

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

API 47-103-02866 County Wetzel District Magnolia
Quad New Martinsville Pad Name Howell Field/Pool Name Mary
Farm name Stone Energy Corporation Well Number #1H
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 4,389,054 Easting 518,693
Landing Point of Curve Northing 4,389,260 Easting 518,223
Bottom Hole Northing 4,390,306 Easting 517,797

Elevation (ft) 1,215 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 3/21/2013 Date drilling commenced 4/25/2013 Date drilling ceased 3/6/2014
Date completion activities began 4/7/2014 Date completion activities ceased 11/4/2014
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 95 Open mine(s) (Y/N) depths Office of Oil and Gas
Salt water depth(s) ft None Reported Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,000 & 1,024 Cavern(s) encountered (Y/N) depths APR 28 2015 N
Is coal being mined in area (Y/N) N

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APR 28 2015
Reviewed by:
W.S. 6/02/15
06/05/2015

WR-35
Rev. 8/23/13

API 47-103 - 02866 Farm name Stone Energy Corporation Well number #1H

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"	35'	New	LS		N - GTS
Surface	17.5"	13.375"	1,209' KB - 1,194' GL	New	J55	159' & 240'	Y - CTS
Coal	17.5"	13.375"	1,209' KB - 1,194' GL	New	J55	159' & 240'	Y - CTS
Intermediate 1	12.25"	9.625"	2,556'	New	J55		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	11,667'	New	P110		N - TOC @ 140'
Tubing	N/A	2.375"	7,485'	New	N80		N/A
Packer type and depth set							

Comment Details Circulated 40 bbls cement to surface on 13.375" casing string. Circulated 60 bbls cement to surface on the 9.625" casing string. Circulated 25 bbls cement to surface on the 5.5" casing string, TOC @ ~140'.

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"	929	15.6	1.19	1,106	Surface	8.0
Coal	Class "A"	929	15.6	1.19	1,106	Surface	8.0
Intermediate 1	Lead-FlexSeal Tail-Class "A"	Lead-520 Tail-254	Lead-15.0 Tail 15.6	Lead-1.26 Tail-1.19	Lead-655 Tail-302	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-FlexSeal Tail-Class "A"	Lead-777 Tail-1,570	15.6	Lead-1.26 Tail-1.19	Lead-979 Tail-1,868	~140	7.0
Tubing							

Drillers TD (ft) 11,675 MD / 6,719 TVD Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Shale Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 5,796 MD / 5,786' 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 #3, #6, #9, #12, #15, #18, #25, and #27. Intermediate casing had bow spring centralizers placed on joints #3, #6, #9, #12, #15, #18, #21, #24, #27, #30, #33, #36, #40, #44, #49, #53 and #57. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint #1 to joint #200. Ran a total of 51 rigid spiral centralizers. Ran bow spring centralizers from joint #208 to joint #264, one on every eight joint. A total of 8 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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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	4/13/14	11,390	11,568	72	Marcellus Shale
2	7/10/14	11,132	11,315	72	Marcellus Shale
3	7/11/14	10,882	11,060	72	Marcellus Shale
4	7/13/14	10,628	10,813	72	Marcellus Shale
5	7/15/14	10,372	10,550	72	Marcellus Shale
6	7/16/14	10,120	10,303	72	Marcellus Shale
7	7/19/14	9,865	10,050	72	Marcellus Shale
8	7/21/14	9,620	9,795	72	Marcellus Shale
9	7/22/14	9,380	9,553	72	Marcellus Shale
10	7/29/14	9,137	9,313	72	Marcellus Shale
11	7/30/14	8,882	9,060	72	Marcellus Shale
12	8/3/14	8,627	8,810	72	Marcellus Shale
13	8/4/14	8,372	8,555	72	Marcellus Shale
14	8/5/14	8,124	8,302	72	Marcellus Shale
15	8/6/14	7,875	8,056	72	Marcellus Shale
16	8/7/14	7,615	7,810	72	Marcellus Shale

