

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

API 47-103-02865 County Wetzel District Magnolia
Quad New Martinsville Pad Name Stone Field/Pool Name Mary
Farm name Stone Energy Corporation Well Number #6H
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 4,389,050 Easting 518,711
Landing Point of Curve Northing 4,388,896 Easting 518,997
Bottom Hole Northing 4,387,566 Easting 519,745

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 3/20/2013 Date drilling commenced 5/24/2013 Date drilling ceased 2/4/2014
Date completion activities began 4/7/2014 Date completion activities ceased 10/25/2014
Verbal plugging (Y/N) N Date permission granted _____ Granted by Office of Oil and Gas

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug **APR 28 2015**

Freshwater depth(s) ft 95 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2,362 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 913 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
DL 5/06/2015
W.S. Glazier

API 47-103 - 02865

Farm name Stone Energy Corporation

Well number #6H

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"	80'	New	LS		N - GTS
Surface	17.5"	13.375"	1,207' KB - 1,192' GL	New	J55	118' & 197'	Y - CTS
Coal	17.5"	13.375"	1,207' KB - 1,192' GL	New	J55	118' & 197'	Y - CTS
Intermediate 1	12.25"	9.625"	2,461'	New	J55		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	12,239'	New	P110		N - TOC @ 1,225'
Tubing	N/A	2.375"	7,080'	New	N80		N/A
Packer type and depth set							

Comment Details Circulated 30 bbls cement to surface on 13.375" casing string. Circulated 45 bbls cement to surface on the 9.625" casing string.
TOC on 5.5" after running CBL @ 1,225'.

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"	935	15.6	1.19	1,113	Surface	8.0
Coal	Class "A"	935	15.6	1.19	1,113	Surface	8.0
Intermediate 1	Lead-FlexSeal Tail-Class "A"	Lead-441 Tail-371	Lead-15.0 Tail-15.6	Lead-1.26 Tail-1.19	Lead-556 Tail-442	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-FlexSeal Tail-Class "A"	Lead-846 Tail-1,673	Lead- 15.0 Tail-15.6	Lead-1.26 Tail-1.19	Lead-1,066 Tail-1,991	1,225	7.0
Tubing							

Drillers TD (ft) 12,256 MD / 6,778 TVD Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Shale Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 6,189 MD / 6,156' 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, 13, 17, 21, 25 and 27. Intermediate casing had bow spring centralizers placed on joints 2, 5, 8, 11, 14, 18, 22, 26, 30, 34, 38, 43, 48, 53 and 57.
Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint #228. Ran a total of 58 rigid spiral centralizers. Ran bow spring centralizers from joint 232 to joint 280 on every eighth joint. A total of 7 bow spring centralizers were run.

