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west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, June 14, 2021  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

EQT PRODUCTION COMPANY  
625 LIBERTY AVE., SUITE 1700  
PITTSBURGH, PA 15222

Re: Permit approval for SHREVE-WATSON UNIT 1V  
47-103-02537-00-00

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.

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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: SHREVE-WATSON UNIT 1V  
Farm Name: WATSON, ERNEST JACK &   
U.S. WELL NUMBER: 47-103-02537-00-00  
Vertical Plugging  
Date Issued: 6/14/2021

## 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.

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### 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.

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/ Liquid injection \_\_\_/ Waste disposal \_\_\_/  
(If "Gas, Production \_\_\_ or Underground storage \_\_\_) Deep \_\_\_/ ShallowX

5) Location: Elevation 1385' Watershed Lower West Virginia Fork Fish Creek  
District Clay County Wetzel Quadrangle Littleton 7.5'

6) Well Operator EQT Production Company 7) Designated Agent Joseph C. Mallow  
Address 400 Woodcliff Drive Address 115 Professional Place  
Canonsburg PA 15317 Bridgeport WV 26330

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Bryan Harris Name HydroCarbon Well Service  
Address PO Box 157 Address PO Box 995  
Volga, WV 26238 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.**

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MAR 30 2021

WV Department of  
Environmental Protection

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

Work order approved by inspector Bryan Harris Date 3/29/21

06/18/2021

## PLUGGING PROGNOSIS

516119  
 L-005706  
 Ernest Watson #1V  
 API# 47-103-002537  
 District, Littleton  
 Wetzel County, WV

BY: T Mizgorski  
 DATE: 03/22/2021

**CCURRENT STATUS:**

**TD @ 7,723'**  
**Elevation @ 1,391'**

16" PE casing @ 40' (Sand)  
 11-3/4" 42# H-40 casing @ 600' (CTS 426 Cu. Ft.) Estimated cement top - Surface  
 8 5/8" 32# J-55 casing @ 2715' (CTS with 792 Cu. Ft) Estimated cement top - Surface  
 4 1/2" 13.5# P-110 casing @ 7723' (Cemented with 629 Cu. Ft) Estimated cement top - 5372' (from CBL)  
 CIBP @7610

Perforations 72 holes @ 7,568' and 7,586'  
 14,268 bbl slickwater pumped in 1 stage  
 403,150 lbs. 100 mesh, 242,235 lbs. 40/70

**Fresh Water @ 140'**  
**Elevation @ 1,391'**  
**Saltwater @ 2166'**  
**Gas Show @ None Reported**  
**Oil shows @ None reported**  
**Coal @ 880'**

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 Bryan Harris  
 3/29/21

1. Notify inspector, **Bryan Harris, (304) 553-6087, Bryan.O.Harris@wv.gov**, 24 hours prior to commencing operations.
2. Check annulus of all casing strings for any pressure (838# on 4.5 / 8 5/8" annulus), (350# on tubing and casing), gas leaking (No), or bubbling water in cellar (No), etc. before starting plugging operations, if any gas is detected on any annuli, notify EQT supervisor before proceeding.
3. No mention of tubing in the well. Tubing tree and B-section pressures are equalized. If tubing is in well pull tubing.
4. TIH and check TD @ or below 7610'.
5. TIH with gauge ring to 7565', set a 4 1/2" CIBP @ 7548' not it collar.
6. Fill hole with fresh water and run renegade segmented bond log from CIBP at 7548' to surface.
7. TIH with tubing to CIBP fill hole with 6% gel from 7548' to 2715'
8. Set a 548' C1A cement plug from 7548' to 7000'. TOOH 300' with tubing. Reverse circulate full hole volume. TOOH 300' with tubing. Let cement cure for 8 hrs.
9. Free point 4 1/2" casing, cut casing @ free point - 5300' using a jet cutter, Estimated Freepoint @5372' TOOH 4 1/2" casing.
10. Set a 200' C1A cement plug 100' in/out of casing cut. 5400' to 5200' Perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs. Do not perforate casing if cemented over any shows. Set plug inside of 4 1/2" casing. TOOH 300' with tubing. Reverse

