

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

October 09, 2015

#### WELL WORK PLUGGING PERMIT

#### Plugging

This permit, API Well Number: 47-1302068, issued to EQT PRODUCTION COMPANY, 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 all 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

Operator's Well No: BOARD 1

Farm Name: STARCHER, BOBBY J.

API Well Number: 47-1302068

Permit Type: Plugging
Date Issued: 10/09/2015

# PERMIT CONDITIONS

West Virginia Code §22-6-11 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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.
- 4. This well is under a consent order and must be plugged under the terms of that agreement.

| Form WW-4 (B)<br>Permit Copy<br>(Rev 2/01) | _   |                                    |               | Date:<br><u>Operator's W</u><br>Well No.<br>API Well No.: |                     | Sept 154571 (Board 47 | #1)<br>013 - 0208 |          |
|--|---|------------------------------------|---------------|---|---------------------|-----------------------|-------------------|----------|
|  | DIVISI  | STATE OF SON OF ENVIR<br>OFFICE OF | ONMENTAL      | PROTECTION  | ON                  |                       |                   |          |
| 41   | APPLICATIO  | N FOR A PER                        | MIT TO PLU    | IG AND ABA  | NDON                |                       |                   |          |
| 4)<br>Weil Type: Oil                       | Gas   | X Liq                              | and Importan  |   |                     |                       |                   |          |
| If Gas, Production                         | X _   | Or Undergrou                       | uid Injection |   | Wa                  | ste Disposai:         | ••                |          |
|  | -   | - <del></del>                      | - •           |   | —_ naeh -           |                       | Shallow           | <u> </u> |
| 5) Eleva<br>Location:                      | ition: 231 ft.<br>Lee   | _ Watershed; _<br>County:          |               |   |                     |                       |                   |          |
| District:                                  |   |                                    | Call          | houn  | Quadra              | ingle:                | Annamor           | ieh      |
| Well Operator 12                           | QT Production Co<br>20 Professional Professional Professional Professional Professional Professional Professional Professional Production Control Professional Profe | lace                               |               | signated Agent<br>Iress:                                  | 120 Pro             | ofessional Place      | x C. Ray          |          |
|  | iugepoit, VVV 20:   | 230                                |               |   |                     | ort, WV 26330         |                   |          |
| B)<br>Oil & Gas Joe Taylo                  | hr.   |                                    |               | gging Contract  |                     |                       |                   |          |
| Name: 1478 Cla                             | ylick Road A  | 2/-                                | Nar<br>Add    |   | PO BOX 9            | on Well Service       | )                 |          |
| Address: Ripley, W                         | N 25271   |                                    | nav           |   |                     | on, WV 26201          |                   |          |
| -  | t for details and   | p. oveduies.                       |               |   |                     |                       |                   |          |
|  |   |                                    |               |   |                     |                       |                   |          |
|  |   | OFFICE U                           | SE ONLY       |   |                     |                       |                   |          |
| Notification must be g                     |   | ct oil and gae in                  | pector 24 ho  | urs before per  | mitted work<br>Date | 10.                   | -2-15             |          |
|  |   |                                    |               |   |                     |                       | CEIVED            |          |

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Office of Oil and Gas

OCT 0,8 2015

WW-9 Revised 2/03

| Page of          |       |       |       |  |
|------------------|-------|-------|-------|--|
| 2) Operator's We | ll Nu | mber  |       |  |
| 154571 (Board #  | 1)    |       |       |  |
| 3) API Well No.: | 47    | 013 - | 02068 |  |

