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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Jim Justice , Governor  
Austin Caperton , Cabinet Secretary  
www.dep.wv.gov

Friday, December 22, 2017  
WELL WORK PERMIT  
Horizontal 6A / Fracture

EQT PRODUCTION COMPANY  
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for MARTIN 5H  
47-103-02924-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin  
Chief

Operator's Well Number: MARTIN 5H  
Farm Name: MARTIN, CHARLES & GWENDOLYN  
U.S. WELL NUMBER: 47-103-02924-00-00  
Horizontal 6A / Fracture  
Date Issued: 12/22/2017

Promoting a healthy environment.

12/22/2017

## PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

### CONDITIONS

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1. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
2. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
3. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
4. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
5. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
6. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov).
7. The entire well pad shall be bermed so as to prevent runoff from leaving the pad during drilling and completion operations, including a mountable berm at pad entrance.

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

1) Well Operator: EQT Production Company 306686 Wetzel Green Porters Falls  
Operator ID County District Quadrangle

2) Operator's Well Number: Martin 5H Well Pad Name: Martin

3) Farm Name/Surface Owner: Martin, Charles and Gwendolyn Public Road Access: WV RT 7

4) Elevation, current ground: 906 Elevation, proposed post-construction: 906

5) Well Type (a) Gas  Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow  Deep \_\_\_\_\_  
Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus, 6645, 48, 3800-4400 psig

*DMH*  
*9-14-17*

8) Proposed Total Vertical Depth: 6549

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 11964

11) Proposed Horizontal Leg Length: 4847

12) Approximate Fresh Water Strata Depths: 108

13) Method to Determine Fresh Water Depths: Depth of bit when water shows in the flowline or when drilling soap injected

14) Approximate Saltwater Depths: none reported

15) Approximate Coal Seam Depths: 632, 716, 748

16) Approximate Depth to Possible Void (coal mine, karst, other): none reported

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes \_\_\_\_\_ No

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(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

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47 10302924

WW-6B  
(04/15)

API NO. 47- 103 - 02924 **F**  
OPERATOR WELL NO. Martin 5H  
Well Pad Name: Martin

18)

**CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	LS	94.1	90	90	40-CTS
Fresh Water	13.375	New	J55	54.5	877	877	811-CTS
Coal	13.375	New	J55	54.5	877	877	811-CTS
Intermediate	9.625	New	J55	36	2236	2236	Lead-496 Tail-484
Production	5.5	New	P110	20	11947	11947	Lead- 421 Tail-2820
Tubing	2.375	New	J55	4.7			
Liners							

*Day 9-14-17*

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	24	0.375	N/A	17	Type 1	1.18
Fresh Water	13.375	17.5	0.380	2730	2160	HalCem Class A	1.21
Coal	13.375	17.5	0.380	2730		HalCem Class A	1.21
Intermediate	9.625	12.25	0.352	3520	2814	Lead-10% Salt Tail HalCem	Lead- 1.24 Tail-1.21
Production	5.5	8.75	0.361	12360	101112	Lead-Tuned Spacer3 Tail- VeriCem	Lead- 1.51 Tail-1.20
Tubing	2.375	N/A	0.190	7700			
Liners	N/A						

**PACKERS**

Kind:				RECEIVED Office of Oil and Gas  <b>SEP 19 2017</b>  WV Department of Environmental Protection
Sizes:				
Depths Set:				

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

well has been drilled to TD; propose to perforate and fracture the Marcellus and turn in to production

DAH  
9-14-17

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20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 400,000 pounds of sand per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): no additional

22) Area to be disturbed for well pad only, less access road (acres): no additional

23) Describe centralizer placement for each casing string:

Surface casing had bow spring centralizers placed on joints 4, 8, 12, 16, and 20.  
Intermediate casing had centralizers placed on joints 4, 8, 12, 16, 20, 24, 28, and 32.  
Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 7 to joint 143. Ran a total of 35 rigid spiral centralizers. Ran bow spring centralizers from joint 147 to joint 232 on every fifth joint. A total of 18 bow spring centralizers were run.

24) Describe all cement additives associated with each cement type:

Fresh water/coal string uses a slurry of Class A cement with 0.125 pps cello flake, 1.0% CaCl<sub>2</sub>, and 0.2% Anti-Foam  
Intermediate string used a lead/tail slurry. Lead is Class A cement with 0.2 gps accelerator, 0.08 gps dispersant, 0.1 gps Anti-Foam, 4.0% Expanding agent, and 0.5% gas mitigation agent. Tail is Class A cement with 1.0% CaCl<sub>2</sub>, 0.125 pps cello flake, and 0.2% anti-foam.  
Production string uses a lead/tail slurry. The lead is class A cement with 4.0% expanding agent, 0.5% gas migration agent, 0.25 gps dispersant, 0.1 gps anti-foam, and 0.06 gps retarder. The tail is class A cement with 0.2% dispersant, 0.4% fluid loss, 0.2% anti-foam, 0.15% retarder, and 0.2% anti settling agent.

25) Proposed borehole conditioning procedures:

- Fresh Water/Coal section will be done by circulating air through the drill string at TD between 30 to 90 minutes or until the well bore clears of cuttings.
- Intermediate section will be conditioned by circulating air and/or stiff foam through the drill string at TD for 30 to 120 minutes until well bore clears of cuttings.
- Production section will be done by circulating drilling fluid through the drill string at TD for 120 to 720 minutes until the shakers are clear of cuttings.

\*Note: Attach additional sheets as needed.

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WR-35  
Rev. 8/23/13

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Office of Oil and Gas

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

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API 47-103-02924 County Wetzel District Green  
Quad Porters Falls Pad Name Martin Field/Pool Name Mary  
Farm name Martin, Charles and Gwendo Well Number #5H  
Operator (as registered with the OOG) Stone Energy Corporation  
Address 1300 Fort Pierpont Dr. - Suite 201 City Morgantown State WV Zip 26508

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,384,806 Easting 520,087  
Landing Point of Curve Northing 4,385,020 Easting 519,922  
Bottom Hole Northing 4,386,271 Easting 519,084

Elevation (ft) 906 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 9/30/2013 Date drilling commenced 4/30/2014 Date drilling ceased 10/26/2014  
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 108 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 632, 716 and 748 Cavern(s) encountered (Y/N) depths N

Is coal being mined in area (Y/N) N

**APPROVED**

NAME: Sam B  
DATE: 5-25-17

Reviewed by: DMH

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API 47-103 - 02924 Farm name Martin, Charles and Gwendo Well number #5H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	90'	New	LS - 94.1 ppf		N - GTS
Surface	17.5"	13.375"	877'	New	J55 - 54.5 ppf	111' & 184'	Y - CTS
Coal	17.5"	13.375"	877'	New	J55 - 54.5 ppf	111' & 184'	Y - CTS
Intermediate 1	12.25"	9.625"	2,236'	New	J55 - 36 ppf		Y - CTS
Intermediate 2							
Intermediate 3							
Production	8.75"	5.5"	11,947'	New	P110 - 20 ppf		N - TOC @ 783' Calculated
Tubing							
Packer type and depth set		TAM CAP Inflatable Packer on 9.625" Casing String @ 754'					

Comment Details Circulated 12 bbls cement to surface on 13.375" casing string. Circulated 26 bbls cement to surface on the 9.625" casing string. Did not circulate any cement to surface on the 5.5" casing string. TOC on 5.5" calculated to be @ 783'.

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	HalCem Class "A"	670	15.6	1.21	811	Surface	8.0
Coal	HalCem Class "A"	670	15.6	1.21	811	Surface	8.0
Intermediate 1	Lead-10% Sail Tail-HalCem	Lead-400 Tail-400	Lead-15.6 Tail-15.6	Lead-1.24 Tail-1.21	Lead-496 Tail-484	Surface	12.0
Intermediate 2							
Intermediate 3							
Production	Lead-TunedSpaceO Tail-Var/Cem	Lead-279 Tail-2,350	Lead-14.5 Tail-15.2	Lead-1.51 Tail-1.20	Lead-421 Tail-2,820	783' Calculated	7.0
Tubing							

Drillers TD (ft) 11,964 MD / 6,549 TVD Loggers TD (ft) N/A  
 Deepest formation penetrated Marcellus Shale Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 5,668 MD / 5,665 TVD

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

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING Surface casing had bow spring centralizers placed on joints 4, 8, 12, 16 and 20. Intermediate casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28 and 32. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 7 to joint 143. Ran a total of 35 rigid spiral centralizers. Ran bow spring centralizers from joint 147 to joint 232 on every fifth joint. A total of 18 bow spring centralizers were run.

