



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

Friday, July 27, 2018
WELL WORK PLUGGING PERMIT
Vertical Plugging

EQT PRODUCTION COMPANY
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for 4952
47-017-02096-00-00

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.

A handwritten signature in blue ink, appearing to read 'James A. Martin'.

James A. Martin
Chief

Operator's Well Number: 4952
Farm Name: SWENTZEL
U.S. WELL NUMBER: 47-017-02096-00-00
Vertical Plugging
Date Issued: 7/27/2018

Promoting a healthy environment.

I

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.

WW-4B
Rev. 2/01

1) Date May 30, 2018
2) Operator's
Well No. 604952 G L Swentzel #4952
3) API Well No. 47-017 - 0206

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 ___ / Shallow X

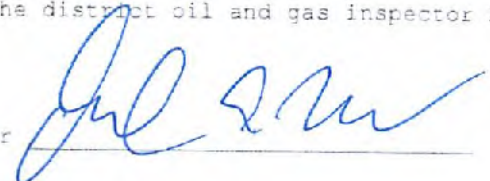
Well No. 1125 Location Nutter Fork
District West Union County Doddridge Quadrangle Smithburg

6) Well Operator EQT Production Company 7) Designated Agent Jason Ranson
Address 2400 Ansys Drive- Suite 200 Address 120 Professional Place
Canonsburg PA 15317 Bridgeport WV 26330

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Daniel Flack Name HydroCarbon Well Service
Address 58 Rive Rd. 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.

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

Work order approved by inspector  Date 6/2/18

PLUGGING PROGNOs
604952
Swentzel
API# 47-017-02096
District, West Union
Doddridge County, WV

BY: R Green
DATE: 02/14/18

CURRENT STATUS:

TD @ 2690'
Elevation @ 1100'

10" casing @ 149' (Pulled)
8 1/4" casing @ 1041' (Pulled)
6 5/8" casing @ 1907'
3" tubing @ 2690' (3" X 6 5/8" packer set @ 1960')

Fresh Water @ None Reported
Saltwater @ None Reported
Oil Show @ None Reported
Gas shows @ 1780', 1971', 1981', 1990', and 2657'
Coal @ 300' & 545'

1. Notify inspector Daniel Flack @ 304-549-0109, 24 hrs. prior to commencing operations.
2. Check tubing and casing pressures to determine integrity of 3" tubing. If 3" tubing is determined to be good continue to step #3. If integrity is not good, call EQT supervisor and state inspector.
3. TIH, check TD @ or below 2600', and locate 3" X 6 5/8" packer.
4. TIH wireline and perforate 3" tubing with 10 holes @ 2600'.
5. Spot 10 bbl. of 6% gelled water, followed by a 200' C1A cement plug 2600' to 2400'. WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
6. TIH to 1960' cut 3" tubing at top of packer. TOOH 3" tubing.
7. TIH to 1960' set a 300' C1A cement plug 1960' to 1660'. (6 5/8" casing seat). TOOH tubing.
8. TIH and perforate 6 5/8" casing with 10 holes @ 1100', TIH tubing and set a 200' C1A cement plug 1200' to 1000' (Elevation).
9. Free point 6 5/8" casing, cut casing @ free point. TOOH 6 5/8" casing.
10. 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.
11. **Note* If unable to cut and pull 6 5/8" casing, TIH and perforate 6 5/8" with 10 holes each @ 545', 300', & 100'.**
12. TIH to 650' set a 650' C1A cement plug 650' to surface.
13. Erect monument with API#, date plugged, company name.
14. Reclaim road, and location, to WV-DEP specifications.

*Make every attempt to pull all pipe
DPE
02/14/18*

There is no Plugging data for this well

There is no Sample data for this well

WW-1A
Revised 6-07

1) Date: May 30 2018
2) Operator's Well Number
604952 G. L. Swentzel #4952

3) API Well No.: 47 - 017 - 02096

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

| | |
|-----------------------------------|------------------------------------|
| 4) Surface Owner(s) to be served: | 5) (a) Coal Operator |
| (a) Name <u>See Attached</u> | Name _____ |
| Address _____ | Address _____ |
| (b) Name _____ | (b) Coal Owner(s) with Declaration |
| Address _____ | Name <u>See Attached</u> |
| (c) Name _____ | Address _____ |
| Address _____ | Name _____ |
| Address _____ | Address _____ |
| 6) Inspector <u>Daniel Flack</u> | (c) Coal Lessee with Declaration |
| Address <u>58 Rive Rd.</u> | Name _____ |
| <u>Buckhannon WV 26201</u> | Address _____ |
| Telephone <u>304-545-0109</u> | 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-1B, 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 Department 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: Erin Spine *[Signature]*
 Its: Regional Land Supervisor
 Address 2400 Ansys Drive, Suite 200
Canonsburg PA 15317
 Telephone (304) 848-0035

