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**west virginia** department of environmental protection

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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 20, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-700142, 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 penalties 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: 7836  
Farm Name: BOGGS, E. L.  
**API Well Number: 47-700142**  
**Permit Type: Plugging**  
Date Issued: 10/20/2015

**Promoting a healthy environment.**

## 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

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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.

700142P

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

Date: September 21, 2015  
Operator's Well  
Well No. 607836 (E. L. Boggs, et al. #10)  
API Well No.: 47 007 - 00142

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

Ch # 19879  
\$100<sup>00</sup>

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil        Gas   X   Liquid Injection        Waste Disposal:         
If Gas, Production          X   Or Underground storage        Deep        Shallow   X  

5) Elevation: 1078 ft. ~~-328 ft.~~ Watershed: Duck Creek  
Location: Birch County: Braxton Quadrangle: Strange Creek  
District:       

6) Well Operator EQT Production Company  
120 Professional Place  
Address: Bridgeport, WV 26330

7) Designated Agent: Rex C. Ray  
Address: 120 Professional Place  
Bridgeport, WV 26330

8) Oil & Gas Danny Mullins  
Name: 124 Big Trace Fork  
Address: Harts, WV 25524

9) Plugging Contractor:  
Name: HydroCarbon Well Service  
Address: PO BOX 995  
Buckhannon, WV 26201

10) Work Order: The work order for the manner of plugging this well is as follows:  
**See Attachment for details and procedures.**

OFFICE USE ONLY

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector \_\_\_\_\_

Date \_\_\_\_\_

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PLUGGING PROGNOSIS

**Boggs et al 10 (607836)**

Braxton Co, WV  
API # 47-007- 00142  
District: Birch

BY: Craig Duckworth  
DATE: 8/18/15

**CURRENT STATUS:**

- 8 1/4" csg @ 593'
- 6 5/8" csg @ 1812'
- 3" tbg @ 2018' (Packer @1927')

