



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, May 7, 2018

WELL WORK PLUGGING PERMIT
Vertical Plugging

EQT PRODUCTION COMPANY
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for 185
47-095-00501-00-00

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

A blue ink signature of James A. Martin, written in a cursive style, is positioned to the right of his name and title.

Operator's Well Number: 185
Farm Name: HAUGHT, J. B.
U.S. WELL NUMBER: 47-095-00501-00-00
Vertical Plugging
Date Issued: 5/7/2018

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

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

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

Date: April 10, 2018
Operator's Well _____
Well No. 650451 Haught #185
API Well No.: # 095 - 00501

STATE OF WEST VIRGINIA
DIVISION 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 Disposa _____
If Gas, Production X Or Underground storage _____ Deep _____ Shallow X
- 5) Elevation: 908 Watershed: Daniels Run
Location: Ellsworth County: Tyler Quadrangle: Porter Falls
District: _____
- 6) Well Operator EQT Production Company
120 Professional Place
Address: Bridgeport, WV 26330
- 7) Designated Agent: Jason Ranson
Address: 120 Professional Place
Bridgeport, WV 26330
- 8) Oil & Gas Cragin Blevins
Name: 1407 19th Street
Address: Vienna WV 26105
- 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 4-26-18

PLUGGING PROGROS

650451
 J.B. Haught # 185
 API# 47-095-00501
 District, Ellsworth
 Tyler County, WV

BY: R Green
 DATE: 01/30/17

CURRENT STATUS:
 TD @ 2651'
 Elevation @ 907'

10" casing @???
 8 1/4" casing @???
 6 5/8" casing @ Casing in well ... but no record of how much.
 5 3/16" casing @ Casing in well... but no records of how much.
 2" tubing @ 2652" (Set on 2" X 5 3/16" packer @ 2404')

Fresh Water @ None Reported
Saltwater @ None Reported
Oil Show @ None Reported
Gas shows @ None Reported
Coal @ None Reported

Dm17
 7-26-18
 GCB
 4/26/2018

Craig Blewins 304-382-5933

1. Notify inspector, ~~Derek Haught, @ 304-206-7613~~, 24 hrs. prior to commencing operations.
2. Release packer and TOOH with 2 3/8" tubing and packer.
3. TIH to 2600', spot 30 bbl. of 6% gelled water, followed by a 250' C1A cement plug, 2600' to 2350'. WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
4. * Note, if unable to release packer and TOOH tubing, TIH, and cut 2" tubing at top of packer, TOOH tubing.
5. TIH to top of packer, spot 30 bbl. of 6% gelled water, followed by a 200' C1A cement plug, 2400 to 2200', WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
6. TIH collar locator and find bottom of 5 3/16" casing.
7. TIH to bottom of 5 3/16" casing, set a 100' C1A cement plug from 50' below to 50' inside of 5 3/16" casing.
8. Free point 5 3/16" casing cut casing @ free point. TOOH 5 3/16" casing.
9. TIH set a 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
10. TIH collar locator and find bottom of 6 5/8" casing.
11. TIH to bottom of 6 5/8" casing, set a 100' C1A cement plug from 50' below to 50' inside of 6 5/8" casing.
12. Free point 6 5/8" casing cut casing @ free point. TOOH 6 5/8" casing.
13. TIH set a 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
14. TIH collar locator and find bottom of 8 1/4" casing. (If present)

15. TIH to bottom of 8 1/4" casing, set a 100' C1A cement plug from 50' below to 50' inside of 8 1/4" casing.
16. Free point 8 1/4" casing cut casing @ free point. TOOH 8 1/4" casing.
17. TIH set a 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
18. TIH to 950' set a 100' C1A cement plug 950' to 850'. (Elevation).
19. TIH collar locator and find bottom of 10" casing. (If present)
20. TIH to bottom of 10" casing, set a 100' C1A cement plug from 50' below to 50' inside of 10" casing.
21. Free point 10" casing cut casing @ free point. TOOH 10" casing.
22. TIH set a C1A cement plug 50' in casing cut to surface. Perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
23. * Note, if unable to cut and pull 10" casing, TIH and perforate 10" with 4 holes each @ 150', 100' & 75'. TIH to 150', and set a 150' C1A cement plug 150' to surface.
24. Erect monument with API#, date plugged, & company name.
25. Reclaim location and road to WV-DEP specifications.