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS APR 28 2015

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

WV Department of Environmental Protection

API 47- 103 - 02865 Farm name Stone Energy Corporation Well number #6H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	4/15/14	11,978	12,122	72	Marcellus Shale
2	5/4/14	11,730	11,908	72	Marcellus Shale
3	5/6/14	11,470	11,663	72	Marcellus Shale
4	5/7/14	11,224	11,403	72	Marcellus Shale
5	5/8/14	10,967	11,153	72	Marcellus Shale
6	5/9/14	10,711	10,898	72	Marcellus Shale
7	5/10/14	10,457	10,640	72	Marcellus Shale
8	5/11/14	10,202	10,385	72	Marcellus Shale
9	5/12/14	9,946	10,136	72	Marcellus Shale
10	5/13/14	9,695	9,883	72	Marcellus Shale
11	5/14/14	9,446	9,633	72	Marcellus Shale
12	5/15/14	9,202	9,383	72	Marcellus Shale
13	5/16/14	8,949	9,133	72	Marcellus Shale
14	5/17/14	8,699	8,883	72	Marcellus Shale
15	5/22/14	8,445	8,638	72	Marcellus Shale
16	5/28/14	8,205	8,383	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	5/4/14	83.4	7,446	6,049	4,775	365,300	8,403	
2	5/6/14	85.3	7,679	6,611	5,376	419,840	8,485	
3	5/7/14	83.3	7,613	6,426	4,947	414,540	8,444	
4	5/8/14	85.2	7,524	6,514	5,090	420,880	8,438	
5	5/9/14	85.6	7,208	6,562	5,119	424,460	8,499	
6	5/10/14	85.4	7,220	5,803	4,717	417,020	8,545	
7	5/11/14	79.7	6,746	5,572	5,048	424,740	8,531	
8	5/12/14	78.7	6,945	5,657	4,642	421,980	8,350	
9	5/13/14	80.1	6,718	5,427	4,860	419,800	8,337	
10	5/14/14	78.9	6,789	6,735	5,262	425,400	8,356	
11	5/15/14	79.2	6,774	5,747	4,833	426,880	8,540	
12	5/16/14	79.2	6,781	5,924	4,570	421,480	8,455	
13	5/17/14	80.5	6,736	6,280	4,604	418,240	8,362	
14	5/22/14	80.1	6,425	5,800	4,333	425,220	8,446	
15	5/27/14	80.1	6,274	6,221	4,373	417,540	8,356	
16	5/29/14	79.3	6,263	5,607	4,861	421,020	8,464	

Please insert additional pages as applicable.

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	5/30/14	7,950	7,953	72	Marcellus Shale
18	6/1/14	7,694	7,883	72	Marcellus Shale
19	6/3/14	7,446	7,628	72	Marcellus Shale
20	6/5/14	7,184	7,375	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)
17	5/31/14	80.5	6,271	6,692	4,172	421,020	8,309	
18	6/2/14	80.3	6,327	6,814	5,178	412,860	8,322	
19	6/4/14	80.0	6,205	6,211	5,375	418,300	8,362	
20	6/5/14	80.3	6,486	7,080	4,182	421,920	8,235	

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus Shale</u>	<u>6,785' to 6,776'</u> TVD	<u>7,184' to 12,122'</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2,902 psi Bottom Hole 4,665 calculated psi DURATION OF TEST 49 hrs

OPEN FLOW Gas 2,388 mcfpd Oil _____ bpd NGL 225.6 bpd Water 372.0 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)
	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

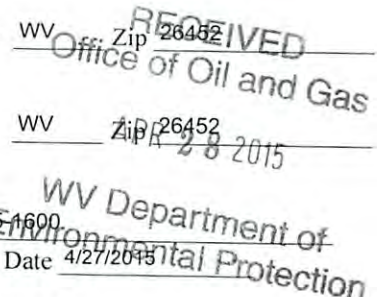
Logging Company Scientific Drilling and Schlumberger
Address 3475 Washington Ave / 1178 US HWY 33 East City Finleyville / Weston State PA / WV Zip 15332 / 26452

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
Signature  Title Drilling Engineer Date 4/27/2015



Stone #6H
API 47-103-02865
Stone Energy Corporation

	Horizontal			
	Top (ft TVD)	Top (ft MD)	Bottom (ft TVD)	Bottom (ft MD)
Sandstone & Shale	Surface		*	913
Coal	913		*	915
Sandstone & Shale	915		*	2,086
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		*	5,891
Rhinestreet	5,891	5,912	~	6,482
Cashaqua	6,482	6,560	~	6,595
Middlesex	6,595	6,721	~	6,618
West River	6,618	6,756	~	6,671
Geneseo	6,671	6,841	~	6,687
Tully Limestone	6,687	6,870	~	6,731
Hamilton Shale	6,731	6,939	~	6,760
Marcellus	6,760	7,083	~	6,778
TD				12,256

FW @ 95

SW @ 2,362

* From Pilot Hole Log and Driller's Log
~ From MWD Gamma Log

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06/05/2015

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	6/6/2014
State:	West Virginia
County/Parish:	Wetzel County
API Number:	47-103-02865
Operator Name:	Stone Energy
Well Name and Number:	Stone 6H
Longitude:	518,711
Latitude:	4,389,050
Long/Lat Projection:	
Production Type:	
True Vertical Depth (TVD):	0
Total Water Volume (gal)*:	7066101

