

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, November 2, 2018
WELL WORK PLUGGING PERMIT
Vertical Plugging

ROSS AND WHARTON GAS COMPANY, INC. RT. 5. BOX 29

BUCKHANNON, WV 262010000

Re: Permit approval for 2-S-85 47-015-01775-00-00

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: 2-S-85

Farm Name: BALL-HARDMAN

U.S. WELL NUMBER: 47-015-01775-00-00

Vertical Plugging
Date Issued: 11/2/2018

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.

WW-4B Rev. 2/01

1) Date August 29	,	20_18
2)Operator's		
Well No. Hardman #2		
3) API Well No. 47-015		- 1775

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

	APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON	
4)	Well Type: Oil/ Gas X/ Liquid	d injection/ Waste	disposal/
	(If "Gas, Production or Unc	derground storage) [Deep/ Shallow X
5)	Location: Elevation 1162'	Watershed Dawson Fork	
	District Otter	County Clay Quadr	cangle Chloe
6)	Well Operator Ross & Wharton Gas Co. Inc.	7)Designated Agent Mike	Ross
·	Address 354 Morton Ave.	Address P.O.	
	Buckhannon, WV 26201		on, WV 26257
			RECEIVED
8)	Oil and Gas Inspector to be notified	9) Plugging Contractor	Office of Oil and Gas
0)	Name Jeremy James	Name N/A	
	Address P.O. Box 36	· · · · · · · · · · · · · · · · · · ·	OCT 0 3 2018
	Clendenin, WV 25045	Address	
	Clerideriiri, WV 25045		WV Department of
			nvironmental Protection
į	6% Gel between plug's Set cement plug 1850' to TD (2220') Set 100' cement plug across casing consect cement plug 1100' to 1200' elevate Set cement plug 800' to 900' (salt beautoes set cement plug 270' to surface, (8"castand surface plug) Tag plug's as neces	ut ion plug aring strata) sing plug, freshwater p	protection plug
	ification must be given to the district oi	l and gas inspector 24 h	ours before permitted
Nor)	c order approved by inspector	Dat	e 10-3-18



