



---

west virginia department of environmental protection

---

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

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

Thursday, March 23, 2017  
WELL WORK PERMIT  
Vertical / Plugging

EQT PRODUCTION COMPANY (A)  
120 PROFESSIONAL PLACE  
BUILDING II  
BRIDGEPORT, WV 26330

Re: Permit approval for C. N. Snodgrass 7539  
47-007-01279-00-00

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

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

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



James A. Martin  
Chief

Operator's Well Number: C. N. Snodgrass 7539  
Farm Name: Lisa Tanner  
U.S. WELL NUMBER: 47-007-01279-00-00  
Vertical / Plugging  
Date Issued: 3/23/2017

Promoting a healthy environment.

03/24/2017

## 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.

701279P

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

Date: January 3, 2017  
Operator's Well  
Well No. 607539 (C. N. Snodgrass #7539)  
API Well No.: 47 007 - 01279

CK 22169  
100<sup>00</sup>

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

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

Elevation: 789 ft. Watershed: Right Fork of Steer Creek  
 Location: Center County: Gilmer (621) Quadrangle: Rosedale 7.5'  
 District:         

i) Well Operator EQT Production Company 7) Designated Agent: Rex C. Ray  
120 Professional Place Address: 120 Professional Place  
 Address: Bridgeport, WV 26330 Bridgeport, WV 26330

Oil & Gas Danny Mullins 9) Plugging Contractor:  
 Name: 220 Jack Acres Road Name: HydroCarbon Well Service  
 Address: Buckhannon, WV 26201 Address: PO BOX 995  
Buckhannon, WV 26201 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

*Danny Mullins*  
*Danny Mullins*

Date 2-23-17

2-23-17

RECEIVED  
Office of Oil and Gas

MAR 14 2017

03/24/2017

WV Department of  
Environmental Protection

PLUGGING PROGNOSIS

**Snodgrass, CN 7539 (607539)**

Braxton, really Gilmer Co., WV

API # 47-007-01279

Rosedale Quad

BY: Arnold Thomas Updated by Craig Duckworth  
DATE: 3/16/2011 2/21/17

**CURRENT STATUS:**

Elevation: 801'

- 10" csg @ 180'
- 8 1/4" csg @ 857'
- 6 5/8" csg @ 1538'
- 3" tbg @ 1895' Packer @ 1832'
- TD @ 1897' est.

**Fresh Water @ none reported      Salt Water @ none reported**  
**1<sup>st</sup> Salt Sand** inferred @ 1500'  
**Coal @ none reported      Maxton @ inferred @ 1600'      Big Lime @ 1665'-1778'**  
**Oil Shows @ None Reported**  
**Gas shows @ Gas Sand (1430'-1479') & Big Injun (1778'-1882')**  
**Stimulation: None Reported**

1. Notify inspector Danny Mullens @ 304-932-6844, 24 hrs prior to commencing operation
2. TIH w/wireline to check TD. Call Inspector & EQT rep. before preceding
3. Attempt to pull 3" tbg and packer @ 1832'. TOOH w/ tbg and check condition.  
If tbg and packer will not pull TIH w/ wireline and cut 3" tbg @ 1832', TOOH w/ tbg and check condition.
4. TIH w/ tbg @ 1832'; Set 244' C1A Cement Plug @ 1832' to 1588' (Big Injun w/ gas show, Big Lime, and 6 5/8" csg. st.)
5. TOOH w/ tbg, Free Point 6 5/8" csg cut csg. @ free point, TOOH w/ 6 5/8" csg
6. Set a 100' C1A Cement Plug 50' in/out of cut. Perf all Sw, Fw, Coal, and Gas Shows below 6 5/8" cut. Do not omit any plugs
7. TIH w/ tbg @ 1588'; Set 258' C1A Cement Plug @ 1588' to 1330' (Maston, 1<sup>st</sup> Salt Sand, and Gas Sand)
8. TOOH w/tbg @ 1330'; Gel Hole @ 1330' to 907'
9. TOOH w/tbg @ 907'; Set 100' C1A Cement Plug @ 907' to 807' (8 1/4" csg. st.)
10. TOOH w/tbg, Free Point 8 1/4" csg, cut csg. @ free point, TOOH w/ 8 1/4" csg
11. Set a 100' C1A Cement Plug 50' in/out of cut. Perf all Sw, Fw, Coal, and Gas Shows below 8 1/4" cut. Do not omit any plugs
12. TIH w/tbg @ 807'; Gel Hole @ 807' to 300'

