

west virginia department of environmental protection

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

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

## Friday, June 22, 2018 WELL WORK PLUGGING PERMIT Vertical Plugging

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for J. WILSON 1888 47-085-08489-00-00

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: J. WILSON 1888 Farm Name: LESKOWICZ, MARK & NOREI U.S. WELL NUMBER: 47-085-08489-00-00 Vertical Plugging Date Issued: 6/22/2018

Promoting a healthy environment.

# **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.

		85-08489
WW-4 Rev.	B 2/01	1) Date May 21 , 20 18 2) Operator's Well No. 657436 Wilson #1888 3) API Well No. 47-085 - 08489
	DEPARTMENT OF ENVI	EST VIRGINIA RONMENTAL PROTECTION OIL AND GAS
	APPLICATION FOR A PER	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liqui	d injection/ Waste disposal/
	(If "Gas, Production or Un	derground storage) Deep/ Shallow $X$
5)	Location: Elevation 1165	Watershed Hughes River
	District Clay	County Ritchie Quadrangle Pennsboro
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
0,	Name Michael Goff	Name HydroCarbon Well Service
	Address 1723 Auburn Road	Address PO Box 995
	Pullman WV 26421	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 of Oil and Gas JUN 0 5 2018 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 MIKE GOFF BY PHONE Date 6/21/2018

Jum Glislis

85-084-89 P

WV Department of Environmental Protection

#### PLUGGING PROGNOSIS

657436 J. Wilson #1888 API# 47-085-08489 District, Clay Ritchie County, WV

BY: R Green DATE: 01/15/18

**CURRENT STATUS:** 

### TD @ 5592' Elevation @ 1100'

9 5/8" casing @ 337' (CTS) 7" casing @ 1995' (CTS) 4 1/2" casing @ 5399' (cemented with 225 sks)

Perforations @ 5281' to 5290' (14 shots) .. @ 4872' to 5005' (14 shots) " @ 4632' to 4646' (14 shots)

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

- 1. Notify inspector Michael Goff @ 304-549-9823, 24 hrs. prior to commencing operations.
- 2. TIH, check TD @ or below 5290'.
- 3. TIH and spot 40 bbl. of 6% gelled water followed by a 515'C1A cement plug, 5290' to 4775', WOC 8 hrs. Tag TOC add additional C1A cement if necessary.
- 4. TOOH to 4650' set a 200' C1A cement plug, 4650' to 4450', WOC 4 hrs. Tag TOC add additional C1A cement if necessary.
- 5. TOOH to 3600' set a 200' C1A cement plug, 3600' to 3400'. (Safety plug).
- 5. Free point 4 <sup>1</sup>/<sub>2</sub>" casing, cut casing @ free point. TOOH 4 <sup>1</sup>/<sub>2</sub>" casing.
  6. Free point 4 <sup>1</sup>/<sub>2</sub>" casing, cut casing @ free point. TOOH 4 <sup>1</sup>/<sub>2</sub>" casing.
  7. Set a 100' C1A cement plug 50' in/out of casing cut. Perforate all freshwater, saltwater, <sup>Comple RECEIVED</sup> of Oil <sup>and</sup> Gas JUN 0 5 2018
- 8. TOOH to 2050' set a 200' C1A cement plug 2050' to 1850'. (7" casing seat).
- 9. TOOH to 1200' set a 200' C1A cement plug, 1200' to 1000' (Elevation).
- 10. TOOH to 500', set a 500' C1A cement plug 500' to surface. (9 5/8" casing seat).
- 11. Erect monument with API#, date plugged, & company name.
- 12. Reclaim location and road to WV-DEP specifications.