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

Oil and Gas Division

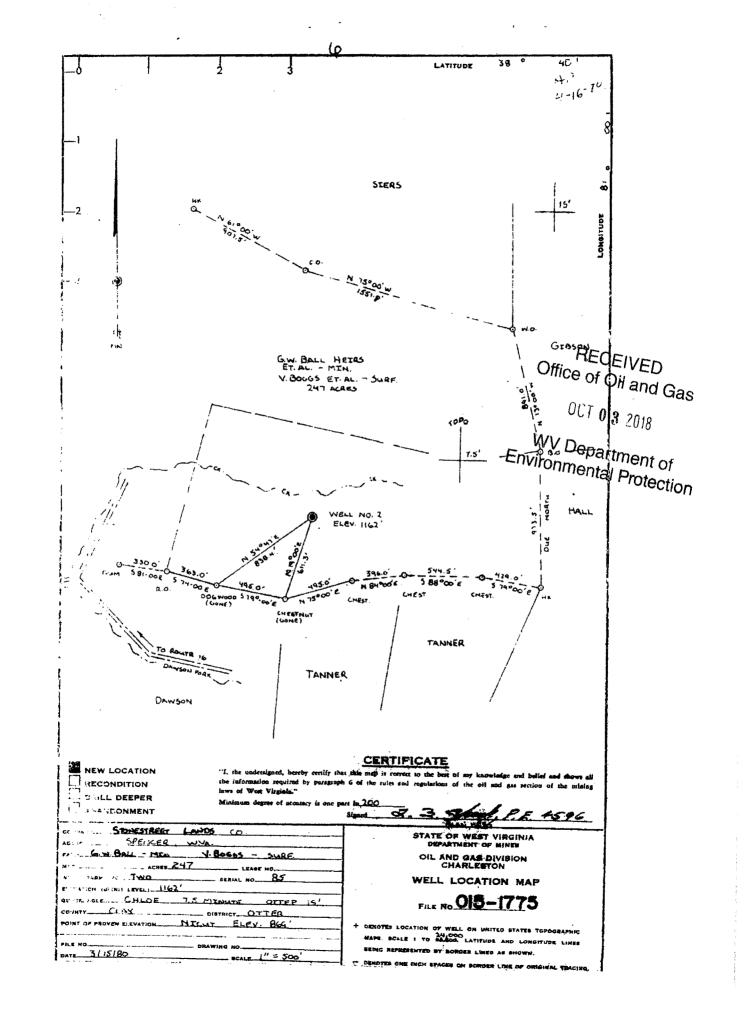
		WELL	RECORD		Rotary_X	Oil	_
Quadrangle Otter					Cable	Gas_X	•
	- 77C				Recycling	Comb.	_
Permit No. 47-015-1	//5				Water Floo	d Storage	
					Disposa!	(Kind)	•
Company Stonestre	eet Lands Compar	ly					.
	350, Spencer, WV		Casing and	Used in	Left	Cement fill up	
Farm Hardman	Ar	res 247	Tubing	Drilling	in Well	Cu. ft. (Sks.)	
Location (waters)	Dawson Fork				 		
Well No. 2-S-85	Ele	1162'	Size 20-1 6				
District Otter		ay	Cond.	İ			
The surface of tract is o	owned in fee by V.	Boggs	13-10"				
			9 5/8		<u> </u>		
Address	······································		8 5/8	220	220	60 sks.	
Mineral rights are owner	d by George W. B	all, et al	7			oo sks.	
Address			5 1/2				
	5-12-80		4 1/2		2220	70 sks.	
	5-21-80		3			, o and .	
Initial open flow Not	tested cu. ft.	0 bbls.	2				
Final production860.00	00_cu. ft. per day	0 hhis	Liners Used				
Well open6	hrs. before test 5	60 RP.					PEOP
Vell treatment details:			Attach copy of	cementing recor	.a	O4	RECEIVED
500 gal. 1	15% HCL, 30,000	1bs 20/40	sand	cententing tecor	u.	On	ICE of Oil and C
15 gal F-5	52, 15 gal free	flo C 300	1bs J-266	· · · · · · · · · · · · · · · · · · ·			ice of Oil and Gas
		······································					ACTOO
							OCT 0 3 2018
			······································	······································		160	
	N						Department of
Coal was encountered at fresh water 66				inches		ENVIRO	nmental D
	njun Blue Monda	·	———— Sait	Water h 1996 to 21		Feet	nmental Protection
roducing Sante	nigon brue nonce	<i>y</i>	Dept	h 1990 to 21	12		
Formation Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or	Water •	Remarks	
C2 m		_					
Clay Sand		0	9				
Shale		9 264	264				
Sand		204 511	511				
Slate & Shale		616	616 888				
Red Rock		888	935	1			
Shale		935	1073				
Sand Sandy Shale		1073	1300				
Shaley Sand		1300	1474				
Shale		1474 1487	1487				
Shale & Slate	1	1520	1520 1584				
Salt Sand			1 1384				
Shale	***						
	SE CONTRACTOR	1584 1645	1645				
Salt Sand	***************************************	1584 1645 1670	1645 1670 1712				
Salt Sand Shale		1584 1645 1670 1712	1645 1670 1712 1728				
Salt Sand Shale Salt Sand		1584 1645 1670 1712 1728	1645 1670 1712 1728 1762				
Salt Sand Shale Salt Sand Shale		1584 1645 1670 1712 1728 1762	1645 1670 1712 1728 1762 1770				
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Salt Sand Shale Salt Sand Shale Sandy Shale Salt Sand		1584 1645 1670 1712 1728 1762 1770	1645 1670 1712 1728 1762 1770 1818				

(over)

* Indicates Electric Log tops in the remarks section.