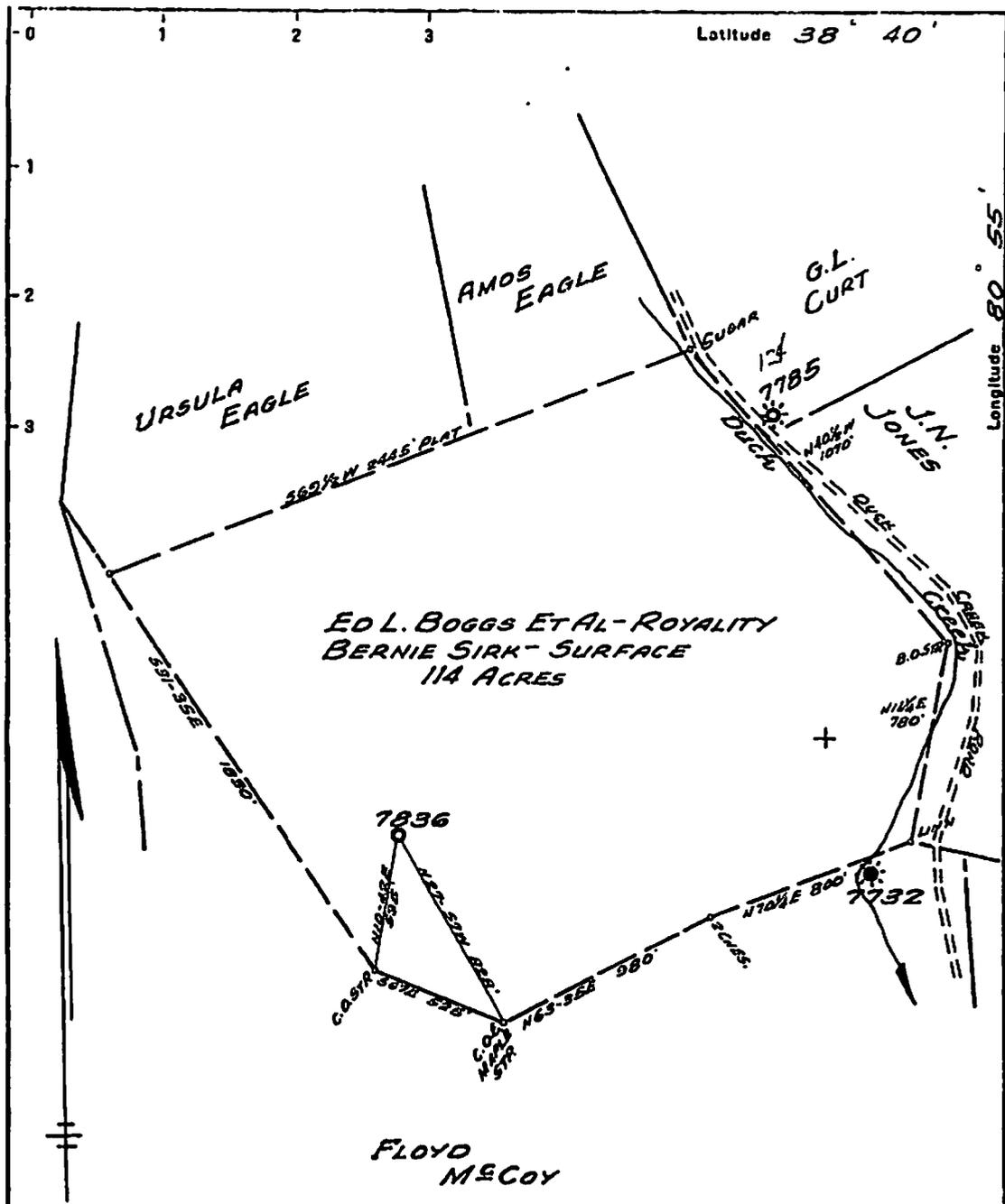
**TD @ 2018'**

**Fresh Water @ 182' & 446'**                      **Salt Water @ None reported**  
**Coal @ 446'-448'**  
**Gas shows @ Rosedale Sand 1450'-1495', Big Injun 1960' & 1978'-1986'**  
**Oil Shows @ None Reported**  
**Stimulation: Shot 1976'-1985'**  
**Elevation: 1089'**

1. Notify State Inspector, **Danny Mullins 304-932-6844**, 24 hrs. Prior to commencing operations.
2. Attempt to pull 3" tbg if unable to pull cut 3" tbg off at packer @ 1927' TOOH w/3" tbg
3. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 3" cut. Do not omit any plugs
4. TIH w/ tbg @ 1927'; Set 200' C1A Cement Plug @ 1927' to 1727' (3" csg cut @ <sup>1927'</sup>1483' & 6 5/8" @ 1812', Big Injun @ 1960' & 1978'-1986')
5. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 6 5/8" cut. Do not omit any plugs
6. TIH w/ tbg @ 1727'; gel hole @ 1727' to 1550'.
7. TOOH w/ tbg @ 1550'; Set 150' C1A Cement Plug @ 1550' to 1400' (Rosedale Sand @ 1450'-1495')
8. TOOH w/ tbg @ 1400'; gel hole @ 1400' to 1100'.
9. TOOH w/ tbg @ 1100'; Set 150' C1A Cement Plug @ 1100' to 1000' (Elevation @ 1089')
10. TOOH w/ tbg @ 1000'; gel hole @ 1000' to 650'.
11. TOOH w/ tbg @ 650'; Set 250' C1A Cement Plug @ 650' to 400' ( 8 1/4" @ 593' & Coal @ 446'-448')  
TOOH w/ 8 1/4" csg
12. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 8 1/4" cut. Do not omit any plugs
13. TIH w/ tbg @ 500'; gel hole @ 500' to 230'
14. TOOH w/ tbg @ 230'; Set 230' C1A Cement Plug @ 200' to 0 (Surface & Fresh Water @ 182')
15. Top off as needed
16. Set Monument to WV-DEP Specifications
17. Reclaim Location & Road to WV-DEP Specifications

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New Location...   
 Drill Deeper.....   
 Abandonment.....

Company PITTSBURGH & W.VA. GAS CO.  
 Address CLARKSBURG, W.VA.  
 Farm ED L. BOGGS ET AL  
 Tract \_\_\_\_\_ Acres 1060 Lease No. 22398  
 Well (Farm) No. TEN Serial No. 7836  
 Elevation (Spirit Level) 1089' KA.  
 Quadrangle GASSAWAY S. W. 2 3  
 County BRAXTON District BIRCH  
 Engineer Jamund J. Jeffries  
 Engineer's Registration No. 1084  
 File No. V-89 P. 145 Drawing No. \_\_\_\_\_  
 Date APRIL 24, 1941 Scale 1" = 500'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