WR-35		Division of E Secti	of West Virg nvironmenta on of Oil and or's Report o	I Protectio Gas			3-Nov97 AECEIVED Por Oll and Gas N U 7 1999 Dides	<b>.</b>
FARM NAME	Leskowicz, Mar	k & Noreen	OPERATOR W	ELL NO.	J. Wilson 1	888 ····	Division of ental Protection	Ť.
LOCATION:	ELEVATION		QUADRANGLI	E Pennsbor	0		non	
DISTRICT: LATITUDE: LONGITUDE:	Clay 2900 Feet Sout 6100 Feet Wes	th of 39 Deg. 17 M it of 80 Deg. 55 M	COUN in. 30 Sec. n. 0 Sec.	ry <u>Ritch</u> i	ie			;
COMPANY:		CARNEGIE NATU 800 REGIS AVEN PITTSBURGH, P/	IRAL GAS CO. IUE	CASING/ TUBING SIZE	USED IN DRILLING	LEFT IN WELL	CEMENT FILL UP CU. FT.	
AGENT:		DOUGLAS R. NA	Υ					
INSPECTOR: PERMIT ISSUE	D:	Sam Hersman 11/6/1997						
WELL WORK C		<u>11/10/1997</u> 7/31/1998		9 5/8″	337'	337′	C.T.S.	
VERBAL PLUGO PERMISSION O	ging Granted ON:	RIG		7"	1995'	1995'	C.T.S.	
ROTARY TOTAL DEPTH FRESH WATER	(FEET):	5592		-				
SALT WATER D				4 1/2"		5399'	<u>225 sks.</u>	
	•••			4				
	G MINED IN AR ; (FT):	REA (Y/N) <u>N</u>		-	<u> </u>			
IS COAL BEIN	5 (FT):	REA (Y/N) <u>N</u>		* Existing				
IS COAL BEING COAL DEPTHS OPEN FLOW D PRODUCING F GAS INITIA FINAL TIME C	; (FT): PATA FORMATION LL OPEN FLOW OPEN FLOW OF OPEN FLOW	Alexand Co-mingled BETWEEN INIT	MCFD/d IAL AND FINA	PAY 2 DIL INITI FINAL L TESTS	ZONE DEPTH AL OPEN FLO . OPEN FLOW	w	Treatment Bbl/d Bbl/d HOURS HOURS	Office Of
IS COAL BEIN COAL DEPTHS OPEN FLOW D PRODUCING F GAS INITIA FINAL STATIC ROCK SECOND PROD GAS INITIA FINAL	G (FT): DATA FORMATION AL OPEN FLOW OF OPEN FLOW OF OPEN FLOW AL OPEN FLOW OPEN FLOW	<u>Alexand</u> Co-mingled BETWEEN INIT psig ATION <u>Riley</u> Co-mingled	MCF/d ( MCFD/d IAL AND FINA (SURI MCF/d ( MCF/d	PAY 2 DIL INITI FINAL L TESTS FACE PRESS PAY 2 DIL INITI FINAL	ZONE DEPTH AL OPEN FLO	W (FT) <u>See</u> W	Bbl/d Bbl/d HOURS HOURS	Office REC JUN 0 5 WV Departm fironmental Ph
IS COAL BEIN COAL DEPTHS OPEN FLOW D PRODUCING F GAS INITIA FINAL STATIC ROCK SECOND PROI GAS INITIA FINAL TIME ( STATIC ROCK	G (FT): DATA FORMATION L OPEN FLOW OPEN FLOW OF OPEN FLOW C PRESSURE DUCING FORMA AL OPEN FLOW OF OPEN FLOW OF OPEN FLOW ( PRESSURE	Alexand Co-mingled BETWEEN INIT psig ATION Riley Co-mingled BETWEEN INIT 670 psig	MCF/d ( MCFD/d IAL AND FINA (SURI MCF/d IAL AND FINA (SUR	PAY 3 DIL INITL FINAL L TESTS FACE PRESS DIL INITI FINAL L TESTS FACE PRESS PAY 3 DIL SINTI	ZONE DEPTH AL OPEN FLOW . OPEN FLOW URE) AFTER ZONE DEPTH AL OPEN FLOW L OPEN FLOW SURE) AFTER	(FT) <u>See</u> W	Bbl/d Bbl/d HOURS HOURS Treatment Bbl/d Bbl/d HOURS HOURS STIMULATING	Office REC JUN 0 JUN 0 WV Departm fironmental P
