

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, October 23, 2019 WELL WORK PLUGGING PERMIT Vertical Plugging

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

BUCKHANNON, WV 262010000

Re:

Permit approval for B-446 47-033-02654-00-00

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: B-446

Farm Name: THOMAS E. WALLACE

U.S. WELL NUMBER: 47-033-02654-00-00

Vertical Plugging

Date Issued: 10/23/2019

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action</u>.

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-4BRev. 2/01

1) Date Octob	per 2	,	20 19
2)Operator	's	_	
Well No.	George \	/incent #B-44	16
3) API Well	No.	47-033	- 02654

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 derground storage) Deep / St	
	(11 das, 11 das et al. of one	derground storage beep/ Si	1allow
5)	Location: Elevation 1068'	Watershed Tenmile Creek	
	District Sardis	County Harrison Quadrangle Wallace	!
6)	Well Operator Ross & Wharton Gas Co. Inc.	7)Designated Agent Mike Ross	
	Address 354 Morton Avenue	Address P.O. Box 219	
	Buckhannon, WV 26201	Coalton, WV 26257	
8)	Oil and Gas Inspector to be notified Name Sam Ward Address P.O. Box 2327	9)Plugging Contractor Name N/A Address	
	Buckhannon, WV 26201		
•	Free point and recover casing's & tubu 6% Gel between plug's Set cement plug 3300' to TD (3949') 1 Set cement plug 2550' to 2750' oil shows Set 100' cement plug across casing curse cement plug 1700' to 1900' Big Liu Set cement plug 1000' to 1200' elevate Set cement plug 150' to surface, groundwater protection plug, and	oo' above top perf ow ow out, me tion plug and 8 5/8 casing plug	EIVED bil and Gas 1 2019 partment of the original Protection
Noti vork	fication must be given to the district oi can commence.	l and gas inspector 24 hours before	permitted
Vork	order approved by inspector	DWord F Date 10/11/	2019

IV-35 DECEIVE	
SEP 2 9 1983	

State of West Birginia

Date	Novem	hain 24 1	007	£:
Operat	or's	ber 24, 1	30.1	
Well N	b	B-446		_
Farm_	George 1	N. Vincen	t etux	
		633 -		ev.
		es con d		

	Department of				Vincent et	
OIL & GAS DIVISION "DEPT. OF MINES	Gil and Gas	Bivisian	API No	47 - 6	53 - 265	54 · R
	WELL OPERATOR	S REPORT		Reus.	se d	
DRILLING, FRACTURE	OF ING AND/OR SETME	CAPTING O	D DUVEYOR			
IL TYPE: Oil / Gas x / I	ionid Injection	/ Want	a Diemon		illow x /)	
CATION: Elevation: 1068'					entition, ,	
District: Sardis	County Harris			e Wallac	e 7.5)- -
	·			_		
MPANY Rerey Energy Consultants	& Mors.	<u>-</u>				₹
DORESS P.O. Box 5, Clarksburg.	WVA. 26301	Casing	Used in	Left	Cement	1
ESIGNATED AGENT Same		Tubing	Drilling	in Well	fill up Cu. ft.	
DORESS Sene URFACE OWNER George N Vincent et	SIEX	Size ₁₁₋₃		None '		1
DDRESS Rt. 1, Box 100 A26, Lumberp	art IVa	13-10"				1
INERAL RIGHTS OWNER Same		9 5/8				1
DORESS		8 5/8	1087'	1087'	To Surface	1
IL AND GAS INSPECTOR FOR THIS IN	DRK Stenhen I	7			10 041120	₹
asey Rt. 2 Box 232D Jane Lew,	WVa. 26378	5 1/2				1
ERMIT ISSUED October 6, 1981		4 1/2	3835'	3835'	0.45 ml	}
RILLING COMMENCED 11-17-8	1	3	3030	3633	245 Sks 50/50 POZ	┨
RILLING COMPLETED 11-23-8		2			30/30 702	1
f applicable: Plugging of Dry Onitinious progression from Drii. Emorkung. Verbal berðussion ob N	LING OR	Liners used				-
COLOGICAL TARGET FORMATION	Benson -		Dept	h 4800	feet	1
Depth of completed well 3		tary x	_/ Cable			
Water strata depth: Fresh_	260 feet; S	alt None	feet			_
Coal seam depths: 80-85 £ 26			eing mine	d in the	area? NO	-
PEN FLOW DATA		•				
Producing formation Ballton	um f Sneechlii	· Dav	zone dent	h		3
Gas: Initial open flow T	race Mcf/d C	il: Trit	ia? onen	** <u>3738=342</u>	28' feet	
Final open flow 169.0	000 Mcf/d	. Fins	dar open dar open fl	TION N/A	V NOTAG	•
Time of open flo	d hetween initia	l and sie	m1 44-			
Static rock pressure 1100#	· psig(surface	Measureme	et) after	Day	16	
(If applicable due to multip	ple completion)	محبوب المداد		- recit	•
Second producing formation			zone dept	h	feet	
Gas: Initial open flow	Mcf/d 0	il: Init	ial open	flow	Bb1/d	
Final open flow	Mcf/d o				Bb1/d	
Time of open flo	w between initia	l and fin	al tests	ho	Ye	
Static rock pressure	_psig(surface.m	easurenen	t) after	ייבות	es shut in	
			//ames-2			