RECEIVED
Office of Oil and Gas
JUL 24 2018

WV Department of
Environmental Protection

Subscribed and sworn before me this 11 day of June 2018
Rebecca L. Wanstreet Notary Public
My Commission Expires 4-7-2020

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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.

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Office of Oil and Gas

JUL 8 2018

Environmental Protection
Department of

47-017-02096

604952 G. L. Swentzel #4952

Owner(s) (Surface and Access)

Sidney W Underwood Revocable Living Trust
2215 Pineview Drive
North Parkersburg WV 26104

Coal Owner(s):

Ed Broome, Inc
4622 WV Highway 5 E.
Glenville WV 26351

Potential Water Owner(s):

Sidney W Underwood
2215 Pineview Drive
North Parkersburg WV 26104

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Office of Oil and Gas
JUN 14 2018
WV Department of
Environmental Protection

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Office of Oil and Gas

JUN 1 3 2018

Environmental Protection
Agency

17-02000

Dear Mr. [Name]:

On [Date], we received your letter regarding [Subject]. We are currently reviewing the information you provided and will contact you again once a decision has been reached.

If you have any questions in the meantime, please do not hesitate to contact our office at [Phone Number].

Sincerely,
[Signature]

Enclosed for you are [Number] copies of [Document Name]. Please review these documents carefully and let us know if you need any further information.

We appreciate your patience and cooperation throughout this process. Your input is valuable to us.

Very truly yours,
[Signature]

cc: [Name], [Name], [Name]

Thank you for your attention to this matter. We will keep you updated as the process moves forward.

[Handwritten Signature]

17-02096P
H20

7015 1730 0000 8189 6549

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 HOUSTON, PA 15342
 JUN 14 2018
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Sidney W. Underwood Revocable Living Trust
 2215 Pineview Drive
 North Parkersburg WV 26104
 604952 G. L. Swentzel #4952 Plugging Permit

PS Form 3800, January 2016 For Instructions

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 2215 Pineview Drive
 North Parkersburg WV 26104
 604952 G. L. Swentzel #4952 Plugging Permit

PS Form 3800, January 2016 For Instructions

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Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

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Total
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 HOUSTON, PA 15342
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Ed Broome, Inc
 4622 WV Highway 5 E.
 Glenville WV 26351
 604952 G. L. Swentzel #4952 Plugging Permit

PS Form 3800, January 2016 For Instructions

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JUN 14 2018
WV Department of
Environmental Protection

WW-9
(5-16)

API Number 47 - 017 02096
Operator's Well No.604952 G. L. Swentzel #4952

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 _____

Watershed (HUC 10) Nutter Fork Quadrangle Smithburg

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

If so, please describe anticipated pit waste Formation Fluids

Will a synthetic liner be used in the pit? Yes No If 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 _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- 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, 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 Spine

Company Official Title Regional Land Supervisor

Subscribed and sworn before me this 11 day of June, 2018

Rebecca L. Wanstreet

Notary Public

My commission expires 4-7-2020



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

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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: [Signature]

Comments: _____

Title: Oil & Gas Inspector Date: 6/21/08

Field Reviewed? () Yes () No

Topo Quad: Smithburg 7.5'

Scale: 1" = 200'