IS COAL BEING COAL DEPTHS OPEN FLOW D PRODUCING F GAS INITIA FINAL STATIC ROCK SECOND PROI GAS INITIA FINAL TIME ( STATIC ROCK NOTE: ON BACK BUSICAL CHAN	G (FT): DATA FORMATION L OPEN FLOW OPEN FLOW OF OPEN FLOW C PRESSURE DUCING FORMA AL OPEN FLOW OF OPEN FLOW OF OPEN FLOW ( PRESSURE	Alexand Co-mingled BETWEEN INIT psig ATION <u>Riley</u> <u>Co-mingled</u> BETWEEN INIT 670 psig JT THE FOLLOWING WELL LOG WHICH	MCF/d ( MCFD/d IAL AND FINA (SURI MCF/d IAL AND FINA (SUR	PAY 3 DIL INITL FINAL L TESTS FACE PRESS DIL INITI FINAL L TESTS FACE PRESS PAY 3 DIL SINTI	ZONE DEPTH AL OPEN FLOW . OPEN FLOW URE) AFTER ZONE DEPTH AL OPEN FLOW L OPEN FLOW SURE) AFTER	(FT) <u>See</u> W	Bbl/d Bbl/d HOURS HOURS Treatment Bbl/d Bbl/d HOURS HOURS STIMULATING	Office PIEC JUN 05 WV Departm Vironmental Pr
IS COAL BEING COAL DEPTHS OPEN FLOW D PRODUCING F GAS INITIA FINAL STATIC ROCK SECOND PROI GAS INITIA FINAL TIME ( STATIC ROCK NOTE: ON BACK BUSICAL CHAN	G (FT): DATA FORMATION L OPEN FLOW OPEN FLOW OF OPEN FLOW C PRESSURE DUCING FORMA L OPEN FLOW OF OPEN FLOW OF OPEN FLOW C PRESSURE C OF THIS FORM PA (S OF THIS FOR	Alexand Co-mingled BETWEEN INIT psig ATION <u>Riley</u> <u>Co-mingled</u> BETWEEN INIT 670 psig JT THE FOLLOWING WELL LOG WHICH	MCF/d ( MCFD/d IAL AND FINA (SURI MCF/d IAL AND FINA (SUR	PAY 2 PAY 2 PAY 2 PACE PRESS PAY 2 PAY	ZONE DEPTH AL OPEN FLOW . OPEN FLOW URE) AFTER ZONE DEPTH AL OPEN FLOW L OPEN FLOW SURE) AFTER	(FT) See W CTURLING OR CORD OF ALL	Bbl/d Bbl/d HOURS Treatment Bbl/d Bbl/d HOURS HOURS STIMULATING, FORMATIONS,	Office of C JUN 05 WV Departm fironmental Pr
IS COAL BEING COAL DEPTHS OPEN FLOW D PRODUCING F GAS INITIA FINAL STATIC ROCK SECOND PROI GAS INITIA FINAL TIME ( STATIC ROCK NOTE: ON BACK BUYSICAL CHAN	G (FT): DATA FORMATION L OPEN FLOW OPEN FLOW OF OPEN FLOW C PRESSURE DUCING FORMA L OPEN FLOW OF OPEN FLOW OF OPEN FLOW C PRESSURE C OF THIS FORM PA (S OF THIS FOR	Alexand Co-mingled BETWEEN INIT psig ATION <u>Riley</u> <u>Co-mingled</u> BETWEEN INIT 670 psig JT THE FOLLOWING WELL LOG WHICH	MCF/d ( MCFD/d IAL AND FINA (SURI MCF/d IAL AND FINA (SURI 1) DETAILS OF IS A SYSTEMAT	PAY 2 PAY 2 PAY 2 PACE PRESS PAY 2 PAY	ZONE DEPTH AL OPEN FLOW OPEN FLOW URE) AFTER ZONE DEPTH AL OPEN FLOW L OPEN FLOW URE) AFTER INTERVALS, FRA SEOLOGICAL RE	(FT) See W CTURLING OR CORD OF ALL	Bbl/d Bbl/d HOURS Treatment Bbl/d Bbl/d HOURS HOURS STIMULATING, FORMATIONS,	Office of C JUN 0 5 WV Departm fironmental Pr

