

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

Wednesday, June 3, 2020 WELL WORK PLUGGING PERMIT Vertical Plugging

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

BUCKHANNON, WV 262010000

Re: Permit approval for SHARP 2 47-015-02143-00-00

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: SHARP 2

Farm Name: COEN, JAMES

U.S. WELL NUMBER: 47-015-02143-00-00

Vertical Plugging Date Issued: 6/3/2020

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 February 24 ,	20 20
2)Operator's	
Well No. Sharp#2	
3) API Well No. 47-015	- 02143

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	l injection/ Waste disp	osal/
	(If "Gas, Production or Unc	derground storage) Deep	/ Shallow X
5)	Location: Elevation 1239	Watershed Mudfork Run	
,	District Otter	County Clay Quadrangl	_e Ivydale
6)	Well Operator Ross & Wharton Gas Co. Inc.	7)Designated Agent Mike Ross	
0,	Address 354 Morton Ave.	Address P.O. Box 2	
	Buckhannon, WV 26201	Coalton, W	
8)	Oil and Gas Inspector to be notified Name Jeremy James Address P.O. Box 36 Clendenin, WV 25045	9)Plugging Contractor Name_N/A Address	
	Work Order: The work order for the manner Free point and recover casing's & tube 6% Gel between plug's Set cement plug 2200' to TD (2464')	ular's	RECEIVED Office of Oil and Gas MAR 26 2020
	, ,		WV Department of Environmental Protection
	Set 100' cement plug across casing co		Environmental Protection
,	Set cement plug 1850' to 1950' Blue N	londay	
,	Set cement plug 1200' to 1300' (salt b	earing strata) elevation pl	ug
;	Set cement plug 250' to surface,(8"cas	sing plug, freshwater prote	ection plug
	and surface plug) Tag plug's as neces	sary, Set monument with	API number
			,
	fication must be given to the district oi	l and gas inspector 24 hours	before permitted
Work	c order approved by inspector	Date	3-17-2020

JUN - 6 1983

Static rock pressure



IV. 55 (Hev 8-81)

DEPT. OF MINE State of West Hirginia

Date	Hecember 7, 1982	
Quital	or's	•
Well N	o. 2-S-287	
Farm	Sharp	
API No	_	•

			^-	***************************************	
Department	-		Sharp		
Gil und Gi	noivid u	API NO	1. <u>47</u>	015 - 2	143
WELL OPERATO		•		Off	RECEIVED fice of Oil and Gas
DRILLING, PRACTURING AND/OR STI	MULATING,	OR PHYSIC	AL CHANCE	,	1AD 0 0 0000
(**			: N	MAR 26 2020
WELL TYPE: Oil / Casx / Liquid Injecti (If "Gas," Production X / Undergr	on_/Was	te Disposi ge/ Dec	il/ :p / Sh	W Allow Envir	V Department of onmental Protecti
LOCATION: Elevation: 1239 Watershed					
			7		
District: Otter County Cla	-3	_Quacirangi	e ivyo	116	
COMPANY Stonestreet Lands Company	**********				
AODRESS P.O. Box 350 Spencer, W.Va. 25276	ſ	T	Υ	10	n
DESIGNATED AGENT O.V. Stonestreet	Casing	Used in	i	Cement fill up	
ADDRESS P.U. Box 350 Spencer, W.Va. 25276	Tubing	Drilling	in Well	Cu. ft.	
SURFACE OWNER James L. Coen	Size 20-16				
ADDRESS% Michael Coen 112 W.Dixie Blv. Clizabet					
MINERAL RIGHTS CHINER Moodrow Metheney, Ltals	" <u>13-10"</u>				
ADDRESS Nebo, W.Va.	4 5/8				1
OIL AND GAS INSPECTOR FOR THIS WORKMartin	8 5/8	204	204	60 sks] .
Nichols ADDRESS P.O. Box 554 Clendenin, Wy	7		· · · · · · · · · · · · · · · · · · ·	-	1
	5 1/2		····		
PERMIT ISSUED April 19, 1982	4.1/2	 	2370	70 sks rfc	
DRILLING COMMENCED 4-28-82	3		2370	70 SKS PTC	
DRILLING CUMPLETED 5-8-82	2	 	**************************************		
OPPLICABLE: PLUGGING OF DRY HOLE ON OPPLICABLE: PLUGGING OF DRY HOLE ON	 				
REMURKING. VERBAL PERMISSION OFFAINED	Liners				<u> </u>
ON	useni				
GEOLOGICAL TAKEET FORMATION Big Injun			220		I
Depth of completed well 2464 feet I		Copt_	n 2368	feet	
Water strata depth: Fresh 485 feet:	wtary^	_/ Cable	Tools		
Coal seam depths: None	Salt				
	is coal t	eing mine	in the	area? No	
DEN FILW DATA					•
Producing formation Big Injun	l'ay	zone depti	2329	feet	
Cas: Initial open flow 60 Mcf/d	Oll: Init				•
Final open flow 540 Mcf/d		l open fic	,		
Time of open flow between initi	al and tin	al toute	7	Bb1/d	•
Static rock pressure 620 psig(surface			A ()		Ę
If applicable due to multiple completion-	_) Dendura	rion tank	nour	s shut in	~
Second producing formation Blue Monday					N
Gaco Tolkini an an		zone depth		feet	4
Et and an article Eta	Oil: Init		-	T\$1/9	w
The second secon	Oil: Fina	l open flo	w0	np)\q	•
Time of open flow between initi	al and fin	al tests_	7 hou	rs	

