WR-35
Rev. 8/23/13

PM

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

API 47 - 103 - 02893 County Wetzel District Magnolia
Quad New Martinsville Pad Name ZMBG Field/Pool Name Mary
Farm name Zumpetta, Lawrence et al 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 4,387,935 Easting 515,383
Landing Point of Curve Northing 4,388,019 Easting 514,893
Bottom Hole Northing 4,389,295 Easting 514,148

Elevation (ft) 1,341 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 7/1/2013 Date drilling commenced 8/29/2013 Date drilling ceased 3/31/2014
Date completion activities began 8/7/2014 Date completion activities ceased 2/5/2015
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 N
Salt water depth(s) ft None Reported Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1,069 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

RECEIVED
Office of Oil and Gas
AUG 21 2015
WV Department of
Environmental Protection

Reviewed by:
TK 10/16/2015

API 47- 103 - 02893 Farm name Zumpetta, Lawrence et al 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"	91'	New	LS		N - GTS
Surface	17.5"	13.375"	1,295'	New	J55	124' & 200'	Y - CTS
Coal	17.5"	13.375"	1,295	New	J55	124' & 200'	Y - CTS
Intermediate 1	12.25"	9.625"	2,548'	New	J55		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	12,611'	New	P110		N - TOC @ 549'
Tubing	N/A	2.375"	7,410'	New	N80		N/A
Packer type and depth set							

Comment Details Circulated 14 bbls cement to surface on 13.375" casing string. Circulated 37 bbls cement to surface on the 9.625" casing string. Circulated 38 bbls EcoSpacer on the 5.5" casing string. TOC on 5.5" after running CBL @ 549'.

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"	980	15.6	1.21	1,186	Surface	8.0
Coal	Class "A"	980	15.6	1.21	1,186	Surface	8.0
Intermediate 1	Lead-10% Salt Tail-Class "A"	Lead-680 Tail-250	Lead-15.6 Tail 15.6	Lead-1.24 Tail-1.21	Lead-843 Tail-303	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-EcoSpacer Tail-VariCem	Lead-105 Tail-2,460	Lead- 14.5 Tail-15.2	Lead-2.66 Tail-1.20	Lead-279 Tail-2,952	549	7.0
Tubing							

Drillers TD (ft) 12,626 MD / 6,643 TVD Loggers TD (ft) N/A

Deepest formation penetrated Marcellus Shale Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) 5,764 MD / 5,757' 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, 21, 24, 27 and 30. Intermediate casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56 and 60. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 226. Ran a total of 57 rigid spiral centralizers. Ran bow spring centralizers from joint 230 to joint 286 on every eighth 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 _____

API 47- 103 - 02893 Farm name Zumpetta, Lawrence et al Well number #1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	8/14/14	12,335	12,507	72	Marcellus Shale
2	9/7/14	12,082	12,265	72	Marcellus Shale
3	9/9/14	11,833	12,010	72	Marcellus Shale
4	9/13/14	11,583	11,760	72	Marcellus Shale
5	10/11/14	11,329	11,510	72	Marcellus Shale
6	10/12/14	11,086	11,263	72	Marcellus Shale
7	10/13/14	10,827	11,010	72	Marcellus Shale
8	10/14/14	10,570	10,755	72	Marcellus Shale
9	10/15/14	10,320	10,500	72	Marcellus Shale
10	10/18/14	10,065	10,246	72	Marcellus Shale
11	10/19/14	9,811	10,000	72	Marcellus Shale
12	10/20/14	9 564	9,743	72	Marcellus Shale
13	10/21/14	9,305	9,485	72	Marcellus Shale
14	10/22/14	9,050	9,232	72	Marcellus Shale
15	10/23/14	8,795	8,975	72	Marcellus Shale
16	10/24/14	8,541	8,723	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	9/7/14	84.9	7,449	5,788	4,883	357,700	8,272	
2	9/8/14	83.4	7,695	7,060	4,972	414,700	8,484	
3	9/12/14	84.4	7,469	6,119	4,917	410,280	8,212	
4	10/11/14	85.0	7,039	5,439	4,827	425,100	8,550	
5	10/12/14	83.6	7,189	6,024	4,678	418,920	8,455	
6	10/13/14	83.5	7,153	5,656	4,936	420,140	8,509	
7	10/14/14	80.6	6,698	5,360	4,767	417,920	8,390	
8	10/15/14	79.3	6,783	5,813	4,588	415,560	8,404	
9	10/18/14	78.7	6,779	5,963	4,558	420,840	8,388	
10	10/19/14	78.3	7,020	3,123	4,470	415,940	9,102	
11	10/20/14	80.1	6,778	5,541	4,767	415,350	8,203	
12	10/21/14	80.5	6,800	4,841	4,841	422,800	8,256	
13	10/22/14	80.7	6,686	5,809	5,005	423,280	8,320	
14	10/23/14	80.3	6,806	6,132	5,511	416,660	8,368	
15	10/24/14	80.0	6,507	5,403	5,154	420,420	8,315	
16	10/25/14	80.6	6,471	5,531	4,767	420,040	8,435	