Parachara 8

85-084-89 P RIT-8489

#### Well Treatment

## 1<sup>st</sup> Stage

Perforated Alexander Formation (5281'-5290') 14 shots. Treated with 500 gal. 15% HCL, 60 Q Foam, 400 sks. 20/40 sand and 433,000 SCF of N<sub>2</sub>, B.D. 2201 psi, MTP 3453 psi, ATP 3230 psi @ BPM rate, ISIP 2592 psi.

## 2<sup>nd</sup> Stage

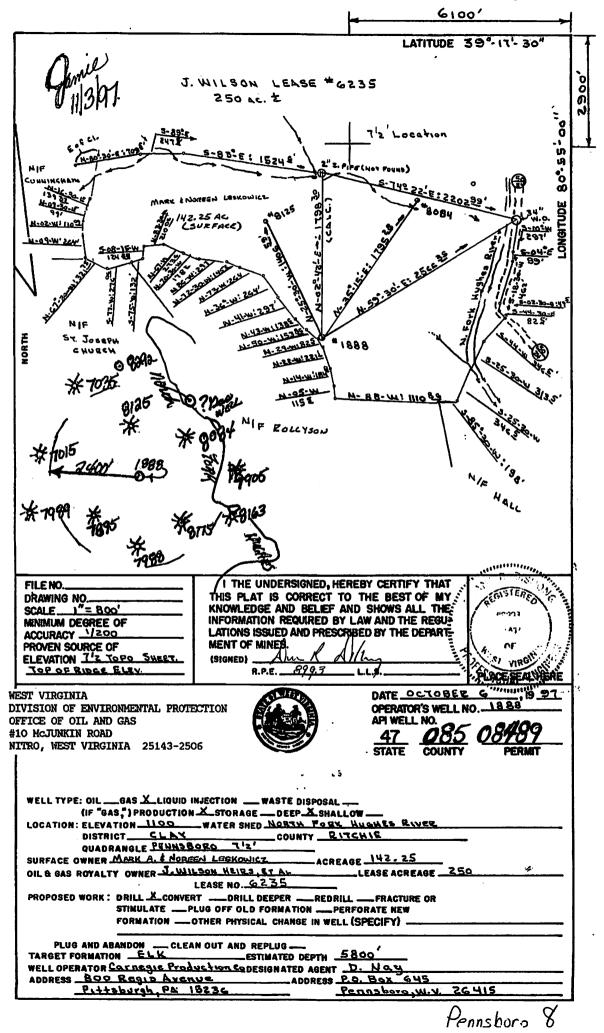
<u>2 stage</u>
 Perforated Benson and Riley Formations (4872'-5005') 14 shots. Treated with 500 gal. 15% HCL, 60 Q Foam, 500 sks.
 20/40 sand and 447,000 SCF of N<sub>2</sub>, B.D. 1924 psi, MTP 3355 psi, ATP 3086 psi
 @ BPM rate, ISIP 2466 psi.