(Continue on reverue side)

620 psig(surface measurement) after 48 hours shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STUMULATING, PHYSICAL CHANCE, ETC.

Perforation Intervals 2311-2329

Well Treatment

J-266 350 lbs. 20/40 sand 30,000 W-22 Anti sludging 36 gals. L-53 Caly control agent 20 gals. F-78 ezeflo surfactant 8 gals. 15% Acid HCL 2000 gals. 500 bbls. water A-200 Inhibitor 4 gals.

RECEIVED Office of Oil and Gas

MAR 26 2020

WELL LOG

WV Department of Environmental Protection

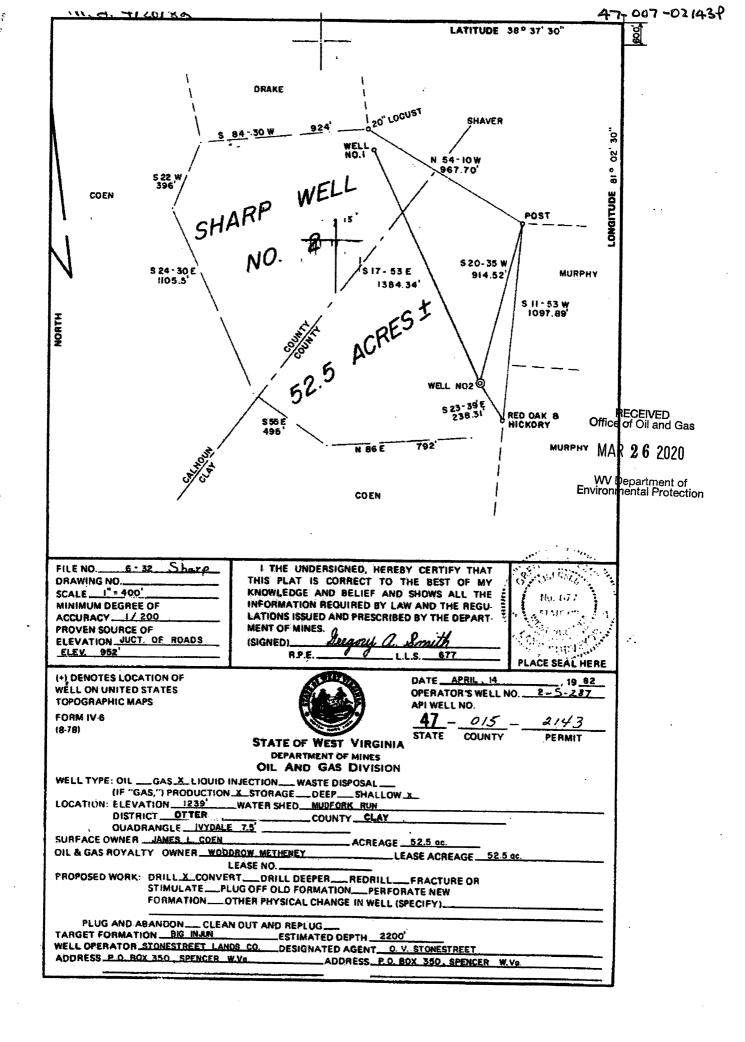
Clay Sand & Shale Sand & Shale Red Rock Sand & Shale	0 22 45 115 155 275 390	22 45 115 165 275 390	and salt water, coal, oil and ga
Sand Sand & Shale Red Rock Sand & Shale	22 45 115 155 275 390	45 115 155 275 390	
Sand & Shale Red Rock Sand & Shale Red Rock Sand & Shale Red Rock Sand & Shale	45 115 155 275 390	115 155 275 390	
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Sand & Shale ked Rock Sand & Shale Red Rock Sand & Shale	155 275 390	275 390	
ked Rock Sand & Shale Red Rock Sand & Shale	275 390	390	
Sand & Shale Red Rock Sand & Shale	390		
Red Rock Sand & Shale			
Sand & Shale		435	
	435	480	
	480	615	
Red_Rock	615	790	
Shale	790	830	
Sand	830	1000	
Sand & shale	1000	1110	
Shale	1110	1136	
Sand & Shale	1136	1270	
Shale	1270	1452	
Sand & Shale	1452	1550	•
Shale	1550	1706	
Sand & Shale	1706	1816	•
Shale	1816	1830	·
Sult sand	1830	1864	
Shale	1864	1970	
Salt sand	1970	2114	
Little Lime	2114	2144	
Pencil cave	2144	2182	
Big Lime	2187	2298	
Big Injun	7298	2368	
Shale	2368	2464	TD

(Attach separate sheets as necessary)

Stonestreet Lands Company General Manager

Regulation 2.02(i) provides us follows:

"The term 'loy' or 'well loy' shall mean a systematic detailed geological record of all formations, including ess!, encountered in the drilling of a well." Note:



WW-4A Revised 6-07

1) Date:	February 24, 2020	
2) Operator's V	Well Number	
Sharp #2		

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 -

	(a) Name	Troxel and/or Connie Methe	nev	Name	N/A	
	Address	974 Mud Fork Rd.	пеу	Address	IV/A	
	Address	Chloe, WV 25325		Address	-	
	(b) Name	Darrell Murphy		(b) Coal O	wner(s) with Decla	eration
	Address	2990 Clinic Rd.		Name	N/A	RECEIVED
	Address	Chloe, WV 25325		Address	14//	Office of Oil and Gas
		Office, VVV 20020		Address		1145 0 6 0000
	(c) Name			Name		MAR 2 6 ZUZU
	Address			Address		MAN / Department of
	71441655					WV Department of Environmental Protection