County: Doddridge

Date: March 26, 2018

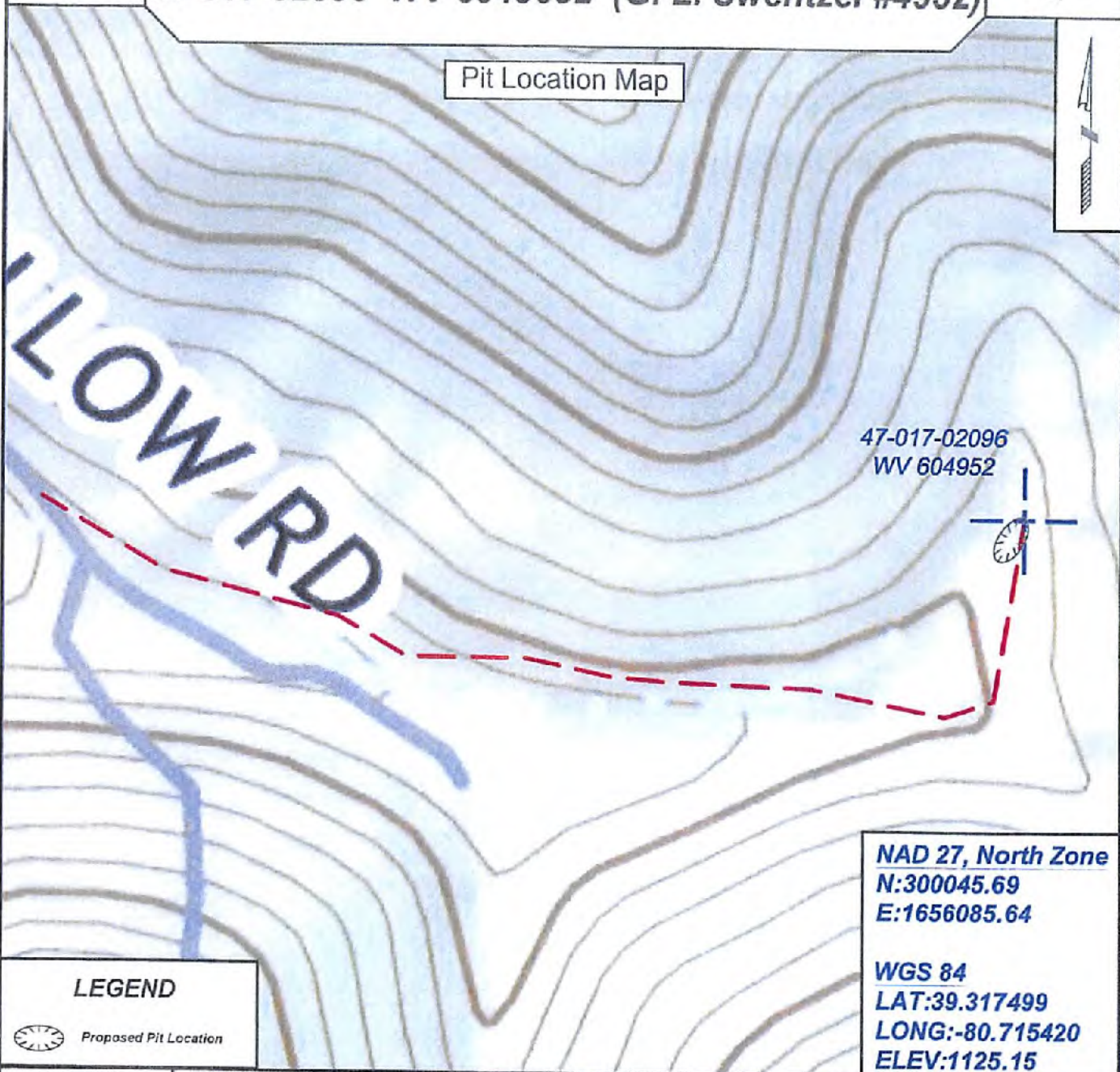
District: West Union

Project No: 67-30-00-08

47-017-02096 WV 6049652 (G. L. Swentzel #4952)

