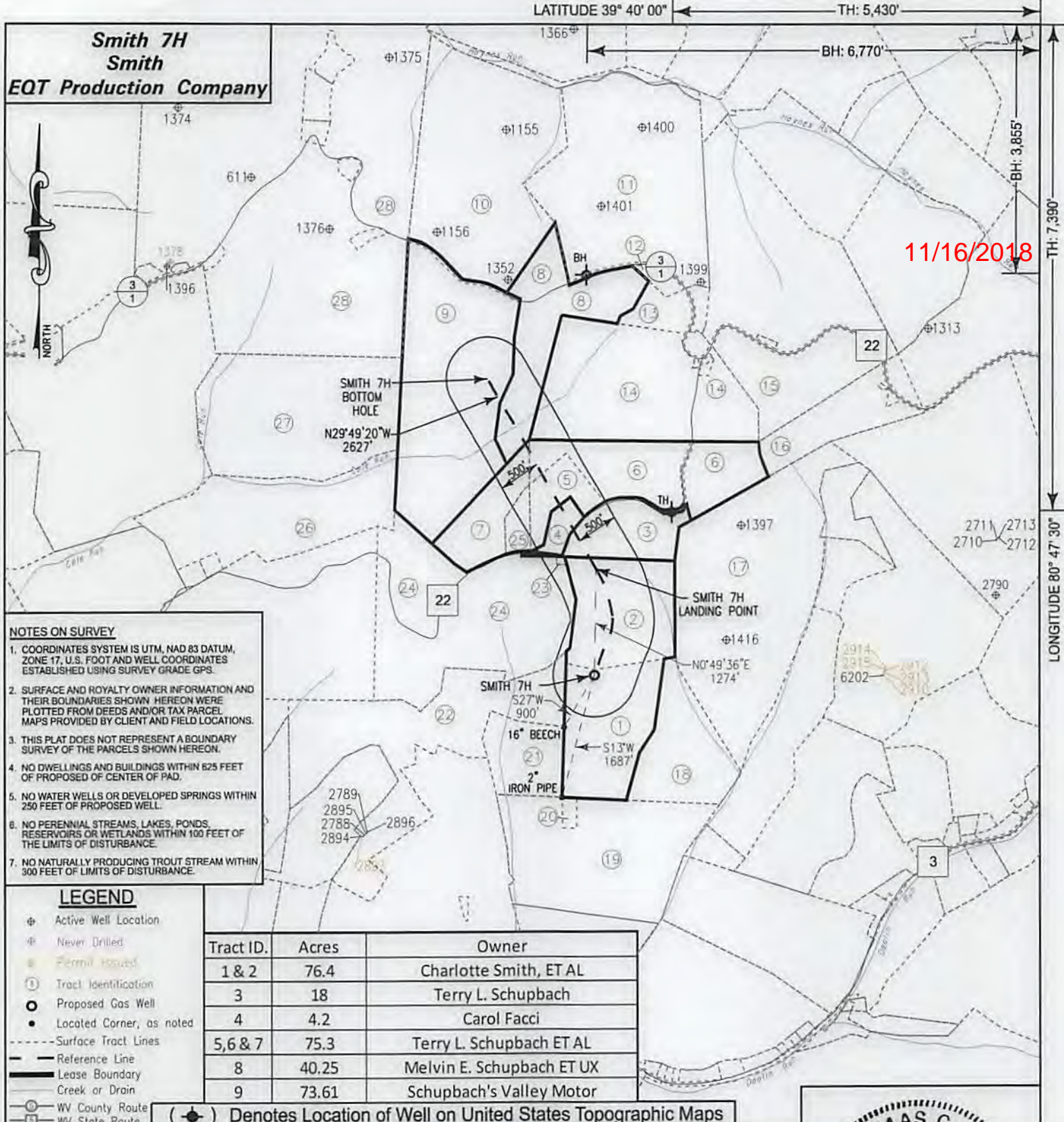
SURFACE OWNER: Chahotte Smith  
 ROYALTY OWNER: Chahotte Smith, ET AL  
 LEASE NO: 873632  
 ACREAGE: 78.4 ±  
 ACREAGE: 38.9 ±