6) I	nspector	Jeremy James		(c) Coal Le	essee with Declara	tion
0.00	Address	P.O. Box 36		Name	N/A	
-	ridaress	Clendenin, WV 25045		Address		
	Telephone	1-304-951-2596				
	rotophone					
	(1) The well (2) The part of the reason	application to Plug and Ab its and the plugging work of plat (surveyor's map) showing you received these documents	andon a Well on order; and ng the well locat is that you have r	tion on Form WW-6.	h sets out the parties	involved in the work and describes the
	(1) The well (2) The particular the reason However, y Take notice accompany Protection, the Application	application to Plug and Ab its and the plugging work of plat (surveyor's map) showing you received these documents you are not required to take any that under Chapter 22-6 of the ring documents for a permit to with respect to the well at the	andon a Well on order; and ing the well locat is that you have r action at all. e West Virginia Coplug and abandon a location described mailed by registere	Form WW-4B, which ich is a polyton on Form WW-6. The ights regarding the applicate, the undersigned well well with the Chief of toon the attached Applicated or certified mail or designed.	h sets out the parties ication which are summand operator proposes to file the Office of Oil and Gas, tion and depicted on the a	
	(1) The well (2) The reason However, y Take notice accompany Protection, the Applic certain circ	application to Plug and Ab its and the plugging work of plat (surveyor's map) showing you received these documents you are not required to take any e that under Chapter 22-6 of the ring documents for a permit to with respect to the well at the ation, and the plat have been remstances) on or before the day of the company	andon a Well on order; and ing the well locate is that you have reaction at all. e West Virginia Coplug and abandon a location described mailed by registere y of mailing or deli	Form WW-4B, which ich is a polyton on Form WW-6. The ights regarding the applicate, the undersigned well well with the Chief of toon the attached Applicated or certified mail or designed.	h sets out the parties ication which are summand operator proposes to file the Office of Oil and Gas, tion and depicted on the allivered by hand to the parties of Co. Inc.	rized in the instructions on the reverses side. or has filed this Notice and Application and West Virginia Department of Environmental attached Form WW-6. Copies of this Notice,