Map Sheet No. *2700 Matthewsville Pa.* RECORD OF WELL Well No. *185*
 Drilled on *J. B. Naught #1* Farm of *40* Acres, situate in
Ellsworth Township *Tyler* County *W. Va.* Lease No. *32611*
 Shipping Point Foreman

47-09500501P

Located _____ Commenced Drilling _____
 Notified Gen'l Office _____ Notified Gen'l Office _____
 Commenced _____ Completed Drilling *July 11, 1900.*
 Completed _____ Notified Gen'l Office _____
 Contractor _____ Contractor _____
 Address _____ Address _____

650451 HPA99nt-185
47-095-00501

ROCK FORMATION	TOP	BOTTOM	REMARKS	PRESSURE AND VOLUME	
Conductor			<i>C.O. and tubed Aug. 22 by D. H.</i>	1/2 Minute	Lbs
Mapleton Coal			<i>Mc " Craker</i>	1 "	"
Pittsburgh Coal			<i>Dr. Pgh. 9-65-27</i>	2 "	"
Little Dunkard				3 "	"
Big Dunkard			<i>Copy to Pgh. 10/18/35</i>	4 "	"
Gas Sand				5 "	"
1st Salt Sand				10 "	"
2nd Salt Sand				15 "	"
Maxton Sand				30 "	"
Little Lime				1 Hour	"
Pencil Cave				Rock	"
Big Lime				Size of } Tubing	Inch
Big Injun				} Casing	"
Gantz Sand				Vol. by Water	
50 Foot Sand				" " Mercury	
30 Foot Sand				" " Pressure	
Gordon Stray				CONNECTED TO MAIN LINE	
Gordon Sand				Length of Line	Feet
4th Sand				Size of Line	Inch
5th Sand				DISCONNECTED FROM LINE	
Bayard Sand				Notified Lessee	
Elizabeth				At _____	
Speechley				Repacked	
Bradford				With _____	

Drilled 29 more holes making 2680' and 9 feet
 Total Depth *2651* Feet at \$ _____
 Gas Furnished at _____ Cents per Foot

RECEIVED
 Office of Oil and Gas
 APR 23 2018
 WV Department of Environmental Protection
 PACKER
Logic of year 3

SIZE	CHARGED TO WELL		PUT IN WELL		PULLED		LEFT IN WELL		TRANSFERRED		LEFT AT WELL	
	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.
<i>2 1/2"</i>	<i>2652</i>		<i>2652</i>				<i>2652</i>					
<i>1 1/2"</i>												

In well but no record

Kind *5 3/16 (Chester)*
 Size *2404*
 Set at _____ Feet
 WELL SHOT
 By _____
 With _____ Qts. at _____ Feet

Casing Cemented in Well _____ by _____ Company Employee

05/11/2018

1) Date: April 10, 2018
2) Operator's Well Number
650451 Haught #185
3) API Well No.: # 095 - 00501
State County Permit

4709500501

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 Robert D and Sherry Ball
Address 552 Pittinger Rd.
New Cumberland WV 26047

(b) Name _____
Address _____

(c) Name _____
Address _____

6) Inspector Cragin Blevins
Address 1407 19th Street
Vienna WV 26105
Telephone 304-382-5933

5) (a) Coal Operator:
Name None
Address _____

(b) Coal Owner(s) with Declaration
Name Robert D and Sherry Ball
552 Pittinger Rd.
Address New Cumberland WV 26047

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.