DM

Office of Oil and Gas

MAR 14 2017

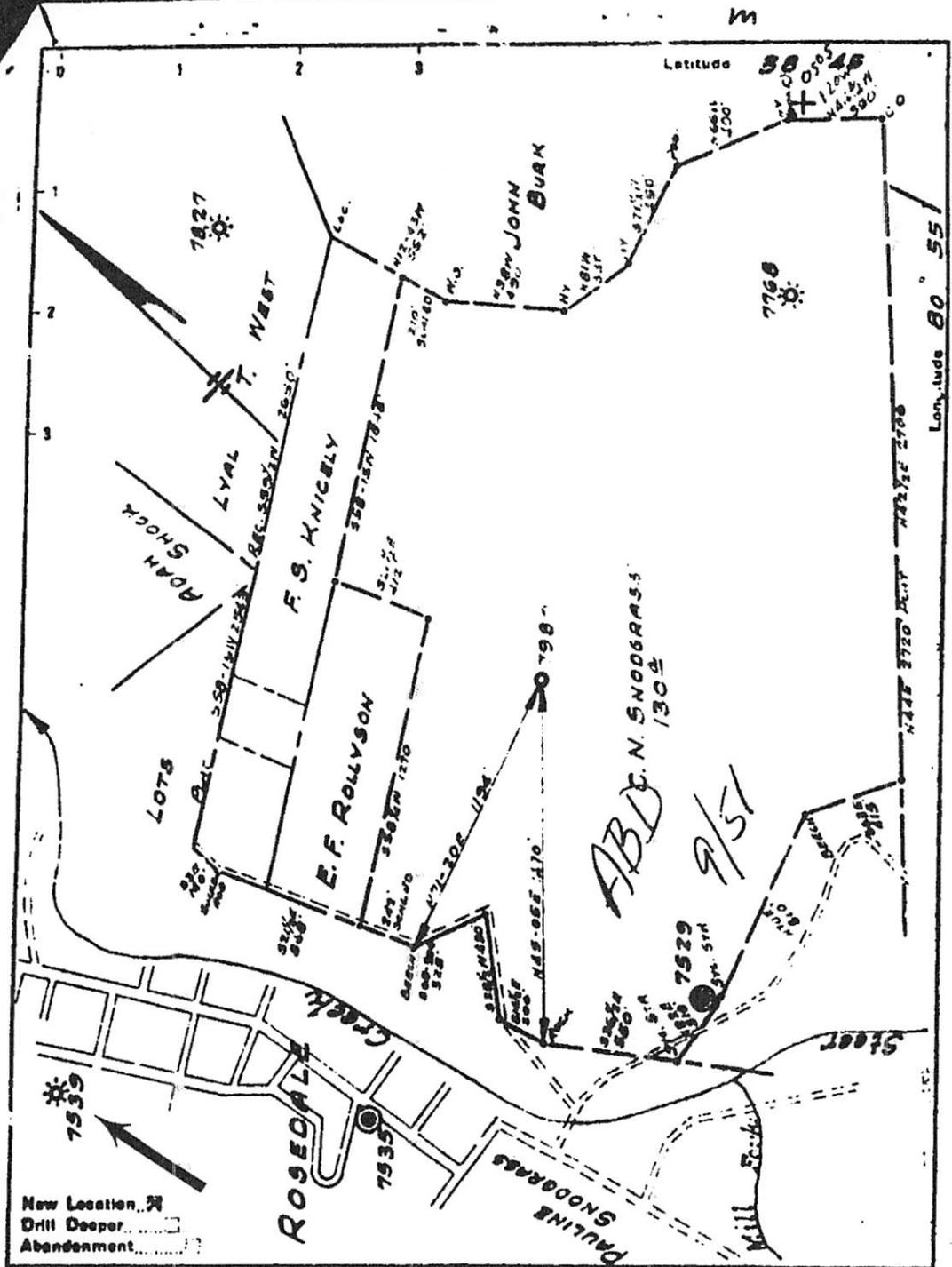
- 13. Swab off all fluid down to 300'
- 14. TIH w/tbg @ 300'; Set 170' CIA Cement Plug @ 300' to 130' (10" csg. st.)
- 15. TOOH w/tbg, DO NOT Cut 10" csg. Leave 10" csg. intact. to protect freshwater aquifers.
- 16. TIH w/ tbg Set CIA Cement Plug 130' to surface. (Protect all possible surface water)
- 17. Top off as needed
- 18. Set Monument to WV-DEP Specifications
- 19. Reclaim Location & Road to WV-DEP Specifications