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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API 47-103 - 02924

Farm name Martin, Charles and Gwendo Well number #5H

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)

Please insert additional pages as applicable.

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API 47-103-02924 Farm name Martin, Charles and Gwendo Well number #5H

PRODUCING FORMATION(S)	DEPTHS	
Not Yet Completed	TVD	MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface \_\_\_\_\_ psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas \_\_\_\_\_ mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ 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		
See Attached Sheet					

Please insert additional pages as applicable.

Drilling Contractor Highlands (top-hole) & Saxon Drilling (horizontal)  
 Address 900 Virginia St. - East / 9303 New Trails Drive City Charleston / The Woodlands State WV / TX Zip 25301 / 77381

Logging Company Scientific Drilling and Schlumberger  
 Address 124 Vista Drive / 1178 US HWY 33 East City Charleroi / Weston State PA / WV Zip 15022 / 26452

Cementing Company Halliburton  
 Address 121 Champion Way, Suite 110 City Cannonsburg State PA Zip 15317

Stimulating Company \_\_\_\_\_  
 Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Please insert additional pages as applicable.

Completed by Greg Zofchak Telephone 304-225-1600  
 Signature *[Signature]* Title Drilling Engineer Date 2/15/17

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

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103-00001

Well: Martin #5H  
 State: West Virginia  
 County: Wetzel  
 District: Green  
 Prospect: Mary  
 Location: Surface: North = 4,384,806 East = 520,087 (UTM NAD 83)  
 PBHL: North = 4,386,270 East = 519,050 (UTM NAD 83)  
 PTD: 12500' MD / 6800' TVD

**STONE ENERGY - PROPOSED HORIZONTAL**

Revision: 24-June-13

Permit Number: 47-103-  
 Permit Issued: 908'  
 Post Construction Ground Elevation: 18'  
 Kelly Bushing: 18'  
 Rig:  
 Spud Date:  
 TD Date:  
 Rig Release Date:

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HOLE SIZE	PILOT HOLE FORMATION TOPS	WELLBORE DIAGRAM	CASING & CEMENTING DATA DIRECTIONAL DATA	MW & FLUID TYPE	HOLE DEV.	
24" Hole then Driven	40' KB (22' BGL)		<b>CONDUCTOR PIPE</b> 20" x 3/8" wall US PE @ 40' (set in bedrock & grouted to surface)		Vertical	
17-1/2" Hole	Shallowest FW 59' TVD Pittsburgh Coal 720' TVD Deepest FW 900' TVD		<b>SURFACE CASING</b> 13-3/8" 54.5# J-55 STC @ 900' MD/TVD Set through fresh water zones Set through coal zones Cemented to surface	Air / Mist	Vertical	
12-1/4" Hole	Salt Water 1556' TVD Little Lime 1823' TVD Big Lime 1913' TVD Big Injun Sandstone 2013' TVD Base of Big Injun 2113' TVD 2245' TVD		<b>INTERMEDIATE CASING</b> 9-5/8" 36.0# J-55 LTC @ 2245' MD/TVD Set through potential salt water zones Set below base of Big Injun Cemented to surface	Sulf Foam	Vertical	
8-3/4" Hole	Berea Sandstone 2477' TVD Gordon Sandstone 2699' TVD			Air / Dust		
8-3/4" Hole	Rhinesriet Shale (Base) 5145' TVD		KOP @ 5924' TVD		WBM In Curve	
8-3/4" Hole in Lateral	Middlesex Shale 5375' TVD West River Shale 5415' TVD Genesee Shale 5515' TVD Tully Limestone 5535' TVD Hamilton Shale 5555' TVD				WBM In Lateral	-90.5'
	Marcellus Shale 5620' TVD					
	Orondaga Limestone 6653' TVD					
	Notes: Formation tops as per vertical pilot hole Curve & lateral tops will vary due to structural changes Directional plan based upon best estimate of structure					

DMIT  
6-26-13

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**EQT Production**  
**Hydraulic Fracturing Monitoring Plan**  
**Pad ID: Martin**  
**Wetzel County, WV**

7/11/17

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## Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on Martin pad: Martin 3H, Martin 6H

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation. A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the hydraulic fracturing, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

### 1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 500 feet of this pad and the lateral sections that are known or could reasonably be expected to be within range of the fracture propagation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
3. Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

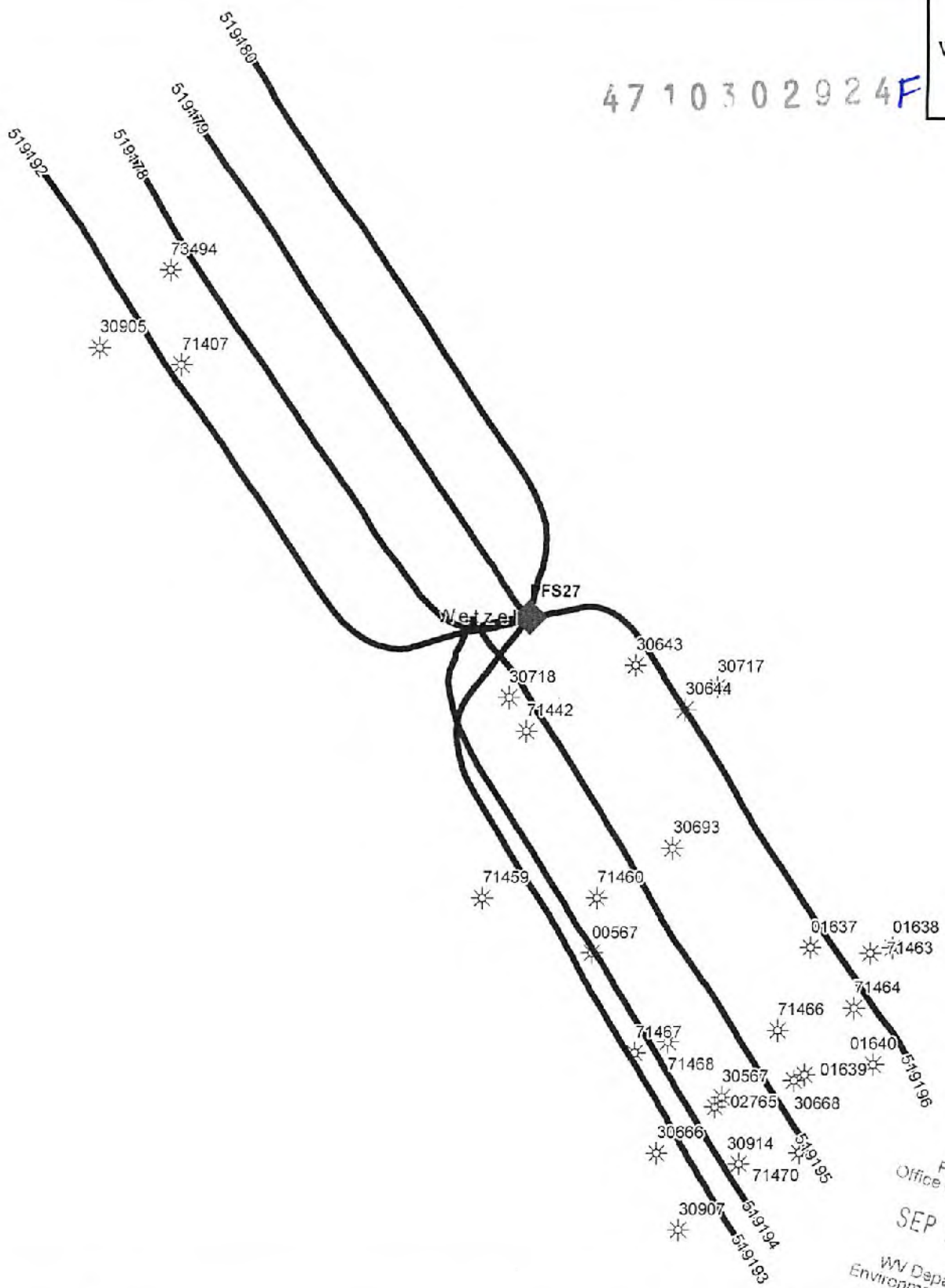
### 2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.

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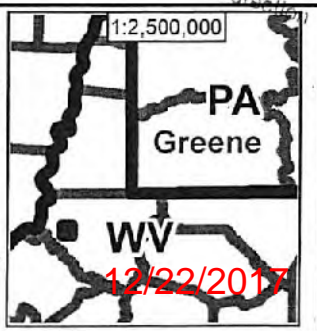
**EQT**  
EQT Corporation  
625 Liberty Avenue  
Pittsburgh, PA 15222

**Legend**  
\* Vertical Offsets  
— Target Formation  
— Marcellus



**Disclaimer:**

This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.



