



 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, June 14, 2019

WELL WORK PLUGGING PERMIT
 Vertical Plugging

EQT PRODUCTION COMPANY
 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for 604260
 47-033-01666-00-00

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: 604260
 Farm Name: PIGGOTT
 U.S. WELL NUMBER: 47-033-01666-00-00
 Vertical Plugging
 Date Issued: 6/14/2019

I

47-033-01666P
06/14/2019

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.

WW-4B
Rev. 2/01

1) Date December 6, 2018
2) Operator's
Well No. 604260 Pigott #4260
3) API Well No. 47-033 - 0125

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 1091 Watershed Robinson Run
District Eagle-Outside County Harrison Quadrangle Shinnston

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 Sam Ward Name HydroCarbon Well Service
Address PO Box 2327 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 S. P. Ward Date 4/19/19

PLUGGING PROGNOSIS

604260
L.M.Piggott #4260
API# 47-033-001666
District, Eagle
Harrison County, WV

BY: R Green
DATE: 08/30/18

CCURRENT STATUS:

TD @ 2467'

Elevation @ 1091'

10" casing @ 115'
6 5/8" casing @ 1412'
5 3/16" casing @ 2240'
3" tubing @ 2335' (Set on 3" X 5 3/16" anchor packer @ 2335')

Fresh Water @ None Reported
Saltwater @ None Reported
Gas Show @ 1560', 2422', 2441'
Oil shows @ None reported
Coal @ None Reported

1. Notify inspector, Sam Ward @ 304-389-7583, 24 hours prior to commencing operations.
2. TIH and check TD @ or below 2400' and locate 3 X 5 3/16" packer.
3. Attempt to release 3" X 5 3/16" packer, if unable to release packer. TIH wireline and cut 3" tubing on top of packer. TOOH 3" tubing.
4. TIH to top of packer and spot 40 bbl. of 6% gelled water followed by a 250' C1A cement plug. 2335' to 2085' (Packer and 5 3/16" casing seat) WOC 8 hrs. Tag TOC, add additional C1A cement if necessary.
5. Free point 5 3/16" casing cut casing @ free point .TOOH 5 3/16" casing.
6. TIH and 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.
7. TOOH to 1650' set a 300' C1A cement plug 1650' to 1350' (6 5/8" casing seat). **CAS**
8. Free point 6 5/8" casing cut casing @ free point .TOOH 6 5/8" casing.
9. TIH and 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. TOOH to 1100' set a 200' C1A cement plug 1100' to 900'.(Elevation).
11. TOOH to 300' set a 200' C1A cement plug 300' to 100'. (10" casing seat).
12. Free point 10" casing cut casing @ free point .TOOH 10" casing.
13. TIH and set a 100' 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.
14. Note, if unable to cut and pull 10" casing, TIH and perforate 10" casing with 6 holes @ 75', TIH to 100', set a 100' C1A cement plug 100' to surface.
15. Erect monument with API#, date plugged, company name.
16. Reclaim location and road to WV-DEP specifications.

SDew
4/19/19

Piggott 4260 - 604260

4703301666 06/14/2019

API# 47-033-01666

Elevation 1091'

SPECIAL WELL TEST REPORT
FORM G30-2726S

Special Test Cleaning Bailing Swabbing Pumping Shooting

Equitable Gas Company - W. Va. Div. Company

WELL NO. 4260

Lease No. 12823 Farm L. N. Piggott Acres 108 Map G.L.K. N.K. 3-3

Twp. or Dist. Eagle County Harrison State W. Va. Other wells on lease -

Date completed 7-11-11 O.D.O.F. M. Cu. Ft. O.R.P. Producing sand Squaw, 5th & 6th.

Gas at 1560, 2122, 2111 Volume factor 6.162 Tubed with 2335 ft. of 2 in. thg.

Packaged at 2335 ft. With 5-3/16 x 3 inch anchor Packer

CASING RECORD: 10" 115 ft. 8 1/4" - ft. 6 3/8" 1112 5 1/2" 2210.

Total depth 2167 ft. Top of fluid at 2135 ft. Bridged at - ft. Depth after this work 2167 ft.