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)
1	7/10/14	79.9	7,568	6,672	4,860	359,000	8,439	
2	7/11/14	84.4	8,040	7,315	4,804	422,195	9,310	
3	7/13/14	73.5	8,250	7,548	5,276	418,640	12,528	
4	7/14/14	65.6	8,858	7,285	5,359	5,692	7,923	
5	7/16/14	83.3	7,857	6,419	5,262	418,960	9,168	
6	7/17/14	77.5	7,801	7,653	6,502	163,866	7,711	
7	7/20/14	55.1	8,879	7,836	5,779	1,200	4,299	
8	7/22/14	78.8	7,465	7,331	4,490	420,620	8,958	
9	7/29/14	79.2	7,443	6,888	4,947	421,960	8,963	
10	7/30/14	77.8	7,491	7,515	4,659	419,740	8,587	
11	7/31/14	54.4	8,907	7,849	5,963	5,460	4,041	
12	8/4/14	80.7	6,959	6,867	4,431	424,320	8,941	
13	8/5/14	82.2	7,178	6,540	5,150	399,240	8,716	
14	8/6/14	79.5	6,899	6,705	4,403	419,220	8,970	
15	8/7/14	79.7	6,951	7,742	4,746	422,080	8,884	
16	8/8/14	80.7	6,941	7,223	4,688	416,760	8,894	

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Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus Shale</u>	<u>6,797' to 6,730'</u> TVD	<u>7,615' to 11,568'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2,123 psi Bottom Hole 3,889 calculated psi DURATION OF TEST 54 hrs

OPEN FLOW Gas 1,686 mcfpd Oil _____ bpd NGL 116.3 bpd Water 428.3 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
See Attached Sheet					

Please insert additional pages as applicable.

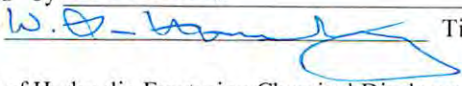
Drilling Contractor Nomac (top-hole) & Saxon Drilling (horizontal)
Address 2034 Martins Branch Rd /9303 New Trails Drive City Mount Morris / The Woodlands State PA / TX Zip 25312 / 77381

Logging Company Scientific Drilling and Schlumberger
Address 3475 Washington Ave / 1178 US HWY 33 East City Finleyville / Weston State PA / WV Zip 15332 / 26452

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

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

Please insert additional pages as applicable.

Completed by W. Lee Hornsby Telephone 304-225-1600 APR 28 2015
Signature  Title Drilling Engineer Date 4/27/2015
Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Register WV Department of Environmental Protection
06/05/2015

Stone #1H
API 47-103-02866
Stone Energy Corporation

	Horizontal		Bottom (ft TVD)	Bottom (ft MD)
	Top (ft TVD)	Top (ft MD)		
Sandstone & Shale	Surface	*	1,000	FW @ 93
Coal	1,000	*	1,002	
Sandstone & Shale	1,002	*	1,024	
Coal	1,024	*	1,026	
Sandstone & Shale	1,026	*	2,086	No SW Reported
Little Lime	2,086	*	2,116	
Big Lime	2,116	*	2,216	
Big Injun	2,216	*	2,316	
Sandstone & Shale	2,316	*	2,689	
Berea Sandstone	2,689	*	2,719	
Shale	2,719	*	2,894	
Gordon	2,894	*	2,944	
Undiff Devonian Shale	2,944	*	6,087	6,117
Rhinestreet	6,087	6,117 ~	6,449	6,637
Cashaqua	6,449	6,637 ~	6,594	6,928
Middlesex	6,594	6,928 ~	6,616	6,966
West River	6,616	6,966 ~	6,666	7,077
Geneseo	6,666	7,077 ~	6,685	7,117
Tully Limestone	6,685	7,117 ~	6,723	7,221
Hamilton Shale	6,723	7,221 ~	6,771	7,419
Marcellus	6,771	7,419 ~	6,719	11,675
TD			6,719	11,675

* From Pilot Hole Log and Driller's Log

~ From MWD Gamma Log

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Environmental Protection 06/05/2015

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	8/8/2014
State:	West Virginia
County/Parish:	Wetzel County
API Number:	47-103-02866
Operator Name:	Stone Energy
Well Name and Number:	Stone 1H
Longitude:	518693
Latitude:	4389054
Long/Lat Projection:	
Production Type:	
True Vertical Depth (TVD):	0
Total Water Volume (gal)*:	5615580

