

#### 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

April 09, 2013

#### WELL WORK PLUGGING PERMIT

#### Plugging

This permit, API Well Number: 47-10302802, 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

James Martin

Chief

Operator's Well No: 510887

Farm Name: EDGELL, KATHY S.

API Well Number: 47-10302802

Permit Type: Plugging

Date Issued: 04/09/2013

Form WW-4 (B) Permit Copy (Rev 2/01) Date:

Operator's Well Well No.

Shreve 510887

API Well No.:

47 - 103 - 02802

2802

February 26, 2013

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

#### APPLICATION FOR A PERMIT TO PLUG AND ABANDON

| 4) ' | Well Type: Oil      | Gas   | X Li                          | quid Injection | on                              | Waste          | e Disposal:         | : _  |  |
|------|---------------------|---|-------------------------------|----------------|---------------------------------|----------------|---------------------|--|--|
|      | If Gas, Production  | X   | Or Undergro                   | und storag     | е                               | Deep           |                     | Shallow _                                    | Χ                                      |
| 5)   | Location: Eleva     | ation: 927'   | Watershed:                    | Sheep Ru       | ın & N.Fk                       | Fishing Ck     |                     |  |  |
| ,    | District:           | Grant   | County:                       |                | etzel                           | Quadran        | gle:                | Big Run                                      |  |
| ۵۱ ۱ |                     | OT D  |                               | 7)             | D : t                           | 1              | D O D               |  |  |
|      |                     | QT Production Co<br>20 Professional P                     |                               | - ')           | Address:                        | ed Agent:      | Rex C. Ressional Pl |  | ************************************** |
| •    |                     | ridgeport, WV 263   |                               | -              | Address.                        |                | rt, WV 263          |  |  |
| ٥١ ، | Oil & Gas Inspecto  |   |                               | - 0)           | Dlugging                        | Contractor:    |                     |  | )                                      |
|      | Name: Derek Ha      |   |                               | 3)             | Name:                           | Savannah 65    | 54                  |  |  |
|      | Address: P.O. Box   |   |                               |                | Address:                        |                |                     |  |  |
|      | Smithvill           | e, WV 26178   |                               | 1              |                                 |                |                     |  |  |
| 10)  | Verbal Pluggin      | he work order for<br>ng - CONTINUOU<br>47'-2847', 1793'-1 | JS OPERATIO<br>993', 1170'-19 | NS - Janua     | a <b>ry 25, 20</b><br>6% gel sp | 13<br>pacers,  | APR O               | Dad Gos<br>1 2013<br>portment<br>ental Prote | of action                              |
|      |                     |   |                               |                |                                 | l f '          |                     |  |  |
|      | Notification must b | e given to the dis  | trict oil and ga              | s inspector    | 24 hours                        | before permitt | ea work ca          | an commen                                    | ce.                                    |
|      | Work order approv   | ed by inspector   |                               | 1              |                                 | Date           | 3-2.                | 5-13   |  |
|      |                     |   |                               |                |                                 |                |                     |  |  |

| WW-4-A       |
|--------------|
| Revised 6-07 |

1) Date:

Operator's Well Number

Shreve 510887

3) API Well No.: <u>47 - 103 - 02802</u> State County Permit

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

| 4) | Surace Own | ner(s) to be served: | 5) (a) Coal Operator:                     |
|----|------------|----------------------|---|
|    | (a) Nam    | ne Kathy Edgell      | Name                                      |
|    | Address    | HC 62, Box JJ        | Address                                   |
|    |            | Pine Grove, WV 26419 |   |
|    | (b) Nam    | ne Mary Dennison     | (b) Coal Owner(s) with Declaration        |
|    | Address    | 101 Ford Avenue      | Name Reserve Coal Properties Co           |
|    |            | Weirton, WV 26062    | Consolidation Coal /Leatherwood           |
|    |            |                      | Address CNX Center, 1000 Consol Energy Dr |
|    |            |                      | Cannonsburg, PA 15317                     |
|    | (c) Nam    | ne Robert K Wildman  | Name                                      |
|    | Address    | HC 62, Box 49        | Address Kathy Edgell                      |
|    |            | Pine Grove, WV 26419 | HC 62, Box JJ                             |
|    |            |                      | Pine Grove, WV 26419                      |
| 6) | Inspector  | Derek Haught         | (c) Coal Lessee with Declaration          |
|    | Address    | P.O. Box 85          | Name                                      |
|    |            | Smithville, WV 26178 | Address                                   |
|    | Telepho    | ne 304-206-7613      |   |
|    |            | ·                    |   |