OPEN FLOW AND MINUTE PRESSURE TESTS OF GAS FROM 2 INCH TUBING CASING

	"U" Tube Reading	M or W	Size Opening	Pitot or F.M.	Open Flow	L/P	1/2 Min.	1 Min.	2 Min.	3 Min.	4 Min.	5 Min.	R/P	Hrs.	Date
before	Against Line Pressure	xxx	x	xxx	xx	xxx	6	6 1/2	6 1/2	7	7	7 1/2	8	None	Taken
	From Atmosphere	6/10	#	3"	xx	4.1M		1	1 1/2	2	2 1/2	3	"	"	
after	Against Line Pressure	xxx	x	xxx	xx	xxx	6	6 1/2	7	7 1/2	8 1/2	9 1/2	10 1/2	"	"
	From Atmosphere	10/10	#	3"	xx	5.7M		1	2	2 1/2	3	4	"	"	

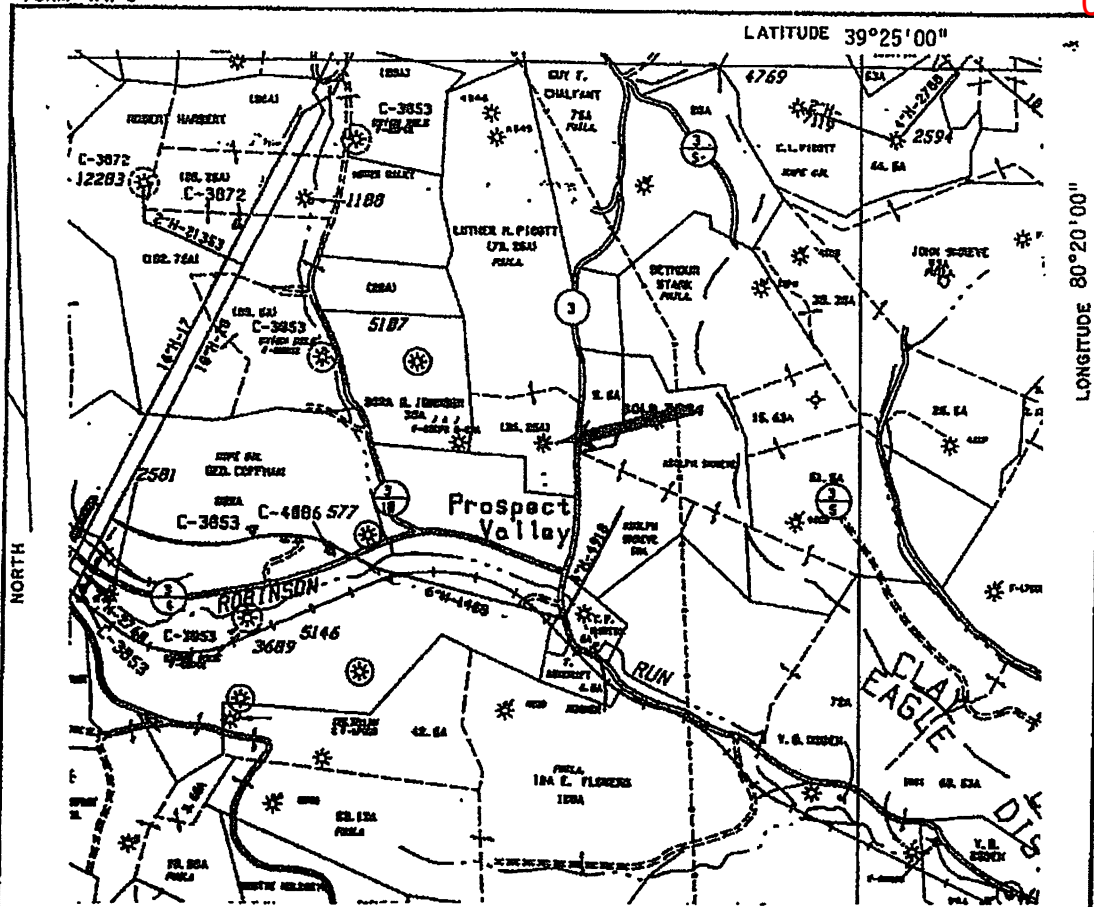
REMARKS (concerning wells condition, work done, machine used, etc.) (5' fluid on sea way). Sealed to total depth 2167, with Jeco machine 712. Lancer 3' surchey, 3 cas. - 110 mi..