3<sup>rd</sup> Stage Perforated Riley Formation (4632'-4646') 14 shots. Treated with 500 gal. 15% HCL, 60 Q Foam, 50 sks. 80/100 sand, 400 sks. 20/40 sand and 408,000 SCF of N<sub>2</sub>, B.D. 1888 psi, MTP 3236 psi, ATP 2520 psi @ BPM rate, ISIP 1236 psi.

(FT) 0	(FT)
	1990
1990	2036
2036	2105
2105	2190
2190	2401
2401	2512
2512	3482
3482	3562
3562	3854
3854	4406
4406	4487
4487	4880
4880	4996
4996	5004
5004	5190
5190	5311
5311	5592 TD
	2036 2105 2190 2401 2512 3482 3562 3854 4406 4487 4880 4996 5004 5190

Office of Oil and Gas JUN 0 5 2018 Environmental Protection

(1) 11 11



WW-4A Revised 6-07

	85-08489

1)	Date:	May 21, 2018
	102.40	Source as second as a second s

2) Operator's Well Number

657436 Wilson #1888

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

4)	Surface Ow	ner(s) to be served:	5) (a) Coal Operator	
	(a) Name	See Attached	Name	
	Address		Address	
	(b) Name		(b) Coal Own	ner(s) with Declaration
	Address		Name	See Attached
			Address	
	(c) Name		Name	
	Address		Address	
6) I	nspector	Michael Goff	(c) Coal Less	see with Declaration
	Address	1723 Auburn Road	Name	
		Pullman WV 26421	Address	4
	Telephone	304-549-9823		

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

The plat (surveyor's map) showing the well location on Form WW-6. (2)

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	
OFFICIAL SEAL NOTARY PUBLIC	Its:	Regional Land Supervisor	
STATE OF WEST VIRGINIA REBECCA L. WANSTREET	Address	2400 Ansys Drive, Suite 200	
EQT PRODUCTION COMPANY PO BOX 280		Canonsburg PA 15317	Office RECEIVED
BRIDGEPORT, WV 26330 My commission expires April 07, 2020	Telephone	(304) 848-0035	Office of Oil and Gas
			UN 0 5 2010
Subscribed and sworn before me this	angti	ay of June 2018 Notary Public	WV Department of Environmental Protection
My Commission Expires4	-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 depprivacyoffier@wv.gov.

3) API Well No.: 47 -085

08489

#### 47-085-08489

## 657436 (Wilson #1888)

## **Owner(s)** (Surface and Access)

Mark A. Leskowicz and Noreen Leskowicz 1325 River Road Pennsboro, WV 26451

## Coal Owner(s):

Wilson-Johnson Family LLC 3315 Higley Road Rocky River, OH 44116

ET Blue Grass 625 Liberty Ave., Suite 1700 Pittsburgh, PA 15222

Susie Perkins 1903 35th St. Parkersburg, WV 26104

Benjamin Weekley Rt 1 Box 53 Pennsboro WV 26415

## Potential Water Owner(s):

N/A

Office of Oil and Gas JUN 0 5 2018 Environmental Protection

WW-4B

# 85-084898

47-085-08489		
J. Wilson		
657436 Wilson #1888		
	J. Wilson	

## 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 then 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  $\_$  X / 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: 531/18

By: Jason Ranson Its EQT Director, Drilling -Land; AIF for E.T.Bluegrass

Office of Oil and Gas JUN 0 5 2018 WV Department of Environmental Protection

## 85-08489 P

My commission expires April 07, 2

WW-9 (5/16)

API Number 47	-	085	- 08489
Operator's Well	No	657436	Wilson #1888

#### 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)_Hughes River Quadrangle Pennsboro
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 Ves 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 systembe 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 2. Sh	UN 0 -
Company Official (Typed Name) Erin Spine	JUN 0 5
Company Official Title Regional Land Supervisor	Environmental Protection
Subscribed and swom before me this 1st day of the	, 2018
My commission expires <u>4-7-2020</u>	Notary Public OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA REBECCA L. WANSTREET EOT PRODUCTION COMPANY PO DOX 280

