



 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, April 22, 2019

WELL WORK PLUGGING PERMIT
 Vertical Plugging

EQT PRODUCTION COMPANY
 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222


Re: Permit approval for MASON 1
 47-103-02534-00-00

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: MASON 1
 Farm Name: GREATHOUSE, JAMES ARN⁺
 U.S. WELL NUMBER: 47-103-02534-00-00
 Vertical Plugging
 Date Issued: 4/22/2019

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.

1) Date December 17, 2018 **01/26/2019**
2) Operator's
Well No. 519056 (Mason #1)
3) API Well No. 47-103 - 02534

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


5) Location: Elevation 1198 Watershed Pine Run
District Proctor County Wetzel Quadrangle Wileyville

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 Derek Haught Name HydroCarbon Well Service
Address PO Box 85 Address PO Box 995
Smithville WV 26178 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 1-7-19

PLUGGING PROGNOSIS

API# 47-103-02534
 District, Proctor
 Wetzel County, WV

BY: R Green
 DATE: 11-26-18

CURRENT STATUS:

TD @ 7053'
Elevation @ 1208'

16" casing @ 40' (Sanded in)
 11 3/4" casing @ 1200' (CTS)
 8 5/8" casing @ 2600' (CTS)
 4 1/2" casing @ 7030' (Cemented with 350 sks)

Perforations @
 6880' to 6904' (144 holes) Geneseo
 7002' to 7032' (120 holes) Marcellus

Fresh Water @ 100' & 1051'
 Saltwater @ 1479'
 Gas Show @ None reported
 Oil shows @ None reported
 Coal @ 1051'

1. Notify inspector, Derek Haught @ 304-206-7613, 24 hours prior to commencing operations.
2. TIH and check TD @ or below 7032'.
3. TIH tbg to 7030', spot 45 bbl. of 6% gelled water followed by a 350', C1A cement plug 7030' to 6680', WOC 8 hrs. Tag TOC, add additional C1A cement if necessary. (Marcellus & Geneseo perfs)
4. Free point 4 1/2" casing, cut casing @ free point. TOO H 4 1/2" casing. ≈ 5200'
5. 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.
6. TOO H to 2800', set a 400' C1A cement plug 2800' to 2400' (8 5/8" casing seat).
7. TOO H to 1550', set a 600' C1A cement plug 1550' to 950' (Elevation, coal, freshwater, saltwater, & 11 3/4" casing seat).
8. TOO H to 500', set a 500' C1A cement plug 500' to surface. (Freshwater @ 100')
9. Erect monument with API#, date plugged, company name.
10. Reclaim location and road to WV-DEP specifications.

GEL SPACES BETWEEN ALL
 CEMENT PLUGS. Jarm

DH
 1-8-19

RECEIVED
 Office of Oil and Gas

MAR 4 2019

WV Department of
 Environmental Protection

47-103-02534P
04/26/2010

WR-35
Rev (1-10)

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

DATE: January 25, 2010
API #: 47-10302534

Farm name: Mason Operator Well No.: 1

LOCATION: Elevation: 1208' Quadrangle: Wileyville 7.5

District: Proctor County: Wetzel
Latitude: 14730 Feet South of 39 Deg. 40 Min. 00 Sec.
Longitude 5120 Feet West of 80 Deg. 42 Min. 30 Sec.

Company: Stone Energy

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
600 Hampton Center, Suite B				
Morgantown, West Virginia 26505	16"	40'	40'	sanded in
Agent: <u>Kevin Stiles</u>				
Inspector: <u>Dave Scranage</u>	11 3/4"	1200'	1200'	683 sacks
Date Permit Issued: <u>10/30/2009</u>				
Date Well Work Commenced: <u>11/12/2009</u>	8 5/8"	2600	2600	612 sacks
Date Well Work Completed: <u>4/12/2010</u>				
Verbal Plugging:	4 1/2"	7030'	7030'	350 sacks
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable Rig				
Total Vertical Depth (ft): <u>7053'</u>				
Total Measured Depth (ft): <u>7053'</u>				
Fresh Water Depth (ft.): <u>100' & 1051'</u>				
Salt Water Depth (ft.): <u>1479'</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>1051'</u>				

