west virginia department of environmental protection

| Office of Oil and Gas | Jim Justice, Governor |
| :--- | ---: |
| $60157^{\text {th }}$ Street, S.E. | Austin Caperton, Cabinet Secretary |
| Charleston, WV 25304 |  |
| www.dep.wv.gov |  |
| (304) $926-0450$ |  |
| fax: (304) $926-0452$ |  |

Wednesday, September 13, 2017
WELL WORK PERMIT
Horizontal 6A / Fracture
EQT PRODUCTION COMPANY
120 PROFESSIONAL PLACE
BUILDING II
BRIDGEPORT, WV 26330
Re: Permit approval for SMITH 5 H
47-103-02907-00-00
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.


Operator's Well Number:
U.S. WELL NUMBER:47-103-02907-00-00

Horizontal 6A / Fracture
Date Issued: 9/13/2017
Promoting a healthy environment.

## 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

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.
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.

API NO. 47-103
OPERATOR WELL NO. SMITH SH Well Pad Name: Smith

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

3) Farm Name/Surface Owner: Smith, Sonny \& Charlotte Public Road Access: Wetzel County Route 22
4) Elevation, current ground: 1321 Elevation, proposed post-construction: 1321
5) Well Type
(a) Gas
$x$ Oil $\qquad$ Underground Storage $\qquad$
Other
(b )If Gas
Shallow
$x \quad$ Deep

Horizontal $x$
6) Existing Pad: Yes or No yes
7) Proposed Target Formations), Depth(s), Anticipated Thickness and Expected Pressures): Marcellus, 6738, thickness is 56 ', with rock pressure between 2500 to 3000 psi
8) Proposed Total Vertical Depth: 6738
9) Formation at Total Vertical Depth: Marcellus Shale
10) Proposed Total Measured Depth: 10157
11) Proposed Horizontal Leg Length: 3380
12) Approximate Fresh Water Strata Depths: 100
13) Method to Determine Fresh Water Depths: Depth of bit when water shows in the flowline or when drilling soap is injected
14) Approximate Saltwater Depths: 2185
15) Approximate Coal Seam Depths: 1,017
16) Approximate Depth to Possible Void (coal mine, karst, other): None Anticipated
17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine?

Yes $\qquad$ No X
(a) If Yes, provide Mine Info: Name: $\qquad$
Depth:
Seam:
Owner:
18)

## AUG 92017 <br> WV Department of

 CASING AND TUBINGuironmental ProtectioOPERATOR WELL NO. SMITH 5H Well Pad Name: Smith

| TYPE | $\frac{\text { Size }}{(\text { in) }}$ | $\begin{aligned} & \frac{\text { New }}{\underline{\text { or }}} \\ & \text { Used } \end{aligned}$ | Grade | $\frac{\text { Weight per } \mathrm{ft}}{(\mathrm{lb} / \mathrm{ft})}$ | $\frac{\text { FOOTAGE: For }}{\text { Drilling }(\mathrm{ft})}$ | $\frac{\text { INTERVALS: }}{\text { Left in Well }}$ <br> (ft) | $\begin{aligned} & \frac{\text { CEMENT: }}{\text { Fill-up }} \\ & \text { (Cu. Ft.)/CTS } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conductor | $20 "$ | New | LS | 94.0 | 95 | 95 | 40-CTS |
| Fresh Water | 13.375" | New | J55 | 54.5 | 1319' KB -1,304' GL | 1319' KB -1,304' GL | 1,224-CTS |
| Coal | ${ }^{13.375 "}$ | New | J55 | 54.5 | 1319' KB -1,304' GL | 1319' KB -1,304' GL | 1,224- CTS |
| Intermediate | 9.625" | New | J55 | 36.0 | 2552 | 2552 | 653 Lead -381 Tall CTS |
| Production | 5.5" | New | P110 | 20.0 | 10136 | 10136 | 422 Lead - 2,172 Tail CTS |
| Tubing | $2.375^{\prime \prime}$ | New | J55 | 4.7 |  | 6,500 |  |
| Liners | N/A |  |  |  |  |  |  |