## Operator's Well No.\_657436 Wilson #1888\_\_\_

Proposed Revegetation Trea	utment: Acres Disturbed 1:	± Preveg etation pl	ł
Lime 3	Tons/acre or to correct	ct to pH 6.5	
Fertilizer type (10	0-20-20) or equivalent		
Fertilizer amount	I/3 ton	lbs/acre	
Mulch 2		_Tons/acre	
		Seed Mixtures	
Т	emporary	Perma	nent
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:						
Comments:						
					UN 0	ENED
					JUN 0.5	Tand Gas
					Environment	<u18< td=""></u18<>
Title:				Date:	Environmental P	otection
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

Office RECEIVED of Oli and Gas JUN 0 5 2018 WV Department of Environmental Protection

# 85-084-89 P

Topo Quad:	Pennsboro 7.5'	Scale:	1" = 400'	
County:	Ritchie	Date:	May 11, 2018	
District:	Clay	Project No:	68-38-00-08	
	47-085-08489 WV 657	7436 (J.	Wilson #1888)	Торо
	Pit Loca	tion Map	1 v	
	1 620		R:	
1110	MARCE		C.	V
R				7
			2140	00
				2/11
	Existing V		115	
	Access R	bad	$M \sim 1$	
	alle		111/	
1	47-085-08489	000	11.25	
5	WV 657436	-90-	NAD 27, N:28875 E:15927	North Zone 7.36 <sup>0</sup> ffice of Oil at 24.45
2111	8	0	L. 139217	7.36 <sup>Office RECEIVE 24.45 WV Dep</sup>
LEGEN		100	WGS 84 LAT:39.2	WV Department 83939tal Protection 0.938706
Proposed P	it Location	1×	LONG:-8 ELEV:11	0.938706 <sup>vec</sup> 65.11
LEGHA	SURVEYING AND MAPPING SERVICES PERFOR		PARED FOR:	
T CONTRACTOR	ALLEGHENY SURVEYS	5, INC.   E	EQT Production Co 2400 Ansys Drive	ompany
SURVEYS.	237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608		Canonsburg, PA 15317	

						85-084-89 P
Topo Quad:	Pennsbo	ro 7.5'	Sca	ale:	1" = 500'	
County:	Ritchie		Dat	e:	May 11, 2018	
District:	Clay		Pro	ject No:	68-38-00-08	
Highway	47-08	85-08489	WV 65743	6 (J.	Wilson #	1888)
			Pit Location	Мар	<u>50</u> 24	
			Existing Well		North	Fork
	47	-085-08489	Access Road		Tughes	Ottic RECT
	Ф <sub>V</sub>	VV 657436			River	Office of Oil and Gas JUN 0 5 2018 Environmental Protection NAD 27, North Zone N:288757.36 E:1592724.45
	<b>ID</b> Pit Location					WGS 84 LAT:39.283935 LONG:-80.938706 ELEV:1165.11
HE LY O SURVEY			iver Road WV 26610 549-8606		2400	<b>Ction Company</b> Ansys Drive burg, PA 15317