Martin Pad  
  
Vertical Offsets and  
Foreign Laterals  
within 500'  
  
Created By: Kellen Waltman Printed By: waltmank on 7/5/2017  
Path: \\wdclic2\gdept\GIS\_Department\GIS\_Users\WaltmanK\ADR\Foreign Well Working Map.mxd

Attachment A.c

4710302924F

UWI	ABAND_DATE	COMP_DATE	CURR_OPER	ELEVATION	ELEV_RE_CD	FNL_STAT	LATITUDE	LONGITUDE	PERMIT_DT	SPUD_DATE	TD_FITTED	PERMIT	OT	Permit
47103005670000		11/1/1968	QUAKER STATE OIL REFINING CORPORATION	1447 GR		D&A-G	39.6038	-80.7641	9/17/1968	10/2/1968	FITTED	274	00567	274
47103016370000			PERKINS OIL & GAS	900 GR		OIL	39.6040	-80.7566						01637
47103016380000			PERKINS OIL & GAS	820 GR		OIL	39.6040	-80.7537						01638
47103016390000			PERKINS OIL & GAS	1000 GR		OIL	39.6006	-80.7567						01639
47103027650000		6/1/2012	PERKINS OIL & GAS	1218 GR		OIL	39.5998	-80.7598	4/3/2012	4/25/2012	DEVONIAN			6500 02765
471030305670000	3/5/1947		UNKNOWN	GR		UNKNWN	39.6000	-80.7596						30567
471030306430000	4/24/1948	2/16/1924	UNKNOWN	695 GR		ABD-OW	39.6114	-80.7626	1/2/1924	1/17/1924	HAMPSHIRE			2643 30643
471030306440000	10/7/1948	2/16/1925	DUNN-MAR OIL & GAS COMPANY	770 GR		ABD-OW	39.6102	-80.7609	1/2/1925	1/17/1925	HAMPSHIRE			2572 30644
47103030660000	8/13/1948	8/31/1923	UNKNOWN	1160 GR		ABDOGW	39.5985	-80.7618	7/17/1923	8/1/1923	HAMPSHIRE			3046 30666
47103030680000	1/1/1948	5/30/1919	UNKNOWN	1172 GR		ABD-OW	39.6005	-80.7571	4/15/1919	4/30/1919	HAMPSHIRE			3038 30688
471030306930000	11/30/1948	8/2/1924	UNKNOWN	750 GR		ABD-OW	39.6066	-80.7613	6/18/1924	7/3/1924	HAMPSHIRE			2620 30693
47103030710000	2/1/1949	2/16/1924	UNKNOWN	700 GR		ABD-OW	39.6108	-80.7598	1/2/1924	1/17/1924	HURON LOWER			2582 30717
471030307180000	10/23/1948	2/16/1924	UNKNOWN	698 GR		ABD-OW	39.6108	-80.7598	1/2/1924	1/17/1924	HURON LOWER			2576 30718
471030309050000	5/21/1951	10/20/1926	UNKNOWN	761 GR		ABD-OW	39.6196	-80.7609	9/5/1926	9/20/1926	BIG INJUN /SD/			3036 30907
471030309070000	6/19/1951	8/5/1918	UNKNOWN	1180 GR		ABD-OW	39.5966	-80.7669	1/2/1924	1/17/1924	HURON LOWER			3060 30914
471030309140000	9/24/1951	5/17/1919	UNKNOWN	1223 GR		ABD-OW	39.5983	-80.7590	4/2/1919	4/17/1919	HURON LOWER			2786 71407
471030309140000		12/23/1926	UNKNOWN	825 GR		D&A-OG	39.6192	-80.7781	11/8/1926	11/23/1926	HAMPSHIRE			2684 71442
471030309140000			UNKNOWN	692 GR		OIL	39.6096	-80.7663						2958 71459
471030314590000		6/5/1925	UNKNOWN	963 GR		D&A-OG	39.6053	-80.7678	4/21/1925	5/6/1925	HAMPSHIRE			3060 71460
471030314600000		11/10/1923	UNKNOWN	1160 GR		OIL	39.6053	-80.7639	9/26/1923	10/11/1923	HAMPSHIRE			3060 71460
471030314630000			UNKNOWN	GR		UNKNWN	39.6038	-80.7545						71463
471030314640000			UNKNOWN	GR		UNKNWN	39.6024	-80.7551						71464
471030314660000			UNKNOWN	GR		UNKNWN	39.6018	-80.7577						71466
471030314670000			UNKNOWN	GR		UNKNWN	39.6012	-80.7626						71467
471030314680000			UNKNOWN	GR		UNKNWN	39.6015	-80.7614						71468
471030314700000			UNKNOWN	GR		UNKNWN	39.5986	-80.7569						71470
4710303734940000	2/26/1927		UNKNOWN	781 GR		D&A-OG	39.6217	-80.7785	1/12/1927	1/27/1927	HAMPSHIRE			2671 73494
4710301640				1100		LOC	-80.7544	39.6009						01640

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WV Department of  
Environmental Protection

12/22/2017

Attachment A-2

WW-9  
(4/16)

4710302924F  
API Number 47 - 103 - 02924

Operator's Well No. Martin 5H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 306686

Watershed (HUC 10) Little Fishing Creek Quadrangle Porters Falls

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 0014, 8462, 4037 )
- Reuse (at API Number Various )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

DAH  
9-14-11

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? N/A

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? N/A

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

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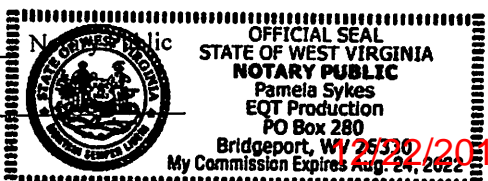
Company Official Signature *Victoria J. Roark*  
Company Official (Typed Name) Victoria J. Roark  
Company Official Title Regional Land Supervisor

SEP 19 2017

WV Department of Environmental Protection

Subscribed and sworn before me this 11 day of Sept, 2017

My commission expires 8-24-22



EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed no additional Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 1/3 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: \_\_\_\_\_

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SEP 19 2017

WV Department of  
Environmental Protection

Title: Oil + Gas Inspector Date: 9-14-17

Field Reviewed?  Yes  No





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# Site Specific Safety Plan

EQT

Martin Pad

Porter Falls

Wetzel County, WV

For Wells:

Martin 54 \_\_\_\_\_

\_\_\_\_\_

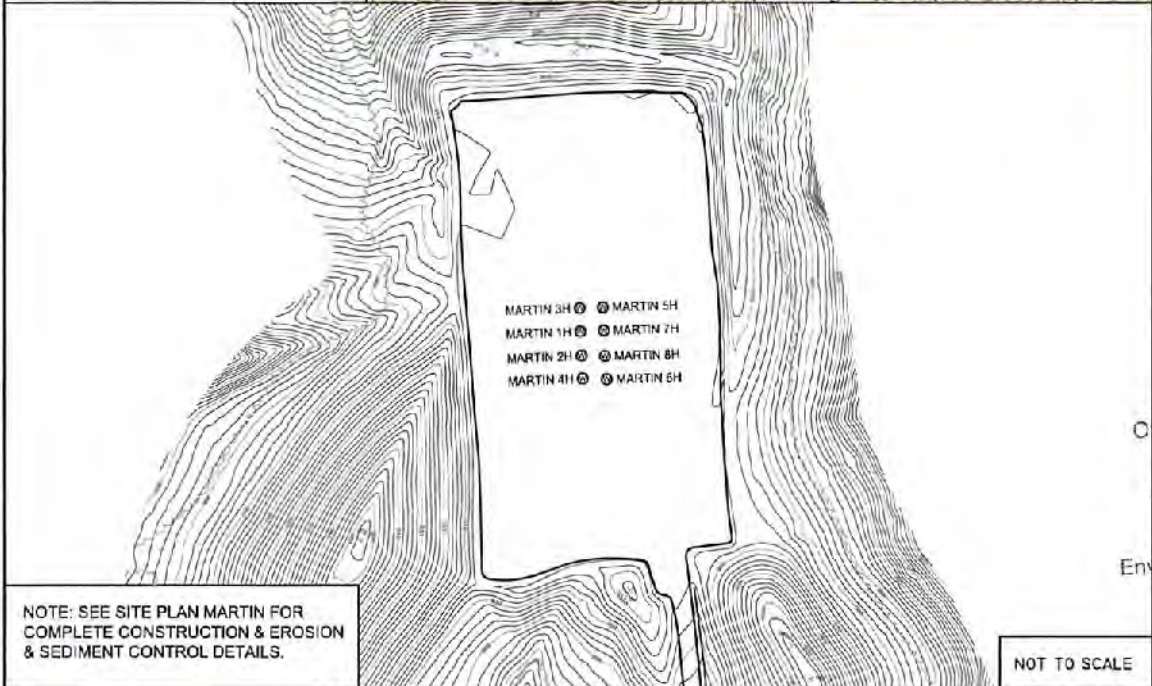
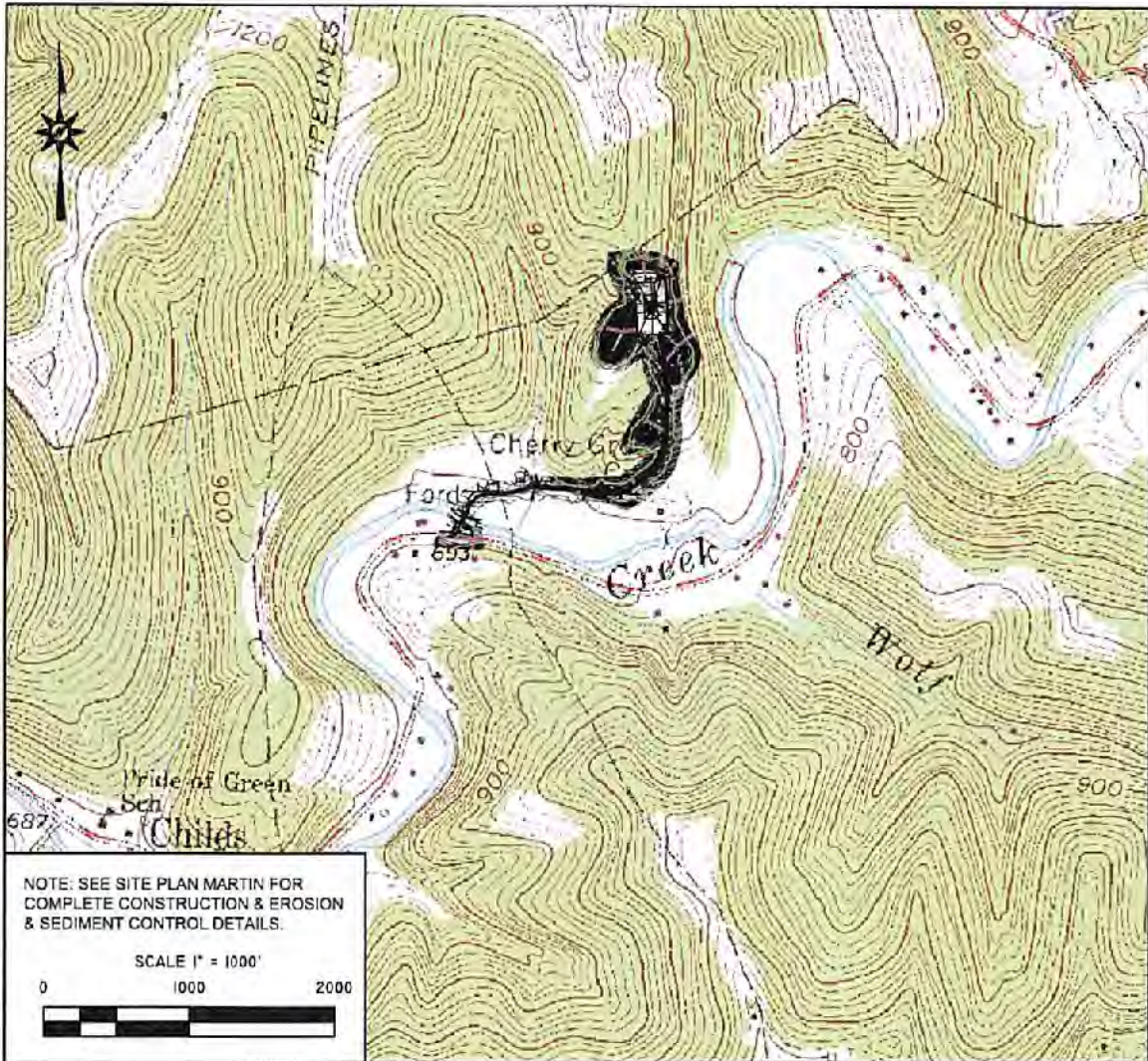
\_\_\_\_\_

Date Prepared: June 19, 2017

[Signature]  
 EQT Production  
Regional Hand Supervisor  
 Title  
9-11-17  
 Date

[Signature]  
 WV Oil and Gas Inspector  
Oil & Gas Inspector  
 Title  
9-14-17  
 Date

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 WV Department of  
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SEP 13 2017

WV Department of  
Environmental Protection

**Blue Mountain Inc.**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 26562  
PHONE: (304) 662-6486

PREPARED FOR:  
EQT Production Co. Inc.  
115 Professional Place, P.O. Box 280  
Bridgeport, WV 26330

FORM WW9

**MARTIN WELL**  
TOPO SECTION OF PORTER FALLS WV  
USGS TOPO QUADRANGLE

JULY 5, 2017

**EQT Production Water plan**  
**Offsite disposals for Marcellus wells**

47 10302924F

**CWS TRUCKING INC.**

P.O. Box 391  
Williamstown, WV 26187  
740-516-3586  
Noble County/Noble Township  
Permit # 3390

**BROAD STREET ENERGY LLC**

37 West Broad Street  
Suite 1100  
Columbus, Ohio 43215  
740-516-5381  
Washington County/Belpre Twp.  
Permit # 8462

**LAD LIQUID ASSETS DISPOSAL INC.**

226 Rankin Road  
Washington, PA 15301  
724-350-2760  
724-222-6080  
724-229-7034 fax  
Ohio County/Wheeling  
Permit # USEPA WV 0014

**TRIAD ENERGY**

P.O. Box 430  
Reno, OH 45773  
740-516-6021 Well  
740-374-2940 Reno Office Jennifer  
Nobel County/Jackson Township  
Permit # 4037

**TRI COUNTY WASTE WATER MANAGEMENT, INC.**

1487 Toms Run Road  
Holbrook, PA 15341  
724-627-7178 Plant  
724-499-5647 Office  
Greene County/Waynesburg  
Permit # TC-1009

**KING EXCAVATING CO.**

Advanced Waste Services  
101 River Park Drive  
New Castle, Pa. 16101  
Facility Permit# PAR000029132

**Waste Management - Meadowfill Landfill**

Rt. 2, Box 68 Dawson Drive  
Bridgeport, WV 26330  
304-326-6027  
Permit #SWF-1032-98  
Approval #100785WV

**Waste Management - Northwestern Landfill**

512 E. Dry Road  
Parkersburg, WV 26104  
304-428-0602  
Permit #SWF-1025 WV-0109400  
Approval #100833WV

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12/22/2017



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# Site Specific Safety Plan

EQT

Martin Pad

Porter Falls

Wetzel County, WV

For Wells:

Martin 54

Date Prepared: June 19, 2017

*[Signature]*  
EQT Production

*Regional Sand Dept*  
Title

9-11-17  
Date

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SEP 13 2017

*[Signature]*  
WV Oil and Gas Inspector

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

WV Department of  
Environmental Protection

12/22/2017

**Martin 5H  
Martin  
EQT Production Company**

LATITUDE 39° 37' 30"

TH: 4,575'

BH: 7,840'