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

Producing formation Marcellus (comingled) Pay zone depth (ft) 7002'-7032'

Gas: Initial open flow 190 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 350 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 256.58 Hours

Static rock Pressure 2338 psig (surface pressure) after 720 Hours

Second producing formation Geneseo (comingled) Pay zone depth (ft) 6880' - 6904'

Gas: Initial open flow 190 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 350 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 256.58 Hours

Static rock Pressure 2338 psig (surface pressure) after 720 Hours

RECEIVED
Office of Oil & Gas

APR 21 2010

WV Department of
Environmental Protection

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.


Signature

4/29/10
Date

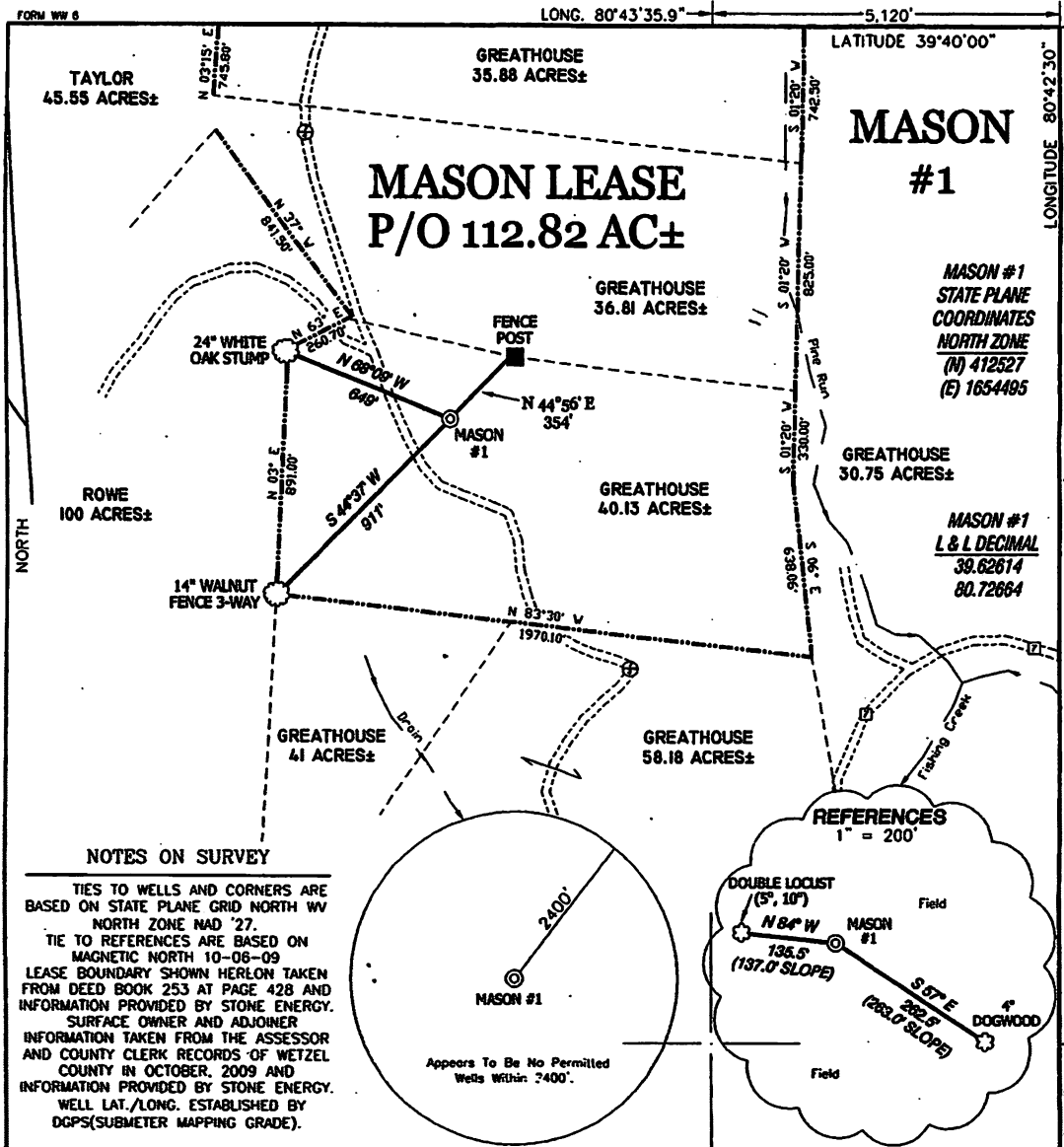
1st Stage Marcellus (perf interval: 7002'-7032') 120 holes