Please insert additional pages as applicable.

API 47- 103 - 02893 Farm name Zumpetta, Lawerence et al Well number #1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	10/25/14	8,286	8,470	72	Marcellus Shale
18	10/26/14	8,035	8,215	72	Marcellus Shale
19	10/27/14	7,785	7,963	72	Marcellus Shale
20	10/28/14	7,525	7,713	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	10/26/14	78.5	6,601	5,914	4,530	417,540	8,302	
18	10/27/14	80.4	6,584	5,183	4,945	423,860	8,284	
19	10/28/14	80.3	6,716	5,422	5,304	420,180	8,341	
20	10/29/14	76.6	7,342	5,981	6,548	410,940	9,378	

Please insert additional pages as applicable.

API 47- 103 - 02893 Farm name Zumpetta, Lawrence et al Well number #1H

PRODUCING FORMATION(S)	DEPTHS		
Marcellus Shale	6,768' to 6,648'	TVD	7,525' to 12,507' MD

Please insert additional pages as applicable.

GAS TEST ■ Build up □ Drawdown ■ Open Flow OIL TEST □ Flow □ Pump

SHUT-IN PRESSURE Surface 2,378 psi Bottom Hole 4,136 calculated psi DURATION OF TEST 138 hrs

OPEN FLOW Gas 2,591 mcfpd Oil bpd NGL 104.4 bpd Water 569.5 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_2S, 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 Halliburton
Address 1628 Jackson Mill Road City Jane Lew State WV Zip 26378

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 W. Lee Hornsby Title Drilling Engineer Date 8/25/2015

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

ZMBG #1H
API 47-103-02893
Stone Energy Corporation
Horizontal

	Top (ft TVD)	Top (ft MD)		Bottom (ft TVD)	Bottom (ft MD)	
Sandstone & Shale	Surface		*	1,069		FW @ 95
Coal	1,069		*	1,071		
Sandstone & Shale	1,071		*	2,116		No SW Reported
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		*	5,585	5,595	
Rhinestreet	5,585	5,595	~	6,485	6,700	
Cashaqua	6,485	6,700	~	6,602	7,000	
Middlesex	6,602	7,000	~	6,619	7,038	
West River	6,619	7,038	~	6,672	7,195	
Geneseo	6,672	7,195	~	6,686	7,242	
Tully Limestone	6,686	7,242	~	6,719	7,343	
Hamilton Shale	6,719	7,343	~	6,748	7,456	
Marcellus	6,748	7,456	~	6,643	12,626	
TD				6,643	12,626	

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

103.02893

Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	8/8/2014
State:	West Virginia
County/Parish:	Wetzel County
API Number:	47-103-02893
Operator Name:	Stone Energy
Well Name and Number:	ZMBG #1H
Longitude:	515,383
Latitude:	4,387,935
Long/Lat Projection:	
Production Type:	Natural Gas
True Vertical Depth (TVD):	6643
Total Water Volume (gal)*:	7,096,730