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
H015, Slickwater, WF115	Schlumberger	Corrosion Inhibitor, Bactericide (Myacide GA25), Scale Inhibitor, Surfactant, Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Clay Control Agent, Propping Agent, Fluid Loss	Water (Including Mix Water Supplied by Client)*	NA		89.72314%	
			Crystalline silica	14808-60-7	97.84821%	10.05572%	
			Hydrochloric acid	7647-01-0	1.41999%	0.14593%	
			Carbohydrate polymer	Proprietary	0.70167%	0.07211%	
			Ammonium sulfate	7783-20-2	0.23429%	0.02408%	
			Polyethylene glycol monohexyl ether	31726-34-8	0.07582%	0.00779%	
			Glutaraldehyde	111-30-8	0.06160%	0.00633%	
			Urea	57-13-6	0.03905%	0.00401%	
			Diammonium peroxodisulfate	7727-54-0	0.03268%	0.00336%	
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00583%	0.00060%	
			Methanol	67-56-1	0.00555%	0.00057%	
			Sodium erythorbate	6381-77-7	0.00432%	0.00044%	
			Ethane-1,2-diol	107-21-1	0.00429%	0.00044%	
			Trisodium ortho phosphate	7601-54-9	0.00429%	0.00044%	
			Aliphatic acids	Proprietary	0.00416%	0.00043%	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00416%	0.00043%	
			Prop-2-yn-1-ol	107-19-7	0.00139%	0.00014%	
			Calcium chloride	10043-52-4	0.00137%	0.00014%	

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Report ID: RPT-29859 (Generated on 8/25/2014 1:05 PM)

All component information listed was obtained from the supplier's Material Safety Data Sheets (MSDS). As such, the Operator is not responsible for inaccurate and/or incomplete information. Any questions regarding the content of the MSDS should be directed to the supplier who provided it. The Occupational Safety and Health Administration's (OSHA) regulations govern the criteria for the disclosure of this information. Please note that Federal Law protects "proprietary", "trade secret", and "confidential business information" and the criteria for how this information is reported on an MSDS is subject to 29 CFR 1910.1200(i) and Appendix D.

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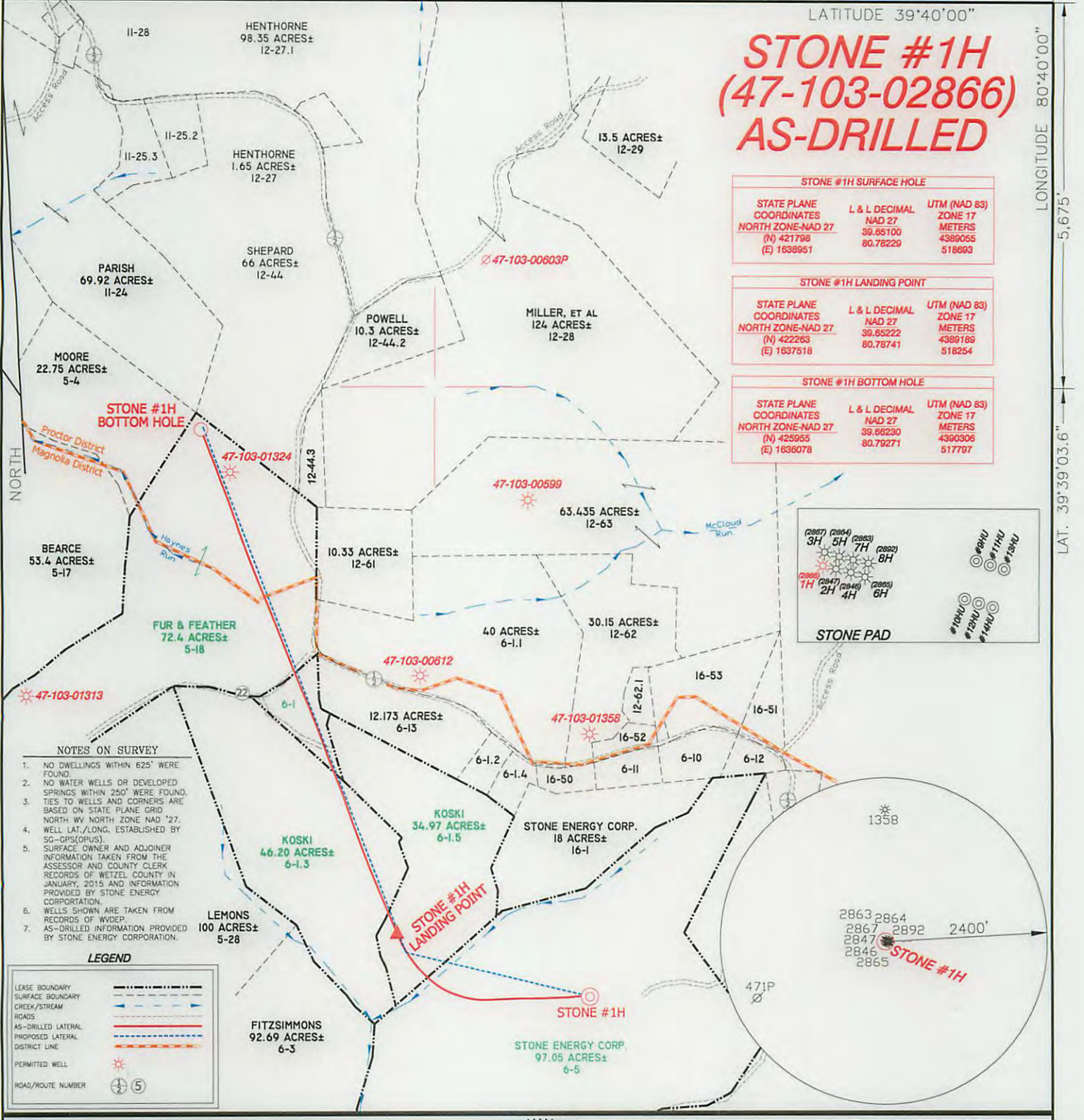
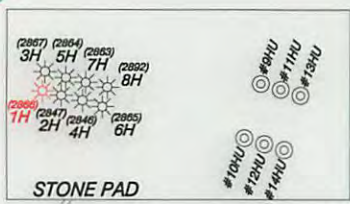
WV Department of
Environmental Protection
08/05/2015