				85-0	08489 P
Topo Quad:	Pennsboro 7.5'	Scale:	1'' = 2000'		
County:	Ritchie	Date:	May 11, 2018		
District:	Clay	Project No:	68-38-00-08		
	47-085-08489 WV 657	436 (1	Wilcont	4000)	Торо
Sala		400 (0.	WIISOII #	, (000)	
San	2 La com	5	515	USI	29
BADE		00	5500-	201	
1100	1 RANNOF	T.P.	JUSS	Joh	
(A)	RADIEL.	No F	1 Cz	26	P
HOURTHANDR	MCDOUGAL DR	1 on affect	1000	N	0001
	5900			15V	120
STA		) (and		SJSPE	2 m
	and the second		- and	525	10
after ST	1200 1200	5	Pennsbore Supply	Water	8
E ANNIES AVE		47-085-084	189	100	- Store
A RO AVE	100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 -	10 WV 65743	36	(1000) /10	Suich
51100	N Bend Rail Trail	NAUAN	)>K	1201	ARIA
NY CAN	CORD 50/23	J. J.	12	1000 1000	CORD
3112	12 and the	Vail	AS C	2721	S.Bun.
1000 300	S S S B		80	JUS.	XI
A Carlo	50 00 10 10	15-	1100	NAD 27, No	orth Zone
5 1000	ALDRES		2576	N:288757 <sub>8</sub> 3 E:15927240	CENED
SER	Long Ruit & 1100		200	WGS 84	5 2018
3110	and the second second		00-	LATMERITE	935
EGH	SURVEYING AND MAPPING SERVICES PERFORMED	. 900 mm	RED FOR:	ELEV:1165.	11
TT CARE	ALLEGHENY SURVEYS,		QT Produc	tion Com	pany
SE CON	1-800-482-8606 237 Birch River Road Birch River, WV 26610		2400 A	Ansys Drive urg, PA 15317	Party
VEYS	PH: (304) 649-8606 FAX: (304) 649-8608				

WW-7	
8-30-06	



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

API: WELL NO.: WV 657436 (Wilson #1888)							
FARM NAME: J, Wilson							
RESPONSIBLE PARTY NAME: EQT Production Company							
COUNTY: Ritchie DISTRICT: Clay							
QUADRANGLE: Pennsboro 7.5'							
SURFACE OWNER:Mark & Noreen Leskowicz							
ROYALTY OWNER: Orma M. Wilson Johnson							
UTM GPS NORTHING: 4348288							
UTM GPS EASTING: 505286 GPS ELEVATION:355 m (1165 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:

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.

05#2180 e <u>Fron</u> Signature

Environmental Protection

Office of Oll and Gas



## Miss Utility of West Virginia (WV811) (Exhibit A) Directions to Gas Well No. WV 657436 API No. 47-085-08489

- Beginning at the intersection of US Interstate 79 Exit 119 (Clarksburg/Bridgeport) and US Route 50 in Harrison County, WV.
- Proceed West on US Route 50, for approximately 37.4 miles, to the intersection of WV County Route 10. (*Point No. 1*)
- Turn right onto WV County Route 10 and proceed Northeast, for approximately 0.3 mile, to WV County Route 50/43, on the left. (*Point No. 2*)
- Turn left onto WV County Route 50/43 and proceed Southwest, for approximately 0.4 mile, to the intersection with WV County Route 50/40. (*Point No. 3*)
- Continue straight onto WV County Route 50/40 and proceed Northwest, for approximately 0.7 mile, to WV County Route 50/24, on the right. (*Point No. 4*)
- Turn right onto WV County Route 50/24 and proceed North, for approximately 1.3 miles, to the Well Access Road, on the left. (*Point No. 5*)
- Turn left onto the Well Access Road and proceed Southwest, for approximately 0.72 mile, arriving at Gas Well WV 657436. (*Point No. 6*)