#### 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.

| OFFICIAL SEAL  | Well Operator: | EQT Production Company               | 5013          |
|--|----------------|--------------------------------------|---------------|
| NOTARY PUBLIC, COST OF WEST VIRGINA JEREMY DESESTON  | By:<br>Its:    | Landman Landman                      | This weight   |
| F Q T Production-Land Dept<br>1710 Pennsytvania Ave, Charleston, WV 25902<br>My Commission Expires July 25, 2021 | Address:       | P.O. Box 120<br>Bridgeport, WV 26330 | OSPOJUI PIO   |
| ······································   | Telephone:     | (304) 848-0623                       | Ma Wes        |
| Subscribed and sworn before me   | this 25th      | day of March                         | Notary Public |
| My Commission Expires:   | T. Jy          | 26 2021                              |               |

Oil and Gas Privacy Notice:

The Office of Oil 7 Gas processes your personal information, such as name, address and phone number, as part of our regulatory duties. Your pesonal information may be discolsed 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 request. OUr office will appropriately secure your personal informatio. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov

1

Don Puglio 1000 Consol Energy Dr Cannonsburg, PA 15317 Reserve Coal Properties
Consolidation Coal / Leatherwood



Mary Dennison 101 Ford Avenue Weirton, WV 26062



1

Kathy Edgell HC62, Box JJ Pine Grove, WV 26419



Walter Bickerstaff HC 62, Box 52 Pine Grove, WV 26419







ZIP 26330 041L10228892

\$06.979

7011 3500 0003 E194 0E84

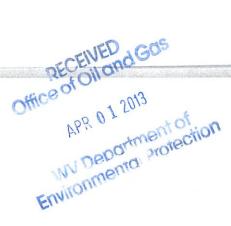
Delores Blake HC 62, Box 48 Pine Grove, WV 26419



Robert K. Wildman HC62, Box 49 Pine Grove, WV 26419







#### Additional Surface Owners Shreve 510887 47-103-02802

Delores Blake HC 62, Box 48 Pine Grove, WV 26419

Walter Bickerstaff HC 62, Box 52 Pine Grove, WV 26419

Office of Oil and Gas

APR 0 1 2013

Environmental Profession

Environmental Profession

#### SURFACE OWNER WAIVER

| Operator's Well Number: | Shreve 510887 |
|-------------------------|---------------|
|                         |               |

#### INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW 4-A

The well operator named on page WW4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

## NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT. WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas Division of Environmental Protection 601 57th Street Charleston, WV 25304 (304) 926-0450

| Time Limits and methods for filing comments.   | The law requires these materials to be served on or before |
|--|--|
| the date the operator files for this Application. You have   | FIVE (5) DAYS after the filing date to file your           |
| comments. Comments must be filed in person or receiv   | ed 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. I  |  |
| have signed a "voluntary statement of no objection" to the   | e planned work described in these materials, then the      |
| permit may be isued at any time.   |  |
| T make the major of the contract of the contra |  |

Comments must be in writing. Your comments must 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.

The chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

#### **VOLUNTARY STATEMENT OF NO OBJECTION**

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For a Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

| FOR EXECUTION BY A NATURAL PE | NOSF | FOR EXI  | ECUTION BY A CORPOR | ATION, ETC. |
|-------------------------------|------|----------|---------------------|-------------|
|                               | Date | Name _   | 00 01 7010          | -k          |
| Signature                     |      | Ву       | H                   | enton       |
|                               |      | Its      | Debar.              | profes      |
|                               |      | <u> </u> | INV menta           |             |
|                               |      | Signatu  | ire Environn        | Date        |
|                               |      |          | To I to             |             |

| Operator's Well Number: | Shreve 510887 |
|-------------------------|---------------|
|                         | 011101001     |

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

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work o plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & 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 your are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Artivle 6, Chapter 22 of the Code and given in detail on observe side of this application.