STONE #1H (47-103-02866) AS-DRILLED

STONE #1H SURFACE HOLE		
STATE PLANE COORDINATES NORTH ZONE-NAD 27	L & L DECIMAL NAD 27	UTM (NAD 83) ZONE 17 METERS
(N) 421798 (E) 1638951	39.85100 80.78220	4389055 518693

STONE #1H LANDING POINT		
STATE PLANE COORDINATES NORTH ZONE-NAD 27	L & L DECIMAL NAD 27	UTM (NAD 83) ZONE 17 METERS
(N) 422263 (E) 1637518	39.85222 80.78741	4389189 518254

STONE #1H BOTTOM HOLE		
STATE PLANE COORDINATES NORTH ZONE-NAD 27	L & L DECIMAL NAD 27	UTM (NAD 83) ZONE 17 METERS
(N) 425955 (E) 1636078	39.86230 80.79271	4390306 517797



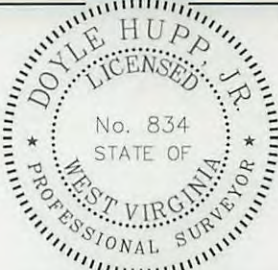
- NOTES ON SURVEY**
1. NO DWELLINGS WITHIN 625' WERE FOUND.
 2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
 3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
 4. WELL LAT./LONG. ESTABLISHED BY SG-GPS(OPUS).
 5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF WETZEL COUNTY IN JANUARY, 2015 AND INFORMATION PROVIDED BY STONE ENERGY CORPORATION.
 6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP.
 7. AS-DRILLED INFORMATION PROVIDED BY STONE ENERGY CORPORATION.

LEGEND

- LEASE BOUNDARY (dashed line)
- SURFACE BOUNDARY (solid line)
- CREEK/STREAM (blue line with arrows)
- ROADS (solid line with double dashes)
- AS-DRILLED LATERAL (dotted line)
- PROPOSED LATERAL DISTRICT LINE (dashed line)
- PERMITTED WELL (sun symbol)
- ROAD/ROUTE NUMBER (circle with number)

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 834
HUPP Surveying & Mapping
 P.O. Box 647 Grantsville, WV 26147
 (304) 354-7035 EMAIL: hupp@frontiernet.net



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE APRIL 6 **RECEIVED** 20 15
 OPERATORS WELL NO. STONE #1H
 API WELL NO. 47-103-02866
 STATE WV COUNTY WETZEL PERMIT 02866
 Environmental Protection

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. W2234 (BK 75-28)
 PROVEN SOURCE OF ELEVATION SG-GPS (OPUS) SCALE 1" = 1000'

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

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

LOCATION :
 ELEVATION 1,215' WATERSHED DOOLIN RUN
 DISTRICT MAGNOLIA COUNTY WETZEL QUADRANGLE NEW MARTINSVILLE 7.5'

SURFACE OWNER STONE ENERGY CORPORATION ACREAGE 97.05±
 ROYALTY OWNER BARBARA BARRETT, et al LEASE ACREAGE 255.14± **06/05/2015**

PROPOSED WORK : LEASE NO. _____
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD-6,800' MD- 11,675'

WELL OPERATOR STONE ENERGY CORPORATION DESIGNATED AGENT TIM MCGREGOR
 ADDRESS P.O. BOX 52807 LAFAYETTE, LA 70508 ADDRESS 1300 FORT PIERPONT DR., SUITE 201 MORGANTOWN, WV 26508

COUNTY NAME
 PERMIT