DM

RECEIVED  
Office of Oil and Gas

MAR 14 2017

WV Department of  
Environmental Protection



New Location  
 Drill Deeper  
 Abandonment

Company PITTSBURGH E. & W.V. GAS CO.  
 Address CLARKSBURG, W.V.  
 Farm C. N. SNODGRASS  
 Tract \_\_\_\_\_ Acre 180 Lease No. 20885  
 Well (Farm) No. THREE Serial No. 7980  
 Elevation (Spirit Level) 1170' V.A.  
 Co. & range GASSAWAY N.W. 21  
 County BRAXTON District BIRCH  
 Engineer James J. Jeffers  
 Engineer's Registration No. 1084  
 File No. V-24, D-14 Drawing No. \_\_\_\_\_  
 Date JUN 25, 1943 Scale 1" = 500'

FOR REFERENCE ONLY  
NO PLAT AVAILABLE

WELL LOCATION MAP

FILE NO. BRAX-3  
Braxton 1279 well # 7539

+ 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 in the Office of Oil and Gas

- Denotes one inch spaces on border lines of original tracing

JAN 11 2017  
AB

WV Department of  
Mental Protection

701279A

WW-4-A  
Revised 6/07

1) Date: January 3, 2017  
2) Operator's Well Number  
607539 (C. N. Snodgrass #7539)  
3) API Well No.: 47 007 - 01279  
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 Lisa Tanner  
Address 1347 Barn Run Road  
P. O. Box 214  
Rosedale, WV 26636  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Danny Mullins  
Address 220 Jack Acres Road  
Buckhannon, WV 26201  
Telephone (304) 932-6844

5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name Carmen Adkins-Thompson  
1980 Falcon Ct.  
Address Saint Johns, FL 32259-2960  
Name TW Mineral Account  
Address c/o Trio Waco Petroleum Corp.  
P. O. Box 880  
Glenville, WV 26351  
(c) Coal Lessee with Declaration  
Name None  
Address \_\_\_\_\_

**TO THE PERSONS NAMED ABOVE:** You should have received this Form and the following documents:

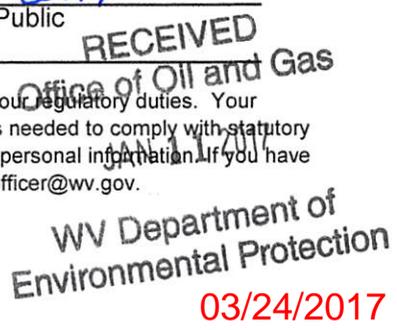
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
  - (2) The plat (surveyor's map) showing the well location on Form WW-6.
- The reason you received these documents is that you have 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  
By: Victoria J. Roark  
Its: Permitting Supervisor  
Address: PO Box 280  
Bridgeport, WV 26330  
Telephone: (304) 848-0076

Subscribed and sworn before me this 4th day of January, 2017  
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).



701279A

WW-9  
Revised 5/16

Page \_\_\_\_\_ of \_\_\_\_\_  
2) Operator's Well Number  
607539 (C. N. Snodgrass #7539)  
3) API Well No.: 47 007 - 01279

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**OFFICE OF OIL & GAS**  
**FLUIDS / CUTTINGS DISPOSAL & RECLAMATION PLAN**

Operator Name: EQT PRODUCTION COMPANY OP CODE: \_\_\_\_\_

Watershed (HUC 10): Right Fork of Steer Creek Quadrangle: Rosedale 7.5'  
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes \_\_\_ No X

Will a pit be used? Yes X No \_\_\_  
If so, please describe anticipated pit waste: \_\_\_\_\_  
Will a synthetic liner be used in the pit? Yes X No \_\_\_ Is so, what ml.? 20 10 ml