### WAIVER

| vner/ les          | see of the coal under th           | nis   |
|--------------------|------------------------------------|---|
| ging work order.   |                                    |   |
| proposed to be do  | one at this location, provided     |   |
| ble requirements o | of the West Virginia Code          |   |
| By:                |                                    | <b>-</b>  |
|                    | ging work order. proposed to be do | ging work order. proposed to be done at this location, provided ble requirements of the West Virginia Code  By: |

Office of Oil and 2013

APR 0 1 2013

Environmento

| Pageof _           |            |       | 27   |
|--------------------|------------|-------|------|
| 2) Operator's Well | Number     |       | 70.0 |
| Shreve 510887      |            |       |      |
| 3) API Well No.:   | 47 - 103 - | 02802 | P    |

#### 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 WAST DISCHARGE

| Operator Name  | EQT PRODUCTION   | N COMPANY   |  |  | _ 0110  |   |  |
|--|--|---|--|--|---|---|--|
| Watershed  | Sheep Run &  | N.Fk Fishing Ck   |  | Quadran  | gle:  | Big Run   | 254  |
| Elevation:   | 927' Co  | ounty:  | Wetzel   | No <sup>2</sup> Di   | strict:   | Grant   | 04   |
| Description of an  | ticipated Pit Waste:   | Drill   | water, frac  | blow back a  | and various for   | mation cutting  | S  |
| Do you anticipate  | using more than 5,000  | bbls of water to  | complete th  | ne proposed  | well work?  | Yes N   | √o x   |
| Will synthetic line  | er be used in the pit?   |   | I  | f so, what m   | nil. ?  |   |  |
| Proposed Dispos  | al Method for Treated P  | it Wastes:  |  |  |   |   |  |
| X  | Land Application   |   |  |  |   |   |  |
|  | Underground Inject   |   | Number   |  |   |   |  |
|  | Reuse (at API Num  |   |  |  |   |   |  |
| -  | Offsite Disposal (Su   | ipple form WW-  | 9 disposal l   | ocation)   |   |   |  |
| Drilling modium o  | Other: Explain anticipated for this well?  | Air frachwater o  | il bacad at  | to   |   |   |  |
|  | at type? Synthetic, petro  |   | iii baseu, ei  | ic.  |   |   |  |
| Additives to   | 5 200  | ioum, oto   |  |  |   |   |  |
| Will closed lo   | op system be used?   |   |  |  | RECE<br>Office of O   | IVED  |  |
| Drill cuttings disp  | 10 (5)   |   |  |  | Office of O   | il and Gas  | Þ  |
| If left in pit and pl  | an to solidify what medi   | um will be used?  |  |  |   |   |  |
| Landfill or offsite  | name/permit number?  |   |  |  | APR 0   | 1 2013  |  |
| 1, 2005, by the Office of the permit are enforced of the permit are enforced of the permit are enforced on the permit are enforced on the permit and all attachments the libelieve that the information, including the Company Official Company Offi | of law that I have personal ereto and that, based on mation is true, accurate and the possibility of fine or implial Signature  ial (Typed or Printed) | Virginia Department of any terms or construction of any terms or construction of any terms or construction of those discomplete. I am a consonment.  Victoria Du  Landman III | ent of Environditions of the manifer with the manifer wit | nmental Protine general perith the inform mmediately representation of the control of the contro | R POLLUTION ection. I unders rmit and/or other ration submitted esponsible for cificant penalties | stand that the per<br>er applicable lav<br>I on this applica<br>obtaining the inf | rovisions v or  ution form ormation, alse EAL EOFWEST VIRGINIA Land Dept |
| My Commission  | Expires  | July  | 25,  | 2021   |   |   |  |
|  |  | 1   |  |  |   |   |  |