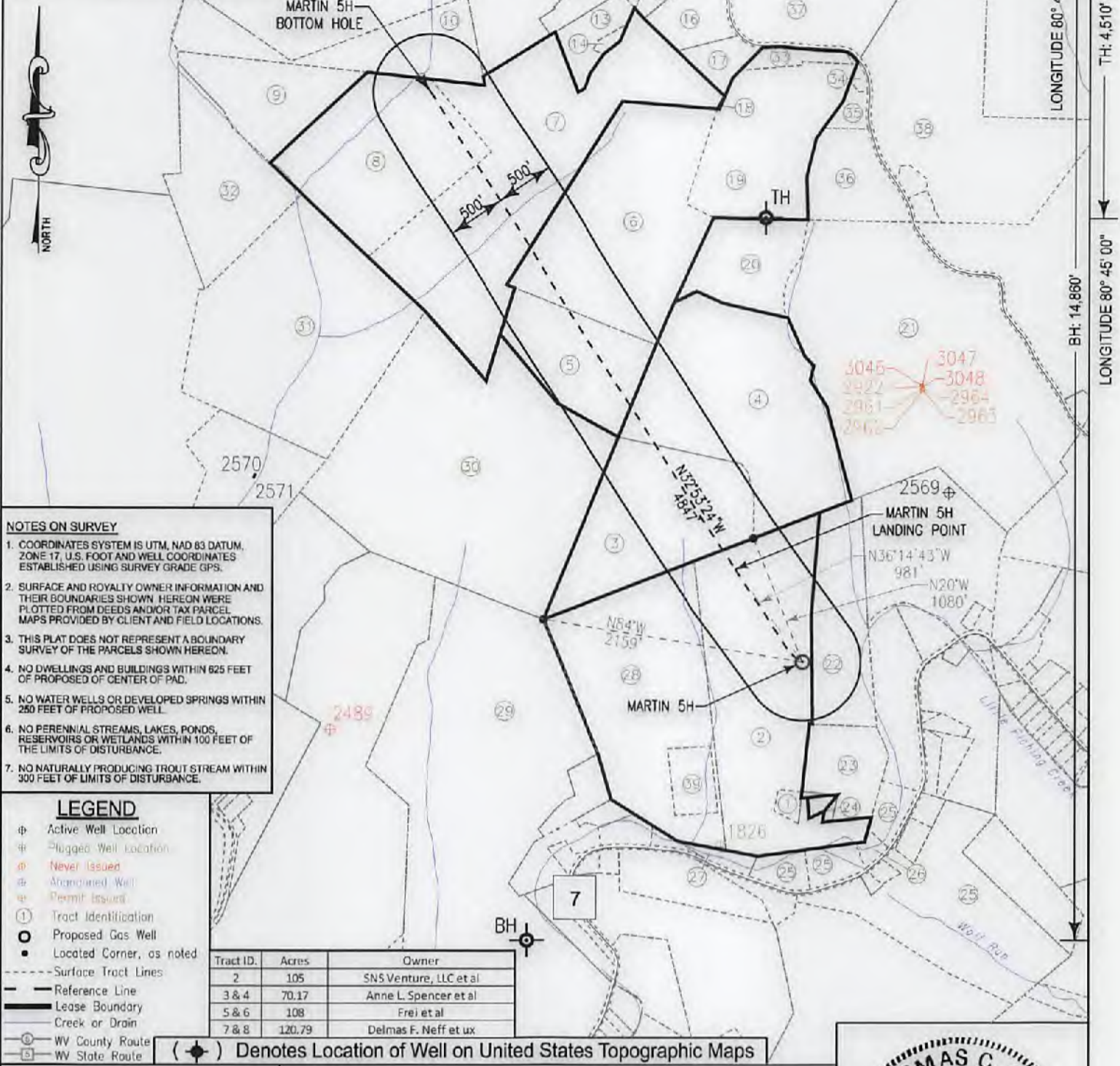
LATITUDE 39° 40' 00"

LONGITUDE 80° 45' 00"

TH: 4,510'

BH: 14,860'

LONGITUDE 80° 45' 00"



**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
- ⊕ Plugged Well Location
- ⊕ Never Issued
- ⊕ Abandoned Well
- ⊕ 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
2	105	SNS Venture, LLC et al
3 & 4	70.17	Anne L. Spencer et al
5 & 6	108	Frei et al
7 & 8	120.79	Delmas F. Neff et ux

(⊕) 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. Smit*  
L. L. S. 687



FILE NO: W2175 (BK 59-37)  
DRAWING NO:  
SCALE: 1" = 1200'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: SG-GPS (OPUS)

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

DATE: SEPTEMBER 8 20 17  
OPERATORS WELL NO: MARTIN 5H  
API WELL NO  
47 - 103 - 02924  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION ELEVATION: 920' WATERSHED: LITTLE FISHING CREEK QUADRANGLE: PORTERS FALLS 7.5'  
DISTRICT: Green COUNTY: Wetzel  
SURFACE OWNER: Charles & Gwendolyn Martin ACREAGE: 54 ±  
ROYALTY OWNER: SNS Ventures, LLC et al LEASE NO: 873397 ACREAGE: 105 ±  
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: 6,600'

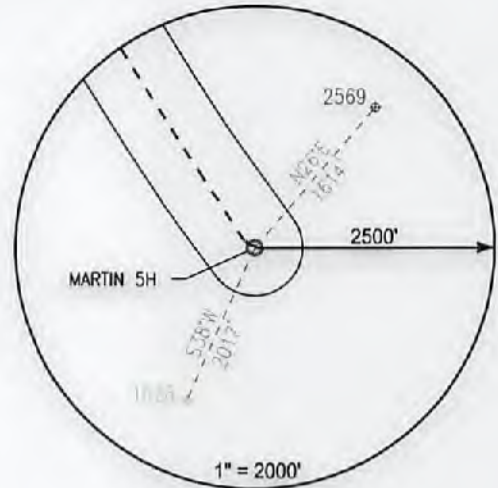
WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Rex C. Ray  
ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
Bridgeport, WV 26330 Bridgeport, WV 26330

12/22/2017

AS-BUILT

**Martin 5H  
Martin  
EQT Production Company**

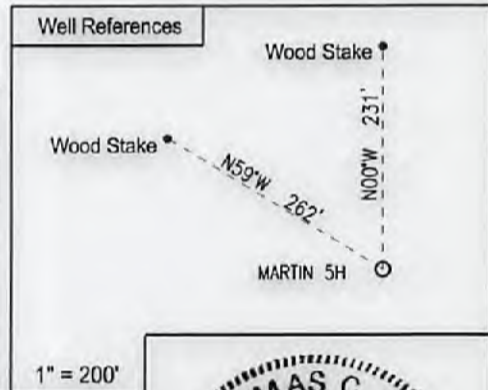
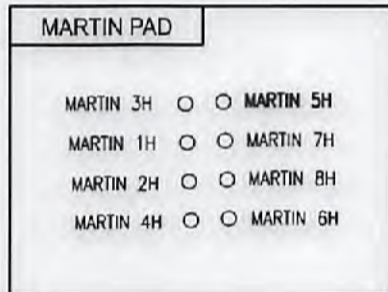
Tract ID.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
2	3	2.1	Wetzel	Green	Gwendolyn L. Stout	56.49
1	3	5	Wetzel	Green	Charles W. Martin	1.13
3	14	12	Wetzel	Magnolia	W. D. Lemon	35.31
4	14	11	Wetzel	Magnolia	W. D. Lemon	53.19
5	14	10	Wetzel	Magnolia	W. D. Lemon	20.62
6	14	30	Wetzel	Magnolia	W. D. Lemon	50.5
7	9	42	Wetzel	Magnolia	Delmas F. Neff	71.17
8	9	44	Wetzel	Magnolia	Delmas F. Neff	38.15
9	9	40	Wetzel	Magnolia	Elizabeth W. Hawkins	17.36
10	9	41	Wetzel	Magnolia	Elizabeth W. Hawkins	21.64
11	9	36.2	Wetzel	Magnolia	Ronald A. Dewitt	43.35
12	9	36	Wetzel	Magnolia	Delmas F. & Linda L. Neff	5.99
13	9	42.3	Wetzel	Magnolia	Delmas F. & Linda L. Neff	5.58
14	9	42.1	Wetzel	Magnolia	Delmas F. & Linda L. Neff	0.67
15	9	29.3	Wetzel	Magnolia	Delmas F. & Linda L. Neff	18.72
16	9	43.1	Wetzel	Magnolia	Keith R. Pyles	7.13
17	9	43	Wetzel	Magnolia	Doretta R. Rush	4.04
18	9	42.4	Wetzel	Magnolia	W. D. Lemon	0.02
19	9	45.1	Wetzel	Magnolia	W. D. Lemon	29.74
20	14	4	Wetzel	Magnolia	W. D. Lemon	14.86
21	14	5.2	Wetzel	Magnolia	Tracy Living trust	100.19
22	3	3	Wetzel	Green	Charles W. Martin	20.2
23	3	7	Wetzel	Green	Charles W. Martin	10.65
24	3	6	Wetzel	Green	Charles W. Martin	0.32
25	3	26	Wetzel	Green	Kernel E. Greathouse Estate	42.1
26	3	25	Wetzel	Green	Ethel Greathouse Estate	1.03
27	3	24	Wetzel	Green	Kernel Greathouse Estate	1.69
28	3	2	Wetzel	Green	Gwendolyn L. Stout	45.07
29	2	33	Wetzel	Green	Douglas L. Steele	146.31
30	14	9	Wetzel	Magnolia	W. D. Lemon	91.67
31	14	2	Wetzel	Magnolia	Robert B. Litman	63.22
32	9	39	Wetzel	Magnolia	Robert B. Litman	24.11
33	9	45	Wetzel	Magnolia	Edward W Frei Est	2.70
34	9	46.2	Wetzel	Magnolia	Donna O. & Dillon R. Smittle	0.52
35	9	46.3	Wetzel	Magnolia	Donna O. & Dillon R. Smittle	2.03
36	9	46.1	Wetzel	Magnolia	Pamela D. Oliver	12.16
37	9	43.2	Wetzel	Magnolia	Randall Moore	27.71
38	9	46	Wetzel	Magnolia	Stevie R. & Faye A. Young	55.82
39	3	2.2	Wetzel	Green	Gwendolyn Lee & Charles Martin	4.92