Proposed Disposal Method for Treated Pit Wastes:  
\_\_\_\_\_  
Land Application (if selected provide a completed form WW-9-GPP)  
\_\_\_\_\_  
Underground Injection (UIC Permit Number \_\_\_\_\_)  
X Reuse (at API Number -- Various \_\_\_\_\_)  
X Off Site Disposal Permit (Supply form WW-9 for disposal location. See attachment)  
\_\_\_\_\_  
Other: (Explain \_\_\_\_\_)

Will closed loop system be used ? If so, describe: \_\_\_\_\_  
Drilling medium anticipated for this well? (vertical and horizontal)? Air, freshwater, oil based, etc. \_\_\_\_\_  
If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_  
Additives to be used in drilling medium? \_\_\_\_\_  
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? \_\_\_\_\_

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

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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 term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

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

Company Official Signature [Signature]

Company Official (Typed Name) Victoria J. Roark

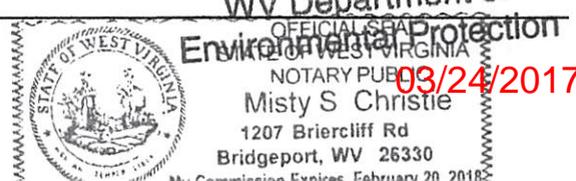
Company Official Title Permitting Supervisor - WV

Subscribed and sworn before me this 4th day of January

My Commission Expires 2/20/18

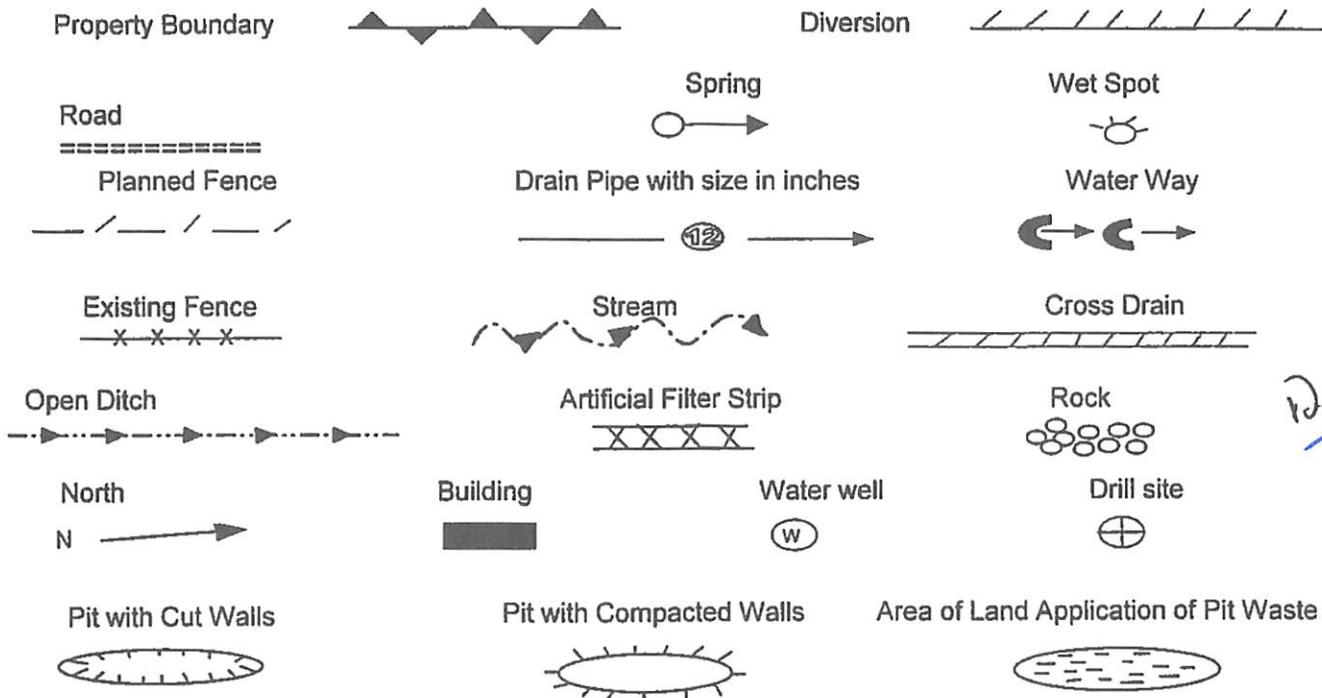
RECEIVED  
Office of Oil and Gas  
JAN 11 2017