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, Accelerator, Fluid Loss Additive, Propping	Water (Including Mix Water Supplied by Client)*	NA		87.43891%	
			Crystalline silica	14808-60-7	98.62526%	12.38841%	
			Hydrochloric acid	7647-01-0	0.78666%	0.09881%	
			Carbohydrate polymer	Proprietary	0.55495%	0.06971%	
			Ammonium sulfate	7783-20-2	0.15066%	0.01892%	
			Polyethylene glycol monohexyl ether	31726-34-8	0.06374%	0.00801%	
			Glutaraldehyde	111-30-8	0.04995%	0.00627%	
			Urea	57-13-6	0.02511%	0.00315%	
			Diammonium peroxodisulphate	7727-54-0	0.02431%	0.00305%	
			Calcium chloride	10043-52-4	0.01494%	0.00188%	
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00490%	0.00062%	
			Trisodium ortho phosphate	7601-54-9	0.00420%	0.00053%	
			Ethane-1,2-diol	107-21-1	0.00420%	0.00053%	
			Methanol	67-56-1	0.00322%	0.00040%	
			Sodium erythorbate	6381-77-7	0.00302%	0.00038%	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00242%	0.00030%	
			Aliphatic acids	Proprietary	0.00242%	0.00030%	
			Prop-2-yn-1-ol	107-19-7	0.00081%	0.00010%	

* 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-29869 (Generated on 8/25/2014 1:11 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 B.

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 06/05/2015

STONE #6H (47-103-02865) AS-DRILLED

STONE #6H SURFACE HOLE

STATE PLANE COORDINATES NORTH ZONE-NAD 27 (N) 421783 (E) 1639008	L & L DECIMAL NAD 27 39.65096 80.78209	UTM (NAD 83) ZONE 17 METERS 4389050 518711
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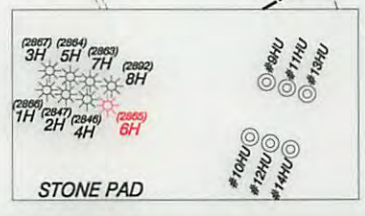
STONE #6H LANDING POINT	
STATE PLANE COORDINATES NORTH ZONE-NAD 27 (N) 421260 (E) 1639940	L & L DECIMAL NAD 27 39.64957 80.77875
UTM (NAD 83) ZONE 17 METERS 4388896 518097	

STONE #6H BOTTOM HOLE	
STATE PLANE COORDINATES NORTH ZONE-NAD 27 (N) 410854 (E) 1642323	L & L DECIMAL NAD 27 39.63756 80.77007
UTM (NAD 83) ZONE 17 METERS 4387566 519748	



LEGEND

LEASE BOUNDARY	---
SURFACE BOUNDARY	---
CREEK/STREAM	~ ~ ~
ROADS	==
AS-DRILLED LATERAL	---
PROPOSED LATERAL	---
DISTRICT LINE	---
PERMITTED WELL	☆
ROAD/ROUTE NUMBER	⑤

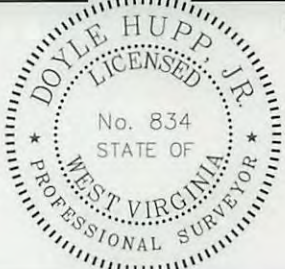


- NOTES ON SURVEY**
- NO DWELLINGS WITHIN 625' WERE FOUND.
 - NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
 - WELL LAT./LONG. ESTABLISHED BY SG-GPS(OPUS).
 - SURFACE OWNER AND ADJOINER INFORMATION TAKEN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

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 8, 20 15
 OPERATORS WELL NO. STONE #6H
 API WELL NO. 47-103-02865
 STATE COUNTY PERMIT

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 X LIQUID INJECTION ___ WASTE DISPOSAL ___ "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 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 527.23± **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-6,792' MD- 12,256'

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