**WELL LOCATION MAP**  
 FILE NO. BRAX-142

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

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700142P

WW-4-A  
Revised 6/07

1) Date: September 21, 2015  
2) Operator's Well Number  
607836 (E. L. Boggs, et al. #10)  
3) API Well No.: 47 007 - 00142  
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:  
(a) Name Judith E. Gray  
Address P. O. Box 85  
Duck, WV 25063  
  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
  
6) Inspector Danny Mullins  
Address 124 Big Trace Fork  
Harts, WV 25524  
Telephone (304) 932-6844

5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_  
  
(b) Coal Owner(s) with Declaration  
Name Wolfpen Know Development Co.  
1000 Consol Energy Drive  
Address Cannonsburg, PA 15317  
  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
  
(c) Coal Lessee with Declaration  
Name None  
Address \_\_\_\_\_  
  
Name \_\_\_\_\_  
Address \_\_\_\_\_

**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  
Victoria J. Roark  
Permitting Supervisor  
PO Box 280  
Bridgeport, WV 26330  
(304) 848-0076  
Telephone: \_\_\_\_\_

Victoria J. Roark  
Permitting Supervisor  
PO Box 280  
Bridgeport, WV 26330  
(304) 848-0076

Subscribed and sworn before me this 22nd day of September, 2015  
Misty S. Christie Notary Public  
My Commission Expires: 2/20/18

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](mailto:depprivacyofficer@wv.gov).

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23 2015  
WV Department of Environmental Protection

WW-9  
Revised 2/03

Page \_\_\_\_\_ of \_\_\_\_\_  
2) Operator's Well Number  
607836 (E. L. Boggs, et al. #10)  
3) API Well No.: 47 007 - 00142

**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 OP ID: \_\_\_\_\_  
Watershed: Duck Creek Quadrangle: Strange Creek  
Elevation: 328 ft County: Braxton District: Birch

Description of anticipated Pit Waste: Formation Fluids

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

Will synthetic liner be used in the pit? Yes Is so, what ml.? 40 ml - 20 ml  
*TRW*

Proposed Disposal Method for Treated Pit Wastes:

- Land Application
- Underground Injection - UIC Permit Number \_\_\_\_\_
- Reuse (at API Number) \_\_\_\_\_
- Offsite Disposal Permit #. \_\_\_\_\_
- Other: Explain \_\_\_\_\_

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. \_\_\_\_\_  
If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_

Additives to be used? \_\_\_\_\_

Will closed loop system be used? \_\_\_\_\_

Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. \_\_\_\_\_  
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust \_\_\_\_\_  
Landfill or offsite name/permit number? \_\_\_\_\_

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.  
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Victoria Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

Subscribed and sworn before me this 20th day of September 2015

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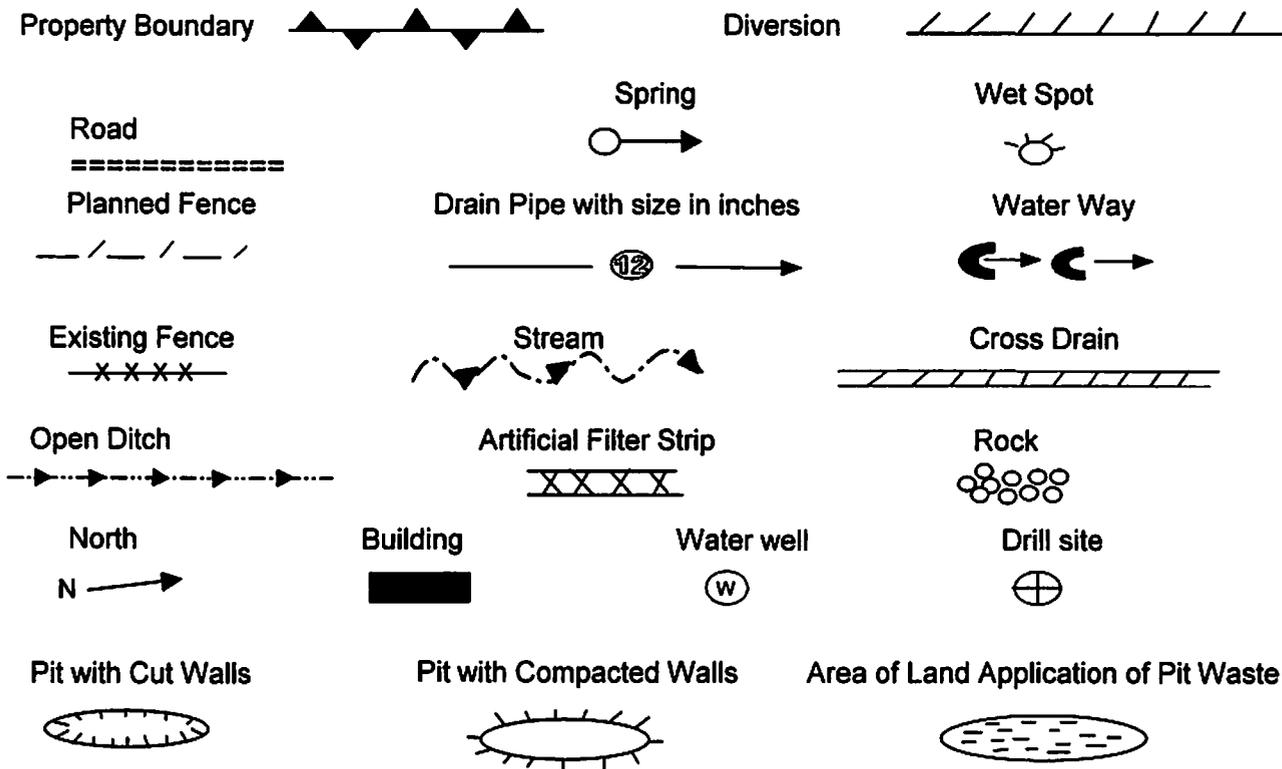