#### STATE OF WEST VIRGINIA

# DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

| Operator Name:   | EQT PRODUCTION (   | COMPANY  |  | 0  | P ID:  |   |                           |
|--|--|--|--|--|--|---|---------------------------|
| Watershed:   | Rowles   | Run  |  | Quadrangle:  | ·  | Annamoriah  | _                         |
| Elevation:   | -231 ft. 759£1. Coun   | ity:   | Calhoun  | District   | :  | Lee   | _                         |
| Description of antic   | cipated Pit Waste:   |  |  | Formation F  | luids  |   | _                         |
| Do you anticipate u<br>Will synthetic liner  | using more than 5,000 bb<br>be used in the pit?  | ls of water to   | complete the   |  | work?  | Yes No_X10-mt ZO_w  | il an                     |
| Drilling medium an   | Underground Inject Reuse (at API Num Offsite Disposal Pe Other: Explain ticipated for this well? Ai sed, what type? Syntheti   | tion - UIC Penber)<br>ermit #.<br>r, freshwater,   | , oil based, etc   | ).   |  |   |                           |
| Additives to be use  | -d?  | -  |  |  |  |   |                           |
| If left in p   | sal method? Leave in pit<br>bit and plan to solidify what in<br>or offsite name/permit numb  | medium will be   | 12-01-11-11-0-0-1-1-1-1-1-1-1-1-1-1-1-1-   |  | t  |   |                           |
| issued on August 1 understand that the permit and/or other I certify under pena application form an for obtaining the interest of the second s | derstand and agree to the control of the permit applicable law or regulated alty of law that I have personal attachments thereto formation, I believe that the for submitting false information of the control of the co | oil and Gas of<br>are enforceation can lead<br>sonally examinand that, base<br>and that, base<br>are information | f the West Virgon<br>ble by law. Voto enforcement<br>ined and am fou<br>sed on my inq<br>n is true, accu | ginia Division of<br>iolations of any<br>nt action.<br>amiliar with the<br>uiry of those in<br>rate and comp | of Environ<br>terms or<br>informati<br>dividuals<br>lete. I am | mental Protection. I condition of the genomeror submitted on this immediately response aware that there are | eral<br>sible             |
| Company Offi   | cial Signature   |  | Wit  | 1/1  |  | SEP 2 3 21  | 115                       |
| Company Offi   | cial (Typed or Printed)  | Victoria   | Roark  |  |  |   | ant of                    |
| Company Office   | cial Title   | Permitting   | Supervisor-  | WV   |  | MV Departn  | Protection                |
| Subscribed and   | sworn before me this   | 2211   | day of   | Pentembe   | 4  | 2015  |                           |
| My Gommission  | Expires OFFICIAL SEAL  | Chist  | ن کا   | Not  | ary Public   | ;   | _                         |
|  | STATE OF WEST VIRO NOTARY PUBLIC Misty S Chris 1207 Briercliff Rd Bridgeport, WV 26330 My Commission Expires February  | tie www.   |  | /( 8   |  | 10  | -<br>0/09/20 <sup>-</sup> |

|  |   |  | 154571 (Board #1)  |
|--|---|--|--|
|  | LEC   | GEND   | 194011 (DOBIU #1)  |
| Property Boundary  | AVAVA   | Diversion  | 1/1/1/1/   |
| _  |   | Spring   | Wet Spot   |
| Road   | •   | ○  | 4  |
| Planned Fence  | Drain Pipe v  | vith size in inches  | Water Way  |
| _/_/_/   |   | - 13   | <b>€</b> → <b>€</b> →  |
| Existing Fence   | Stream  | m  | Cross Drain  |
| Open Ditch   |   | Filter Strip   | Rock   |
| North  | Building  | Water well   | Drill site   |
| N  |   | W  | $\oplus$   |
| Pit with Cut Walls   | Pit with Comp   | acted Walls Area of  | Land Application of Pit Waste  |
| posed Revegetation Treatm  | nent: Acres Disturbed:  | 1± Prevegetation   | pH   |
|  |   |  |  |
| Lime3To  | ons/acre or to correct to p   | oH 6.5   |  |
|  |   | 0H 6.5<br>1/3 ton  | lbs/acre (500 lbs minimum)   |
| Fertilizer (10-20-20) or ed  |   | -  | lbs/acre (500 lbs minimum)   |
| Fertilizer (10-20-20) or ec  | quivalent   | 1/3 ton  | lbs/acre (500 lbs minimum)   |
| Fertilizer (10-20-20) or economic Mulch 2 To   | quivalent<br>ins/acre or hydroseed.<br>SEED MIXTUR  | 1/3 ton  | Ibs/acre (500 lbs minimum)  Area II  |
| Fertilizer (10-20-20) or ed<br>Mulch 2 To  | quivalent<br>ns/acre or hydroseed.  | 1/3 ton  | 34 E   |
| Fertilizer (10-20-20) or ed  Mulch 2 To  Area I  Seed Type  Red Fescue   | quivalent ins/acre or hydroseed. SEED MIXTUR Ibs/acre 40  | 1/3 ton ES Seed Type Red Fescue                                  | Area II  |
| Fertilizer (10-20-20) or ed  Mulch 2 To  Area I  Seed Type  Red Fescue  Alsike Clover  | quivalent ons/acre or hydroseed. SEED MIXTUR Ibs/acre 40 5  | 1/3 ton ES Seed Type   | Area II<br>Ibs/acre  |
| Fertilizer (10-20-20) or ed  Mulch 2 To  Area I  Seed Type  Red Fescue  Alsike Clover  | quivalent ins/acre or hydroseed. SEED MIXTUR Ibs/acre 40  | 1/3 ton ES Seed Type Red Fescue                                  | Area II<br>Ibs/acre<br>15  |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I Seed Type Red Fescue Alsike Clover   | quivalent ons/acre or hydroseed. SEED MIXTUR Ibs/acre 40 5  | 1/3 ton ES Seed Type Red Fescue                                  | Area II<br>Ibs/acre<br>15<br>5   |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I Seed Type Red Fescue Alsike Clover Annual Rye  | quivalent ons/acre or hydroseed. SEED MIXTUR Ibs/acre 40 5  | 1/3 ton ES Seed Type Red Fescue                                  | Area II  Ibs/acre  15  5  RECEN  |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I Seed Type Red Fescue Alsike Clover Annual Rye  | quivalent  ons/acre or hydroseed.  SEED MIXTUR  Ibs/acre  40 5 15   | 1/3 ton  Seed Type  Red Fescue  Alsike Clover                    | Area II Ibs/acre 15 5  |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I  Seed Type Red Fescue Alsike Clover Annual Rye  ATTACH: Drawing(s) of road, location,  | quivalent  ns/acre or hydroseed.  SEED MIXTUR  Ibs/acre  40  5  15  | 1/3 ton  Seed Type  Red Fescue  Alsike Clover                    | Area II  Ibs/acre  15 5 RECEN  |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I Seed Type Red Fescue Alsike Clover   | quivalent  ns/acre or hydroseed.  SEED MIXTUR  Ibs/acre  40  5  15  | 1/3 ton  Seed Type  Red Fescue  Alsike Clover                    | Area II  Ibs/acre  15  5  RECEN  |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I  Seed Type  Red Fescue Alsike Clover Annual Rye  ATTACH: Drawing(s) of road, location, Photocopies section of invertible plan approved by: | Julivalent Ins/acre or hydroseed. SEED MIXTUR  Ibs/acre  40 5 15  pit and proposed area for yed 7.5' topographic sheet. | 1/3 ton  Seed Type  Red Fescue  Alsike Clover                    | Area II  Ibs/acre  15  5  RECEI  Office of OII  UCT 0.8  WV Depart Environmental |
| Fertilizer (10-20-20) or economic Mulch 2 To Area I  Seed Type  Red Fescue Alsike Clover Annual Rye  ATTACH: Drawing(s) of road, location, Photocopies section of inverting Plan approved by:  | Julivalent Ins/acre or hydroseed. SEED MIXTUR  Ibs/acre  40 5 15  pit and proposed area for yed 7.5' topographic sheet. | 1/3 ton  Seed Type  Red Fescue  Alsike Clover  land application. | Area II  Ibs/acre  15  5  RECEI  Office of OII  UCT 0.8  WV Depart Environmental |