471 0302537P

- circulate full hole volume. TOOH 300' with tubing. Let cement cure for 8hrs. and tag top of cement. If cement top is at 5200' or close proceed on to step 11.
11. TIH with tubing and set 100' C1A cement plug @4,000' to 3,900' TOOH 300' with tubing. Reverse circulate full hole volume. TOOH 500' with tubing. Let cement cure 8 hrs. (safety plug)
  12. Check TD. If top of cement is at 3900' or close. Pump 6% GEL from 3900' to surface. TOOH to 2815' set a 300' C1A cement plug 2815' to 2515'. TOOH 300' with tubing. Reverse circulate full hole volume. TOOH with tubing. Let cement cure 8 hrs. (8 5/8" casing seat).
  13. Check TD. If top of cement is at 2515' or close. TOOH with tubing.
  14. TIH with wireline to 2515' If successful TIH with CIBP set @ 2500' TOOH with wireline
  15. TIH with tubing to 1395' set a 100' C1A cement plug 1395' to 1295'. TOOH with tubing. Let cement cure 8 hrs. (Elevation @ 1391').
  16. TIH with tubing. Tag Cement. If at 1295' or close. TOOH with tubing to 930' Set a 430' C1A cement plug 930' to 500'. TOOH and let cement cure 8hrs. (Coal @ 880' and 11-3/4" casing seat)
  17. TIH with tubing to check TD. If top of cement is at 500' or close TOOH with tubing to 200' set a 200' C1A cement plug 200' to surface. (Fresh Water @140' and Surface Plug)
  18. Erect monument with API#, date plugged, company name.
  19. Reclaim location and road to WV-DEP specifications.

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06/18/2021

4710302537

WR-35  
Rev (9-11)

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas  
Well Operator's Report of Well Work

DATE: 02/28/13  
API #: 47-103-02537

Farm name: Watson, Ernest Jack & Nancy Operator Well No.: Shreve-Watson Unit 1V (See note on Page 2)

LOCATION: Elevation: 1,391' Quadrangle: 438 - Littleton 7.5'

District: 3 - Clay County: 103 - Wetzel  
Latitude: 2,700' Feet South of 39 Deg. 42' Min. 30.0 Sec.  
Longitude 13,740' Feet West of 80 Deg. 32' Min. 30.0 Sec.

Company: Grenadier Energy Partners, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
CT Corporation 707 Virginia Street East 15th Floor Charleston, WV 25301				
Agent: <u>Dianna Stamper</u>	16"	40'	40'	Sanded In
Inspector: <u>Dave Scranage</u>	11-3/4"	600'	600'	426 cu.ft. (CTS)
Date Permit Issued: <u>04/12/2011</u>	8-5/8"	2715'	2715'	792 cu.ft (CTS)
Date Well Work Commenced: <u>04/15/2011</u>	4-1/2"	7723'	7723'	629 cu. ft.
Date Well Work Completed: <u>04/21/2011</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>7,723'</u>				
Total Measured Depth (ft): <u>7,723'</u>				
Fresh Water Depth (ft.): <u>N/A</u>				
Salt Water Depth (ft.): <u>N/A</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 7,568'-7586' MD

Gas: Initial open flow 1988 MCF/d Oil: 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 3500 psig (surface pressure) after 168 Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: 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

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I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and 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.

Bryan H. [Signature]  
Signature

2/28/13  
Date

06/18/2021

Were core samples taken? Yes  No

Were cuttings caught during drilling? Yes  No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes: Cement Bond Log, Compact Micro Imager, Compensated neutron photo density gamma ray, dual laterlog gamma ray density caliper, compact monopole cross dipole semblance

**NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.**

Perforated Intervals, Fracturing, or Stimulating:

Perforations: Total Perforated Interval (7,568'-7,586' MD)

Fluid: 14,268 bbl Slickwater pumped in 1 Stage

Sand: 403,150 lbs 100 mesh sand, 242,235 lbs 40/70 sand

Plug Back Details Including Plug Type and Depth(s): See page 4.

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		

See page 3.