### **LEGEND**

| Property Boundary   |  |                                       |   |
|---|--|---------------------------------------|---|
|   |  | Spring                                | Wet Spot  |
| Road  |  | <b></b>                               | -6-   |
| ========<br>Planned Fence   | Drain Pipe wi  | th size in inches                     | Water Way                                       |
| _/_/_/  |  | 12 →                                  | $\longrightarrow$                               |
| Existing Fence  —X X X X—   | Stream   |                                       | Cross Drain                                     |
| Open Ditch  | Artificial F   | Filter Strip                          | Rock  |
| North   | Building   | Water well                            | Drill site                                      |
| N   | The same of the  | W                                     | $\oplus$  |
| CHILLIA   |  | $\Rightarrow$                         | =======================================         |
|   |  |                                       |   |
| posed Revegetation Treatm   | ent: Acres Disturbed:  | Prevegetation                         | n pH  |
|   |  |                                       | n pH  |
| ime <u>3</u> To   | ns/acre or to correct to p   |                                       |   |
| ime <u>3</u> To   | ns/acre or to correct to puivalent   | oH6.5                                 |   |
| Lime 3 To   | ns/acre or to correct to puivalent   | DH6.5<br>1/3 ton                      | lbs/acre (500 lbs minimum                       |
| Lime 3 To   | ns/acre or to correct to puivalent ns/acre or hydroseed.   | DH6.5<br>1/3 ton                      | lbs/acre (500 lbs minimun                       |
| Lime 3 To   | ns/acre or to correct to puivalent ns/acre or hydroseed.   | DH6.5<br>1/3 ton                      | lbs/acre (500 lbs minimun                       |
| Lime 3 To Fertilizer (10-20-20) or ed Mulch 2 To Area I  Seed Type  | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR   | DH6.5<br>1/3 ton                      | lbs/acre (500 lbs minimum                       |
| Lime 3 Too Fertilizer (10-20-20) or ed Mulch 2 To Area I Seed Type  | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR Ibs/acre 40 5   | DH6.5<br>1/3 ton                      | Area II  RECEIVED a lbs/acre                    |
| Lime 3 To Fertilizer (10-20-20) or ed Mulch 2 To Area I  Seed Type  (Y-31 Alsike Clover   | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR Ibs/acre  | Seed Type Orchard Grass Alsike Clover | Area II  RECEIVED a lbs/acre 15  APP 0 1 2013 5 |
| Lime 3 To Fertilizer (10-20-20) or ed Mulch 2 To Area I  Seed Type  (Y-31 Alsike Clover   | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR Ibs/acre 40 5   | Seed Type Orchard Grass Alsike Clover | Area II  RECEIVED a lbs/acre 15  APP 0 1 2013 5 |
| Lime 3 To Fertilizer (10-20-20) or ed Mulch 2 To Area I  Seed Type  KY-31  Alsike Clover  | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR Ibs/acre 40 5   | Seed Type Orchard Grass Alsike Clover | Area II  RECEIVED a lbs/acre 15  APP 0 1 2013 5 |
| Lime3To Fertilizer (10-20-20) or ed Mulch2To Area I  Seed Type  CY-31 Alsike Clover Annual Rye  ATTACH: Drawing(s) of road, location  | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR  Ibs/acre 40 5 15  15  , pit and proposed area for                              | Seed Type Orchard Grass Alsike Clover | Area II  RECEIVED a lbs/acre 15  APP 0 1 2013 5 |
| Dosed Revegetation Treatm  Lime3To  Fertilizer (10-20-20) or ed  Mulch2To  Area I  Seed Type  KY-31  Alsike Clover  Annual Rye  ATTACH: Drawing(s) of road, location Photocopies section of invo  Plan approved by: | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR  Ibs/acre 40 5 15  15  , pit and proposed area for                              | Seed Type Orchard Grass Alsike Clover | Area II  RECEIVED and Shacre 15                 |
| Lime3To  Fertilizer (10-20-20) or ed  Mulch2To  Area I  Seed Type  KY-31  Alsike Clover  Annual Rye  ATTACH:  Drawing(s) of road, location Photocopies section of invo  | ns/acre or to correct to puivalent ns/acre or hydroseed. SEED MIXTUR  Ibs/acre  40 5 15  15  , pit and proposed area for lived 7.5' topographic shee | Seed Type Orchard Grass Alsike Clover | Area II  RECEIVED a lbs/acre 15 15              |

WR-35 Rev (9-11)