RECEIVED
Office of Oil and Gas
APR 23 2018
WV Department of Environmental Protection



Well Operator: EQT Production Company
By: Erin Spine
Its: Regional Land Supervisor
Address: 2200 Energy Drive
Canonsburg PA 15317
Telephone: (304) 848-0035

Subscribed and sworn before me this 18 day of April, 2018
Rebecca L. Wanstreet Notary Public
My Commission Expires: 4-7-2020

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 deprivacyofficer@wv.gov.

WW-9
Revised 5/16

Page ___ of ___
2) Operator's Well Number
650451 Haught #185
3) API Well No.: # 095 - 00501

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): Daniels Run Quadrangle: Porter Falls

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:

Formation Fluids

Will a synthetic liner be used in the pit? Yes X No ___ Is so, what ml.? 20 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 _____)

*DMH
4/26/18
JCB
4/26/2018*

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 :
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.

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 Spine

Company Official Title Regional Land Supervisor

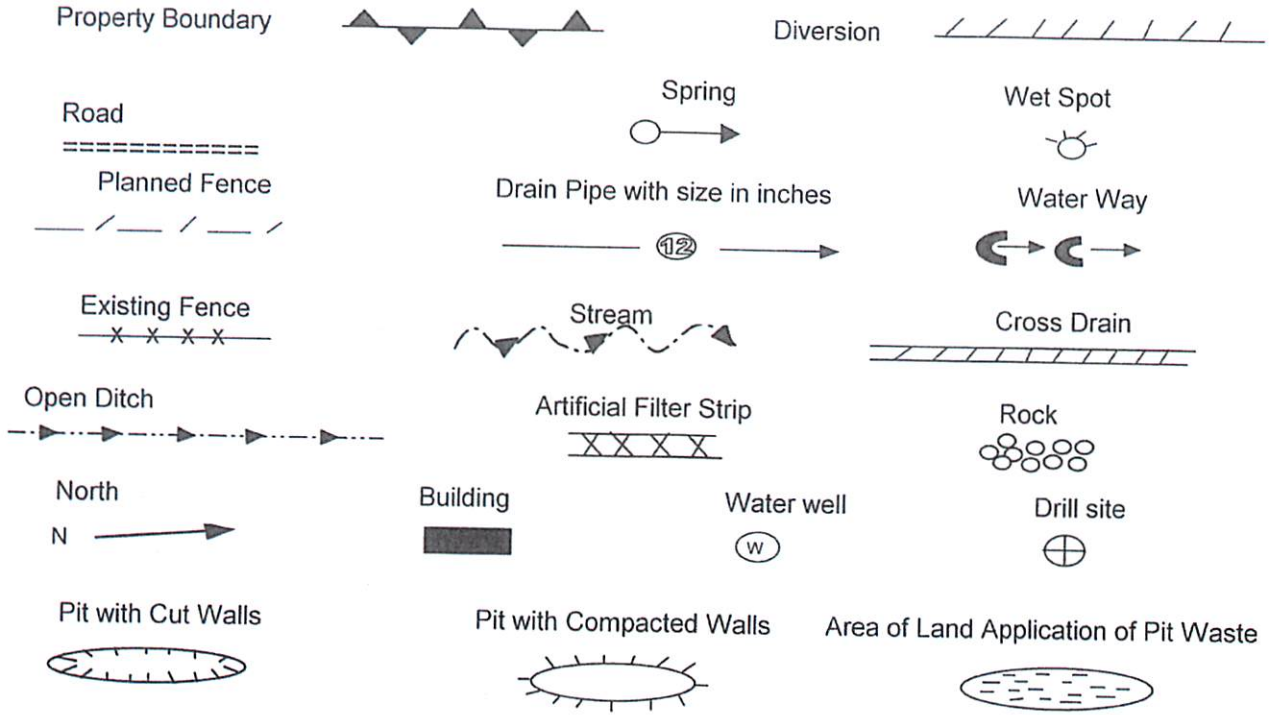
Subscribed and sworn before me this 18 day of April, 2018

Rebecca J. Wanstreet
My Commission Expires 4-7-2020



OPERATOR'S WELL NO.:
650451 Haught #185

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: [Signature]