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, AntiFoam Agent, Surfactant , Acid, Breaker, Gelling Agent, Friction Reducer, Iron Control Agent, Clay Control Agent, Fluid Loss Additive , Propping	Water (Including Mix Water Supplied by Client)*	NA		87.53518%	
			Crystalline silica	14808-60-7	98.52526%	12.28100%	
			Hydrochloric acid	7647-01-0	0.78693%	0.09809%	
			Ammonium sulfate	7783-20-2	0.13689%	0.01706%	
			Polyethylene glycol monohexyl ether	31726-34-8	0.07141%	0.00890%	
			Glutaraldehyde	111-30-8	0.05130%	0.00639%	
			Diammonium peroxidisulphate	7727-54-0	0.02643%	0.00329%	
			Urea	57-13-6	0.02281%	0.00284%	
			Dicoco dimethyl quaternary ammonium chloride	61789-77-3	0.00549%	0.00068%	
			Methanol	67-56-1	0.00464%	0.00058%	
			Trisodium ortho phosphate	7601-54-9	0.00391%	0.00049%	
			Ethylene Glycol	107-21-1	0.00391%	0.00049%	
			Sodium erythorbate	6381-77-7	0.00258%	0.00032%	
			Thiourea formaldehyde polymer	Proprietary	0.00232%	0.00029%	
			Aliphatic acids	Proprietary	0.00178%	0.00022%	
			Calcium chloride	10043-52-4	0.00121%	0.00015%	
			Aliphatic alcohols, ethoxylated #2	Proprietary	0.00077%	0.00010%	
			Propargyl alcohol	107-19-7	0.00077%	0.00010%	
			Olefin hydrocarbon	Proprietary	0.00039%	0.00005%	
			Polypropylene glycol	25322-69-4	0.00030%	0.00004%	
			Hexadec-1-ene	629-73-2	0.00015%	0.00002%	
			Formaldehyde	50-00-0	0.00001%	< 0.00001%	

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

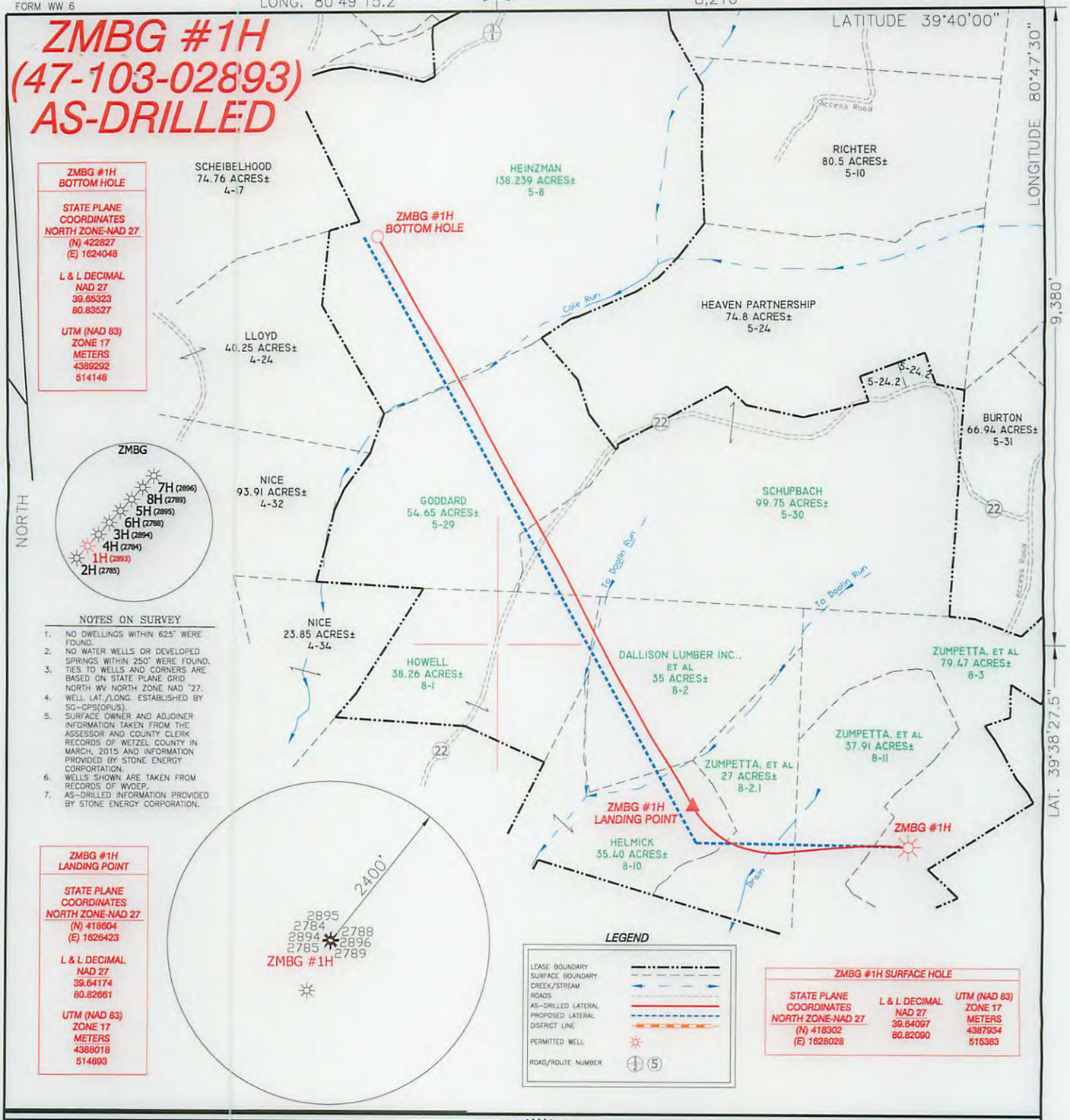
** Information is based on the maximum potential for concentration and thus the total may be over 100%