#### **PLUGGING PROGNOSIS**

#### Board #1 (154571

Calhoun Co. W.V. API # 47-013-02068

Dist.: Lec

BY: Craig Duckworth

DATE: 8/24/15

#### **CURRENT STATUS:**

 10" csg
 @ 250' (pulled)

 8 1/4" csg
 @ 880' (pulled)

 6 5/8" csg
 @ 1730' (pulled)

 4 1/2" csg
 @ 2245' (75sks)

TD @ 2250'

Fresh Water @ None reported

Salt Water @ none reported

Coal @ None reported
Gas Shows @ None reported
Oil Shows @ None reported

Stimulation: Fractured (perfs. 1836'-1839') Injun Sand

Elevation: 742'

- 1. Notify State Inspector, Joe Taylor 304-380-7469, 24 hrs. Prior to commencing operations.
- 2. Check TD
- 3. TIH w/ tbg @ 2245'; Set 100' C1A Cement Plug @ 2245' to 2145' ( Berea 2217'- 2222')
- 4. TOOH w/ tbg @ 2145'; gel hole @ 2145' to 1890'
- 5. TOOH w/ tbg @ 1890'; Set 150' CIA Cement Plug @ 1890' to 1740' (Injun Sand Perfs. @ 1836' 1839')
- 6. TOOH w/ tbg. Free Point 4 1/2", cut 4 1/2" @ free point, TOOH w/ 4 1/2" csg
- 7. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 4 1/2" cut. Do not omit any plugs
- 8. TIH w/ tbg @ 1740'; Set 100' C1A Cement Plug @ 1740' to 1640'( 4 1/2" csg cut & 6 5/8" csg set)
- 9. TOOH w/ tbg @ 1640'; gel hole @ 1640' to 930'
- TOOH w/ tbg @ 930'; Set 250' C1A Cement Plug @ 930' to 680'(8 ¼" csg @ 880' & elevation @ 742')
- 11. TOOH w/ tbg @ 680'; gcl hole @ 680' to 300'
- 12. TOOH w/ tbg @ 300'; Set 300' C1A Cement Plug @ 300' to Surface ( 10"@ 250')
- 13. Top off as needed
- 14. Set Monument to WV-DEP Specifications
- 15. Reclaim Location & Road to WV-DEP Specifications

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WV Department of Environmental Protection



#### STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION 2

| dasarsulis                  | COURT DADGE     | <del>/U</del>   | _                                       |             |                      | CABLE         | AAP3             |
|-----------------------------|-----------------|-----------------|---|-------------|----------------------|---------------|------------------|
| Permit No CAL               | -2068           | 154571          | WEL                                     | L RECORD    | 1                    | Oil or Gas    | Well OIL         |
| Company PRI                 | 00 011 004      |                 | *************************************** | <del></del> | <del> </del>         |               | (KINO)           |
| Address 720 U               |                 |                 | EDCOUDO 1/                              | Casing and  | Used in              | Left in       | Packers          |
| Farm MARY E                 |                 |                 |   |             | Deliting             | Well          | 1 octobe         |
| Location (waters            |                 |                 |   |             |                      |               |                  |
|                             |                 |                 |   | Size        | 1                    | 1             | •                |
| Well No ONE                 |                 |                 | _Rlev7/42.1                             | 16          | <del> </del>         |               | Clad of Packer   |
| District LEE                |                 |                 |   |             | 45!                  | <u> </u>      | <del></del>      |
| The surface of tr           |                 |                 |   |             | 2501                 | s             | ise of           |
|                             |                 |                 | ZION, W. VA.                            |             | 880                  |               |                  |
| Mineral rights ar           |                 |                 |   |             | 17301                | I             | epth set         |
|                             |                 | _AddressGRAN    | TSVILLE, W.                             | VA. 88/16   | ļ                    |               |                  |
| Drilling commend            |                 |                 |   |             | 2245                 | 22451         | erf. top1836!    |
| Drilling complete           | <u>a 3/1/64</u> |                 | <del></del>                             |             | <u> </u>             |               | erf. bottom 1839 |
| Date Shot                   | Pro             | m               | ro                                      | Liners Used |                      |               | erf. top         |
| With                        |                 |                 |   | _           | 1                    |               | erf. bottom      |
| Open Plow                   | /10ths Water    | In              | Inc                                     | chi         |                      |               | err. oction      |
|                             |                 |                 | In                                      |             | . 1                  |               |                  |
| Yolume                      |                 |                 |   | Casing Cem  | ented_42             | SIZE 2245 No  | Ft 2/24/64 Date  |
| Rock Pressure               |                 |                 |   |             | cement -             | fallificer    | 52-5             |
| Oil                         |                 |                 | bbls., 1st 24 hr                        |             | NCOUNTERED           | AT PE         | DTINCHES         |
|                             | 250 CAL         | <del></del>     | DOIS., IST 24 ht                        |             |                      |               |                  |
| MELL VCIDISE                | D 230 GAL       | <u> </u>        |   | FBE:        | - NO CONTUCH         | E8FE          | etinches         |
|                             | ali 00          | 0. #00 / 10     | 10 000# 10                              | FEET        | rinch                | esp           | etinches         |
| WELL FRACTU                 | RED_24.00       | U_#2U/4U        | 10.000# 10                              | /20         |                      |               |                  |
| ROCK PRESSUR<br>Fresh Water |                 |                 |   | Salt Water  |                      | Foot          |                  |
| Formation                   | Color           | Hard or<br>Soft | Тар                                     | Bettom      | Oil, Gas<br>or Water | Depth         | Remarks          |
| Clay                        |                 |                 | 0                                       | 20          |                      |               |                  |
| Lime                        |                 |                 | 20                                      | 34          |                      |               |                  |
| Slate                       |                 |                 | 34                                      | 80          |                      |               |                  |
| Lime<br>Sand                |                 |                 | 80                                      | 105         |                      |               |                  |
| Red rock                    |                 |                 | 105                                     | 150         |                      |               |                  |
| Slate                       |                 |                 | 165                                     | 165         |                      | E 1617 10 192 | <b>75</b> 2      |
| Lime                        |                 |                 | 185                                     | 210         | Ŕ                    | (y,           | <b>E</b>         |
| Sand                        |                 |                 | 210                                     | 220         | E.                   | MA: 156       |                  |
| Slate                       |                 |                 | 220                                     | 225 ·       | Æ                    | KECE"         | ୍ର ଅଧିକ          |
| Red rock                    |                 |                 | 225                                     | 250         | (2                   |               |                  |
| Lime                        |                 |                 | 250                                     | 280         | 6                    | Dept of Min   |                  |
| Red rock                    |                 |                 | 280                                     | 310         | 7                    | En.           |                  |
| Slate<br>Red rock           |                 |                 | 310                                     | 396         |                      | RECEIVE       |                  |
| Lime i                      |                 |                 | 396<br>405                              | 405<br>430  |                      |               | 7                |
| Sand                        |                 |                 | 430                                     | 456         |                      |               | 1-12             |
| Red rock                    |                 |                 | 456                                     | 470         | ÷                    | DECEN         | /FI) = - ~       |
| Slate                       |                 |                 | 470                                     | 490         |                      | 170           | and Gas          |
| Red rock                    |                 |                 | 490                                     | 515         | Offi                 | ce of O''     | 20               |
| Lime                        |                 |                 | 515                                     | 550         | <b>O</b>             |               | and Gas CAL      |
| Red rock                    |                 |                 | 550                                     | 580         |                      | I CEP %       | olevino t        |
| Lime                        |                 |                 | 580                                     | 1 590       |                      | ישני י        | n.               |
| Slate                       |                 |                 | 590                                     | 630         |                      |               | Section 2        |
| Red rock<br>Slate           | i               |                 | 630                                     | 655         | VI                   | N Design      | 0                |
| Red rock                    |                 |                 | 655<br>690                              | 690<br>720  |                      |               | 2                |
| Sand                        | .               |                 | 720                                     | 730         | T                    | . 1 =         | 1 00             |
|                             |                 |                 |   |             |                      |               |                  |
| Slate                       |                 |                 | 730                                     | 785         |                      |               | }                |