FORM IV-35 (REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMILATING, PHYSICAL CHANGE, ETC.

Water Fraced: December 9, 1981

1st Stage Baltown: 10,000,80/100, 80,000, 20/40 - 827 Bbls. Water 2nd Stage Speechly: 10,000,80/100, 54,000, 20/40 - 720 Bbls. Water

Perforations: Balltown; 3738-3748 - 14 holes, .41

Speechlt; 3402-3428 - 15 holes, .41

WELL LOG

FORMATION COLOR HAND OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre
	<u> </u>		and salt water, coal, oil and c
Cond.	0	10	
Sand.	10	80	
Coal	80	85	<u></u>
Sand	85	170	7
Shale	170	200	
Sand	200	260	Water @ 260' - 2" Stream
Coal	260	263	Stream
Sand	263	460	
Shale	460	560	
Red Rock	560	935	
Sand & Shale	935	1685	Some Oil @ 2665'
Shale	1685	1780	20me A11 & 5002.
Big Lime	1780	1862	•
Shale -	1862	1870	7.
Big Injun	1870	1926	
Sand & Shale	1926	2393	÷
Fifty Foot	2393	2447	
Sand	2447	2458	
Thirty Foot	2458	2494	
Shale	2494	2522	
Gordon Stray	2522	2536	
Sand	2536	2554	
Gordon	2554	2624	
Shale	2624	2634	
Fourth Sand	2634	2660	
Sand '	2660	2680	
Fifth Sand	2680	2718	
Sand & Shale	2718	3384	
Speechly	3384	3434	
Sand & Shale	3434	3640	
Balltown	3640	3768	
Brown Sand & Shale	3768	3949 TD	

(Attach separate sheets as necessary)

Mell Operator

Berry Favery Consent to als F Mgr's, har

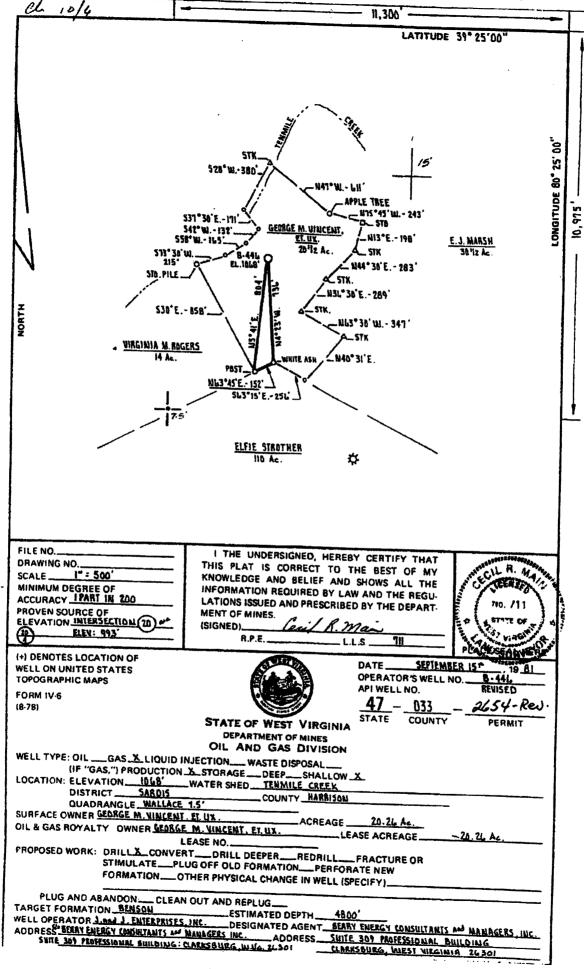
By: Northury

Date: 2-7-82 9-19-33

Remord

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including that, encountered in the drilling of a well."