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Note: This revised WR-35 is submitted to show the fracture stimulation and flow test results. The well was originally drilled in February 2010 but not completed at that time. Information on the plugback of the well has also been previously submitted for reclassification of the well from a deep well to a shallow well (see page 4).

## Shreve-Watson Unit 1V

Formation/Lithology	Top Depth	Bottom Depth
N/A	0	2704
Silt & Shale	2704	3199
Gordon Stray Ss	3199	3204
Silt & Shale	3204	3232
Gordon Ss	3232	3284
Silt & Shale	3484	3326
Fourth Gordon ss	3326	3333
Silt & Shale	3333	7124
Sonya Sh	7124	7304
Genesee sh	7304	7389
Geneseo Sh	7389	7412
Tully Lm	7412	7416
Upper Hamilton Sh	7416	7444
Middle Hamilton Sh	7444	7492
Lower Hamilton Sh	7492	7540
Marcellus Sh	7540	7590
Onondaga Lm	7590	7622
Huntersville Chert	7622	7723*

\* This depth is the TD of the well. The bottom of the formation was not reached.

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4710302537P CR

WR-35  
Rev (5-01)

DATE: 4/26/10  
API#: 47-103-02537

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

*Handwritten:* Feb 13 13:11 / 2010

Well Operator's Report of Well Work

Farm Name: Watson, Ernest Jack & Nancy Operator Well No. : Jack Watson IV

LOCATION: Elevation: 1391' Quadrangle: 438 - Littleton

District: 3 - Clay County: 103 - Wetzel  
Latitude: 2700' Feet West of 39 Deg. 42 Min. 30 Sec.  
Longitude: 13,740 Feet South of 80 Deg. 32 Min. 30 Sec.

Company: Grenadier Energy Partners, LLC

	Casing & Tubing	Used In Drilling	Left In Well	Cement Fill Up Cu. Ft
Address: CT Corporation 707 Virginia Street East 15 <sup>th</sup> Floor Charleston, WV 25301	16"	40'	40'	Sanded In
Agent: Sharon Barth	11-3/4"	600'	600'	CTS
Inspector: David Scranage	8-5/8"	2715'	2715'	CTS
Date Permit Issued: 11/17/2009	4-1/2"	7723'	7723'	493 sks Class A
Date Well Work Commenced: 12/14/2009				
Date Well Work Completed: 02/02/2010				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 7723'				
Fresh Water Depth (feet): N/A				
Salt Water Depth (feet): N/A				
Is coal being mined in area (N/Y)? N				

Coal Depths (feet): N/A

OPEN FLOW DATA

Producing formation N/A - Well Not Completed Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: 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

Second Producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: 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

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NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Bvron Hailey  
Grenadier Energy Partners, LLC  
By: Bvron Hailey, VP - Operations  
Date: 4/30/10

06/18/2021

47103025370

DATE: 4/26/10

API#: 47-103-02537

WR-35  
Rev (5-01)

- 1.) Perforated Intervals, Fracturing or Stimulation – N/A (Well Not Completed)
- 2.) Well Log

Formation/Lithology	From	To
Silt & shale	2704	3199
Gordon Stray Ss	3199	3204
Silt & shale	3204	3232
Gordon Ss	3232	3284
Silt & shale	3484	3326
Fourth Gordon ss	3326	3333
Silt & shale	3333	7124
Sonya Sh	7124	7304
Genesee sh	7304	7389
Geneseo Sh	7389	7412
Tully Lm	7412	7416
Upper Hamilton Sh	7416	7444
Middle Hamilton Sh	7444	7492
Lower Hamilton Sh	7492	7540
Marcellus Sh	7540	7590
Onondaga Lm	7590	7594
Huntersville Chert	7494	7708