er Hand or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
ay	1959 1993 2025 2030 2161 2208	1993 2025 2030 2161 2208 2254	ТО	
				RECEIVED Office of Oil and Gas
				WV Department of Environmental Protection
		ay 1993 ve 2025 2030 2161 2208	ay 1993 2025 2030 2030 2161 2208 2254	ne 1959 1993 2025 2030 2030 2161 2208 2254 TD

APPROVED By Translation (Little)



KELLY L FISHER
Notary Public Official Seal
State of West Virginia
My Comm. Expires Sep 9, 2022
782 Geshen Rd. Reck Cave Wy 26234

WW-4A Revised 6-07

gust 29, 2018	
ll Number	
	ll Number

015

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

3) API Well No.: 47 -

Address (b) Name Address (c) Name Address 6) Inspector Address 6	eremy James	Name Address (b) Coal O Name Address Name Address	wner(s) with Declaration N/A
(b) Name Address (c) Name Address 6) Inspector Address 6	uray, VA 22835 eremy James	(b) Coal O Name Address	
(b) Name Address (c) Name Address 6) Inspector Address 6	eremy James	Name Address Name	
(c) Name Address 6) Inspector Address		Name Address Name	
(c) Name Address 6) Inspector Address F		Address Name	
Address 6) Inspector Address F		Name	
Address 6) Inspector Address F			
Address 6) Inspector Address F			-
6) Inspector Address		Address	
Address			PEGE
Address			Office DECEIVED
0		(c) Coal Le	ssee with Declaration Office of Oil and Gas
and the second s	O. Box 36	Name	N/A Gas
TT 1 1	lendenin, WV 25045	Address	007 0 2 220
Telephone 1	-304-951-2596		2 0 2 U B
			WV Department of eived this Form and the Wireythe documents of Protection
Take notice that accompanying of Protection, with the Application	re not required to take any action at all. t under Chapter 22-6 of the West Virginia Coloruments for a permit to plug and abandon respect to the well at the location describe	Code, the undersigned well as well with the Chief of the don the attached Applicated or certified mail or discountered or certified mail or discountered.	I operator proposes to file or has filed this Notice and Application and the Office of Oil and Gas, West Virginia Department of Environmental tion and depicted on the attached Form WW-6. Copies of this Notice, elivered by hand to the person(s) named above (or by publication in
	Well Operat	or Ross & Wharton Gas	s Co Inc.
	By:	141.11	· ^ ^
	Its:	Mille	e Moss
	Address	354 Morton Ave.	
	Address	Buckhannon, WV 2	06204
	Telephone	1-304-472-4289	.0201
	reiephone	1-304-472-4209	
Subscribed and sw	orn before me this 2014	day of Septe	mbee, 2018 Notary Public
My Commission Ex	pires September	9 2022	

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.

WW-9 (5/16)

API Number	47 -	015	_ 1775	
Operator's W	The Late			

792 Goshen Rd. Rock Cave WV 26234

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Ross & Wharton Gas Co. Inc.	OP Code 306580
Watershed (HUC 10)	Quadrangle
Do you anticipate using more than 5,000 bbls of water to con-	nplete the proposed well work? Yes No
Will a pit be used? Yes No ✓	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes	
Proposed Disposal Method For Treated Pit Wastes:	RECEIVED
	ride a completed form WW-9-GPP) Office of OH and Gas
Underground Injection (UIC Pen Reuse (at API Number	mit Number
Off Site Disposal (Supply form V	/W/ 0 for disposal location)
Out of the	WV Danarton
	Environmental Protectio
Will closed loop systembe used? If so, describe:	
Drilling medium anticipated for this well (vertical and horizon	intal)? Air, freshwater, oil based, etc.
-If oil based, what type? Synthetic, petroleum, etc.	
Additives to be used in drilling medium?	
	ed offsite, etc.
	be used? (cement, lime, sawdust)
	d Cas of any load of drill cuttings or associated waste rejected at any ed within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Cas of the West V provisions of the permit are enforceable by law. Violations of or regulation can lead to enforcement action. 1 certify under penalty of law that I have personal application form and all attachments thereto and that, based of	d conditions of the GENERAL WATER POLLUTION PERMIT issued virginia. Department of Environmental Protection. I understand that the fany term or condition of the general permit and/or other applicable law ally examined and am familiar with the information submitted on this on my inquiry of those individuals immediately responsible for obtaining rate, and complete. I am aware that there are significant penaltics for imprisonment.
× -7H	1 + 1
Subscribed and sworn before me this 20 day of	September 20/8
July of taker	Notary Public
My commission expires September 9	2022
	KELLY L FISHER Notary Public Official Seal State of West Virginia My Comm. Expires Sep 9, 2022