RECOMMENDATION

Amount Royalty \$ 150.00 Amount of free gas allowed per yr. M Cu. ft. Amount used last 12 months M Cu. ft.

	This Job	Total Previous	TOTAL EXPENSE LAST TWELVE MONTHS
EXPENSE: Cleaning.....	\$	\$	
Bailing.....	129.01		
Swabbing.....			
			\$ 129.01

Commenced work 12-9 1953



FOR REFERENCE ONLY
NO PLAT AVAILABLE

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 DEPARTMENT OF ENERGY.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE April 28, 19 94

OPERATORS WELL NO. 4260

API WELL NO. 47 STATE 033 COUNTY 1666 PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. _____
PROVEN SOURCE OF ELEVATION _____ SCALE 1"=1320'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



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

LOCATION: ELEVATION _____ WATERSHED Robinson Run
DISTRICT Eagle COUNTY Harrison QUADRANGLE Shinnston

SURFACE OWNER _____ ACREAGE _____
ROYALTY OWNER Luther Piggott LEASE ACREAGE _____

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 _____ ESTIMATED DEPTH _____

WELL OPERATOR Equitable Gas Co. DESIGNATED AGENT _____
ADDRESS _____ ADDRESS _____

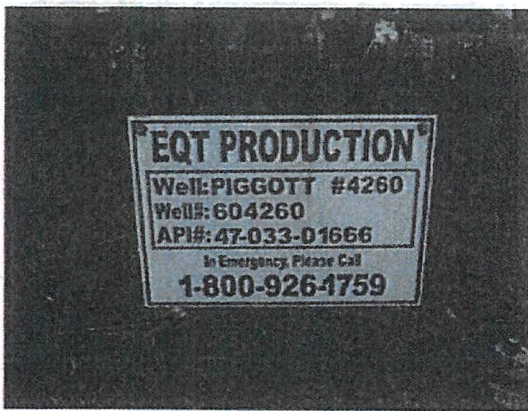
COUNTY NAME
PERMIT



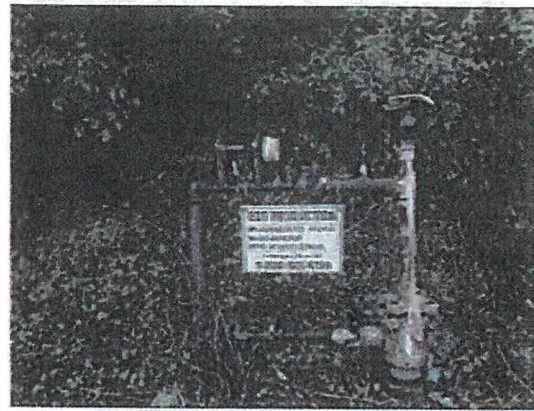
Site Pictures

Pigott #4260

WV 604260 47-033-01666



WV 604260 Well ID Sign



WV 604260 Well Pad Site



WV 604260 Well Pad Site



Looking along Access Road toward Driveway

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

WW-4A
Revised 6-07

1) Date: December 6, 2018
2) Operator's Well Number
604260 Pigott #4260
3) API Well No.: 47 - 033 - 01666

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

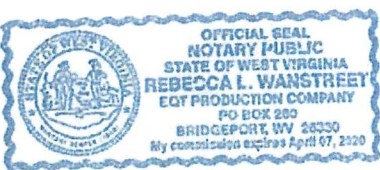
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name See Attached	Name See Attached
Address	Address
(b) Name	(b) Coal Owner(s) with Declaration
Address	Name See Attached
(c) Name	Address
Address	Name
	Address
6) Inspector Sam Ward	(c) Coal Lessee with Declaration
Address PO Box 2327	Name
Buckhannon WV 26201	Address
Telephone 304-389-7583	

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

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.