Misty S. Christie  
Notary Public



**OPERATOR'S WELL NO.:**  
**607539 (C. N. Snodgrass #7539)**

**LEGEND**



*DM*

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: \_\_\_\_\_

RECEIVED  
 Office of Oil and Gas

Title: \_\_\_\_\_ Date: MAR 14 2017

Field Reviewed?          Yes ✓ No

WV Department of  
 Environmental Protection

701279A

**EQT Production Water plan**  
**Offsite disposals**

**Waste Management - Meadowfill Landfill**

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

**Waste Management - Northwestern Landfill**

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

RECEIVED  
Office of Oil and Gas

JAN 11 2017

WV Department of  
Environmental Protection  
01/11/2017

701279P

Topo Quad: Rosedale 7.5' Scale: 1" = 200'  
 County: Gilmer Date: October 19, 2016  
 District: Center Project No: 40-02-00-07

Highway

**47-007-01279 WV 607539 (C. N. Snodgrass #7539)**

**Pit Location Map**

Existing Well Access Road

WV 607539  
47-007-01279

Right Fork Steer Creek

Rosedale



**LEGEND**

- PIT-CUT WALLS 
- PIT-COMPACTED WALLS 
- AREA OF LAND APPLICATION OF PIT WASTE 

NAD 27, South Zone  
N:634699.51  
E:2015346.52

WGS 84  
RECEIVED 743104  
Office of Oil and Gas  
ELEV:789.32



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**  
 WY Department of Environmental Protection  
 P.O. Box 280  
 Bridgman, WV 26330