Comments: _____

Title: D.I. + G.C. Inspector Date: 4-26-18

Field Reviewed? Yes No

EQT Production Water plan
Offsite disposals

4709500501P

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

APR 23 2018

WV Department of
Environmental Protection

05/11/2018

Topo Quad: Porter Falls 7.5' Scale: 1" = 200'
 County: Tyler Date: November 8, 2017
 District: Ellsworth Project No: 69-54-00-08

47-095-00501 WV 650451 (Haught #185)

Topo

Pit Location Topo



47-095-00501
WV 650451



42
1

42
1

Daniels-Runn

00

*Dm4
4-26-18
Jeb
4/26/2018*

NAD 27, North Zone
N:370336.15
E:1644855.31

WGS 84
LAT:39.510039
LONG:-80.758590
ELEV:907.63

LEGEND



Proposed Pit Location



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

Topo Quad: Porter Falls 7.5'

Scale: 1" = 500' 47 09 5 00 50 1 P

County: Tyler

Date: November 8, 2017

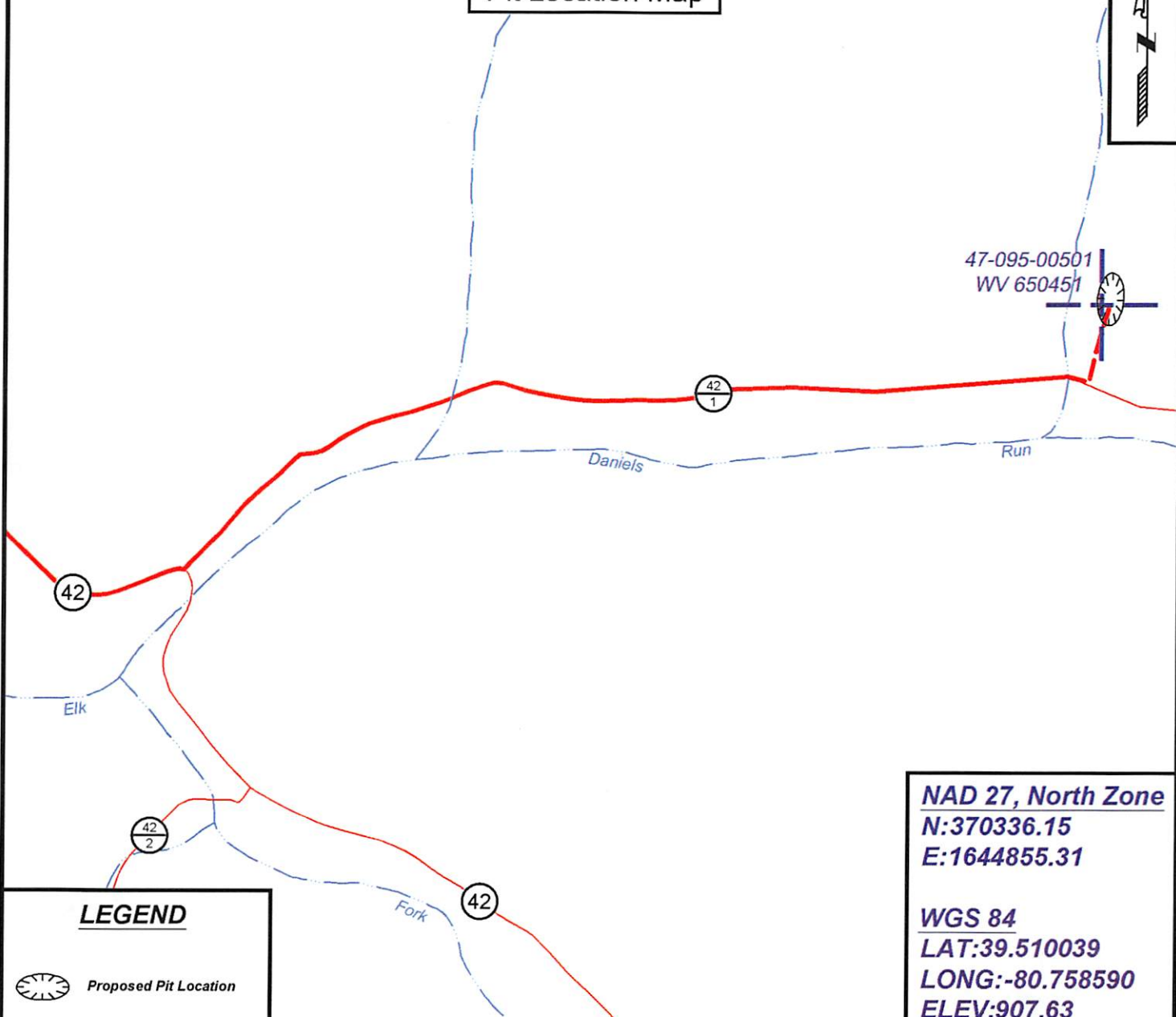
District: Ellsworth

Project No: 69-54-00-08

Highway

47-095-00501 WV 650451 (Haught #185)

Pit Location Map



47-095-00501
WV 650451

42

42
1

42
2

42

LEGEND



Proposed Pit Location

NAD 27, North Zone
N:370336.15
E:1644855.31

WGS 84
LAT:39.510039
LONG:-80.758590
ELEV:907.63



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: RECEIVED

EQT Production Company

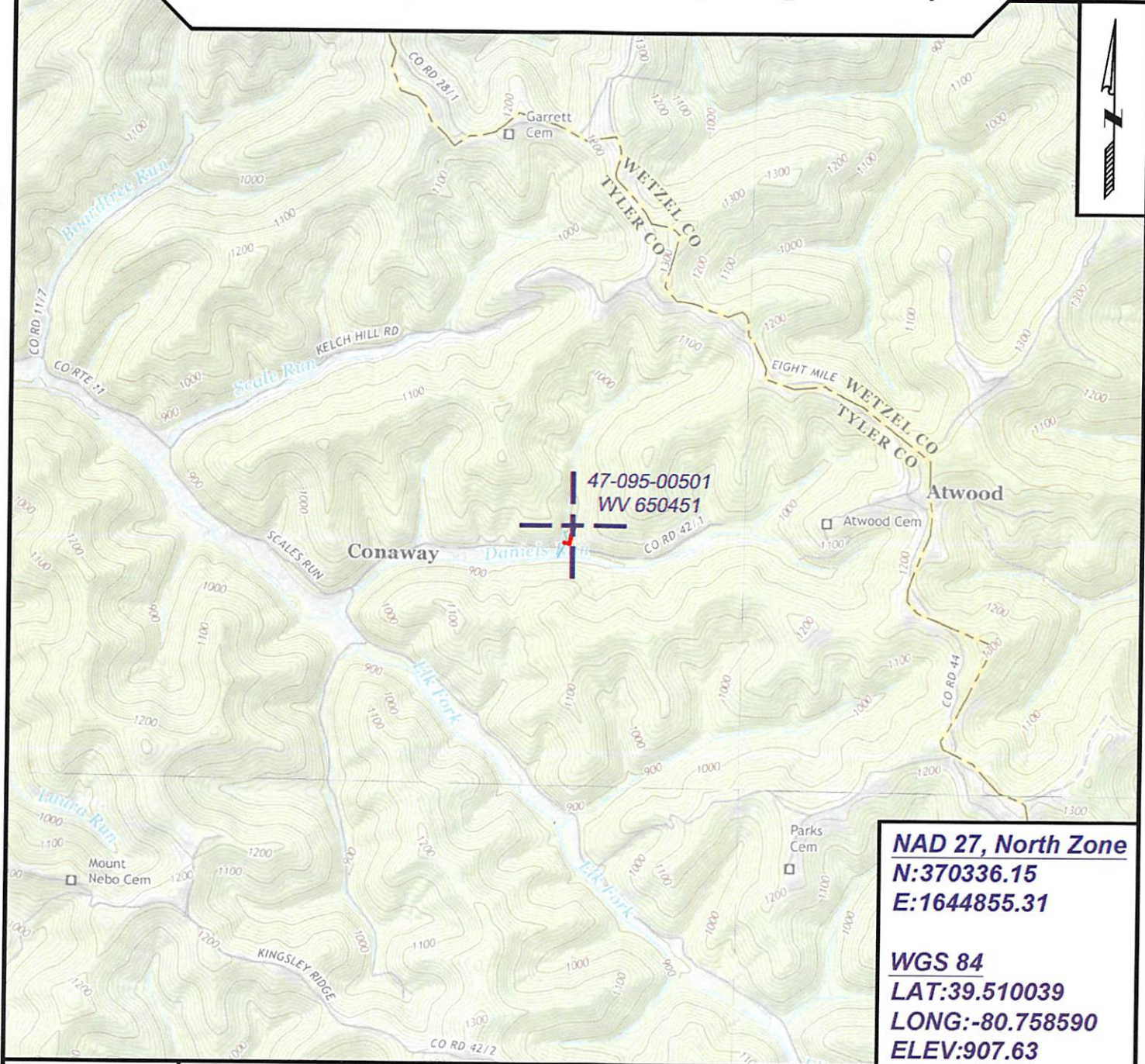
P.O. Box 280
Martinsburg, WV 26330
APR 11 2018