47-033-01666

604260 L M Pigott #4260

Owner(s) (Surface and Access)

Diane M. Moran & William D. Poling
2631 Lucas Rd.
Shinnston, WV 26431-6823

Kevin Allen Kuhens
2683 Lucas Road
Shinnston, WV 26431

Coal Owner(s)

N/A

Coal Operator

Murray Energy Corp.
46266 National Road
Saint Clairsville, OH 43950

Potential Water Owner(s):

Joe Glaspell
Rt 1 Box 2530
Shinnston WV 26431

William Daniel Poling
2631 Lucas Road
Shinnston WV 26431

Donald Stark
2610 Lucas Road
Shinnston WV 26431

Shannon Hines
2656 Lucas Road
Shinnston WV 26431

Kevin A Kuhens
2683 Lucas Road
Shinnston WV 26431

Nancy E Sturm
2754 Lucas Road
Shinnston WV 26431

William C Dunn Jr.
2735 Lucas Road
Shinnston WV 26431

Robert Bartlett
1 Jarvis Ave
Shinnston WV26431

WW-9
(5/16)

API Number 47 - 033 - 01666
Operator's Well No.604260 Pigott #4260

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) Robinson Run Quadrangle Shinnston

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 _____)

SDW
4/19/19

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.

Company Official Signature *Erin Spine*

Company Official (Typed Name) Erin Spine

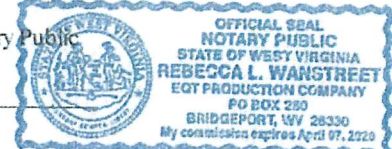
Company Official Title Regional Land Supervisor

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

Rebecca L. Wangstreet

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: _____

Title: DOG Inspector Date: 4/19/19

Field Reviewed? () Yes (X) 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

Topo Quad: Shinnston 7.5'

Scale: 1" = 200'

County: Harrison

Date: November 2, 2018

District: Eagle-Outside

Project No: 70-36-00-08

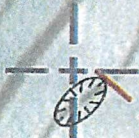
47-033-01666 WV 604260 (Pigott #4260)

Topo

Pit Location Map



47-033-01666
WV 604260



Proposed Well
Access Road

Existing Driveway/
Well Access Road

Prospect Valley

NAD 27, North Zone
N:330381.60
E:1761548.95

WGS 84
LAT:39.404105
LONG:-80.343670
ELEV:1091.02

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

Topo Quad: Shinnston 7.5' Scale: 1" = 500'
County: Harrison Date: November 2, 2018
District: Eagle-Outside Project No: 70-36-00-08

Highway **47-033-01666 WV 604260 (Pigott #4260)**

Pit Location Map

47-033-01666
WV 604260

3

Proposed Well
Access Road

Existing Driveway/
Well Access Road

3
4

Robinson

Run

3

NAD 27, North Zone
N:330381.60
E:1761548.95

WGS 84
LAT:39.404105
LONG:-80.343670
ELEV:1091.02

LEGEND



Proposed Pit Location



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Birch River, WV 26610
PH: (304) 649-8606
FAX: (304) 649-8608

PREPARED FOR:

EQT Production Company

2400 Ansys Drive
Canonsburg, PA 15317

Topo Quad: Shinnston 7.5'

Scale: 1" = 2000'