DMH
$84-17$

| TYPE | Size (in) | Wellbore Diameter (in) | $\frac{$ Wall  <br>  Thickness  <br>  (in) }{ ( } | $\frac{\text { Burst Pressure }}{(\mathrm{psi})}$ | Anticipated Max. Internal Pressure (psi) | $\frac{\text { Cement }}{\text { Type }}$ | $\begin{aligned} & \frac{\text { Cement }}{\text { Yield }} \\ & \text { (cu. ft./k) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conductor | 20" | 24" | $0.375{ }^{\prime \prime}$ | N/A | 17 psi | Type 1 | 1.18 |
| Fresh Water | 13.375" | 17.5" | 0.380" | 2730 | 2160 psi | Class A | 1.20 |
| Coal | 13.375" | 17.5" | $0.380 "$ | 2730 | 2160 psi | Class A | 1.20 |
| Intermediate | 9.625" | 12.25" | 0.352 " | 3520 | 2814 psi | Class A | 1.28 Lead-1.19 Tail |
| Production | 5.5" | 8.75" | 0.361" | 12360 | 10112 psi | Class A | 2.37 Lead - 1.20 Tail |
| Tubing | $2.375^{\prime \prime}$ | N/A | 0.190" | 7700 |  | N/A | N/A |
| Liners |  |  |  |  |  |  |  |

## PACKERS

| Kind: |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 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

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 Office of Oil and Gas
22) Area to be disturbed for well pad only, less access road (acres): no additional AUG 92017
23) Describe centralizer placement for each casing string: WV Department cf

Surface casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28 and 30.
Intermediate casing had bow spring centralizers placed on joints $1,4,7,10,13,16,19,22,25,28,31,35,38,41,44,47,50,53,56,59$ and. 62.
Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 96 . Ran a total of 25 rigid spiral centralizers. Ran bow spring centralizers from joint 100 to joint 229 on every third joint. A total of 44 bow spring centralizers were run.
24) Describe all cement additives associated with each cement type:

Fresh Water/Coal string will be cemented using a slurry of class A cement with $0.10 \mathrm{lb} / \mathrm{sx}$ Cello Flake, $0.20 \%$ BWOB Anti-Foam, and $1.0 \%$ BWOB CaCl2 Intermediate string will be cemented using a Lead and Tail Slurry, Lead is Class A cement with 0.20 gps Accelerator 0.07 gps Dispersant, 0.10 gps Anti-Foam, $4.0 \%$ BWOB Expanding Agent, and $0.50 \%$ BWOB Gas Control Agent. Tail is a class A Cement with $1.0 \% \mathrm{BWOBCCCl}, 0.1 \mathrm{lb} / \mathrm{sx}$ Cello-Flake, and $0.2 \% \mathrm{BWOB}$ Anti-Foam.
Production String will be cemented using a Lead and Tail Slurry. Lead is Class A cement with 0.10 gps Dispersant. 0.10 gps Anti-Foam, 0.05 gps Retarder, 4.0\% BWOB Expanding Agent, and 0.20\% BWOB Anti-Foam, and 0.60\% BWOB retarder
25) Proposed borehole conditioning procedures:

Fresh Water/Coal section will be conditioned by circulating air through the drill string at TD between 30 and 60 minutes or until the well bore clears of cuttings.
Intermediate section will be done by circulating air and/or stiff foam through the drill string at TD between 30 and 120 minutes or until the well bore clears of cuttings.
Production section will be done by circulating drilling fluid through the drill string at TD between 60 to 720 minutes until the shakers are clear of cuttings and the drill string pulls free of bottom.

[^0]
## 4710302907 F

# EQT Production <br> Hydraulic Fracturing Monitoring Plan 

## Pad ID: Smith

## Wetzel County, WV

AUG
32017
Wry $\mathrm{Den}_{\text {ater }}$ ent of Envircimentienticisction

Purpose
The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notiy eonlenforial well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on Smith pad: Smith 4H, Smith 5H, Smith 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.