CAL -2068

|                     |       |                 | سيند سيناورو |                       | ر                    | HL - 2068                                 | 5                                       |                    |
|---------------------|-------|-----------------|--------------|-----------------------|----------------------|---|---|--------------------|
| Permeting           | Color | Hard or<br>Soft | Top 2        | Bettem                | Oil, Gas<br>or Water | Depth<br>Found                            | Remarks                                 |                    |
| ate                 |       |                 | 830          | 920                   |                      |   |   |                    |
| 5 rd                | İ     |                 | 920<br>1030  | 1030<br>1135          |                      | '   |   |                    |
| S.are<br>Sand       | ľ     | 1               | 1135         | 1165                  |                      |   |   |                    |
| Slate               |       |                 | 1165<br>1245 | 1245<br>1380          |                      |   |   |                    |
| Line                |       | 1               | 1380         | 1390                  |                      |   |   |                    |
| Sand<br>Slate       |       |                 | 1390<br>1405 | 1405                  |                      |   |   |                    |
| Sand                |       |                 | 1505         | 1505<br>1 <b>62</b> 0 |                      |   |   |                    |
| L!ne<br>State       |       | ]               | 1620         | 1655                  |                      |   |   |                    |
| Sand                | •     |                 | 1655<br>1660 | 1660<br>1667          |                      |   |   |                    |
| Lime                |       | 1               | 1667         | 1693                  |                      | 1   |   |                    |
| Sand<br>Slate       |       |                 | 1693<br>1698 | 1698<br>1780          | •                    |   |   |                    |
| Line                |       | 1               | 1780         | 1787                  |                      | 1   |   |                    |
| Lime<br>İnjun Sand  |       |                 | 1787<br>1824 | 1824<br>1860          |                      |   |   |                    |
| Line.               |       |                 | 1860         | 1895                  |                      |   |   |                    |
| Slate<br>Lime       |       |                 | 1895         | 1980                  |                      |   | •                                       |                    |
| <b>Slate</b>        |       |                 | 1980<br>2035 | 2035<br>2217          |                      | }   |   |                    |
| Berea Sand<br>Slate |       |                 | 2217         | 2222                  |                      |   |   |                    |
| 310fe               |       |                 | 2222         | 2250                  |                      |   |   |                    |
|                     |       |                 |              |                       |                      | 1   |   |                    |
|                     |       |                 |              | • ,                   |                      | <b>f</b> 1                                |   |                    |
|                     |       | ļ               | 1            |                       |                      |   |   |                    |
|                     |       |                 | 1            |                       |                      | l   |   |                    |
|                     |       |                 | 1            |                       |                      |   |   |                    |
|                     |       |                 | ł. I         |                       |                      | l i                                       |   |                    |
|                     |       |                 |              |                       |                      |   |   |                    |
|                     |       |                 |              |                       |                      |   |   |                    |
|                     | • •   | <b>4</b>        |              |                       |                      |   |   |                    |
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| · [                 |       |                 | 1            | Ī                     |                      |   |   |                    |
| ŀ                   | ,     |                 |              |                       |                      |   |   |                    |
| ł                   |       |                 | , ,          |                       |                      | • • •                                     | •                                       |                    |
| ļ                   |       |                 |              | ł                     |                      |   |   |                    |
|                     |       |                 |              |                       |                      |   |   |                    |
|                     |       |                 |              |                       |                      |   |   |                    |
|                     | •     |                 |              |                       | ı                    |   | scienced Gas                            | _                  |
|                     |       |                 |              |                       |                      | Ì   | WED Gas                                 | ,                  |
| [                   |       | • •             | ,            |                       | •                    | Ç.  | En Caralla                              |                    |
| j                   |       |                 |              | , }                   | ·                    | 1   | 17                                      |                    |
|                     |       |                 | ** * .       |                       | 20 I                 | * • 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | SEP 12 3 2015                           | , of               |
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| · . }               | :     |                 |              | 1                     |                      | j   | Mar Company S.                          | Orbine.            |
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|-----------|-------------------|---------|
| APPROVED_ | PRIOR DIL COMPANY | Owner   |
| 37        | Edward P. Harr    | GŘ.     |
|           | (Title)           |         |