Topo

Pit Location Map



47-017-02096
WV 6049652

NAD 27, North Zone
N:300045.69
E:1656085.64

WGS 84
LAT:39.317499
LONG:-80.715420
ELEV:1125.15

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

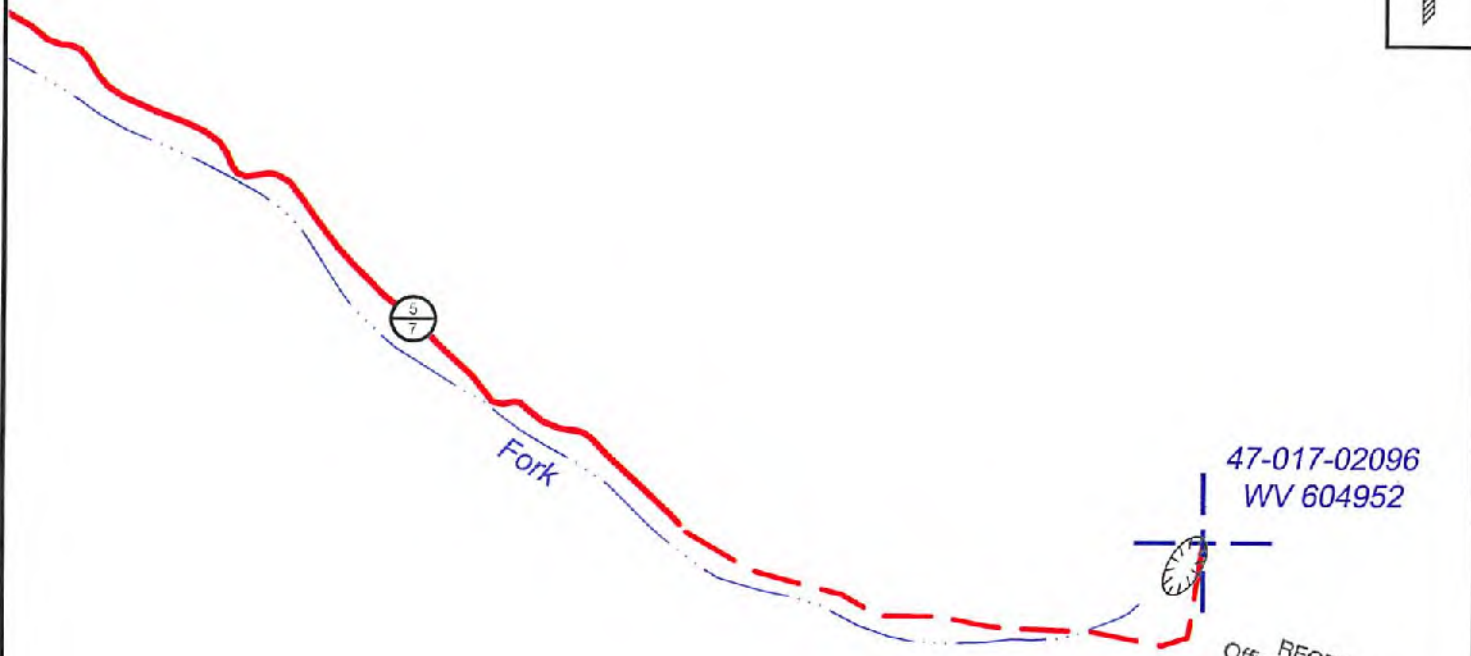
P.O. Box 280
Bridgeport, WV 26330

Handwritten signature and date: G. L. Swentzel 3/26/18

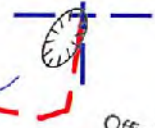
| | |
|---------------------------|-------------------------|
| Topo Quad: Smithburg 7.5' | Scale: 1" = 500' |
| County: Doddridge | Date: March 26, 2018 |
| District: West Union | Project No: 67-30-00-08 |

Highway **47-017-02096 WV 6049652 (G. L. Swentzel #4952)**

Pit Location Map




47-017-02096
WV 604952



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WV Department of
Environmental Protection

NAD 27, North Zone
N:300045.69
E:1656085.64
WGS 84
LAT:39.317499
LONG:-80.715420
ELEV:1125.15

LEGEND

 Proposed Pit Location



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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: Smithburg 7.5'

Scale: 1" = 2000'