**Notes:**  
**MARTIN 5H As-Built coordinates are**  
 NAD 27 N: 407,780.003 E: 1,643,293.000  
 NAD 27 Lat: 39.612691 Long: -80.766172  
 NAD 83 UTM N: 4,384,806.085 E: 520,087.232  
**MARTIN 5H As-Built Landing Point coordinates are**  
 NAD 27 N: 408,571.023 E: 1,642,713.080  
 NAD 27 Lat: 39.614840 Long: -80.768270  
 NAD 83 UTM N: 4,385044.122 E: 519,908.540  
**MARTIN 5H As-Built Bottom Hole coordinates are**  
 NAD 27 N: 412,640.723 E: 1,640,081.160  
 NAD 27 Lat: 39.625910 Long: -80.777817  
 NAD 83 UTM N: 4,386,270.579 E: 519,084.049  
 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.

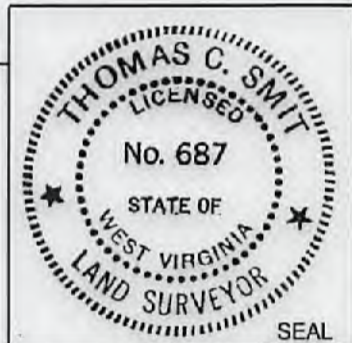
**LEGEND**

- ⊕ Active Well Location
- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- ⊙ W County Route
- ⊠ W 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.*  
 L. L. S. 687



FILE NO: W2174 (BK 59-37)  
 DRAWING NO: \_\_\_\_\_  
 SCALE: 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY:  
1:2500  
 PROVEN SOURCE OF ELEVATION:  
SG-GPS (OPUS)

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

DATE: SEPTEMBER 8 20 17  
 OPERATORS WELL NO: MARTIN 5H  
 API WELL NO  
47 - 103 - 02924  
 STATE COUNTY PERMIT

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

LOCATION ELEVATION: 920' WATERSHED: LITTLE FISHING CREEK QUADRANGLE: PORTERS FALLS 7.5'  
 DISTRICT: Green COUNTY: Wetzel

SURFACE OWNER: Charles & Gwendolyn Martin ACREAGE: 54 ±  
 ROYALTY OWNER: SNS Ventures, LLC et al LEASE NO: 873397 ACREAGE: 105 ±

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: 6,600'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Rex C. Ray  
 ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
Bridgeport, WV 26330 Bridgeport, WV 26330

AS-BUILT

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6A, Section 5(a)(5)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Various	Stone Energy Corp.	EQT Production Company	**	183A/305

\*\*Per West Virginia Code Section 22-6-8.

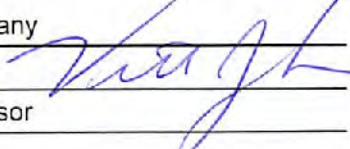
**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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SEP 13 2017  
WV Department of  
Environmental Protection

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: EQT Production Company  
 By: Victoria J Roark   
 Its: Regional Land Supervisor

103-02924F

WW-6A1  
(5/13)

Operator's Well No. \_\_\_\_\_ Martin #5H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6A, Section 5(a)(5)  
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- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>8-9-44</u>	Delmas F Neff, et ux	Stone Energy Corporation	1/8	102A/339
<u>8-9-42</u>	Delmas F Neff, et ux	Stone Energy Corporation	1/8	102A/339
<u>8-14-3</u>	Chesapeake	Stone Energy Corporation	1/8	88A/274
<u>8-14-10</u>	Chesapeake	Stone Energy Corporation	1/8	88A/274
<u>8-14-11</u>	Anne L Spencer	Stone Energy Corporation	1/8	104A/851
<u>8-14-11</u>	W.D. Lemon	Stone Energy Corporation	1/8	126A/364

**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Received

Well Operator: STONE ENERGY CORPORATION  
 By: [Signature] : 28 20:3  
 Its: Land Coordinator

Office of Oil and Gas  
WV Dept. of Environmental Protection  
Page 1 of 2

12/22/2017





4710302924 F

June 12, 2017

Mr. James Martin  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: Martin well pad, well numbers MARTIN 3H, MARTIN 5H, MARTIN 7H  
Green District, Wetzel County

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark  
Regional Land Supervisor-WV

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**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE CERTIFICATION**

Date of Notice Certification: 9-10-17

API No. 47- 103 - 02924 F  
Operator's Well No. Martin 5H  
Well Pad Name: Martin

**Notice has been given:**

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: <u>WV</u>	UTM NAD 83 Easting: <u>520087.03</u>
County: <u>Wetzel</u>	Northing: <u>4384806.07</u>
District: <u>Green</u>	Public Road Access: <u>WV RT 7</u>
Quadrangle: <u>Porters Falls</u>	Generally used farm name: <u>Martin, Charles and Gwendo</u>
Watershed: <u>Little Fishing Creek</u>	

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 40px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p><b>OOG OFFICE USE ONLY</b></p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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**Required Attachments:**

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

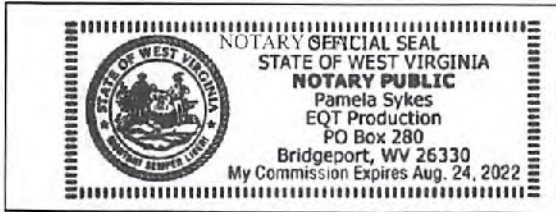
4710302924F

**Certification of Notice is hereby given:**

THEREFORE, I *[Signature]*, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator: EQT Production Company  
By: Victoria J Roark  
Its: Regional Land Supervisor  
Telephone: 304-848-0076

Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Facsimile: 304-848-0041  
Email: vroark@eqt.com



Subscribed and sworn before me this 11 day of Sept 2017.

*[Signature]* Notary Public

My Commission Expires 8-24-22

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 9-12-17 Date Permit Application Filed: 9-12-17

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

SURFACE OWNER(s)

Name: See Attached  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: See Attached  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)

Name: See Attached  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE

Name: See Attached  
Address: \_\_\_\_\_

COAL OPERATOR

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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Surface Owners, Surface Owners (road or other disturbance), and Surface Owners (AST):

CHARLES AND GWENDOLYN MARTIN  
8369 MOUNTAINEER HWY  
NEW MARTINSVILLE WV 26155-8027

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/

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**CBM Coal Owner**

Master Mineral Holdings I, LP  
223 W Wall, 9<sup>th</sup> Floor  
Midland TX 79701

**Coal Owners:**

SNS Venture LLC  
708 Flinn Ave  
Ravenswood WV 26164

Todd D Steele  
Successor Trustee of Jackson O Steel &  
Margaret L Steele Living Trust  
201 US Grant St  
LaGrange OH 44050



Theodore R & Betty J Steele Living Trust  
61 14<sup>th</sup> St  
Wheeling WV 26003

James Steele  
1425 33<sup>rd</sup> St  
San Diego CA 92102

Betty Pelligra  
POA Margue Steele Hoover  
2248 Cross Creek  
Cuyahoga Falls OH 44223

Marjorie Hoover  
4538 Stagecoach Tr  
Copley OH 44321

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**Owners of Water Wells**

Laura C DeBolt  
9164 Mountaineer Hwy  
New Martinsville WV 26155

Charles Mavity  
9020 Mountaineer Hwy  
New Martinsville WV 26155

Wade David Gene et al  
9164 Mountaineer Hwy  
New Martinsville WV 26155

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**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sedimentation control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

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**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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12/22/2017

WW-6A  
(8-13)

API NO. 47- 103 - 02924 F  
OPERATOR WELL NO. Martin 5H  
Well Pad Name: Martin

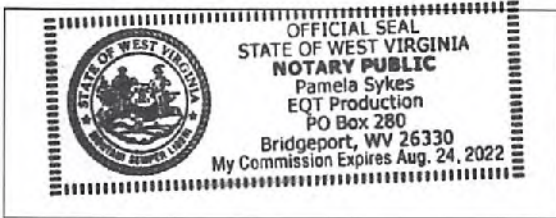
**Notice is hereby given by:**

Well Operator: EQT Production Company  
Telephone: 304-848-0075  
Email: wrcark@eqt.com

Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Facsimile: 304-848-0041

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).