| MARY. E. RIDDLE  MARY. E. RIDDLE  We all 1 742'  To Creston  The second | 5.                            |
|---|-------------------------------|
| 24Walnut B  |                               |
| G. C. BEE<br>125.5 Aç   |                               |
| MINIMUM ERROR OF CLOSURE 1/ 10,000  Source of Elevation B.M. Annamoriah 945   |                               |
| New Location  |                               |
| Address UNION TRUST BLUG PARILES BUTTON DEPARTMENT OF MINES OF FORM MARY E RIDDLE BUTTON OIL AND GAS DIVISION OF CHARLESTON   | 16.                           |
| Tract Acres 50 Lease No.  Well (Farm) No. 1 Seriel No.  Elevation (Spirit Level) 742'  Quadrangle ARNOI DSBURG ANNAMORIA  County CALHOUN District LEE  Engineer County CALHOUN C Palls   tude and longitude lines being represented by border lines as shown.   | 2015  Takitment of Protection |
| Pile No Drawing No — Denotes one inch spaces on border line of original tracing. 47-0/3   | 0/09/2015                     |

Stephene Stueprint and Supply Company - Perkeraburg, W. Virginia 25.50' Gordod

annamoriah 8

WW-4-A September 21, 2015 1) Date: Revised 6/07 2) Operator's Well Number 154571 (Board #1) 3) API Well No .: 47 013 02068 State County Permit STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS NOTICE AND APPLICATION TO PLUG AND ABANDON WELL 4) Surface Owner(s) to be served: 5) (a) Coal Operator: (a) Name Robert and Debra Starcher Name None Address 2579 Rowles Road Address Mt. Zion, WV 26251 Coal Owner(s) with Declaration Name (b) (b) Address See Attachment Name Address (c) Name Name Address Address 6) Inspector Joe Taylor Coal Lessee with Declaration (c) Address 1478 Claylick Road Name None Ripley, WV 25271 Address (304) 380-7469 Telephone TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents: (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and (2) The plat (surveyor's map) showing the well location on Form WW-6. The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all. Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator: **EQT Production Company** By: Victoria J.Roark Permitting Supervisor Its: Address: PO Box 280 Bridgeport, WV 26330 Telephone: (304) 848-0076

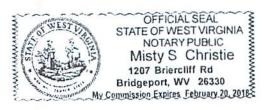
Subscribed and sworn before me this

day of

Notary Public

My Commission Expires:

The Office of Oil & Gas processes your personal information, such as name, address and phone 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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



| WW-4-A<br>Revised 6/07   |   | 1) Date: September 21, 2015 2) Operator's Well Number  |
|--|---|--|
|  |   | 154571 (Board #1)  |
|  |   | 3) API Well No.: 47 013 - 02068 County Parmit  |
| DIVI 4) Surface Owner (a) Name Address   | STATE OF WEST VIRGINIA - BU<br>SION OF ENVIRONMENTAL PROT<br>NOTICE AND APPLICATION TO<br>(s) to be served:<br>Robert and Debra Starcher<br>2579 Rowles Road<br>Mt. Zion, WV 26251  | REAU OF ENVIRONMENT<br>FECTION, OFFICE OF OIL & GAS  |
| (b) Name<br>Address  |   | (b) Coal Owner(s) with Declaration Name See Attachment Address   |
| (c) Name<br>Address  |   | Name<br>Address  |
| 6) Inspector<br>Address<br>Telephone   | Joe Taylor<br>1478 Claylick Road<br>Ripley, WV 25271<br>(304) 380-7489  | (c) Coal Lessee with Declaration Name None Address   |
| work and of (2) The plat (a) The reason your reverses side.  Take notice the Application and Division of Environme to the Community of Environme to the Community of Environme to the Community of Environment of Enviro | ation to Plug and Abandon a Well on Form \ lescribes the well its and the plugging work ourveyor's map) showing the well location on the received these documents is that you have however, you are not required to take any set under Chapter 22-8 of the West Virginia (di accompanying documents for a permit to prironmental Protection, with respect to the woopies of this Notice, the Application, and the | Form WW-8.  e rights regarding the application which are summarized in the instructions on the   |
| Subscribed and swo   | Witten St. Cha  | EQT Production Company Victoria J.Roark Permitting Supervisor PO Box 280 Bridgeport, WV 28330 (304) 848-0076 day of Notary Public  |
| disclosed to other State a   | rocesses your personal information, such as name<br>gencies or third parties in the normal course of bu   | a, address and phone number, as part of our regulatory duties. Your personal information may be istness or as needed to comply with statutory or regulatory requirements, including Freedom of I information. If you have any questions about our use of your personal information, please contact |