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  
 ADDRESS: 115 Professional Place PO Box 280 Bridgeport, WV 26330  
 DESIGNATED AGENT: Jason Ranson

STATE COUNTY PERMIT  
 47 - 103 - 02791  
 API WELL NO  
 OPERATORS WELL NO: SMITH 7H  
 DATE: DECEMBER 4 20 17





11/16/2018

**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	76.4	Charlotte Smith, ET AL
3	18	Terry L. Schupbach
4	4.2	Carol Facci
5, 6 & 7	75.3	Terry L. Schupbach ET AL
8	40.25	Melvin E. Schupbach ET UX
9	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. Smalls*  
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 7H  
API WELL NO  
47 - 103 - 02791  
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: Charlotte Smith ACREAGE: 38.9 ±  
ROYALTY OWNER: Charlotte Smith, ET AL LEASE NO: 873632 ACREAGE: 76.4 ±

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

AS-BUILT



ADDRESS: 112 Professional Place PO Box 380  
 ADDRESS: 112 Professional Place PO Box 380  
 WELL OPERATOR: EOT Production Company  
 DESIGNATED AGENT: Jason Hanson

PROPOSED WORK:  DRILL  CONVERT  DRIFT DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION

BOULTY OMIEB: Charlotte Smith, ET AL  
 LEASE NO: 813033  
 ACCEASE: 10/4/7

SURFACE OMIEB: Charlotte Smith  
 ACCEASE: 11/16/2018

DISTRICT: Madison COUNTY: Mercer

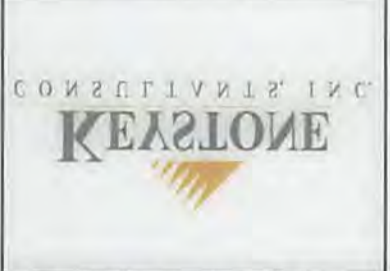
LOCATION ELEVATION: 1332 WATERSHED: TRIBUTARY OF DOOGIN RUN QUADRANGLE: NEW MARTINSVILLE T.S.  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOM

WELL TYPE:  OIL  GAS  FLUID INJECTION  WASTE DISPOSAL

WELL CORRECTION  
 BROKEN SOURCE OF ELEVATION:  
 1:3200  
 MINIMUM DEGREE OF ACCURACY:  
 SCALE: 1" = 1000'  
 DRAWING NO:  
 FILE NO: MS035 (BK 48-8)