Notary Public

WV Department of Environmental Protection

**OPERATOR'S WELL NO.:**  
607836 (E. L. Boggs, et al. #10)

**LEGEND**



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH         

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

**SEED MIXTURES**

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

**ATTACH:**

Drawing(s) of road, location, pit and proposed area for land application.

Photocopies section of involved 7.5' topographic sheet.

Plan approved by: \_\_\_\_\_

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

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Field Reviewed?      Yes      No

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Topo Quad: Strange Creek 7.5'

Scale: 1" = 2000'

County: Braxton

Date: August 26, 2015

District: Birch

Project No: 40-02-00-07

47-007-00142 WV 607836 (E. L. Boggs, et al. #10)

Topo



NAD 27, South Zone  
 N: 578435.05  
 E: 2015942.52  
 WGS 84  
 LAT: 38.588612  
 LONG: -80.944053  
 ELEV: 1078.27



SURVEYING AND MAPPING SERVICES PERFORMED BY:  
**ALLEGHENY SURVEYS, INC.**

1-800-482-8606  
 237 Birch River Road  
 Birch River, WV 26610  
 PH: (304) 649-8606  
 FAX: (304) 649-8608

PREPARED FOR:

**EQT Production Company**

P.O. Box 280  
 Bridgeport, WV 26330

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WW-7  
8-30-06



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

API: 47-007-00142 WELL NO.: WV 607836 (E. L. Boggs, et al. #10)

FARM NAME: E. L. Boggs

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Braxton DISTRICT: Birch

QUADRANGLE: Strange Creek 7.5'

SURFACE OWNER: Judith E. Gray

ROYALTY OWNER: Mike Ross, Inc., et al.

UTM GPS NORTHING: 4271127

UTM GPS EASTING: 504873 GPS ELEVATION: 328 m (1078 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:

- Datum: NAD 1983, Zone: 17 South, Coordinate Units: meters, Altitude: height above mean sea level (MSL) - meters.
- Accuracy to Datum - 3.05 meters
- Data Collection Method:  
Survey grade GPS ; Post Processed Differential   
Real-Time Differential   
Mapping Grade GPS ; Post Processed Differential   
Real-Time Differential
- 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.

*Shy O'Brien*  
Signature

PS #2180  
Title

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8/28/15 SEP 23 2015  
Date  
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Environmental Protection



## POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY  
 LEASE NAME AND WELL No. E. L. Boggs, et al. #10 - WV 607836 - API No. 47-007-00142

### POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 607836.

#### 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

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

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 Office of Oil and Gas  
 RANSON OFFICE  
 401 South Fairfax Blvd, Suite 3  
 Ranson, WV 25087  
*phone:* 304-724-5008  
*fax:* 304-724-5010  
 SEP 25 2015  
 WV Department of  
 Environmental Protection

Topo Quad: Strange Creek 7.5' Scale: 1" = 2000'