DEP's Chief Privacy Officer at depprivacyofficer@wv.gov. RECEIVED

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Misty S Christie
1207 Briorelli Rd
Bridgeport, WV 26330
Mr Complished Easter Estuary 20, 2015

Office of Oil and Gas

001 08 7015

WV Department of Environmental Foots (2015)

#### WW2-A

#### **Additional Coal Owners**

GMH Gas Co., Inc. P. O. Box 1007 Spencer, WV 25276

F. B. Foster c/o AEI P. O. Box 218330 Houston, TX 77218

Mary E. Riddle c/o AEI P. O. Box 218330 Houston, TX 77218

EQT Production Company Walvev Coal EQT Plaza 625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222

Thelma L. Mollohan 905 Lynn Street Parkersburg, WV 26101

Doris H. Mollohan 1131 Cook Road Phil Campbell, AL 35581

Connie S. Mollohan 10 Winnipeg Lane Hedgesville, WV 25427

Steven M. Mollohan 905 Lynn Street Parkersburg, WV 26101

Vada Sue Board Heirs Unknown address

Walter W. Board 242 Hawthorne Street Elyria, OH 44035

Robert Bruce Board Unknown address NOT DECLARED

Betty Walker Heirs Unknown address

NOT DECLARED

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Office of Oil and Gas

SEP 2 3 2015

Larry Glenn Stutler Heirs NOT DECCAME Unknown address

Ruby Lee Stump
Unknown address

Dennis R. Mollohan 3304 Middlebranch Ave., N.E. Canton, OH 44705

Todd M. Mollohan 1341 Carmen Ct., N.W. Canton, OH 44703

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Office of Oil and Gas

SEP 2 3 2015

| Operat | or's | Well | Num | ber: |
|--------|------|------|-----|------|
|--------|------|------|-----|------|

154571 (Board #1)

#### INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

The well operator named on the attached page WW-4(B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inpsector is notified. Which date shall not be less than five days after the dat on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of OII & Gas

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on the obverse side of this application

Note: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner or Lessee for plugging" prior to the issuance of this plugging permit.

#### WAIVER

| The   | undersigned operator                                     | / owner   | / lessee        | of the coal under this well location has   |
|-------|--|---|-----------------|--|
|       |  |   |                 | s not no objection to the work proposed to |
|       | at this location, provided the code and the governing re | entrate " entra 120 militario per a contra esta comenta | has complied wi | ith all applicable requirements of the Wes |
| _     | 9.22-15  |   | FZQ3            | Production Co.                             |
| Date: |  | В   |                 | lone                                       |
|       |  | Its   | S: Rea          | ional Director                             |

Office of Oil and Gas
SEP 2 3 2015

| Topo Quad:   | Annamoriah 7.                            | 5'             | Scale:                    | 1" =                                  | 2000'  |
|--|--|----------------|---------------------------|---------------------------------------|--|
| County:  | Calhoun                                  |                | Date:                     | August 2                              | 28, 2015   |
| District:  | Lee                                      |                | Project No:               | 178                                   | -28-00-15  |
|  | 47-013-0                                 | 2068 WV        | 154571 (1                 | Board #1)                             | Торо   |
|  | Mt                                       | W-11-          | -114                      | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1000   |
|  | Beulah 8                                 |                |                           |                                       |  |
|  |  |                | Ratti                     | lesnake /                             | in the second  |
|  |  | 7511           | STA                       |                                       | MAN SOL  |
|  |  |                |                           |                                       |  |
|  | a San San San San San San San San San Sa |                | 1000                      |                                       | (R.141)  |
| 68   | He kondes Run                            | Hardman Fork   | 47-013-02068<br>WV 154571 |                                       | See See See See See See See See See See  |
|  | CUMP                                     | Cremo          |                           |                                       |  |
|  | R:14 Ourles-Run                          | Palsor<br>Knob | 1100                      | F Office                              | ECEIVED of Oil and Gas   |
|  |  | imo            |                           |                                       | N:687349.46  |
| Jun Vinor  | sco soo Bo                               | overd Eark     | /rap-                     | Enviro                                | E:1943162.61<br>mental Protection<br>WGS 84<br>LAT:38.887503<br>LONG:-81.199503<br>ELEV:758.95 |
| STANDERS OF THE PROPERTY OF TH | 237 Birch<br>Birch Riv<br>PH: (30-       |                |                           | P.O                                   | etion Company 3. Box 280 ort, WV 26330 10/09/2015  |