STATE COUNTY PERMIT  
 17 - 103 - 05191  
 API WELL NO  
 OPERATORS WELL NO: SMITH JH  
 DATE: DECEMBER 4 20 17



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

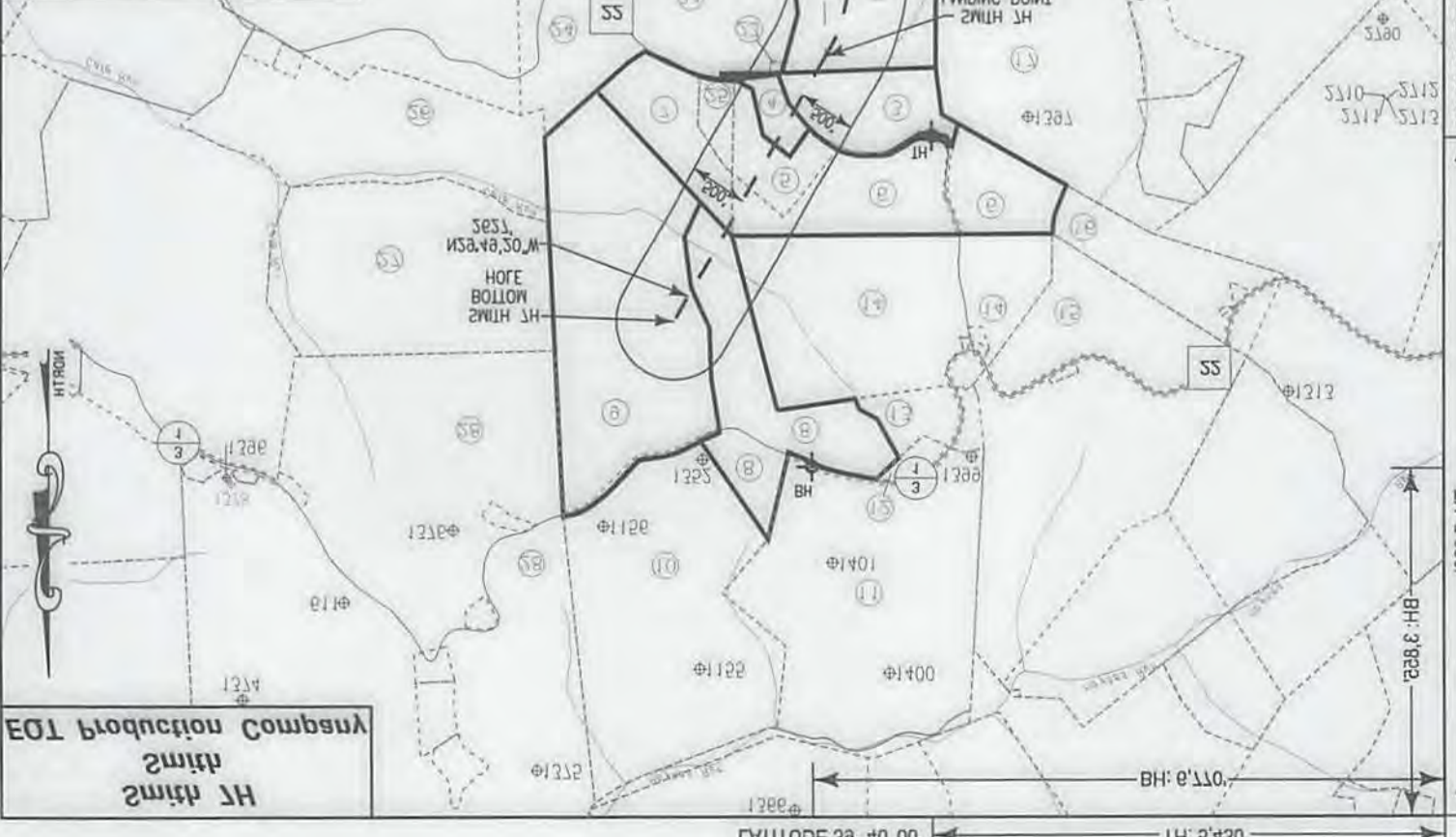


- Legend
- MA State Route
  - MA County Route
  - Creek or Run
  - Lease Boundary
  - Reference Line
  - Surface Tract Lines
  - Located Corner as noted
  - Proposed Gas Well
  - Tract Identification
  - Boundary Survey
  - Well Depth
  - Active Well Location

Denotes location of Well on United States Topographic Maps

6	13.81	Schubach's Valley Motor
8	25.04	Melvin E. Schubach ET UX
2, 8, 1	12.3	Terry L. Schubach ET AL
4	4.5	Carol Facci
3	18	Terry L. Schubach
1, 2, 1	4.81	Charlotte Smith, ET AL
DISTRICT	2975A	OWNER

300 FEET OF LIMITS OF DISTURBANCE  
 1. NO UNLAWFUL PRODUCTION TRACTS WITHIN  
 THE LIMITS OF DISTURBANCE  
 2. NO REMAINING STREAMS, LAKES, PONDS  
 300 FEET OF PROPOSED WELL  
 2. NO WATER WELLS OR DELEGATED RIGHTS WITHIN  
 OF PROPOSED OF CENTER OF BVD  
 4. NO DWELLINGS AND BUILDINGS WITHIN 250 FEET  
 SURVEY OF THE SURVEY FROM HEREON  
 3. THIS BVD DOES NOT REPRESENT A BOUNDARY  
 MAPS PROVIDED BY AGENT AND FIELD LOCATIONS  
 BOTTLED FROM DEEDS WHICH TXH HAS SET  
 THEIR BOUNDARIES FROM HEREON WERE  
 SURVEY AND BOULTY OMIEB INFORMATION AND  
 ESTABLISHED USING SURVEY GRADE OR  
 ZONE 17' N 2' FOOT AND WELL COORDINATES  
 1. COORDINATES SYSTEM IS UTM  
 NOTES ON SURVEY



EOT Production Company  
 Smith JH