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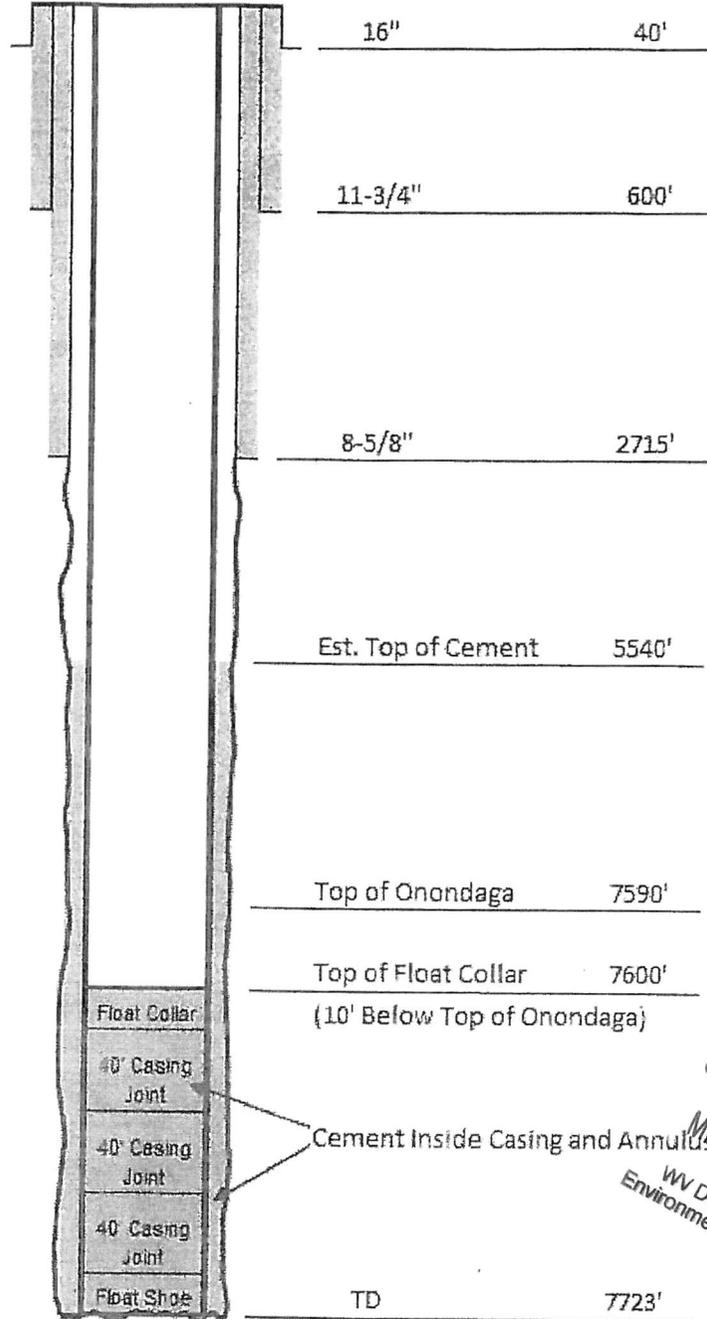
06/18/2021

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WR-35  
Rev (5-01)

DATE: 4/26/10  
API#: 47-103-02537

**Jack Watson 1V (API# 47-103-02537)**  
**Plug Back for Conversion of Deep Well to Shallow Well**



Cement Inside Casing and Annulus

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<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 1.60
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Sent To  
**ERNEST JACK WATSON  
& NANCY LEE WATSON  
145 WATSON LANE  
LITTLETON WV 26581-7745**  
516119 WATSON

Street and Apt. No.  
City, State, ZIP+4®

PS Form 3800, A



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5260 IRWIN ROAD  
HUNTINGTON WV 25727-3247**  
516119 WATSON

Street and Apt. No.,  
City, State, ZIP+4®

PS Form 3800, A



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<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$ 1.60
<b>Total Postage and F</b>	<b>\$ 8.05</b>

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12088 MIDDLE ISLAND ROAD  
ALMA WV 26320-7211**  
516119 WATSON

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06/18/2021

**SURFACE OWNER WAIVER**

471 03 025 37 P

Operator's Well  
Number

516119 Shreve Watson Unit #1V

**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A**

The well operator named on page WW-4A 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  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
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 his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

**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 statement of

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  
ETC.