*[Handwritten signature]*

Subscribed and sworn before me this 11 day of Sept, 2017.

*[Handwritten signature]* Notary Public

My Commission Expires 8-24-22

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12/22/2017

Topo Quad: PORTERS FALLS, WV 7.5'

Scale: 1" = 800'

County: WETZEL

Date: 12 JULY 2017

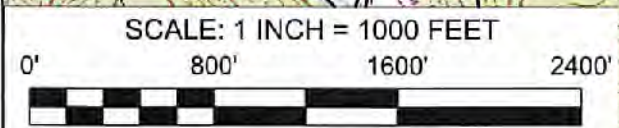
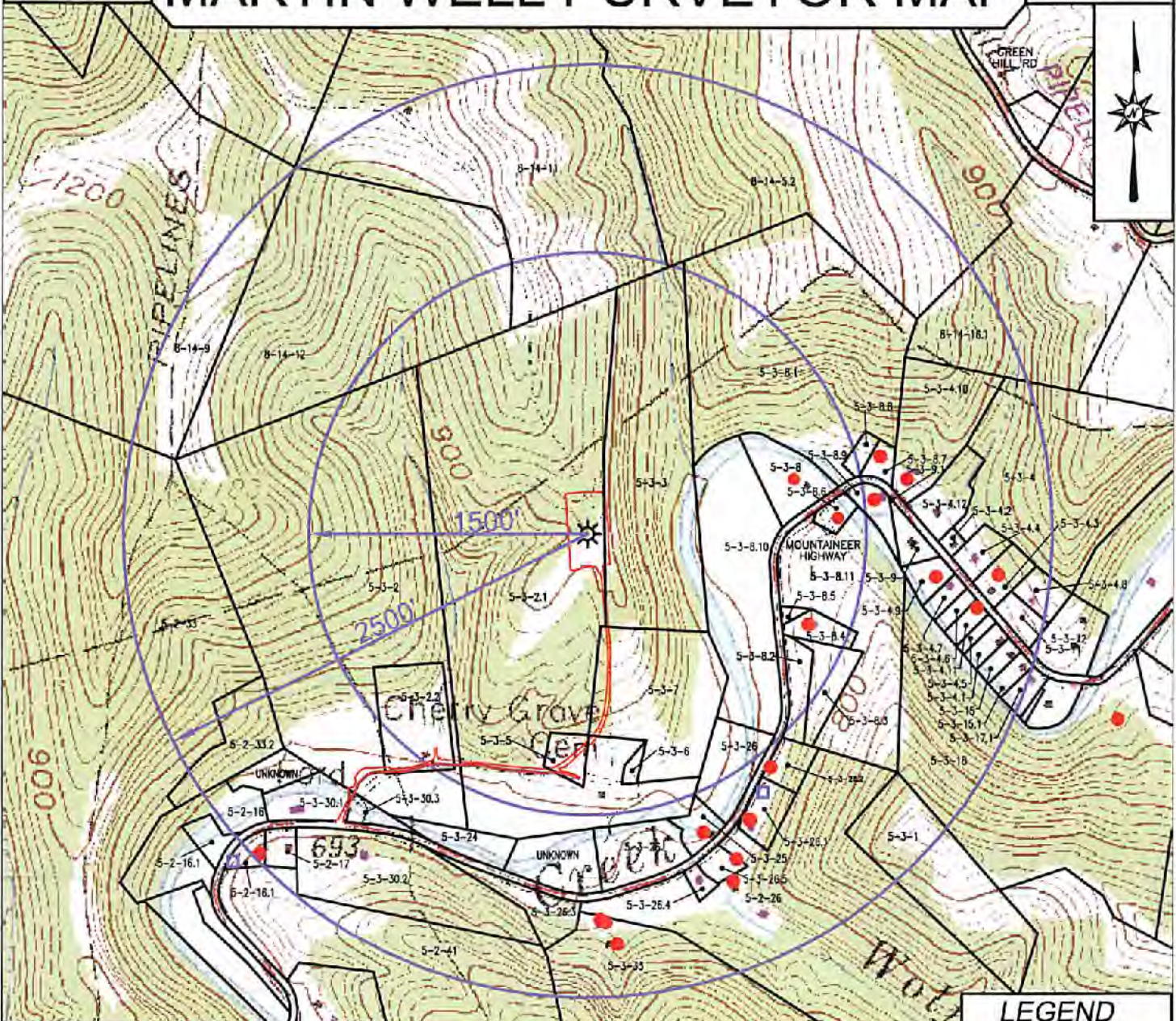
District: GREEN

Project No: 0491-17

Water

# MARTIN WELL PURVEYOR MAP

Topo



**LEGEND**

- Water Well
- Cistern/Spring
- ◆ Stream

SURVEYING AND MAPPING SERVICES PERFORMED BY:

**Blue Mountain Inc.**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 26562  
PHONE: (304) 862-8486

PREPARED FOR:

**EQT Production Co. Inc.** SEP 13 2017  
115 Professional Place, P.O. Box 280  
Bridgeport, WV 26330

Office of Oil and Gas  
WV Department of Environmental Protection

4710302924F

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application.  
Date of Notice: 08/04/2017 Date Permit Application Filed: 08/14/2017

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

- HAND DELIVERY       CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: See Attached  
Address: \_\_\_\_\_

Name: See Attached Charles & Gwendolyn  
Address: \_\_\_\_\_

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: WV UTM NAD 83 Easting: 520087.03  
County: Wetzel Northing: 4384806.07  
District: Green Public Road Access: WV RT 7  
Quadrangle: Porters Falls Generally used farm name: Martin, Charles and Gwendo  
Watershed: Little Fishing Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Notice is hereby given by:

Well Operator: EQT Production Company  
Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Telephone: 304-848-0076  
Email: vroark@eqt.com  
Facsimile: 304-848-0041

Authorized Representative: Victoria Roark  
Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Telephone: 304-848-0076  
Email: vroark@eqt.com  
Facsimile: 304-848-0041

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

RECEIVED  
Office of Oil and Gas  
SEP 13 2017  
WV Department of  
Environmental Protection  
12/22/2017

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the filing date of permit application.

**Date of Notice:** 09/12/2017      **Date Permit Application Filed:** 09/12/2017

**Delivery method pursuant to West Virginia Code § 22-6A-16(c)**

CERTIFIED MAIL                                       HAND  
RETURN RECEIPT REQUESTED                                      DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: Charles & Gwendolyn Martin                                      Name: \_\_\_\_\_  
Address: 8369 Mountaineer Hwy                                      Address: \_\_\_\_\_  
New Martinsville WV 26155                                      \_\_\_\_\_

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>WV</u>	UTM NAD 83	Easting:	<u>520087.03</u>
County:	<u>Wetzel</u>		Northing:	<u>4384806.07</u>
District:	<u>Green</u>	Public Road Access:		<u>WV RT 7</u>
Quadrangle:	<u>Porters Falls</u>	Generally used farm name:		<u>Martin, Charles and Gwendolyn</u>
Watershed:	<u>Little Fishing Creek</u>			

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator:	<u>EQT Production Company</u>	Address:	<u>115 Professional Place PO Box 280</u>
Telephone:	<u>304-848-0076</u>		<u>Bridgeport WV 26330</u>
Email:	<u>vroark@eqt.com</u>	Facsimile:	<u>304-848-0041</u>

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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Office of Oil and Gas

SEP 13 2017

WV Department of  
Environmental Protection

12/22/2017



47 10302924F

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
**Division of Highways**

1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505

Jim Justice  
Governor

Thomas J. Smith, P. E.  
Secretary of Transportation/  
Commissioner of Highways

August 18, 2017

James A. Martin, Chief  
Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Subject: DOH Permit for the Martin Pad, Wetzel County

	Martin 1H	Martin 2H
	Martin 3H	Martin 4H
47-103-	Martin 5H	Martin 6H
	Martin 7H	Martin 8H

Dear Mr. Martin,

This well site will be accessed from a DOH Permit #06-2017-0544 issued to EQT Production Company for access to the State Road for a well site located off of West Virginia Route 7 Feeder.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.  
Regional Maintenance Engineer  
Central Office O&G Coordinator

Cc: Nick Bumgardner  
EQT Production Company  
CH, OM, D-6  
File

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Office of Oil and Gas  
SEP 13 2017  
WV Department of  
Environmental Protection