Proposed Revegetation Treatm	ent: Acres Disturbed 1	Preveg etat	tion pH 6.5
	Tons/acre or to correct to		
Fertilizer type 10-20			
Fertilizer amount_500		lbs/acre	
		ons/acre	
		Seed Mixtures	
Tem	porary	P	Permanent
Seed Type	lbs/acre	Seed Type	lbs/acre
Contractor's Mix Fescue	30	Contractor's Mix Fescue	30
Maps(s) of road, location, pit a rovided). If water from the pit	t will be land applied, provide	oplication (unless engineered plans de water volume, include dimension	
provided). If water from the pirtle. W), and area in acres, of the	t will be land applied, provide e land application area.		
Maps(s) of road, location, pit a rovided). If water from the pit W), and area in acres, of the	t will be land applied, provide e land application area.		ns (L, W, D) of the pit, and dimens RECFIVED
Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the Photocopied section of involve	t will be land applied, provide land application area.		ns (L, W, D) of the pit, and dimens
Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the Photocopied section of involve Plan Approved by:	t will be land applied, provide land application area.		ns (L, W, D) of the pit, and dimens RECFIVED
Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the Photocopied section of involve	t will be land applied, provide land application area.		RECEIVED Office of Oil and
Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the photocopied section of involve that Approved by:	t will be land applied, provide land application area.		RECEIVED Office of Oil and
Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the photocopied section of involve that Approved by:	t will be land applied, provide land application area.		RECEIVED Office of Oil and
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Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the Photocopied section of involve Plan Approved by:	t will be land applied, provide land application area.		RECEIVED Office of Oil and
Maps(s) of road, location, pit a provided). If water from the pit L. W), and area in acres, of the Photocopied section of involve Plan Approved by:	t will be land applied, provide land application area.		RECEIVED Office of Oil and

WW-9- GPP Rev. 5/16

Page	of Z
API Number 47 - 015	- 1775
Operator's Well No.	