County: Doddridge

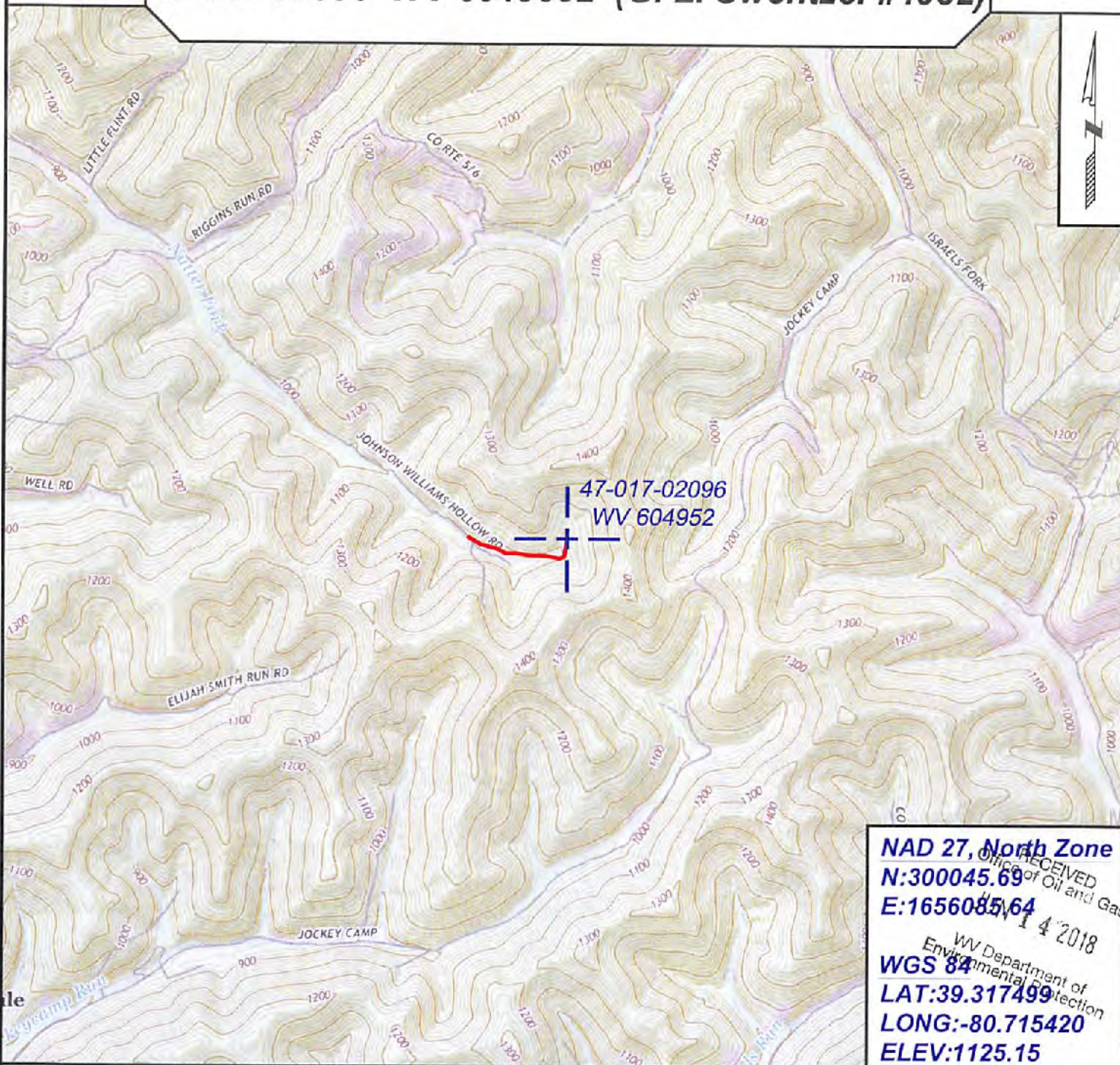
Date: March 26, 2018

District: West Union

Project No: 67-30-00-08

47-017-02096 WV 6049652 (G. L. Swentzel #4952)

Topo



NAD 27, North Zone
N:300045.69
E:1656085.64
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 FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

P.O. Box 280
 Bridgeport, WV 26330



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
LEASE NAME AND WELL No. G.L. Swentzel #4952 - WV 604952 - API No. 47-017-02096

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 850 +/- Owner: Sidney W. Underwood
Address: 2215 Pineview Dr., North Parkersburg, WV 26104 Phone No. _____
Comments: _____

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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

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

17-02096P

Topo Quad: Smithburg 7.5'

Scale: 1" = 2000'