County: Harrison

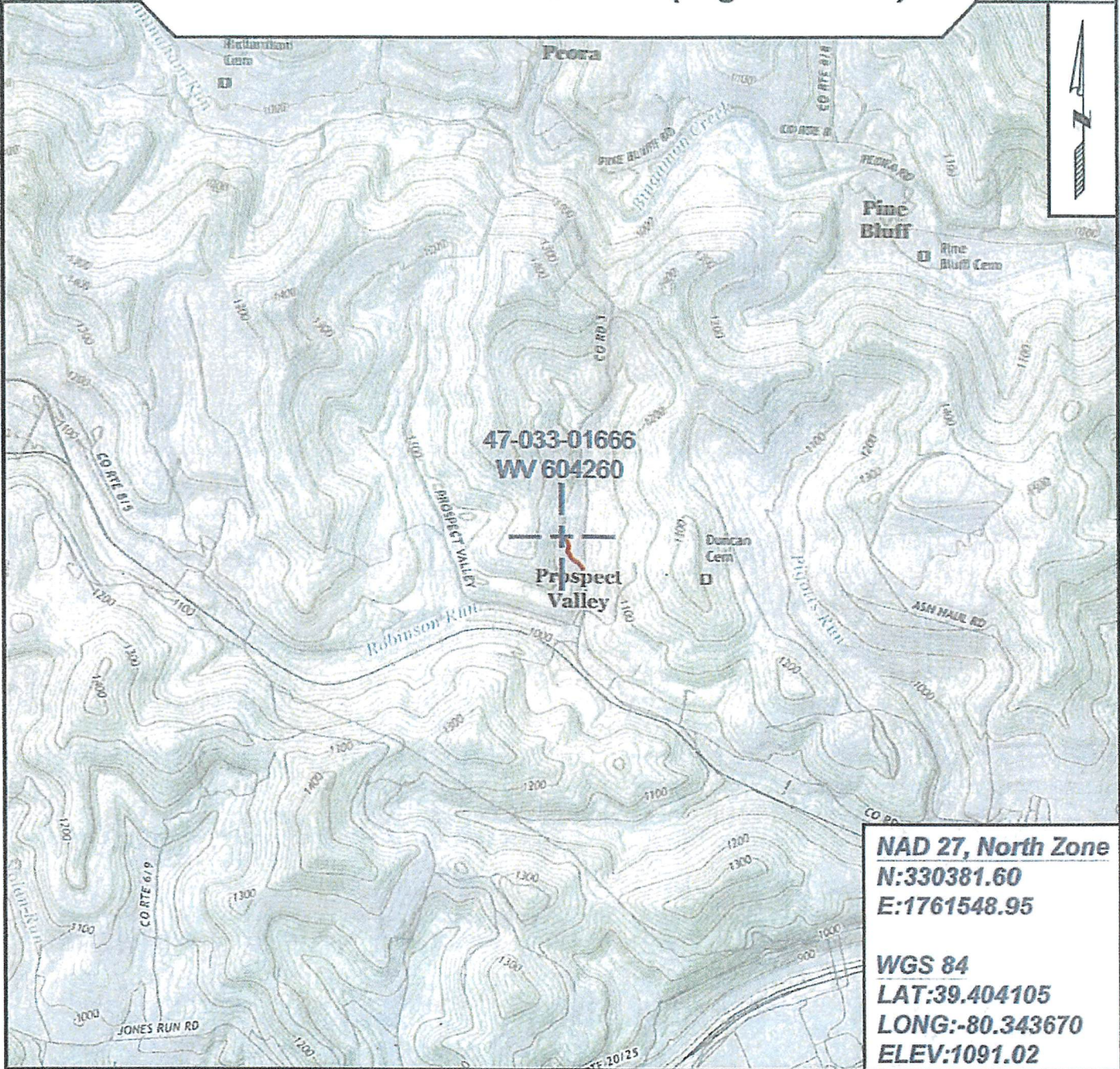
Date: November 2, 2018

District: Eagle-Outside

Project No: 70-36-00-08

47-033-01666 WV 604260 (Pigott #4260)

Topo



NAD 27, North Zone
N:330381.60
E:1761548.95

WGS 84
LAT:39.404105
LONG:-80.343670
ELEV:1091.02



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

WW-7
8-30-06



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

API: 47-033-01666 WELL NO.: WV 604260 (Figott #4260)

FARM NAME: L. M. Figott

RESPONSIBLE PARTY NAME: EOT Production Company

COUNTY: Harrison DISTRICT: Eagle-Outside

QUADRANGLE: Shimston 7.5'

SURFACE OWNER: Diane Moran and William D. Poling

ROYALTY OWNER: Diane Moran and William D. Poling

UTM GPS NORTHING: 4361828

UTM GPS EASTING: 556508 GPS ELEVATION: 332 m (1091 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:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS _____ : Post Processed Differential _____
Real-Time Differential _____
Mapping Grade GPS X : Post Processed Differential X
Real-Time Differential _____

4. 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.


Signature

PS#2180
Title

11/2/18
Date