JAN 11 2017

03/24/2017

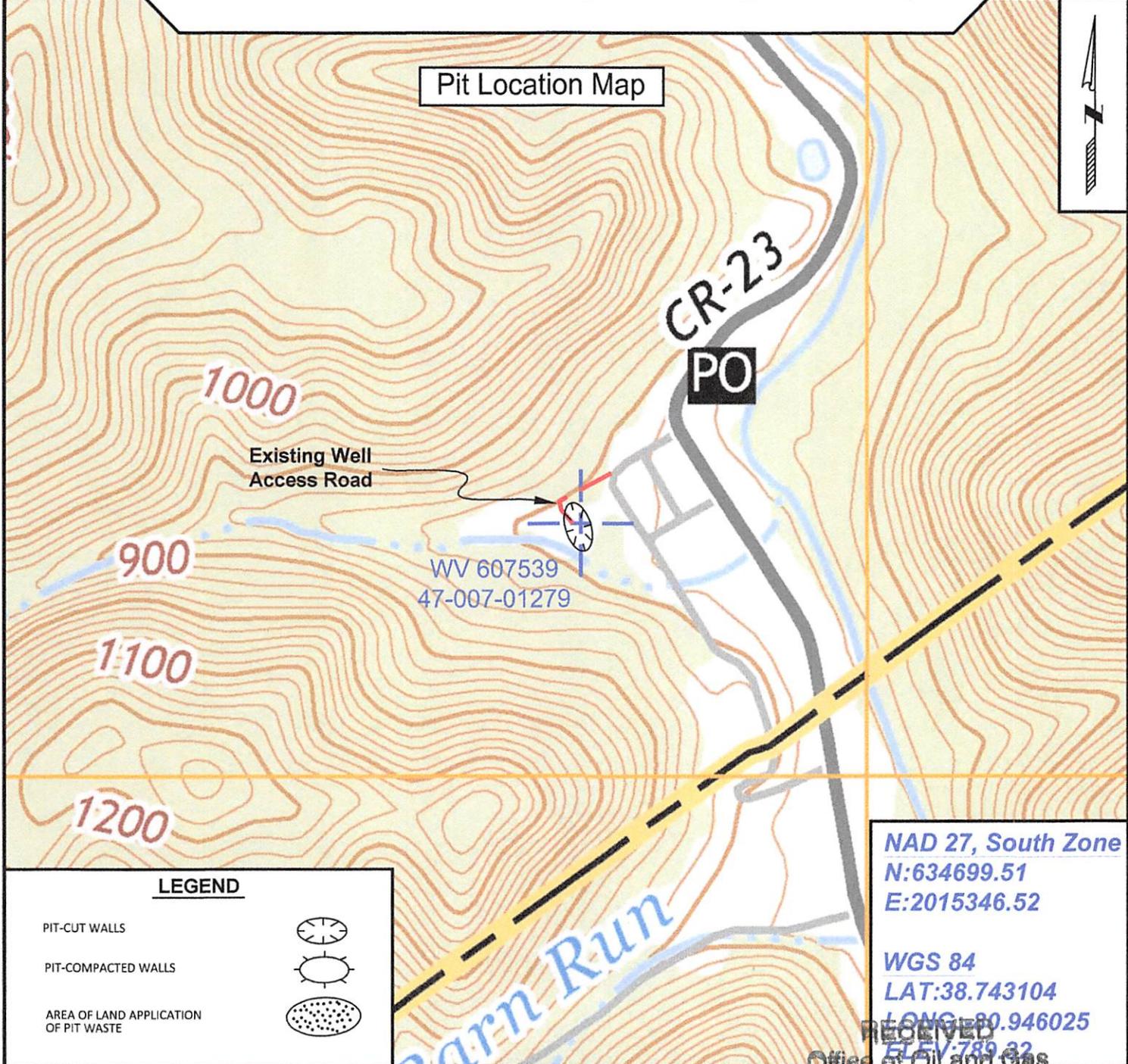
701279A

Topo Quad: Rosedale 7.5' Scale: 1" = 500'  
 County: Gilmer Date: October 19, 2016  
 District: Center Project No: 40-02-00-07

**47-007-01279 WV 607539 (C. N. Snodgrass #7539)**

Topo

**Pit Location Map**



**LEGEND**

- PIT-CUT WALLS 
- PIT-COMPACTED WALLS 
- AREA OF LAND APPLICATION OF PIT WASTE 

NAD 27, South Zone  
 N:634699.51  
 E:2015346.52

WGS 84  
 LAT:38.743104  
 LONG:-80.946025  
 ELEV:789.32

RECEIVED  
 Office of Oil and Gas



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  
 JAN 11 2017  
 WV Department of  
 Environmental Protection  
**03/24/2017**

701279P

Topo Quad: Rosedale 7.5' Scale: 1" = 2000'  
 County: Gilmer Date: October 19, 2016  
 District: Center Project No: 40-02-00-07

**47-007-01279 WV 607539 (C. N. Snodgrass #7539)**

Topo



SURVEYING AND MAPPING SERVICES PERFORMED BY:

**ALLEGHENY SURVEYS, INC.**

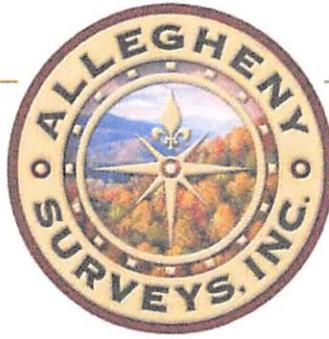
1-800-482-8606  
 237 Birch River Road  
 Birch River, WV 26610  
 PH: (304) 649-8606  
 FAX: (304) 649-8608

PREPARED FOR:

**EQT Production Company**

Office of Oil and Gas  
 P.O. Box 280  
 Bridgeport, West Virginia  
 Department of Environmental Protection  
 03/24/2017





### POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY INC.

LEASE NAME AND WELL No. C. N. Snodgrass #7539 - WV 607539 - 47-007-01279

#### POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 263' Owner: Vicky Carter

Address: 303 Walnut St., Rosedale, 26636 Phone no. \_\_\_\_\_

Comments Water Well

Site: 2 Spacing: 500' Owner: Stoney Dickey

Address: PO Box 139 Phone no. (304) 364-4234

Comments Water Well

**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

**MARTINSBURG OFFICE**  
1413 Childress Drive  
Martinsburg, WV 25404  
phone: 304-901-2162  
fax: 304-901-2182

RECEIVED  
Office of Oil and Gas  
JAN 11 2017  
WV Department of  
Environmental Protection  
03/24/2017