County: Doddridge

Date: March 26, 2018

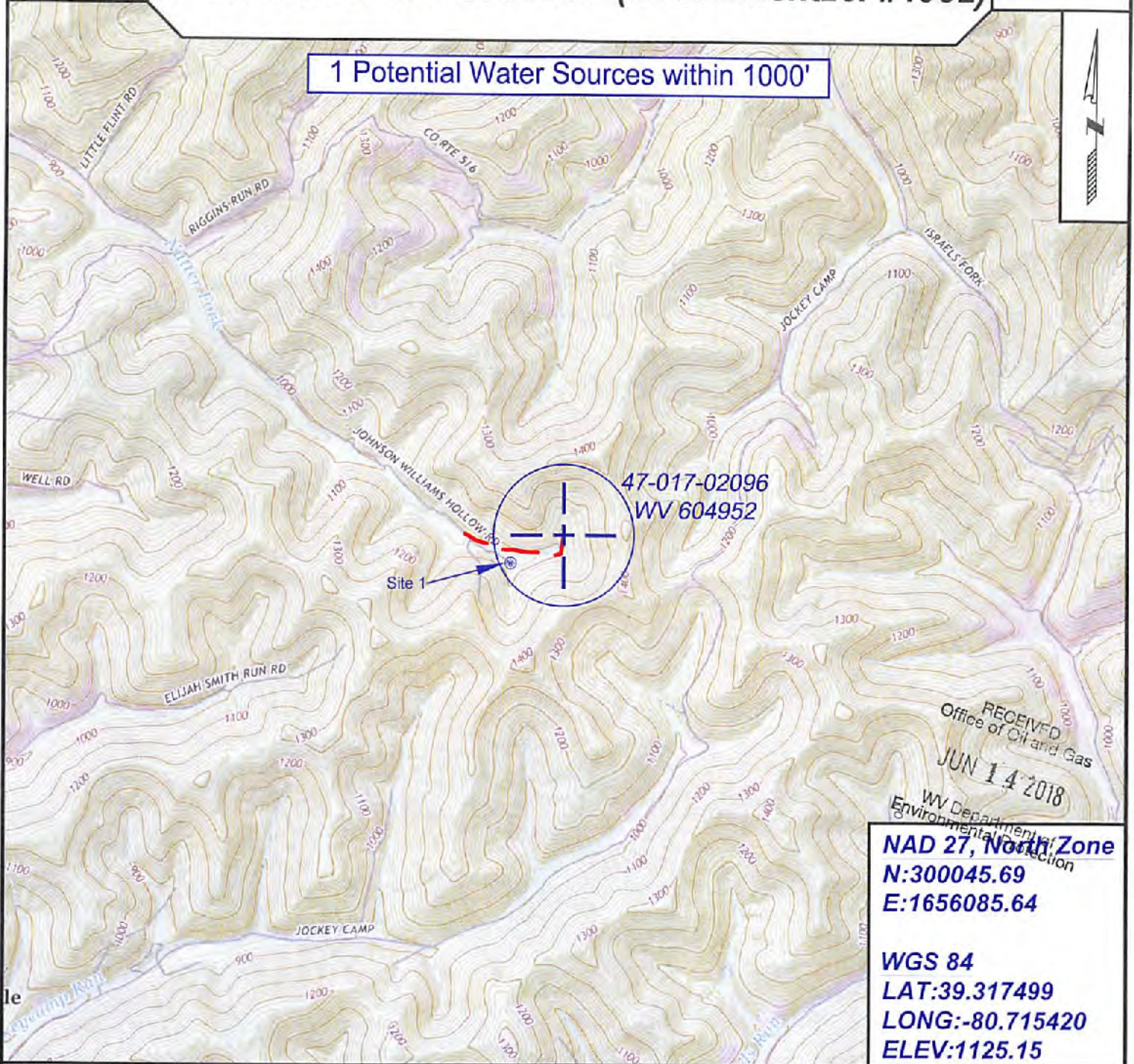
District: West Union

Project No: 67-30-00-08

Water

47-017-02096 WV 6049652 (G. L. Swentzel #4952)

1 Potential Water Sources within 1000'



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JUN 14 2018
WV Department of Environmental Protection

NAD 27, North Zone
N:300045.69
E:1656085.64

WGS 84
LAT:39.317499
LONG:-80.715420
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PREPARED FOR:

EQT Production Company

P.O. Box 280
Bridgeport, WV 26330