## 4710302 SnフF

| Well ID | Completion D | Current Operator | Elevation |  | inal St |  | Long | Permit Date | UD Date | TD Formation | Depth | Permit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 47103702890000 |  | UNKNOWN |  | GR | PSEUDO | 39.653169 | -80.81888 |  |  |  |  | 70289 |
| 47103000140000 | 12/1/1929 | LEATHERWOOD INCORPORATED |  |  | D\&A | 39.632704 | -80.805742 | 10/17/1929 | 11/1/1929 | BIG INJUN /SD/ | 1926 | 00014 |
| 47103716450000 |  | UNKNOWN |  | GR | UNKWN | 39.651717 | -80.818692 |  |  |  |  | 71645 |
| 47103716490000 |  | UNKNOWN |  | GR | UNKWN | 39.631398 | -80.794669 |  |  |  |  | 71649 |
| 47103716480000 | 8/13/1925 | UNKNOWN |  |  | D\&A-OG | 39.634591 | -80.795796 | 6/29/1925 | 7/14/1925 | HAMPSHIRE | 2842 | 71648 |

## FLUIDS/ CUTTINGS DISPOSAL \& RECLAMATION PLAN

Operator Name EQT Production Company
OP Code 306686
Watershed (HUC 10) Tributary of of Doolin Run
Quadrangle New Martinsville
Do you anticipate using more than 5,000 bbl of water to complete the proposed well work? Yes $\quad \square \square$ Will a pit be used? Yes $\square$ No $\boxed{\square}$

If so, please describe anticipated pit waste: N/A
Will a synthetic liner be used in the pit? Yes $\square$ No $\sqrt{ }$ 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

Will closed loop system be used? If so, describe:
Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud
Additives to be used in drilling medium? See Attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. $\qquad$
Landfill
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? See Attached List
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.


Subscribed and sworn before me this
 day of August - $\qquad$ Mecca \& Uanstreet , 2017

My commission expires $\qquad$

## EQT Production Company



## Seed Mixtures



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 ( $\mathrm{L} \times \mathrm{W} \times \mathrm{D}$ ) of the pit, and dimensions ( $\mathrm{L} \times \mathrm{W}$ ), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: $\qquad$ 3.

Comments: $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


## Site Specific Safety Plan

## ERT <br> Smith Pad

## New Martinsville

## Wetzel County, WV

$\int m i t h S H$
For Wells:
-


Date Prepared: June 19/2017


## STONE ENERGY - AS DRILLED TOP HOLE with SLANT <br> Revision: 20-Jun-14




## STATE OF WEST VIRGINIA

 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
## CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM

 GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Vertical section: Air and Driling Soap, Curve and Lateral: Brine fluid -If oil based, what type? Synthetic, petroleum, etc. N/A
Additives to be used? See Attached WW-9 Addendum
Will closed loop system be used ? Both Top Hole and Horizontal drilling rigs will incorporate the use of a closed loop system
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Approved and permitted of site landfill $\quad 4-23-13$
-If left in pit and plan to solidify what medium will be used? Cement, lime, N/A
-Landfill or offsite name/permit number? Wetzel County Sanitary Landfill (SWF-1021/WV0109185)

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.


My commission expires $\qquad$ $5 / 18 / 2021$

WW-9
Rev. 1/12

API No. 47 - 103 .02907 Operator's Well No. ._SMITH\#5H


Proposed Revegetation Treatment: Acres Disturbed $\qquad$ Prevegetation pH $\qquad$
Lime 2.0 Tons/acre or to correct to pH 6.5

Fertilizer ( $10-20-20$ or equivalent) 500-750 lbs/acre ( 500 lbs minimum)
Mulch 0.50 to 0.75 TPA + Straw Tons/acre
Seed Mixtures

| Area 1 |  | Area II |  |
| :---: | :---: | :---: | :---: |
| Seed Type | lbs/acre | Seed Type | lbs/acre |
| Marcellus Mix | 100.0 | Marcellus Mix | 100.0 |
| White or Ladino Clover | 10.0 | White or Ladino Clover | 10.0 |
| Orchard Grass | 40.0 | Orchard Grass | 40.0 |
| Winter Rye | 50.0 | Winter Rye | 50.0 |

Attach:
Drawing(s) of road, location,pit and proposed area for land application.
Photocopied section of involved 7.5' topographic sheet.
Plan Approved by:

Comments: $\qquad$


WW-9 ADDENDUM

## Drilling Medium Anticipated for This well

- Vertical section of well bore, down to KOP, will be drilled on air and/or a combination of air and drilling soap.
- From KOP through the curve section and horizontal section of well bore will be drilled on a brine-water based mud system.