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 - 0	15 .	02143
Operator's Well No.	Shari	#2

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Para Maria Cara da la	DISTOSA & RECENTATION TEAT
Operator Name Ross & Wharton Gas Co. Inc.	OP Code 306580
Watershed (HUC 10) Mudfork	
Do you anticipate using more than 5,000 bbls of water t	o complete the proposed well work? Yes No No
	ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS BEFORE DISPOSING OFF SITE.
If so, please describe anticipated pit waste:	No If so, what ml.?
Proposed Disposal Method For Treated Pit Wa	
	provide a completed form WW-9-GPP) RECEIVED Office of Oil and Gas
	MAR 2 6 2020
Off Site Disposal (Supply fo	rm WW-9 for disposal location)
Other (Explain	WV Department of Environmental Protection
Will be the second of the seco	
	orizontal)? Air, freshwater, oil based, etc.
	etc
	moved offsite, etc
	will be used? (cement, lime, sawdust)
-Landfill or offsite name/permit number?	
West Virginia solid waste facility. The notice shall be p	il and Cas of any load of drill cuttings or associated waste rejected at any rovided within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Gas of the V provisions of the permit are enforceable by law. Violatic or regulation can lead to enforcement action. I certify under penalty of law that I have pe application form and all attachments thereto and that, but the information, I believe that the information is true, submitting false information, including the possibility of Company Official Signature Company Official (Typed Name) Mike Ross Company Official Title President	ay of March , 20 30 OFFICIAL SEAL
My commission expires September 3	Notary Public STATE OF WEST VIRGINIA BRENDA K BUSH 20 GUM STREET BUCKHANNON, WV 26201 My Commission Expires September 27, 2020