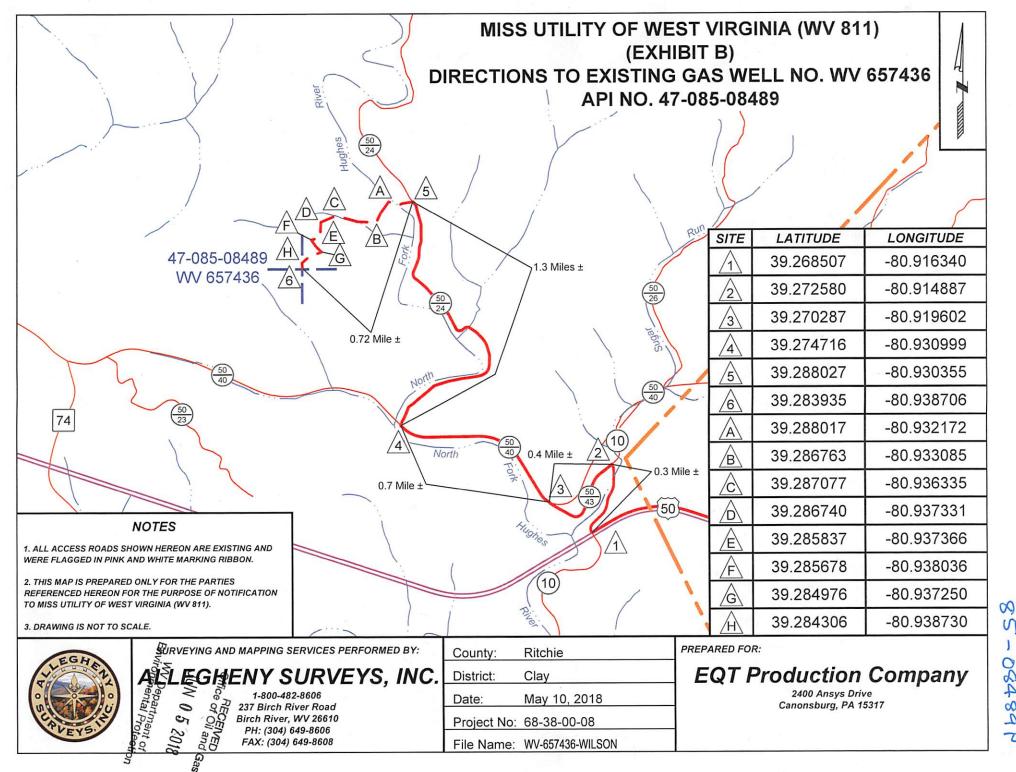
Office of Oil and Gas JUN 0 5 2018 WV Department of Environmental Protection

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 Road Alum Creek, WV 25003 phone: 304-756-2949 fax: 304-756-2948

ALLEGHENYSURVEYS.COM



85-08489 P



## POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY LEASE NAME AND WELL No. J. Wilson #1888 - WV 657436 - API No. 47-085-08489

## POTENTIAL SAMPLE LOCATIONS

There appears to be no potential water sources within the required 1000 feet of the existing well WV 657436.

Office of Oil and Gas JUN 0 5 2018 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 Road Alum Creek, WV 25003 phone: 304-756-2949 fax: 304-756-2948

ALLEGHENYSURVEYS.COM

85	- (	28	4	89	۴
----	-----	----	---	----	---

Topo Quad:	Pennsboro 7.5'	Scale: 1" = 2000'	
County:	Ritchie	Date: May 11, 2018	
District:	Clay	Project No: 68-38-00-08	
Water	47-085-08489 WV 657	7436 (J. Wilson #1	1888)
2 los		Sources within 1000'	
Dour L	1.43 L100	8	
HOUHTAIN OR			Show Sol
	900 MCDOUGAL DR		A CAR
Later and Later		-08489 57436	33200
CREV SI	1200 1200	Supply L	ake and the stud
E MYLES AVE		1.42 Mag	1000 SuleAR Pro
51100 1100	N Bend Rail Trail OLD US HWY SO CO RD 50/23	No Pol	(1/20 / 200 / CO RD
- and			
	500 00 100	1100	NAD 27, North Zone N:288757.3000 Fecerved E:1592724,45 WGS 84 100 0 5 2018
	Real Long Run av 100	2000 1000 1000	WGS 80 Department of LAT:39.283990 Department of LONG:-80.938706 Ction ELEV:1165.11
E GHENY O UN	SURVEYING AND MAPPING SERVICES PERFORM <b>ALLEGHENY SURVEYS</b> 1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608	, INC. EQT Produc	<b>Ction Company</b> Ansys Drive burg, PA 15317