## Additives to be Used While Drilling

- Common additives when air drilling: KCl (CAS No. 1302-78-9 \& 14808-60-7), soda ash (CAS No. 497-19-8), shale stabilizer (CAS No 67-48-1 \& 7732-1835), drilling soap (CAS No. 111-76-2), air hammer/motor lubricant.
- Common water based additives for mud drilling: NaCl (CAS No. 7647-14-5), XCI (CAS No. 7447-40-7), barite (CAS No. 13462-86-7 \& 14808-60-7), starch (CAS No. 9005-25-8), PAC (CAS No. 9004-324), xanthum gum (CAS No. 11138-66-2), PHPA (CAS No. 64742-47-8), polysaccharide (CAS No. 11138-66-2), sulfonate asphaltic material (CAS No. 269-212-0 \& 238-878-4), aluminum silicate (CAS No. 37287-16-4), gilsonite (CAS No. 12002-43-6), graphite (CAS No.14808-60-7 \& 7782-42-5), shale stabilizer (CAS No. 67-48-1 \& 7732-18-5), fluid loss control polymers (CAS No. 9004-34-6), viscosity control polymers (CAS No. 11138-66-2 \& 107-22-2), soda ash (CAS No. 497-19-8), sodium bicarbonate (CAS No. 144-55-8), NaOH (CAS No. 1310-73-2, 7647-14-5, \& 7732-18-5), lime (CAS No. 1305-62-0), gypsum (CAS No.778-18-9) , citric acid (CAS No. 77-92-9), biocide (CAS No. 52-$51-7$ or 7732-18-5 + 67-56-1 + 141-43-5), $\mathrm{CaCO}_{3}$ (CAS No. 471-34-1), cellulose fibers (CAS No. 14808-60-7), nut plug (CAS No. 9004-34-6 \& 14808-60-7), cross-linking polymers (CAS No. 107-22-2 \& 11138-66-2), other LCM, surfactants (CAS No. 64-17-5), ROP enhancer/lubricant (CAS No. 8002-13-9), beads, corrosion inhibitor (CAS No. 7732-18-5), aluminum stearate (CAS No. 300-925), defoamer (CAS No. 246-771-9).

MSDS are available upon request.



4790302907

Where energy meets innovation. ${ }^{\text {en }}$

## Site Specific Safety Plan

## ERT <br> Smith Pad

New Martinsville
Wetzel County, WV

## $\int \sin S H$

For Wells:

Date Prepared: June 19,2017


WV Oil and Gas Inspector

| Title | RECEDED |
| :--- | :--- |
|  | Office of Oil and |
| Date | AUG 32017 |



| Smith 5H Smith <br> QT Production Company |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tract ID. | Tax Map No. | Parcel No. | County | District | Surface Tract Owner | Acres |
| 1 | 8 | 5 | Wetzel | Magnolia | Sonny L. \& Charlotte Smith | 38.9 |
| 2 | 5 | 32 | Wetzel | Magnolia | George S. Schupbach | 37.5 |
| 3 | 5 | 31 | Wetzel | Magnolia | John William Burton | 66.56 |
| 4 | 5 | 25.1 | Wetzel | Magnolia | Stone Energy Corporation | 4.17 |
| 5 | 5 | 25 | Wetzel | Magnolia | Stone Energy Corporation | 17.64 |
| 6 | 5 | 11 | Wetzel | Magnolia | Ronald L. Schupbach | 89.45 |
| 7 | 5 | 26 | Wetzel | Magnolia | Stone Energy Corporation | 39.95 |
| 8 | 5 | 26.3 | Wetzel | Magnolia | Stone Energy Corporation | 10.95 |
| 9 | 5 | 1.1 | Wetzel | Magnolia | Ronald L. Schupbach | 90.33 |
| 10 | 5 | 12 | Wetzel | Magnolia | Melvin E. \& Wilda G. Schupbach | 36.87 |
| 11 | 5 | 19 | Wetzel | Magnolia | Ronald L. \& Monette Schupbach | 68.49 |
| 12 | 5 | 16 | Wetzel | Magnolia | Sharon L. Bearce | 108.64 |
| 13 | 5 | 22 | Wetzel | Magnolia | Sharon L. Bearce | 37.5 |
| 14 | 5 | 26.1 | Wetzel | Magnolia | Stone Energy Corporation | 3.93 |
| 15 | 5 | 31.1 | Wetzel | Magnolia | Schupbach Cemetery | 0.27 |
| 16 | 5 | 26.2 | Wetzel | Magnolia | Franklin Ray Blake | 17.73 |
| 17 | 5 | 33 | Wetzel | Magnolia | Franklin Ray Blake | 108.47 |
| 18 | 8 | 6 | Wetzel | Magnolia | Kocher Albert HRS | 33.01 |
| 19 | 8 | 12 | Wetzel | Magnolia | David L. \& Ralph O. Smith | 58.15 |
| 20 | 8 | 12.1 | Wetzel | Magnolia | Ralph Oscar \& Jonee Kay Smith | 1.37 |
| 21 | 8 | 4 | Wetzel | Magnolia | Lawrence E. Zumpetta ETAL | 15.28 |
| 22 | 8 | 3 | Wetzel | Magnolia | Lawrence E. Zumpetta ETAL | 72.86 |
| 23 | 5 | 30 | Wetzel | Magnolia | Wayne A. \& Virginia L. Schupbach | 93.83 |
| 24 | 5 | 24 | Wetzel | Magnolia | Heaven Partnership | 53.59 |
| 25 | 5 | 10 | Wetzel | Magnolia | Herman L. \& Sherman Richter | 80.66 |
| 26 | 5 | 1 | Wetzel | Magnolia | Mark Edwin Scheibelhood | 327.66 |