Report ID: RPT-34837 (Generated on 2/16/2015 4:40 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.

FORM WW 6

ZMBG #1H (47-103-02893) AS-DRILLED



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 MARCH, 2015 AND INFORMATION PROVIDED BY STONE ENERGY CORPORTATION.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP.
7. AS-DRILLED INFORMATION PROVIDED BY STONE ENERGY CORPORATION.

ZMBG #1H LANDING POINT

STATE PLANE COORDINATES NORTH ZONE-NAD 27
(N) 418604
(E) 1626423

L & L DECIMAL NAD 27
39.64174
80.82661

UTM (NAD 83) ZONE 17 METERS
4388018
514893

LEGEND

- LEASE BOUNDARY
- SURFACE BOUNDARY
- CREEK/STREAM
- ROADS
- AS-DRILLED LATERAL
- PROPOSED LATERAL
- DISTRICT LINE
- PERMITTED WELL
- ROAD/ROUTE NUMBER (1) (5)

ZMBG #1H SURFACE HOLE

STATE PLANE COORDINATES NORTH ZONE-NAD 27	L & L DECIMAL NAD 27	UTM (NAD 83) ZONE 17 METERS
(N) 418302	39.64097	4387934
(E) 1628026	80.82090	515383

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

DOYLE HUPP, JR. LICENSED No. 834 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

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 JULY 15, 20 15

OPERATORS WELL NO. ZMBG #1H

API WELL NO. 47 (STATE) – 103 (COUNTY) – 02893 (PERMIT)

MINIMUM DEGREE OF ACCURACY 1/2500

PROVEN SOURCE OF ELEVATION SG-GPS(OPUS)

FILE NO. W2068 (BK 77-29)

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 ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION :

ELEVATION 1,340' WATERSHED TRIBUTARY OF DOOLIN RUN

DISTRICT MAGNOLIA COUNTY WETZEL QUADRANGLE NEW MARTINSVILLE 7.5'

SURFACE OWNER LAWRENCE ZUMPETTA, et al ACREAGE 79.47±

ROYALTY OWNER LAWRENCE ZUMPETTA, et al LEASE ACREAGE 545.67±

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 6,643' MD 12,626'

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

10/16/2015

PERMIT

USM