Slickwater – 5965 bbls. Pumped 75,734# 80-100 mesh sand and 9198# 40/70 mesh white sand.

2nd Stage Geneseo (perf interval: 6880' – 6904') 144 holes

Slickwater – 9812 bbls. Pumped 49606# 80-100 mesh and 507600# 40-70 mesh white sand.

	Top Depth	Bottom Depth
Fill	0'	30'
Sand & Shale	Not Logged	Not Logged
Little Lime	Not Logged	Not Logged
Big Lime	Not Logged	Not Logged
Big Injun	Not logged	2504'
Sand & Shale	2504'	2825'
Berea	2825'	2843'
Sand & Shale	2843'	3282'
Gordon	3282'	3300'
Sand & Shale	3300'	5336'
Benson	5336'	5348'
Sand & Shale	5348'	5620'
Pipe Creek Marker	5620'	5636'
Lower Alexander	5636'	5668'
Shale	5668'	6684'
Cashaqua	6684'	6792'
Middlesex	6792'	6830'
West River	6830'	6884'
Geneseo	6884'	6908'
Tully	6908'	6995'
Marcellus	6995'	7042'
Onondaga	7042'	7053' TD



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DIVISION OF ENVIRONMENTAL PROTECTION.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE OCTOBER 8, 20 09
OPERATORS WELL NO. MASON #1
API WELL NO. 47-103-02534
STATE LA COUNTY WV PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. W1916 (BK 47-25)
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER GRADE) SCALE 1" = 500'

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

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,208' WATERSHED PINE RUN
DISTRICT PROCTOR COUNTY WETZEL QUADRANGLE WILEYVILLE 7.5'

SURFACE OWNER JAMES ARNOLD GREATHOUSE ACREAGE 40.13±
ROYALTY OWNER WELLS & GENELDA MASON LEASE ACREAGE 112.82±

PROPOSED WORK: LEASE NO. _____
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER _____
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
ESTIMATED DEPTH 6670-7100'

WELL OPERATOR STONE ENERGY CORPORATION DESIGNATED AGENT TIM MCCREGOR
ADDRESS P.O. BOX 52807 LAFAYETTE, LA 70508 ADDRESS 6000 HAMPTON CENTER SUITE B MORGANTOWN WV 26505

RECEIVED
Office of Oil and Gas
DEC 26 2018
WV Department of Environmental Protection

Wileyville 7

WW-4A
Revised 6-07

1) Date: December 17, 2018
2) Operator's Well Number
519056 (Mason #1)
3) API Well No.: 47 - 103 - 02534

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: (a) Name See Attached, Address, (b) Name, Address, (c) Name, Address
5) (a) Coal Operator Name, Address, (b) Coal Owner(s) with Declaration Name See Attached, Address, (c) Coal Lessee with Declaration Name, Address
6) Inspector Derek Haught, Address PO Box 85, Smithville WV 26178, Telephone (304) 206-7613

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 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
Its: Regional Land Supervisor
Address 2400 Ansys Drive, Suite 200
Canonsburg PA 15317
Telephone (304) 848-0035

RECEIVED
Office of Oil and Gas
DEC 26 2018

WV Department of Environmental Protection

Subscribed and sworn before me this 18 day of December 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.