# POTENTIAL WATER SAMPLE DATA SHEET

| CLIENT: EQT PRODUCTION COMPANY LEASE NAME AND WELL No. Board #1 - WV 154571 - API No. | o, 47-013-02068 . |
|---|-------------------|
| POTENTIAL SAMPLE LOCA Site: 1 Spacing: 830 +/- Owner: Robert D. & Debra Starch        |                   |
| Address: 2579 Rowels Road, Mt. Zion, WV 26151   |                   |
| Comments:   | 1                 |
| Site: 2 Spacing:188+/- Owner: Robert D. & Debra Starch                                | her               |
| Address: 2579 Rowels Road, Mt. Zion, WV 26151   | Phone No          |

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Office of Oil and Gas

SEP 2 3 2015

WV Department of Environmental Protection

#### BIRCH RIVER OFFICE

237 Birch River Road Birch River, WV 26610 phone: 304-649-8606 fax: 304-649-8608

## BRIDGEPORT OFFICE

172 Thompson Drive Bridgeport, WV 26330 phone: 304-848-5035 fax: 304-848-5037

#### ALUM CREEK OFFICE

PO. Box 108 • 1413 Childress Rd Alum Creek, WV 25003 phone 304-756-2949 fax: 304-756-2948

#### RANSON OFFICE

401 South Fairfax Blvd, Suite 3 Ranson, WV 25438 phone: 304-724-5008 fux: 304-724-5010

| Topo Quad:  | Annamoriah 7.5'  | Scale:         | 1" = 2                        | 000'   |
|---|--|----------------|-------------------------------|--|
| County:   | Calhoun  | Date:          | August 2                      | 3, 2015  |
| District:   | Lee  | Project N      | o:178-2                       | 28-00-15   |
| Water   | 47-013-02068   | WV 15457       | 1 (Board #1)                  |  |
|   | 2 Potential Wa   | ater Sources   | within 1000' Rattlesnake Knob | inac.  |
| 970   | Anic Rantes Run  |                | Site 2                        | 1000<br>1000   |
| 1000 A  | CR-14 Rourles Run  | Palsor<br>Knob | 1100                          | Routles-Run  |
| od soor   | 1000<br>1000<br>1100 rd Fork   | Coon           | SE                            | NAD 27, South Zone<br>N:687349.46<br>E:1943162.61<br>WGS 84<br>LAT:38.887503<br>LONG:-81.199503<br>ELEV:758.95 |
| EGHENA<br>OUT OUT OUT OUT OUT OUT OUT OUT OUT OUT | SURVEYING AND MAPPING SERVICES F<br>ALLEGHENY SURV<br>1-800-482-8606<br>237 Birch River Road<br>Birch River, WV 26610<br>PH: (304) 649-8606<br>FAX: (304) 649-8608 |                | P.O.                          | tion Company Box 280 rt, WV 26330 10/09/2015   |

Topo Quad: Annamoriah 7.5' Scale: 1" = 2000" County: \_\_\_\_ Calhoun Date: \_\_\_\_\_\_ August 28, 2015 District: Project No: \_\_\_\_\_ 178-28-00-15 Topo 47-013-02068 WV 154571 (Board #1) Beulah Rattlesnake Knob 47-013-02068 RECEIVED Office of Oil and Gas Cremo CUT 0,8 2015 WV Department of Environmental Protection CR 14 Palsor Knob NAD 27, South Zone N:687349.46 E:1943162.61 WGS 84 LAT:38.887503 LONG:-81.199503 Coon Cem ELEV:758.95 SURVEYING AND MAPPING SERVICES PERFORMED BY: PREPARED FOR: **EQT Production Company** ALLEGHENY SURVEYS, INC. 1-800-482-8606 P.O. Box 280 237 Birch River Road Bridgeport, WV 26330 Birch River, WV 26610

PH: (304) 649-8606 FAX: (304) 849-8608



# West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

| API: 47-013-02068 WELL NO.: WV 154571 (Board #1)  |
|---|
| FARM NAME: Bobby J. Starcher  |
| RESPONSIBLE PARTY NAME: EQT Production Company  |
| COUNTY: Calhoun DISTRICT: Lee   |
| QUADRANGLE:Annamoriah 7.5'  |
| SURFACE OWNER: Robert D. & Debra Starcher   |
| ROYALTY OWNER: Betty Walker Heirs, et al.   |
| UTM GPS NORTHING: 4304312   |
| UTM GPS EASTING: 482697 GPS ELEVATION: 231 m (759 ft)   |
| The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:  1. Datum: NAD 1983, Zone: 17 South, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.  2. Accuracy to Datum – 3.05 meters  3. Data Collection Method:  Survey grade GPS: Post Processed Differential  Real-Time Differential  Mapping Grade GPS _X : Post Processed Differential  Real-Time Differential |
| 4. Letter size copy of the topography map showing the well location.  |
| I the undersigned, hereby certify this data 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 Office of Oil and Gas.  |
| Say Chim P5" 2180 8/34/15   |
| Signature Title Date  |