WV Department of Environmental Protection
05/11/2018

Topo Quad: Porter Falls 7.5' Scale: 1" = 2000' **47 095 005 01P**
 County: Tyler Date: November 8, 2017
 District: Ellsworth Project No: 69-54-00-08

47-095-00501 WV 650451 (Haught #185)

Topo



NAD 27, North Zone
N:370336.15
E:1644855.31

WGS 84
LAT:39.510039
LONG:-80.758590
ELEV:907.63



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: **RECEIVED**
 Office of Oil and Gas
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

WV Department of Environmental Protection
 05/11/2018

47 095 0050 1P



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
LEASE NAME AND WELL No. Haught #185 WV 650451 47-095-00501

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 322 +/- Owner: Robert D. & Sherry A. Ball
Address: 552 Pittinger Road, New Cumberland, WV 26047 Phone No. _____
Comments: _____

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Office of Oil and Gas

APR 23 2018

WV Department of
Environmental Protection

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

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

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

MARTINSBURG OFFICE
25 Lights Addition Drive
Martinsburg, WV 25404
phone: 304-901-2162
fax: 304-901-2182

4709500501

Topo Quad: Porter Falls 7.5'

Scale: 1" = 2000'

County: Tyler

Date: November 8, 2017

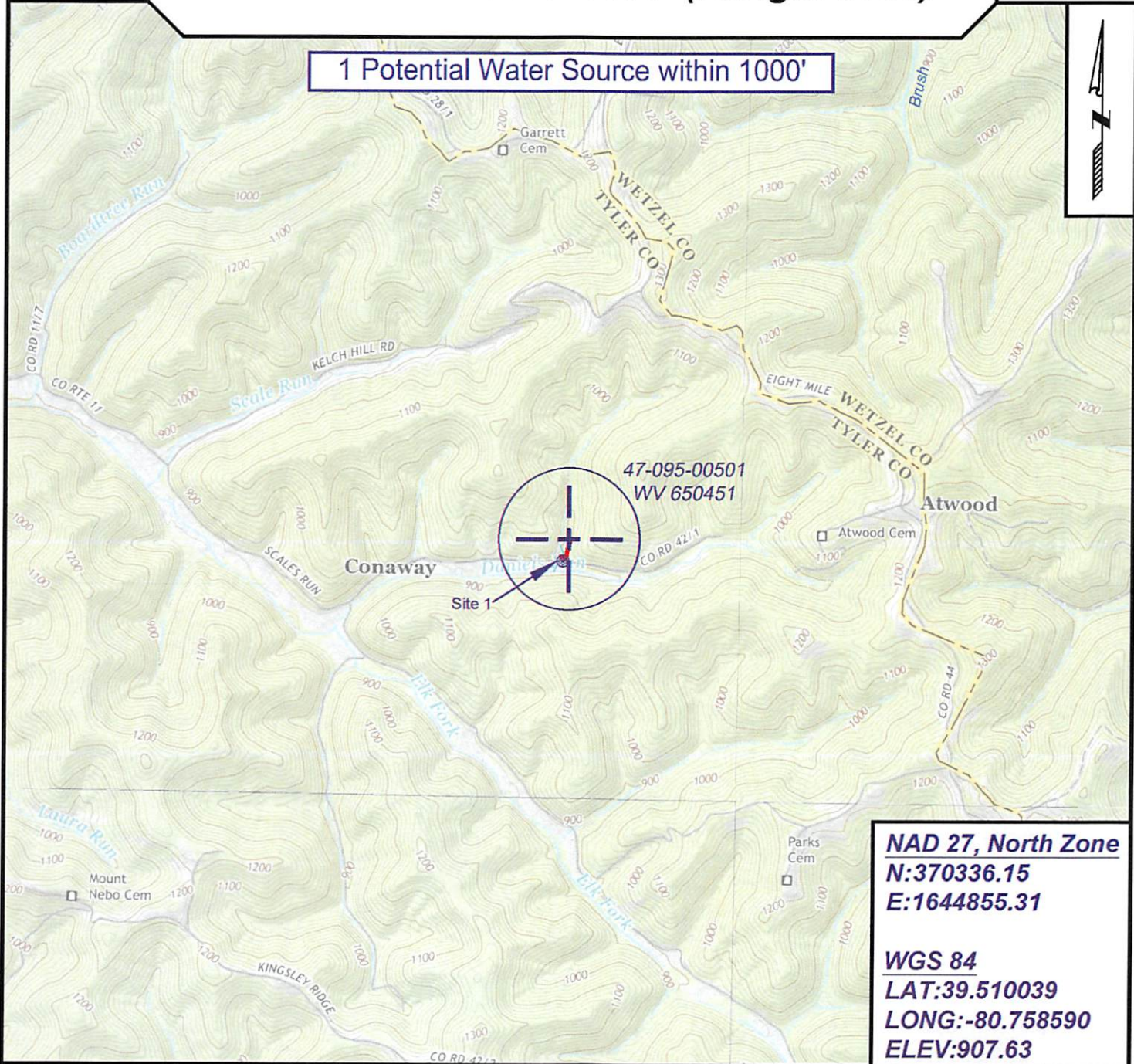
District: Ellsworth

Project No: 69-54-00-08

Water

47-095-00501 WV 650451 (Haught #185)

1 Potential Water Source within 1000'



NAD 27, North Zone
N:370336.15
E:1644855.31

WGS 84
LAT:39.510039
LONG:-80.758590
ELEV:907.63



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
 RECEIVED
 Office of Oil and Gas
 P.O. Box 280
 Bridgeport, WV 26305
 APR 29 2018

WV Dept of Environmental Protection
 05/11/2018



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

API: 47-095-00501 WELL NO.: WV 650451 (Haught #185)

FARM NAME: J. B. Haught

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Tyler DISTRICT: Ellsworth

QUADRANGLE: Porter Falls 7.5'

SURFACE OWNER: Robert and Sherry Ball

ROYALTY OWNER: John W. Kerns Heirs Trust, et al.

UTM GPS NORTHING: 4373406

UTM GPS EASTING: 520753 GPS ELEVATION: 276 m (908 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 North, 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 X : Post Processed Differential _____
 Real-Time Differential _____

RECEIVED
Office of Oil and Gas

- 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.

APR 23 2018
WV Department of Environmental Protection

Steph Brown
Signature

PS # 2180
Title

11/14/17
Date