			s Well No. Sharp#2
Proposed Revegetation Treatmen	nt: Acres Disturbed 1	Preveg etatio	_{n pH} 6.5
Lime 2	Tons/acre or to correc	t to pH 6.5	
Fertilizer type 10-20-2	20		
Fertilizer amount_500		lbs/acre	
_{Mulch} Hay		_Tons/acre	
		Seed Mixtures	
Тетро	orary	Per	rmanent
Seed Type Contractor's Mix	lbs/acre	Seed Type Contractor's Mix	lbs/acre
Fescue	30	Fescue	30
Maps(s) of road, location, pit and	d proposed area for land	l application (unless engineered plans in	cluding this info have been (L. W. D) of the pit, and dimensions
Maps(s) of road, location, pit and provided). If water from the pit v (L, W), and area in acres, of the	will be land applied, pro land application area.	l application (unless engineered plans in vide water volume, include dimensions	(L, W, D) of the pit, and dimensions
Maps(s) of road, location, pit and provided). If water from the pit v (L, W), and area in acres, of the Photocopied section of involved	will be land applied, proland application area. 7.5' topographic sheet.	l application (unless engineered plans in vide water volume, include dimensions	cluding this info have been (L, W, D) of the pit, and dimensions RECEIVED Office of Oil and Gas
Maps(s) of road, location, pit and provided). If water from the pit w (L, W), and area in acres, of the Photocopied section of involved	will be land applied, proland application area. 7.5' topographic sheet.	l application (unless engineered plans in vide water volume, include dimensions	(L, W, D) of the pit, and dimensions
Attach: Maps(s) of road, location, pit and provided). If water from the pit w (L, W), and area in acres, of the Photocopied section of involved Plan Approved by:	will be land applied, proland application area. 7.5' topographic sheet.	l application (unless engineered plans in vide water volume, include dimensions	(L, W, D) of the pit, and dimensions RECEIVED Office of Oil and Gas

(____)Yes (____)No

Field Reviewed?

WW-9- GPP Rev. 5/16

Page	of 2
API Number 47 - 015	- 02143
Operator's Well No.	Sharp #2

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

GROUNDWATER PROTECTION PLAN

Operator Name: Ross & Wharton Gas Co. Inc. Watershed (HUC 10): Mudfork Run	Quad: Ivydale
Watershed (HUC 10): Mudfork Run Farm Name:	
ann manc.	
 List the procedures used for the treatment and discharge o groundwater. 	f fluids. Include a list of all operations that could contaminate the
N/A	
2. Describe procedures and equipment used to protect ground	lwater quality from the list of potential contaminant sources above.
N/A	RECEIVED Office of Oil and Gas
	MAR 26 2020
	WV Department of Environmental Protection
 List the closest water body, distance to closest water bo discharge area. 	dy, and distance from closest Well Head Protection Area to the
Mudfork Run	
4. Summarize all activities at your facility that are already reg	gulated for groundwater protection.
N/A	

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

W W-9- GPP	Page 2 of 2	
Rev. 5/16	API Number 47 - 015 - 02143 Operator's Well No. Sheep # 3	
	operators	
N/A		
5. Provide a statement that no waste material v	will be used for deicing or fill material on the property.	
	The state of the s	
No material will be used		
7. Describe the groundwater protection instruprovide direction on how to prevent ground	uction and training to be provided to the employees. Job procedures shall dwater contamination.	
N/A		
	RECEIVED Office of Oil and Gas	
	MAR 2 6 2020	
	WV Department of Environmental Protection	
	Environmental Protection	
Provide provisions and frequency for insper	ections of all GPP elements and equipment.	
N/A		
Signature: Tille Roll	1	

Date: March 13, 2020



WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

WELLL	OCATION FORM. 015	
API: 47-015-1775 4	7-015-02143 WELL NO.: #2	2
FARM NAME: Sharp	7-015-02143 WELL NO.: #2	RECEIVED Office of Oil and Gas
RESPONSIBLE PARTY NAM	E: Mike Ross	MAR 2 6 2020
COUNTY: Clay	otte	WV Department of Environmental Protection
QUADRANGLE: Ivydale		
SURFACE OWNER: Troxel	or Connie Metheney	
ROYALTY OWNER:		
UTM GPS NORTHING: 427	4982.9	
UTM GPS EASTING: 49389	94.0 GPS ELEVATION	_{DN:} 1239'
preparing a new well location planabove well. The Office of Oil and the following requirements: 1. Datum: NAD 1983, Zoheight above mean sea 2. Accuracy to Datum – 3. Data Collection Method		PI number on the that do not meet
Réa	I-Time Differential	
Mapping Grade GPS: P	ost Processed Differential	
F	Real-Time Differential	
I the undersigned, hereby certify t	e topography map showing the well this data is correct to the best of my known required by law and the regulation d Gas.	nowledge and
tike Kost	President	March 13, 2020
Signature	Title	Date '