WW-4A Revised 6-07

1) Date: October 2, 2019 2) Operator's Well Number George Vincent #B-446

3) API Well No.: 47 -

02654 033

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

	1				<u> </u>
4) Surface Ow	ner(s) to be served	. 5) (a) Coal Operator		
(a) Name	Thomas E. Wallace	. 0)	Name		
Address	441 Fullen Farm Rd.		Address		
22442500	Lumberport, WV	# DL3 9/	Address		
(b) Name	Talling Policy 110	m 4(0) 86	(b) Carl O-	(-) -: '11 D - 1 - : '	
Address			(b) Coal Ow Name	vner(s) with Declaratio	n
Mulcos				N/A	
			Address		
(c) Name			Name		
Address			Address		
6) Inspector	Sam Ward		(c) Coal Les	ssee with Declaration	
Address	P.O. Box 2327		Name	N/A	
	Buckhannon, WV 262	01	Address		
Telephone	304-389-7583				
•					
The reason However, y Take notice accompany Protection, the Applica certain circ	ou are not required to take that under Chapter 22-6 ing documents for a permi with respect to the well at	nents is that you have r any action at all. of the West Virginia Cc t to plug and abandon a the location described cen mailed by registere	ights regarding the applic ode, the undersigned well a well with the Chief of the on the attached Application of or certified mail or del	operator proposes to file or has to e Office of Oil and Gas, West Von and denicted on the attached	the instructions on the reverses side. filed this Notice and Application and firginia Department of Environmental Form WW-6. Copies of this Notice.) named above (or by publication in
		Wall Operate	r Ross & Wharton Gas	0- 1	
0	CT 1 1 2040	By:	T Koss & Wilditoli Gas	Co. IIIC	
U	CT 1 1 2019	Its:	President	ROUS	
W۱	/ Department of	Address	354 Morton Ave.		
	nmental Protection	Address			
	1010011011	M-11	Buckhannon, WV 262	201	
		Telephone	304-472-4289		
Subscribed and My Commission Oil and Gas Priva	/	nis QNO (lay of Octob	Sec , 2019 Notary Public	Notary Public Official Seal State of West Virginia
701 0 000 0					My Comm. Expires Sep 9, 2022

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 model to assume with extent parties and phone number, as a part of our regulatory duties. 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	_ 033	_ 02654	P
Operator's Well	No.		

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) Tenmile Creek Quadrangle Wallace
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No V Well a pit be used? Yes No V TANKS AND DISPOSED OF OFFSITE SOUTH
If so, please describe anticipated pit waste:
Will a synthetic liner be used in the pit? Yes No If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes: Land Application (if selected provide a completed form WW-9-GPP) p(11/2019)
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 Cas 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
Company Official (Typed Name) Mike Ross
Company Official Title President
Subscribed and sworn before me this 2 ND day of October . 20/9 Notary Public
My commission expires KELLY L FISHER Notary Public Official Seal State of West Virginia My Comm. Expires Sep 9, 2022 782 Gushen Rd. Rock Cave WV 26234

Form WW-9 Operator's Well No. Proposed Revegetation Treatment: Acres Disturbed 1 Prevegetation pH 6.5 Tons/acre or to correct to pH 6.5 Fertilizer type 10-20-20 Fertilizer amount 500 lbs/acre Mulch Hay Tons/acre Seed Mixtures **Temporary** Permanent Seed Type lbs/acre Seed Type lbs/acre Fescue 30 Fescue 30 Contractor's Mix Contractor's Mix 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: Plan Approved by: Comments: __

Title: OOG Inspector Date: 10/11/2019

Field Reviewed?

WW-9- GPP Rev. 5/16

NIA

Page	of	
API Number 47 - 033	- 02654	
Operator's Well No.		

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): Tenmile Creek	Quad: Wallace
Farm Name:	
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 D 1	
Describe procedures and equipment used to protect ground	water quality from the list of potential contaminant sources above.
N/A	
 List the closest water body, distance to closest water bod discharge area. 	ly, and distance from closest Well Head Protection Area to the
Tenmile Creek	
Tennile Greek	
4. Summarize all activities at your facility that are already reg	ulated for groundwater protection.
N/A	
N/A	

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

NIA	
WW-9- GPP Rev. 5/16	Pageof
N/A	
6. Provide a statement that no waste material will be used for deicing or	fill material on the property.
No material will be used	
7. Describe the groundwater protection instruction and training to be provide direction on how to prevent groundwater contamination.	provided to the employees. Job procedures shall
N/A	
8. Provide provisions and frequency for inspections of all GPP elements	and equipment.
N/A Signature: Mike Poss	

Date:

1000-meter Universal Transverse Mercator grid ticks,

zone 17. shown in blue

WW-7 8-30-06



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

WELL LOCATION FORM: GPS						
_{API:} 47-033-02654	WELL NO.: B-446					
FARM NAME: George Vince	ent					
RESPONSIBLE PARTY NAME: Mike Ross						
COUNTY: Harrison	Sardis					
QUADRANGLE: Wallace						
SURFACE OWNER: Thomas E. Wallace						
ROYALTY OWNER: George Vincent et.ux.						
UTM GPS NORTHING: 435983						
UTM GPS EASTING: 546810.5	GPS ELEVATION: 1068'					
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: Post Pro						
	ime Differential					
I the undersigned, hereby certify this da belief and shows all the information req prescribed by the Office of Oil and Gas.	graphy map showing the well location. ta is correct to the best of my knowledge and uired by law and the regulations issued and President					
Signature	Title Date					

PAGE 1			GPS YES	s no	
DATE STARTED/LOCATION:	4/10/2017	API#:	47-051-01955	WELL NO.	Heaven Hill 2- 10HM
DRILLING COMMENCED:	10/21/2017	OPERATOR:	Tug Hill Ope	erating LLC	
TD DATE: 8/14/2018	DEPTH:	16,687 ft.			orn, Jr., ET UX
See WR-3	35	COA	L DEPTHS	See WR-35	
WATER DEPTHS QUESTIONS FOR THIS REPOR AND REGULATIONS 35CSR 4-				DLLUTION CO	NTROL PERMIT
POINTS ARE TO BE GIVEN U	P TO MAXIMUM AS	S SHOWN BASE	D ON PERFORM	IANCE.	
1. DID OPERATOR GIVE PROP					
A. CONSTRUCTION YES \(\) NO (2 PTS) B. DRILLING YES \(\sqrt{\) NO (2 PTS) 2. WAS THE TIMBER CUT, STACKED, AND BRUSH USED FOR SEDIMENT BARRIERS BEFORE					(4 PTS)_4
DIRT WORK STARTED? YES V NO (4 PTS)				(4 PTS)4	
3. ARE ALL LOCATION AND/O	OR ROAD BANKS BE	ING SLOPED? Y	YES V NO_	(4 PTS)	(4 PTS)4
4. CONSTRUCTION: WERE THE FOLLOWING SEDI	MENT CONTROL ST	RUCTURES PRO	PERLY INSTALI	LED/MAINTAI	NED?
A. ROAD DITCHES 12	34(PTS)	B. CROSS	DRAINS 12	3 4 5	$\sqrt{(PTS)}$
C. CULVERTS 123	45(PTS)	D. CREEK	CROSSINGS 1_		PTS) n/a
E. DIVERSION DITCHES 1	23_ (PTS)	F. BARRIE	ERS 123_	✓(PTS)	
G. TEMPORARY SEEDING YE	S 🗸 NO (10 PT	S) POINTS A	VAILABLE FOR	QUESTION 4	: (33 PTS)_33
5. HAS TOP SOIL (IF ANY) BEE	N STOCKED PILED?	YES 🗸 NO_	(2 PTS)		(2 PTS)2
6. IS THE PIT PROPERLY INSTA	ALLED AND MAINTA	AINED? YES_	_ NO (9 PT	s) n/a	(9 PTS) _9
7. RECLAMATION:					
A. ROADWAY 123					
C. PITS 123(PTS)					
E. TÄNK DIKES 1_2_3			ESNO(3)	PTS)	
G. ADEQUATE SEEDING MATE	ERIALS 123	(PTS)			
H. WAS SEED BED ADEQUATE	123_ V (PTS)) POINTS AV	AILABLE FOR	QUESTION 7:	(24 PTS)_24
8. WAS RECLAMATION COMP	LETED WITHIN:				
A. CONVENTIONAL:					
6 MTHS OF TD6 P	TS ONLY; 4 MTHS	S OF TD12 F	PTS ONLY; 2 N	MTHS OF TD _	19 PTS ONLY.
B. HORIZONTAL:					
3 YRS OF PAD COMPLE 5 YRS OF PAD COMPLE	ETION 19 PTS (ETION 13 PTS (ONLY; 4 YRS OF ONLY	PAD COMPLET	ION 16 P	TS ONLY;
	MAXIM	UM POINTS AV	AILABLE FOR	QUESTION 8:	(19 PTS)19
TOTAL MAXIMUM POSSIBLE SCORE OF 99.					
TOTAL MAXIMUM 1 0551BLE SCORE OF 99.					

10/9/2019

Jim Mille