### State of West Virginia Department of Environmental Protection Office of Oil and Gas

| DATE:  | 2/26/2013    |   |
|--------|--------------|---|
| API #: | 47-103-02802 | P |

Well Operator's Report of Well Work

| District: Grant  | Farm name: J.R.Shreve  | Operator Well   | No.: 510887      |                  |                   |                   |
|--|--|-----------------|------------------|------------------|-------------------|-------------------|
| District: Grant Latitude: 39.592142 Feet South of Deg. 39 Min. 34 Sec. Longitude-80.618849 Feet West of DegBO Min. 37 Sec.  Company:  EQT Production Company    Casing & Used in drilling drilling Up Cu. Ft. 100  |  |                 |                  |                  |                   |                   |
| Latitude: 30,582142 Feet South of Deg. 39 Min. 34 Sec. Longitude-80,618849 Feet West of Deg80 Min. 37 Sec.  Company: EQT Production Company  Address: EQT Plaza, Suite 1700 Tubing drilling Up Cu. Ft. 40' 40' 49  Address: EQT Plaza, Suite 1700 Tubing drilling Up Cu. Ft. 40' 40' 49  Agent: Cecil Ray 13 3/8 370 357 386  Inspector: Derek Haught 9 5/8 2,927 2,914 1,073  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary ✓ Cable Rig ✓  Total Vertical Depth (ft): 7,084' Plugging beach to 5,0829  Total Measured Depth (ft): 7,084' Presh Water Depth (ft): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft): 175,640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 69,947'  Gas: Initial open flow N/NA Amsterdend MCF/d Final open flow N/A Bbl/d  Final open flow Machandends MCF/d Final open flow N/A Bbl/d  Final open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Amsterdend Depts (Ft) 11,000 to 1000 N/A Bbl/d  Final open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Amsterdend Depts (Ft) 11,000 N/A Bbl/d  Final open flow Machandends MCF/d Final open flow N/A Bbl/d  Final open flow N/A-Amsterdend MCF/d Final open flow N/A Bbl/d  Final open flow Shandends MCF/d Final open flow N/A Bbl/d  Final open flow N/A-Amsterdend MCF/d Final open flow N/A Bbl/d  Final open flow N/A-Amsterdend MCF/d Final open flow N/A Bbl/d  Final open flow Shandends MCF/d Final open flow N/A Bbl/d  Final open flow N/A-Amsterdend MCF/d Final open flow N/A Bbl/d  Final open flow N/A-Amsterdend MCF/d Final open flow N/A Bbl/d  Final open flow N/A More N/A Bbl/d  Final      |  |                 |                  |                  |                   |                   |
| Company: EQT Production Company  Address: EQT Plaza, Suite 1700  Tubing drilling drilling Up Cu. Ft. 1909.  625 Liberty Avenue, Pittsburgh, PA 15222  26"  40'  40'  49'  Agent: Cecil Ray  13 3/8  370  357  386  Inspector: Derek Haught  9 5/8  2,927  2,914  1,073  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary  | Latitude: 39.582142 Feet South of Deg.   | 39 Min. 34 Sec. |                  |                  |                   |                   |
| Address: EQT Plaza, Suite 1700  Casing & Tubing drilling  G25 Liberty Avenue, Pittsburgh, PA 15222  26"  40'  40'  49  49  Agent: Cecil Ray  13 3/8  370  357  386  Inspector: Derek Haught  9 5/8  2,927  2,914  1,073  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging:  Yes  Date Permission granted on: 1/24/2013  Rotary Cable Rig C  Total Vertical Depth (ft): 7,084'  Fresh Water Depth (ft): 7,084'  Fresh Water Depth (ft): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus  Pay zone depth (ft) 6,847'  Gas: Initial open flow MA-Abandoned MCF/d Final open flow N/A Bbl/d  Final open flow between initial and final tests M/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Second producing formation No second formation. Pay zone depth (ft)  Cost Date N/A Bbl/d  Time of open flow between initial and final tests M/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Second producing formation No second formation. Pay zone depth (ft)  Cost Date of the rich well drill in pc. 10 M/A Bbl/d  Phours  Second producing formation No second formation. Pay zone depth (ft)  Cost Date of the rich well drill in pc. 10 M/A Bbl/d  Phours  Second producing formation No second formation. Pay zone depth (ft)  Cost Date of the rich well and the pc. 2013  | Longitude_80.618849_Feet West ofDeg.   | -80 Min.        | .37 Sec          | <b>.</b> .       |                   |                   |
| Address: EQT Plaza, Suite 1700  Casing & Tubing drilling  G25 Liberty Avenue, Pittsburgh, PA 15222  26"  40'  40'  49  49  Agent: Cecil Ray  13 3/8  370  357  386  Inspector: Derek Haught  9 5/8  2,927  2,914  1,073  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging:  Yes  Date Permission granted on: 1/24/2013  Rotary Cable Rig C  Total Vertical Depth (ft): 7,084'  Fresh Water Depth (ft): 7,084'  Fresh Water Depth (ft): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus  Pay zone depth (ft) 6,847'  Gas: Initial open flow MA-Abandoned MCF/d Final open flow N/A Bbl/d  Final open flow between initial and final tests M/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Second producing formation No second formation. Pay zone depth (ft)  Cost Date N/A Bbl/d  Time of open flow between initial and final tests M/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Second producing formation No second formation. Pay zone depth (ft)  Cost Date of the rich well drill in pc. 10 M/A Bbl/d  Phours  Second producing formation No second formation. Pay zone depth (ft)  Cost Date of the rich well drill in pc. 10 M/A Bbl/d  Phours  Second producing formation No second formation. Pay zone depth (ft)  Cost Date of the rich well and the pc. 2013  | Company: EQT Production Company  |                 |                  |                  |                   |                   |