47-103-02534

47-103-02534P
519056 Mason #1 04/26/2019

Owner(s) (Surface and Access)

James Arnold Greathouse
11274 Mountaineer Hwy. ✓
New Martinsville, WV 26155

Coal Owner(s)

Genelda M. Mason ✓
HC 60 Box 152
New Martinsville, WV 26155

Potential Water Owner(s):

Brad Carpenter ✓
380 Southpointe Blvd.
Canonsburg PA 15317

James Greathouse ✓
11274 Mountaineer HWY.
New Martinsville WV 26155

RECEIVED
Office of Oil and Gas

DEC 26 2018

WV Department of
Environmental Protection

47-103-02534P

04/26/2019

WW-9
(5/16)

API Number 47 - 103 - 02534
Operator's Well No. 519056 (Mason #1)

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) Pine Run Quadrangle Wileyville

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 _____)

DH
1-7-19

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.

RECEIVED
Office of Oil and Gas

Company Official Signature [Signature]

MAR 4 2019

Company Official (Typed Name) Erin Spine

WV Department of
Environmental Protection

Company Official Title Regional Land Supervisor

Subscribed and sworn before me this 18 day of December, 20 18

[Signature] Notary Public

My commission expires 4-7-2020



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: _____

RECEIVED
Office of Oil and Gas

MAR 4 2019

WV Department of
Environmental Protection

Title: Oil + Gas Inspector Date: 1-9-19

Field Reviewed? Yes No

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

DEC 26 2018

WV Department of
Environmental Protection

47-103-02534P

04/26/2019

RECEIVED
Office of Oil and Gas

Topo Quad: Wileyville 7.5'

Scale: 1" = 500'

County: Wetzel

Date: November 2, 2018

DEC 26 2018

District: Proctor

Project No: 40-34-00-09

WV Department of
Environmental Protection

Highway

47-103-02534 WV 519056 (Mason #1)

Pit Location Map

Existing Access Road


47-103-02534
WV 519056

7
3.4 Miles ±
To Wileyville
Creek

NAD 27, North Zone
N:412,525.97
E:1,654,498.36

WGS 84
LAT:39.626226
LONG:-80.726450
ELEV:1198.47'

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

2400 Ansys Drive
Canonsburg, PA 15317

47-103-02534P

04/26/2019

Topo Quad: Wileyville 7.5'

Scale: 1" = 200'

RECEIVED
Office of Oil and Gas

County: Wetzel

Date: November 2, 2018

DEC 26 2018

District: Proctor

Project No: 40-34-00-09

WV Department of
Environmental Protection

47-103-02534 WV 519056 (Mason #1)

Topo

Pit Location Map



Existing Well
Access Road

W
M
A
N
R
I
D
G
E

1100

47-103-02534
WV 519056



NAD 27, North Zone
N:412,525.97
E:1,654,498.36

WGS 84
LAT:39.626226
LONG:-80.726450
ELEV:1198.47'

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

2400 Ansys Drive
Canonsburg, PA 15317

04/26/2019

RECEIVED
Office of Oil and Gas

Topo Quad: Wileyville 7.5'

Scale: 1" = 2000'