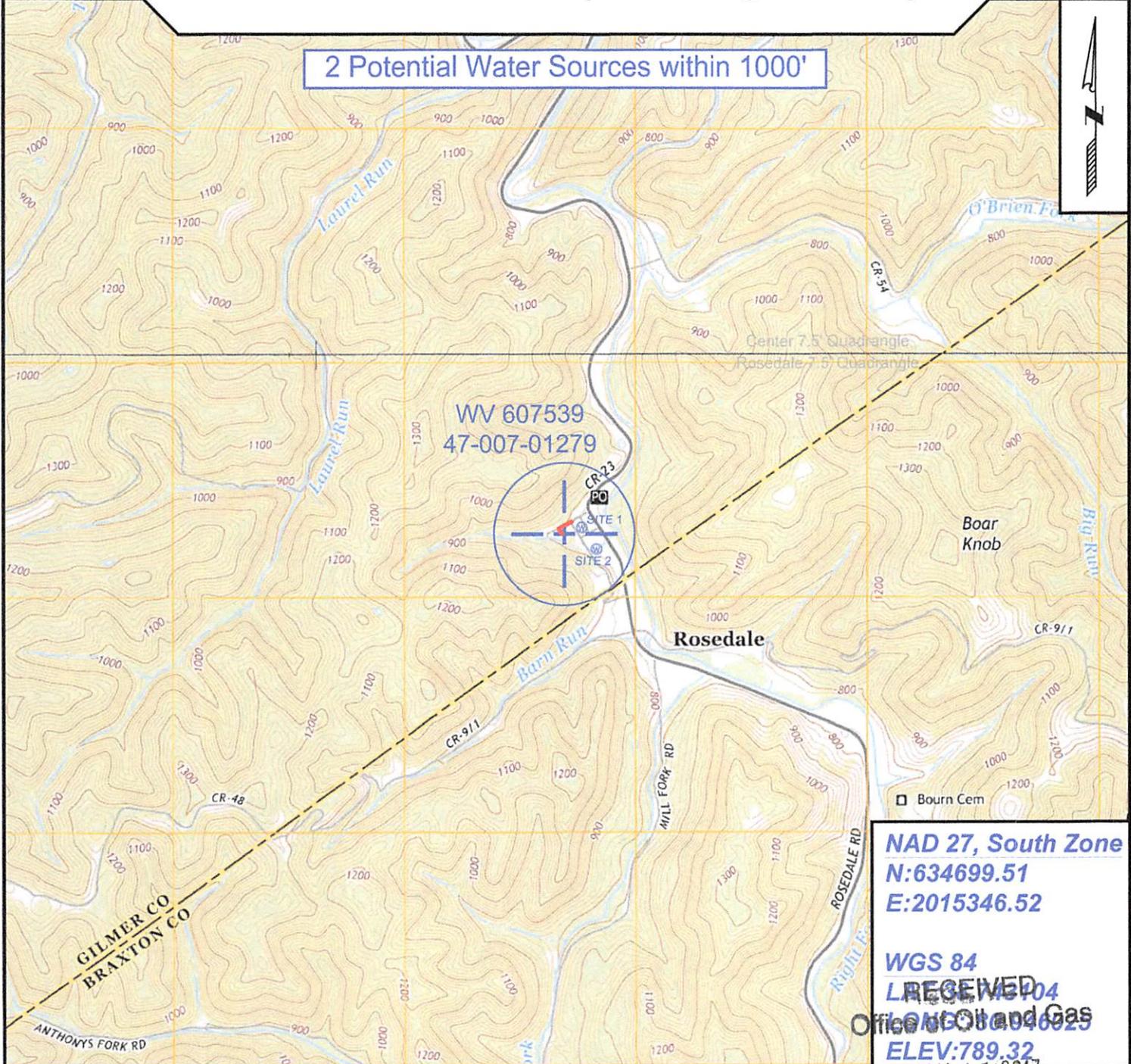
701279P

Topo Quad: Rosedale 7.5' Scale: 1" = 2000'  
 County: Gilmer Date: October 19, 2016  
 District: Center Project No: 40-02-00-07

Water

# 47-007-01279 WV 607539 (C. N. Snodgrass #7539)

2 Potential Water Sources within 1000'



NAD 27, South Zone  
 N:634699.51  
 E:2015346.52

WGS 84  
 RECEIVED  
 Office of Oil and Gas  
 ELEV:789.32  
 JAN 11 2017



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  
 Environmental Protection

03/24/2017