| Agent: Cecil Ray  Inspector: Derek Haught  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary   | EOT Plaza Suita 1700   |                 | 1                | Left in well     |                   |                   |
| Inspector: Derek Haught  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary   | 625 Liberty Avenue, Pittsburgh, PA 15222   | 26"             | 40'              | 40'              | 49                |                   |
| Inspector: Derek Haught  Date Permit Issued: 8/16/2012  Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary  Cable Rig  C  Total Vertical Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow MA-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure NA-Abandoned psig (surface pressure) after N/A Hours  Static rock Pressure NA-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Date Media McF/d Oil: No  Disconding formation No second formation. Pay zone depth (ft)  Date Media McF/d Oil: No  Disconding formation No second formation. Pay zone depth (ft)  Date McF/d Oil: No  Disconding formation No second formation. Pay zone depth (ft)  Date McF/d Oil: No  Disconding formation No second formation. Pay zone depth (ft)  Date McF/d Oil: No  Disconding formation No second formation. Pay zone depth (ft)  Date McF/d Oil: No  Disconding formation No second formation. Pay zone depth (ft)  | Agent: Cecil Ray   | 13 3/8          | 370              | 357              | 386               |                   |
| Date Well Work Commenced: 10/19/2012  Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary V Cable Rig V  Total Vertical Depth (ft): 7.084' (Plugged back to 6.082)  Total Measured Depth (ft): 7.084'  Fresh Water Depth (ft): 282'  Salt Water Depth (ft): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow MA-Abandened MCF/d Oil: Initial open flow NIA Bbl/d  Final open flow NIA-Abandened MCF/d Final open flow NIA Bbl/d  Time of open flow between initial and final tests NA Hours  Static rock Pressure MA-Abandened psig (surface pressure) after NIA Hours  Static rock Pressure MA-Abandened psig (surface pressure) after NIA Hours  Second producing formation No second formation. Pay zone depth (ft) Delvided of the control  |  | 9 5/8           | 2,927            | 2,914            | 1,073             |                   |
| Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary ✓ Cable  Rig ✓ Total Vertical Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 7,084'  Fresh Water Depth (ft.): 282'  Salt Water Depth (ft.): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned Psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) DN/A DN/A DN/A No Second producing formation. Pay zone depth (ft) DN/A DN/A No Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A DN/A DN/A DN/A DN/A DN/A DN/A   |  |                 |                  |                  |                   |                   |
| Date Well Work Completed: 1/26/2013  Verbal Plugging: Yes  Date Permission granted on: 1/24/2013  Rotary ✓ Cable  Rig ✓ Total Vertical Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 7,084'  Fresh Water Depth (ft.): 282'  Salt Water Depth (ft.): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned Psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) DN/A DN/A DN/A No Second producing formation. Pay zone depth (ft) DN/A DN/A No Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A DN/A NO Second producing formation. Pay zone depth (ft) DN/A DN/A DN/A DN/A DN/A DN/A DN/A DN/A   | Date Well Work Commenced: 10/19/2012   |                 |                  |                  |                   |                   |
| Verbal Plugging: Yes   | 4/06/2042  |                 |                  |                  |                   |                   |
| Date Permission granted on: 1/24/2013  Rotary  Cable  Rig  Total Vertical Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 7,084'  Fresh Water Depth (ft.): 282'  Salt Water Depth (ft.): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation  Marcellus  Pay zone depth (ft) 6,947'  Gas: Initial open flow  N/A  MCF/d Oil: Initial open flow  N/A  Bbl/d  Final open flow  N/A-Abandoned  MCF/d Final open flow  N/A  Bbl/d  Time of open flow between initial and final tests  N/A  Hours  Static rock Pressure  N/A-Abandoned  psig (surface pressure) after  N/A  Hours  Second producing formation  No second formation. Pay zone depth (ft)  Pal/depth  Pal/de |  |                 |                  |                  |                   |                   |
| Rotary Cable Rig   |  |                 |                  |                  |                   |                   |
| Total Vertical Depth (ft): 7,084' (Plugged back to 6,082')  Total Measured Depth (ft): 7,084'  Fresh Water Depth (ft.): 282'  Salt Water Depth (ft.): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Debt/d  Second producing formation No second formation. Pay zone depth (ft) Debt/d  Office of Oil Ord 2003  | parties and the same of the sa |                 |                  |                  |                   |                   |