 Notes:

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 UTM coordinates are NAD83, Zone 17, Meters.

Well References


1. 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 bf Enviggnmental Protection.

Cuur C. Eme LLS
L. L. S. 687

FILE NO: W2032 (BK 49-6)
DRAWING NO
SCALE:
$1^{\prime \prime}=1000$
MINIMUM DEGREE OF ACCURACY:
1:2500
PROVEN SOURCE OF ELEVATION:
NGS CORS Station
WELL TYPE: $\square$ OIL $\square$ GAS (IF GAS) PRODUCTION:
LOCATION ELEVATION: $1,335^{\prime}$
IQUID INJECTION $\square$ STORAGE
WATERSHED:

# STATE OF WEST VIRGINIA DEPARTMENT OFENVIRONMENTAL PROTECTION OIL AND GAS DIVISION 

$\square$ WASTE DISPOSAL
$\square$ DEEP $\triangle$ SHALLOW
TRIBUTARY OF DOLLIN RUN

MITH $3 \mathrm{H} \quad \mathrm{O} \quad \mathrm{O}$ SMITH 5 H
SMITH 1H O O SMITH 7H
SMITH $2 \mathrm{H} \bigcirc \bigcirc$ SMITH 8 H
SMITH $4 \mathrm{H} \quad \mathrm{O} \quad \mathrm{O}$ SMITH 6H


- Wood Stake
$1^{\prime \prime}=200^{\prime}$

DISTRICT: Magnolia
QUADRANGLE: NEW MARTINSVILLE 7.5'

SURFACE OWNER: Sonny \& Charlotte Smith
ROYALTY OWNER: Sonny \& Charlotte Smith, ET AL
LEASE NO: 873632 ACREAGE: $98.9 \pm 2017$

PROPOSED WORK: $\square$ DRILL $\square$ CONVERT $\square$ DRILL DEEPER $\triangle$ FRACTURE OR STIMULATE $\square$ PLUG OFF OLD FORMATION $\square$ PERFORATE NEW FORMATION $\square$ OTHER PHYSICAL CHANGE IN WELL (SPECIFY)

| $\square$ PLUG AND ABANDON $\square$ CLEAN OUT AND REPLUG | TARGET FORMATION: | Marcellus ESTIMATED DEPTH: | 6,740' |
| :---: | :---: | :---: | :---: |
| WELL OPERATOR: EQT Production Company | DESIGNATED AGEN ADDRESS: $\qquad$ | Rex C. Ray |  |
| ADDRESS: 115 Professional Place PO Box 280 |  | 115 Professional Place PO Box 280 |  |
| Bridgeport, WV 26330 |  | Bridgeport, WV 26330 |  |

## \section*{INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE} <br> Chapter 22, Article 6A, Section 5(a)(5) <br> 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 |
|  |  |  |  |  |
|  |  |  |  | $3 \times 107$ |
| - Per West Virginia Code Section 22.6.8. |  |  |  | 4. |

## 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

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.