County: Wetzel

Date: November 2, 2018

DEC 26 2018

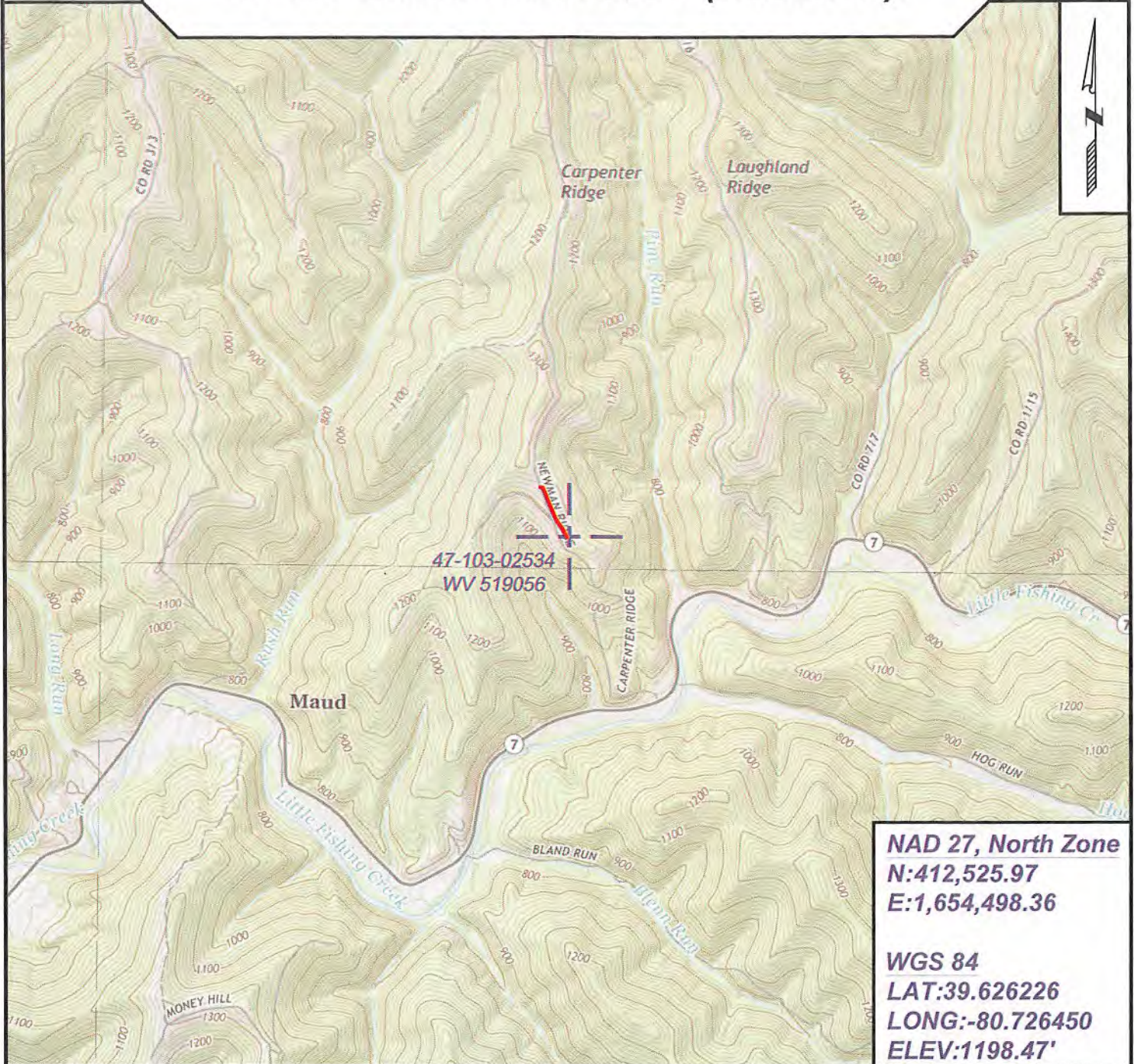
District: Proctor

Project No: 40-34-00-09

WV Department of
Environmental Protection

47-103-02534 WV 519056 (Mason #1)

Topo



NAD 27, North Zone
N:412,525.97
E:1,654,498.36

WGS 84
LAT:39.626226
LONG:-80.726450
ELEV:1198.47'



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

2400 Ansys Drive
 Canonsburg, PA 15317