| Total Measured Depth (ft): 7,084'  Fresh Water Depth (ft.): 282'  Salt Water Depth (ft.): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and Society of Oil  |  |                 |                  |                  |                   |                   |
| Salt Water Depth (ft.): 282'  Salt Water Depth (ft.): 1,900'  Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and Gos   |  |                 |                  |                  |                   |                   |
| Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow M/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and Oil |  |                 |                  |                  |                   | MH                |
| Is coal being mined in area (N/Y)? No  Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus  Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  |  |                 |                  |                  |                   | 3-25-17           |
| Coal Depths (ft.): 175', 640', 1,153', 1,503'  Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and Oi |  |                 |                  |                  |                   |                   |
| Void(s) encountered (N/Y) Depth(s) No  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and Source Pay 2013   | Coal Depths (ft.): 175', 640', 1,153', 1,503'  |                 |                  |                  |                   |                   |
| OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6.947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and Oil  |  |                 |                  |                  |                   | ]                 |
| Producing formation Marcellus Pay zone depth (ft) 6,947'  Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft) Office of Oil and O |  | 1 1             |                  | lata au agravata | ale oat)          |                   |
| Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d  Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Office of Oil and Gastan Acceptable to the control of the co |  |                 |                  | iata on separate | sneet)            |                   |
| Final open flow N/A-Abandoned MCF/d Final open flow N/A Bbl/d  Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Office of Oil and Control of the second formation.  |  |                 |                  |                  |                   |                   |
| Time of open flow between initial and final tests N/A Hours  Static rock Pressure N/A-Abandoned psig (surface pressure) after N/A Hours  Second producing formation No second formation. Pay zone depth (ft)  Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow Bbl/d   | Final open flow N/A-Abandoned MCF/d Final open flow  | w N/A B         | bl/d             |                  |                   |                   |
| Static rock Pressure NA-Adandoned psig (surface pressure) after NA-Hours  Second producing formation No second formation. Pay zone depth (ft)  Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow Bbl/d  | Time of open flow between initial and final tests N/A Hours  |                 |                  |                  |                   |                   |
| Second producing formation No second formation. Pay zone depth (ft)  Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  Final open flow Bbl/d  | Static rock Pressure NA-Abandoned psig (surface pressure) a  | tter NA Hou     | ırs              | REC              | Oilano            |                   |
| Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  | Second producing formation No second formation. Pay zo   | one depth (ft)  |                  | Office or        | 242               |                   |
| Final open flow MCF/d Final open flow Bhl/d  | Gas: Initial open flowMCF/d Oil: Initial open flow_  |                 | 8bl/d            |                  | 3 0 1 5013        |                   |
| That open now initial and final tests Hours  | Final open flow MCF/d Final open flow  | WB              | bl/d             | P.P              | nem               | OTHOR             |
| Static rock Pressure psig (surface pressure) after Hours   | Static rock Pressure psig (surface pressure) a   | after Hours     |                  |                  | echo              |                   |
| Final open flow MCF/d off: Initial open flow Bbl/d  Final open flow MCF/d Final open flow Bbl/d  Time of open flow between initial and final tests Hours  Static rock Pressure psig (surface pressure) after Hours  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and   | purg (commo process), a  |                 |                  | W.               | mental            |                   |
| I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and   | I certify under penalty of law that I have personally examined   | and am familia  | ar with the info | rmation submitte | ed on this docume | nt and<br>believe |
| all the 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.   | Dellore  |                 |                  |                  |                   |                   |
| mil by   |  |                 |                  |                  |                   |                   |
| Signature 2/26/2013 Date   | The State  |                 |                  |                  |                   |                   |