Page 1 of $\qquad$

## INFORMATION SUPPLIED UNDER WEST VIRGINIA CQPY <br> Chapter 22, Article 6A, Section 5(a)(5)

103 IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

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Lease Name or

| Number | Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
| :---: | :---: | :---: | :---: | :---: |
| $8-8-5 \& 8-5-32$ | Sonny Smith | Stone Energy Corp | $1 / 8$ | $111 \mathrm{~A} / 982$ |
| $8-5-11$ | Schupbach Valley Motors | Stone Energy Corp | $1 / 8$ | $112 \mathrm{~A} / 390$ |
| $8-5-25 \& 8-5-26$ | Karen Miller | Stone Energy Corp | $1 / 8$ | $129 \mathrm{~A} / 228$ |
| $8-5-25 \& 8-5-26$ | Gary C Kirkhart | Stone Energy Corp | $1 / 8$ | $129 \mathrm{~A} / 225$ |
| $8-5-25 \& 8-5-26$ | Ronald Kirkhart | Stone Energy Corp | $1 / 8$ | $214 / 429$ |

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$\qquad$

## INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE

 Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)| Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page | Map/Parcel |
| :---: | :---: | :---: | :---: | :---: |
| John William Burton | Stone Energy Corporation | 1/8 | 114A/713 | 8-5-31 |
| Lyman B. Waterman, Jr. | Stone Energy Corporation | 1/8 | 1314/696 | 8-5-31 |
| Sherrell Lee Lallathin | Stone Energy Corporation | 1/8 | 137A/332 | 8-5-31 |
| Mary Martha Young | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| Lisa Hoyt | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| Joseph M. Young | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| Lois J Hornbrook | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| Terry L. Schupbach | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| Paul Nieratko Jr | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| Charles Menkel | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| James Young | Stone Energy Corporation | 1/8 | 39/105 | 8-5-31 |
| The Heaven Partnership | Stone Energy Corporation | 1/8 | 116A/948 | 8-5-24 |
|  | Stone Energy Corporation | 1/8 |  |  |
|  | Stone Energy Corporation | 1/8 |  |  |
|  | Stone Energy Corporation | 1/8 |  |  |
|  | Stone Energy Corporation | 1/8 |  |  |
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|  | Stone Energy Corporation | 1/8 |  |  |
|  | Stone Energy Corporation | 1/8 |  |  |
|  | Stone Energy Corporation | 1/8 |  |  |

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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:

Well Operator Stone Energy Corporation


Mr. James Martin
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
Re: Smith well pad, well numbers SMITH 2H, SMITH 4H, SMITH 5H, SMITH 6H, SMITH 7H
Magnolia 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.


Vicki Roark
Permitting Supervisor-WV

## DEPARTMENT OF ENVIRONMENTAL PROTECTION，OFFICE OF OIL AND GAS NOTICE CERTIFICATION

## Date of Notice Certification： $8 / 1117$

API No．47－ 103 － 02907
Operator＇s Well No．SMITH 5H
Well Pad Name：SMITH

## 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： | WV | UT | Easting： | 516232.67 |
| :---: | :---: | :---: | :---: | :---: |
| County： | Wetzel | UTM NAD 83 | Northing： | 4388547.86 |
| District： | Magnolia | Public Road A |  | Wetzel County Route 22 |
| Quadrangle： | New Martinsville | Generally used | rm name： | Smith，Sonny \＆Charlotte |

Watershed：
Tributary of of Doolin Run
Pursuant to West Virginia Code $\S 22-6 \mathrm{~A}-7(\mathrm{~b})$ ，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．

## 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：

OOG OFFICE USE
＊PLEASE CHECK ALL THAT APPLY

## 1．NOTICE OF SEISMIC ACTIVITY or $\quad$ NOTICE NOT REQUIRED BECAUSE NO

 SEISMIC ACTIVITY WAS CONDUCTED2．NOTICE OF ENTRY FOR PLAT SURVEY or $⿴ 囗 口$ NO PLAT SURVEY WAS CONDUCTED3．NOTICE OF INTENT TO DRILL or
NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or $\square$ WRITTEN WAIVER BY SURFACE OWNER （PLEASE ATTACH）