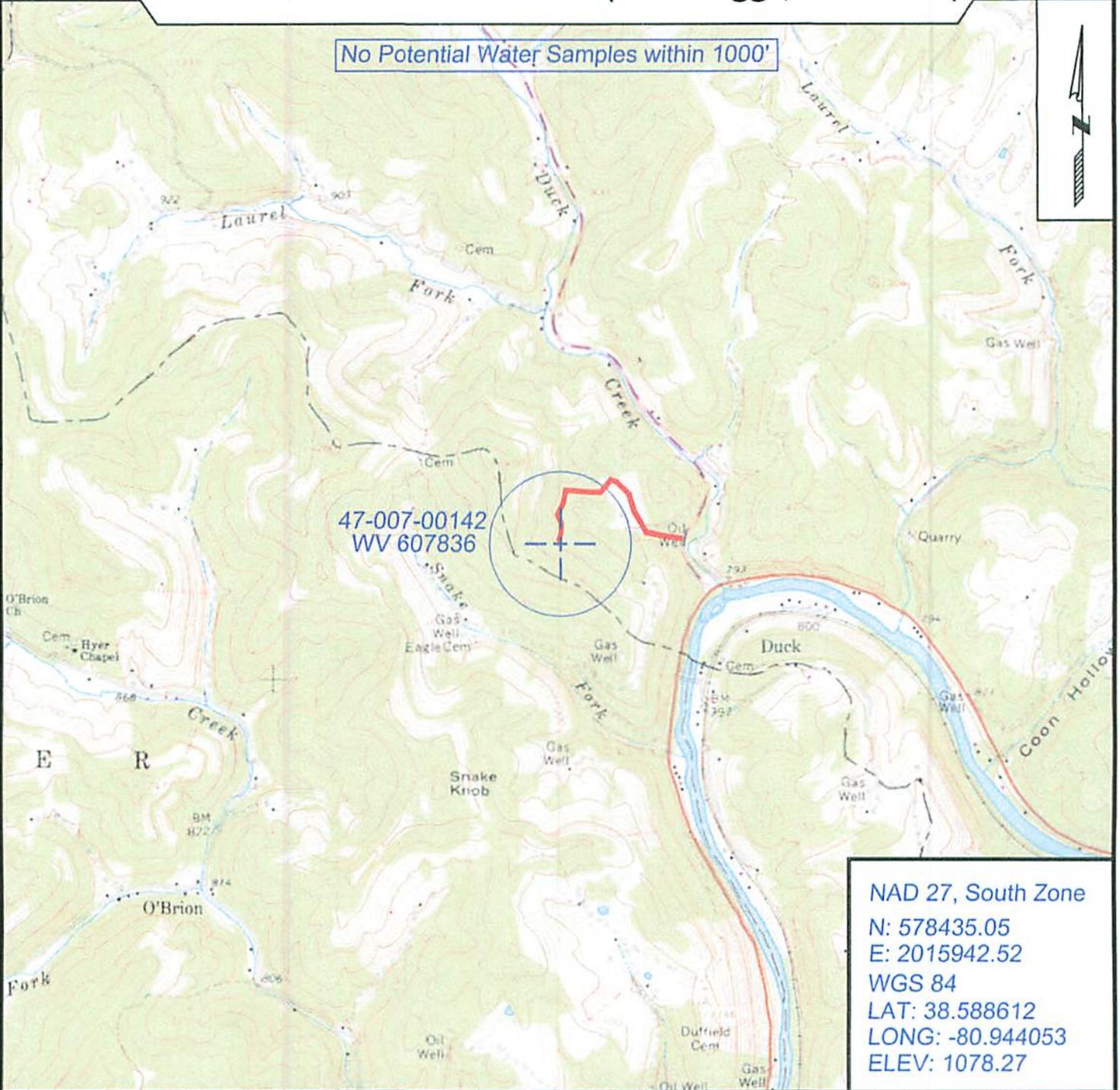
County: Braxton Date: August 26, 2015

District: Birch Project No: 40-02-00-07

Water

47-007-00142 WV 607836 (E. L. Boggs, et al. #10)

No Potential Water Samples within 1000'



NAD 27, South Zone  
 N: 578435.05  
 E: 2015942.52  
 WGS 84  
 LAT: 38.588612  
 LONG: -80.944053  
 ELEV: 1078.27



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PREPARED FOR:

**EQT Production Company**

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