| Were core samples taken? YesNoX  | Were cuttings caught during drilling? YesX_No  |   |  |  |  |  |  |
|--|--|---|--|--|--|--|--|
| Were Electrical, Mechanical or Geophysical logs recorded or  | on this well? If yes, please list Geophysical  |   |  |  |  |  |  |
| FRACTURING OR STIMULATING, PHYSICAL CHA<br>DETAILED GEOLOGICAL RECORD OF THE TO<br>COAL ENCOUNTERED BY THE WELLBORE FROM | OLLOWING: 1). DETAILS OF PERFORATED INTERVALS, HANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING DM SURFACE TO TOTAL DEPTH. |   |  |  |  |  |  |
| Perforated Intervals, Fracturing, or Stimulating:  |  |   |  |  |  |  |  |
| N/A Well Abandoned   |  |   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |
|  | mped cement plug from: 1) 7,070' to 6,082' 2) 2,858' to 2,659'   |   |  |  |  |  |  |
| 3) 2,854' to 2,654' 4) 2,847' to 2,647' 5) 1,993' to 1,7   | 1,793' 6) 1,970 to 1,170' 7) 1,170 to 585' 8) 585' to Surface  |   |  |  |  |  |  |
| Formations Encountered: Top Surface:   | Top Depth / Bottom Depth   |   |  |  |  |  |  |
|  | IM/s<br>3-25   | 7 |  |  |  |  |  |
| Sand/shale /0/ 178 / 178 Coal / 178 / 181 / 3 Sand/shale / 181 / 538 / 357   |  |   |  |  |  |  |  |
| Coal / 538 / 540 / 2 Sand/Shale / 540 / 643 / 103 Coal / 643 / 646 / 3   |  |   |  |  |  |  |  |
| Sand/shale / 646 / 1,153 / 507 Coal / 1,153 / 1,155 / 2 Sand/shale / 1,155 / 1,503 / 348                                 |  |   |  |  |  |  |  |
| Coal / 1,503 / 1,505 / 2 Sand/shale / 1,505 / 1,526 / 21 Coal / 1,526 / 1,532 / 6  |  |   |  |  |  |  |  |
| Sand/shale / 1,532 / 1,773 / 241 MAXTON / 1,773 / 1,889 / 116 BIG LIME / 1,889 / 2,271 / 382                             |  |   |  |  |  |  |  |
| WEIR / 2,271 / 2,445 / 174 GANTZ / 2,445 / 2,596 / 151 50F / 2,596 / 2,667 / 71  |  |   |  |  |  |  |  |
| 30F / 2,667 / 2,714 / 47 GORDON / 2,714 / 2  |  |   |  |  |  |  |  |
|  | 3,386 / 3,532 / 146 SPEECHLEY / 3,532 / 3,900 / 369  |   |  |  |  |  |  |
|  | / 4,354 / 5,011 / 657 BENSON / 5,011 / 5,368 / 357   |   |  |  |  |  |  |
| ALEXANDER / 5,368 / 6,520 / 1,152 - SONYEA   | EA / 6,520 / 6,690 / 170 MIDDLESEX / 6,690 / 6,725 / 35<br>D / 6,798 / 6,832 / 34 TULLY / 6,832 / 6,850 / 18   |   |  |  |  |  |  |
|  | olk shale / 6,947 / 6,992 748 ONONDAGA / 6,992   |   |  |  |  |  |  |
| MAINILION / 0,000 / 0,94/ / 94 Walcellus Dik   | -0011  |   |  |  |  |  |  |
|  | artman action  |   |  |  |  |  |  |
|  | WV Departmental protection   |   |  |  |  |  |  |
|  |  |   |  |  |  |  |  |