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

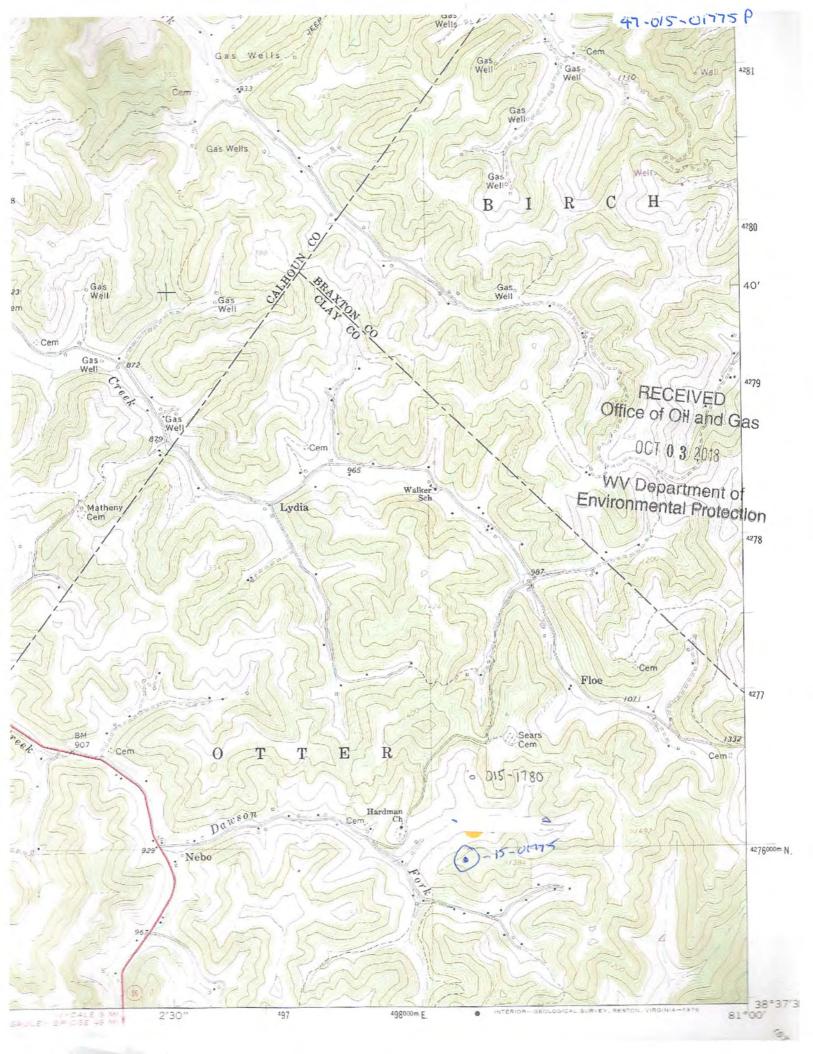
Operator Name: Ross & Wharton Gas Co. Inc. Vatershed (HUC 10): Dawson Fork	Quad: Chloe
	Quad. Sinss
arm Name:	
 List the procedures used for the treatment and discharge groundwater. 	e of fluids. Include a list of all operations that could contaminate the
N/A	
Mario Pro Principal Control of the C	
. Describe procedures and equipment used to protect grou	indwater quality from the list of potential contaminant sources above
N/A	
	RECEIVEL Office of Oil and
	Office of Oil and
List the closest water body, distance to closest water b	body, and distance from closest Well Head Protection Area to the
discharge area.	WV Departmental Pro
Daniela Fall	Environmontal
Dawson Fork	- Troilliental Pro
Dawson Fork	
Dawson Fork	and the first pro-
Dawson Fork	Proj
Dawson Fork	Proj
Dawson Fork	Proj
Summarize all activities at your facility that are already to	
Summarize all activities at your facility that are already to	
Summarize all activities at your facility that are already to	

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

W-9- GPP v. 5/16	Page of API Number 47 Operator's Well No
N/A	
Provide a statement that no waste material will be used to	for deicing or fill material on the property.
No material will be used	
Describe the groundwater protection instruction and tra- provide direction on how to prevent groundwater contar	aining to be provided to the employees. Job pr最级医科细口 mination. Office of Oil and Gas
N/A	OCT 0 3 2018
	WV Department of Environmental Protection
Provide provisions and frequency for inspections of all C	GPP elements and equipment.
I/A	
	GPP elements and equipment.

Signature:

Date:



WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-015- 21775	WELL:	
FARM NAME: Hardman		
		PRINTOR SO MILARTON GAS COMMUN, le
COUNTY: Clay	DISTRICT	Otter
QUADRANGLE: Chloe		
SURFACE OWNER: Verno	on G. Boggs & G.	V. Boggs, Jr.
ROYALTY OWNER: Mike	Ross	
UTM GPS NORTHING: 427		
UTM GPS EASTING: 4982	43.8 GPS EL	EVATION: 1162'
그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	d Gas will not accept GPS concerns. If North, Coordinate Una level (MSL) – meters. 3.05 meters od:	ordinates that do not med VED Office of Oil and Gas nits: meters, Altitude: OCT 0 \$ 2018 WV Department of
	Il-Time Differential	rotection
Mapping Grade GPS: I	Post Processed Differential _	
	Real-Time Differential	13,45,97
 Letter size copy of the I the undersigned, hereby certify belief and shows all the informat prescribed by the Office of Oil are 	ion required by law and the re	of my knowledge and
Wike Koss	President	9-20-18
Signature	Title	Date