FOR EXECUTION BY A CORPORATION,

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name  
By  
Its

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

06/18/2021  
Date

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MAR 30 2021  
WV Department of Environmental Protection

API No. 47-103-02537 P  
Farm Name Ernest Watson  
Well No. 516119 Shreve Watson Unit #1V

**INSTRUCTIONS TO COAL OPERATORS  
OWNERS AND 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 of 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 and 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 you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

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

**WAIVER**

The undersigned coal operator \_\_\_\_\_/ owner \_\_\_\_\_/ lessee \_\_\_\_\_/ of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

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

By: \_\_\_\_\_

Its \_\_\_\_\_

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4710302537P

WW-9  
(5/16)

API Number 47 - 103 - 02537  
Operator's Well No. 516119 Shreve Watson Unit #1V

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

Operator Name EQT Production Company OP Code 306686

Watershed (HUC 10) Lower West Virginia Fork Fish Creek Quadrangle Littleton 7.5'

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

Will a pit be used? Yes  No  ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS BEFORE DISPOSING OFF-SITE. JWM

If so, please describe anticipated pit waste:

Will a synthetic liner be used in the pit? Yes  No  If so, what ml? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_ )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain SEE ATTACHED)

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, removed 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 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 Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

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

Company Official Signature [Signature]

Company Official (Typed Name) Erin Spire

Company Official Title Supervisor - Subsurface Permitting

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WV Department of  
Environmental Protection

Subscribed and sworn before me this 23rd day of March, 2021

[Signature] Notary Public

My commission expires March 9, 2024

Commonwealth of Pennsylvania - Notary Seal  
Rebecca Shrum, Notary Public  
Beaver County  
My commission expires March 9, 2024  
Commission number 1267706  
Member, Pennsylvania Association of Notaries

06/18/2021

Proposed Revegetation Treatment: Acres Disturbed 1± Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type (10-20-20) or equivalent

Fertilizer amount 1/3 ton lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Aslike Clover	5	Aslike Clover	5
Annual Rye	15		

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Bryan Harris

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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Environmental Protection

Title: Inspector

Date: 3/29/21

Field Reviewed? ( ) Yes (X ) No

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

4710302537P

**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

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Topo Quad: Littleton 7.5'

Scale: 1" = 2000'

4710302537P

County: Wetzel

Date: January 11, 2021

District: Clay

Project No: 40-34-00-09

# WV 516119 47-103-02537 Shreve Watson Unit #1V

Topo



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MAP 27, North Zone  
WV: 428,041.28  
WV Dept. of Environmental Protection  
704,160.32  
WGS 84  
LAT: 39.670469  
LONG: -80.550785  
ELEV: 1385.35'



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**

400 Woodcliff Drive  
Canonsburg, PA 15317

06/18/2021





471 030 2537

**Site Pictures**  
**Shreve Watson Unit #1V**  
**WV 516119 47-103-02537**



**WV 516119 Well Head**



**WV 516119 Well Head**



**WV 516119 Well Head**

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**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

**CHARLESTON OFFICE**

301 RHL Boulevard - Suite 5  
Charleston, WV 25309  
phone: 304-756-2949 fax: 304-756-2948

4710302537P



400 Woodcliff Dr | Canonsburg, PA 15317  
[www.eqt.com](http://www.eqt.com)

**Via Email**

March 29, 2021

West Virginia Department of Environmental Protection  
Office of Oil and Gas  
Attn: Jeff McLaughlin  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

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WV Department of  
Environmental Protection

**RE: Application for a Permit to Plug & Abandon  
516119 Shreve Watson Unit #1V  
API 47-103-02537  
Clay District, Wetzel County, WV**

WVDEP Recipient,

Attached is EQT Production Company's application for a permit to plug and abandon for the well referenced above.

EQT Production trusts that if any portion of the submitted documentation is found to be inadequate for processing the permit, notification will be made to our land department at your earliest convenience. It is EQT Production's intent to cooperate fully to provide any additional requested documentation and clarification in a timely manner such that permitting proceeds in a predictable and logical manner.

Sincerely,

Becky Shrum  
Project Specialist - Permitting  
[bshrum@eqt.com](mailto:bshrum@eqt.com)  
724-271-7314

06/18/2021