4．NOTICE OF PLANNED OPERATION


5．PUBLIC NOTICE
6．NOTICE OF APPLICATION

## 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 $\S 22-6 \mathrm{~A}-11$（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．

6 A . I certify that as required under West Virginia Code $\S 22-6 \mathrm{~A}$, I have served the attached copies of the Notice Forms, identified above, to the required parties throngh 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: | Permitting Supervisor |  |  |
| Telephone: | $304-848-0076$ |  |  |

Address: 115 Professional Place PO Box 280

|  | Bridgeport WV 26330 |
| :--- | :--- |
| Facsimile: | $304-848-0041$ |
| Email: | vroark@eqt.com |
|  |  |



## 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.

# 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. 790302907
Date of Notice: $8 / 2 / 17$ Date Permit Application Filed: $8 / 2 / 17$
Date of Notice: $8 / 2 / 17$ Date Permit Application Filed: $8 / 2 / 17$ Notice of:

## $\square$ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

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

## PERSONAL $\square$ REGISTERED $\square$ METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code $\S 22-6 \mathrm{~A}-10$ (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.
$\square$ Application Notice $\square$ WSSP Notice $\quad$ E\&S Plan Notice $\square$ Well Plat Notice is hereby provided to:
$\square$ SURFACE OWNER(s)
Name: See Attached
Address:
Name:
Address:
$\square$ SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: See Attached
Address: $\qquad$

## Name:

Address:
$\square$ SURFACE OWNER(s) (Impoundments or Pits)
Name: See Attached
Address:
$\square$ COAL OWNER OR LESSEE
Name:
Address: $\qquad$
$\square$ COAL OPERATOR
Name:
Address:
$\square$ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name:
Address:

## - OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name:
Address: $\qquad$
*Please attach additional forms if necessary

4710302907

## Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby giviven 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 sediment 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 $60157^{\text {th }}$ Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting 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
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
$60157^{\text {th }} \mathrm{St}$. 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 personsfatualifiechto test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

## 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.

[^1]
## Notice is hereby given by:

Well Operator: EQT Production Company
Telephone: $304-848-0076$
Email: vroark@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.


RECEIVED Office of Oil and Gas

4710302907
Topo Quad: NEW MARTINSVILLE, WV - OHIO 7.5' Scale: $1^{\prime \prime}=1000^{\prime}$
County: WETZEL

District: $\qquad$
Date: 29 JUNE 2017

## Water

 SMITH WELL PURVEYOR MAP

Surface Owners, Surface Owners (road or other disturbance), and Surface Owners (AST):
Sonny and Charlotte Smith
440 Farm Road
New Martinsville WV 26155


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

 NOTICE OF INTENT TO DRILL} 4710302907

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: 0

Date Permit Application Filed: 07/10/2017
Delivery method pursuant to West Virginia Code § 22-6A-16(b)HAND
$\square$ CERTIFIED MAIL
DELIVERY
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
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:


## 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 $60157^{\text {th }}$ Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting 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 W 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 W 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, pledsecohfad DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Sonny and Charlotte Smith
440 Farm Road
New Martinsville WV 26155


# 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: $8 / 2 / 17$

Date Permit Application Filed:


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

```
CERTIFIED MAIL RETURN RECEIPT REQUESTED
```

```
HAND
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: See attached
Address: $\qquad$
Name:
Address: $\qquad$

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: | WV |  | Easting: | 516231.23 |
| :---: | :---: | :---: | :---: | :---: |
| County: | Wetzel |  | Northing: | 4388529.58 |
| District: | Magnolia | Public Road A | ess: | Wetzel County Route 22 |
| Quadrangle: | New Martinsville | Generally used | rm name: | Smith, Sonny \& Charlotte |

Watershed
Tributary of of Doolin Run

## 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 $\S 22-6 A-10(b)$ 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 $60157^{\text {th }}$ Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-andgas/pages/default.aspx.

| Well Operator: | EQT Production Company |
| :--- | :--- |
| Telephone: | $\frac{304-848-0076}{\text { Email: }} \quad$ |


| Address: | 115 Professional Place PO Box 280 <br> Bridgeport WV 26330 <br> Facsimile: $304-848-0041$ |
| :--- | :--- |

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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 $a$ wv.gov.
Sonny and Charlotte Smith 440 Farm Road 471032907 New Martinsville WV 26155

Sonny and Charlotte Smith
440 Farm Road
New Martinsville WV 26155


4710302907

# WEST VIRGRIA DEPARTMENT OF TRANSPORTATION <br> Division of Highways 

1500 Kanawha Boulevard East • Building Five • Room 110
Jim Justice Governor

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

July 26, 2017

\author{

James A. Martin, Chief <br> Office of Oil and Gas <br> Department of Environmental Protection <br> $60157^{\text {th }}$ Street, SE <br> Charleston, WV 25304 <br> Subject: DOH Permit for the Smith Pad. Wetzel County <br> | Smith 1H | Smith 3H | Smith 4 H |
| :--- | :--- | :--- |
| Smith 5H | Smith 6H | Smith 8H | <br> 47-103-02907

}

Dear Mr. Martin.
This well site will be accessed from an encroachment permit 06-2013-0010 to be transferred EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 22 SLS. This permit must be approved by the DOH before construction is begun.

The operator has signed a STATEWIDE OIL AND GAS ROAD MANNTENANCE 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,
pEary Clageton
Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O\&G Coordinator
Office of Oil and Gas
Cc: Nick Bumgardner
EQT Production Company
CH, OM, D-6
File

AUG 32017
YN Department of Environmeria! Protection

## Chemical Names and CAS numbers

| Material | Ingredient | CAS Number |
| :--- | :--- | :--- |
| Water |  |  |
| Sand | Hydrotreated light petroleum distillate | $14808-60-7$ |
| Friction Reducer | Tributyl tetradecyl phosphonium |  |
| chloride | $64742-47-8$ |  |
| Biccide | 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 |  | $584-08-7$ |

Dons
$8-4-17$


SITE LOCATION
The PRoject is located at 39.650510 , - 00.812201 (nadBS WVN). THE COORONATES ARE REFERENCE O FPOM THE PAD ENTPANCE ANO CAN BE LOCATEO QY TAKING DOOLIN RIDEE ROAD ONE MLE EAST FROM NEW MARTINVILLE. TURN LEFT
ONTO SCHUPACH RIOGE ANO TRAVLL APPROXIMATELY 2.4 MLES ANO TTE PAD ONTRANEE WLL
BE ON THE RILGTT
FLOODPLAIN NOTE
The Proposeo limits of disturannee for this prouect are not located IN A FLOOO ZONE, PER THE FLOOD INSURANCE RATE MAP (FIRM) NUMGER SL051C0225E.

## E(QT

## SMITH WELL SITE

## ENTRANCE OF SITE

NAD 83 - LAT: N $39.650510^{\circ}$; LONG: W $80.812201^{\circ}$ NAD 27 - LAT: N 39.650432́; LONG: W 80.812381 ${ }^{\circ}$ UTM (NAD83) - N: 4388985.269; E: 5I6III. 897

CENTER OF WELL PAD LOCATION
NAD 83 -LAT: N $39.646617^{\circ}$; LONG: W $80.810879^{\circ}$ NAD 27 - LAT: N $39.646539^{\circ}$; LONG: W $80.811059^{\circ}$ UTM (NAD83) - N: 4388553.447; E: 516226.226

MAGNOLIA DISTRICT WETZEL COUNTY, WEST VIRGINIA

DATE: JUNE I, 2017

| SHEET INDEX |  |
| :---: | :---: |
| PG | CRAWING NAME |
| 1 | COVER SHEET |
| 2 | GENERAL DETAILS \#1 |
| 3 | GENERAL DETAILS \#2 |
| 4 | EXISTNG STE PAN |
| 5 | OVERALL SITE LAAN |
| 6 | OVERALL PROPOSED SITE PLAN W/ ORTHO |
| 7 | DETAIL SITE PLAN \#1 |
| 8 | PROFILES |
| 9 | CONSTRUCTION DETAILS |



LOCATION MAP


PROPERTY OWNERS

1. SMITH SONNY L $~ C H A R L O T T E$
2. SCHUPBACH GEORGE 5 OB-05-32


Know what's below. Call before you dig.

Rof Essional Ppace



[^0]:    *Note: Attach additional sheets as needed.

[^1]:    RECEIVED
    Office of Oil ard Gas
    AUG 32017
    MRD-
    Envirormanationcoun