Anticipated Frac Additives  
Chemical Names and CAS numbers

47 10302924F

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
Water		
Sand	Hydrotreated light petroleum distillate	14808-60-7
Friction Reducer	Tributyl tetradecyl phosphonium chloride	64742-47-8
Biocide	Ammonium chloride	81741-28-8
Scale Inhibitor	Hydrochloric Acid	12125-02-9
15% Hydrochloric Acid	Propargyl Alcohol	7647-01-0
Corrosion Inhibitor	Methanol	107-19-7
Corrosion Inhibitor	Guar Gum	67-56-1
Gelling Agent	Sodium Persulfate	9000-30-0
Oxidizing Breaker	Potassium Carbonate	7775-27-1
Buffering Agent		584-08-7

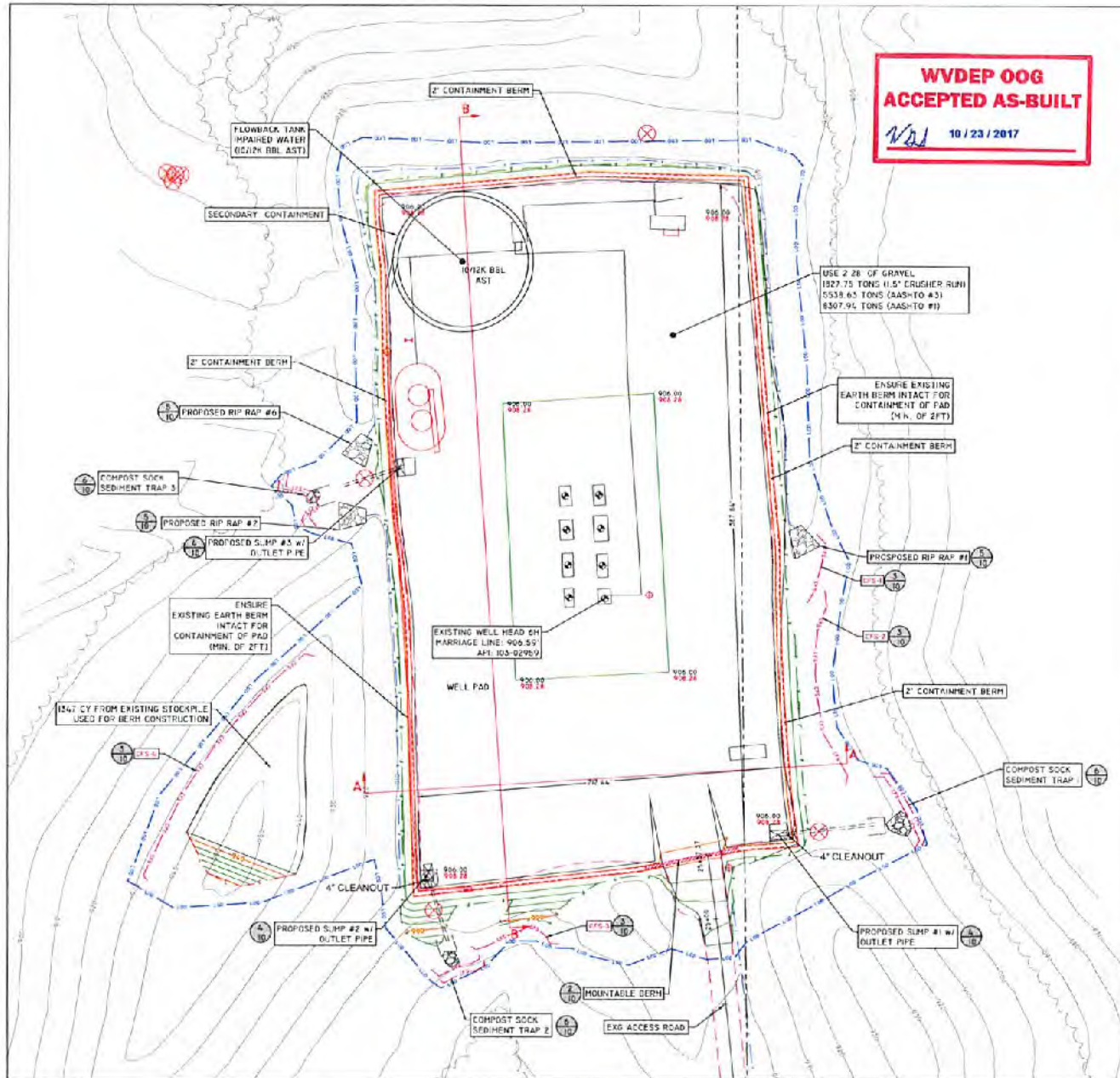
DMH  
9-14-17

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Office of Oil and Gas  
SEP 19 2017  
WV Department of  
Environmental Protection

12/22/2017







**WVDEP OOG  
ACCEPTED AS-BUILT**

*WJ* 10 / 23 / 2017

WELL NUMBER	API NUMBER	COORDINATES			
		NAD 83	NAD 27	UTM (NAD83)	
MARTIN 0W	103-02958	LAT - 39 472731' LONG - 80 766268'	LAT - 39 472633' LONG - 80 766241'	N 4384790.287 E 570084.355	
MARTIN 2W	103-02957	LAT - 39 466557' LONG - 80 766584'	LAT - 39 467571' LONG - 80 766264'	N 4384745.577 E 570086.736	
MARTIN 5W	103-02923	LAT - 39 462758' LONG - 80 766586'	LAT - 39 462758' LONG - 80 766586'	N 4384808.784 E 570094.047	
MARTIN 6W	103-02958	LAT - 39 462825' LONG - 80 766533'	LAT - 39 462825' LONG - 80 766272'	N 4384782.017 E 570087.804	
MARTIN 6W*	103-02926	LAT - 39 422710' LONG - 80 765004'	LAT - 39 462825' LONG - 80 766264'	N 4384782.017 E 570087.804	
MARTIN 4W	103-02959	LAT - 39 502605' LONG - 80 765779'	LAT - 39 462752' LONG - 80 766264'	N 4384808.014 E 570087.804	
MARTIN 3W	103-02925	LAT - 39 462777' LONG - 80 765939'	LAT - 39 462752' LONG - 80 766264'	N 4384808.014 E 570087.804	
MARTIN 8W	03-02968	LAT - 39 462637' LONG - 80 765585'	LAT - 39 462637' LONG - 80 766264'	N 4384795.525 E 570087.805	

DESCRIPTION	COORDINATES			
	NAD 83	NAD 27	UTM (NAD83)	
WELL PAD	LAT - 39 462637' LONG - 80 766264'	LAT - 39 462637' LONG - 80 766264'	N 4384802.247 E 570084.352	
ENTER OF WELL PAD	LAT - 39 462757' LONG - 80 766222'	LAT - 39 462637' LONG - 80 766264'	N 4384795.822 E 570084.360	

**LEGEND**

- PROPOSED FENCE
- PROPERTY BOUNDARY
- FENCE LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- COMPLETE FILLER BODY
- LIMIT OF DISTURBANCE
- DITCH LINE
- EXISTING TREE LINE
- THE AREA
- CUT
- FILL
- 2 BERM
- MOUNTABLE BERM
- GAS
- GAS LINE
- WATER MAIN
- WETLANDS
- BAREM AREA
- CURVE
- WELL HEAD
- EXISTING ELEVATION
- PROPOSED ELEVATION

AREA		
DESCRIPTION	QUANTITY	UNITS
CLEARING AND GRUBBING		
BRCE CLEARING	---	ACRES
MOVING	3.57	ALBES
LIMITS OF DISTURBANCE		
AREA	8.37	ACRES

ENVIRONMENTAL IMPACTS		
# OF IMPACTS	TOTAL LENGTH	TOTAL AREA
STREAMS		
WETLANDS		

EARTHWORK QUANTITIES		
DESCRIPTION	QUANTITY	UNITS
TOTAL PROJECT		
CUT	1.543	CY
FILL	2.743	CY
NET (CUT)	0	CY

**NOTE**  
 1) WELLS MARKED WITH AN ASTERISK (\*) ARE APPROXIMATE. THEY ARE NOT IN PRODUCTION AND WERE COVERED WITH PROTECTIVE STEEL PLATES AT THE TIME OF SURVEY.

DATUM: 83 WV NORTH

**NOTE: DRAWING WAS CREATED ON 22x34 PAPER, 11x17 DRAWINGS ARE HALF SCALE. REFER TO SCALE BAR FOR PROPER SCALING.**



125 PROFESSIONAL PLACE  
 PROFESSIONAL BUILDING FOUR  
 BRIDGEPORT, WV 26030



MARTIN WELL SITE  
 OVERALL SITE PLAN

REVISIONS

DATE: 11/19



Drawn by: CJP  
 Checked by: JPH  
 DATE: 10/20/17  
 SCALE: 1" = 20'  
 JOB NO:  
 DRAWING NAME: MARTIN WELL SITE

SHEET NO. 0