

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 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Wednesday, April 19, 2017 WELL WORK PERMIT Vertical / Plugging

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

BUCKHANNON, WV 262010000

Re:

Permit approval for 1-S-239 47-007-01731-00-00

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.

Please be advised that form WR-35, Well Operators Report of Well Work 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: 1-S-239

Farm Name: WHITE, ROGER & CHERYL U.S. WELL NUMBER: 47-007-01731-00-00

Vertical / Plugging

Date Issued: 4/19/2017

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 February 16	, 20 17
2)Operator's	
Well No. Duffield, Lovey 1	-S-239
3) API Well No. 47-00	7 - 01731

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

	APPLICATION FOR A PER	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas _X/ Liquid	d injection/ Waste disposal/
	(If "Gas, Production X or Un	derground storage) Deep/ Shallow_X_
۲,	Logation Blaustian 1140	Watershed Plantation Fork of Steer Creek
5)	Location: Elevation 1140 District Birch	County Braxton Quadrangle Rosedale
	District	Quadrangic
6)	Well Operator Ross & Wharton	7) Designated Agent Mike Ross
-	Address Route 5 Box 29	Address PO Box 219
	Buckhannon, WV 26201	Coalton, WV 26257
0.1		
8)	Oil and Gas Inspector to be notified Name Danny Mullins	Name Unknown
	Address 220 Jack Acres Road	Address
	Buckhannon, WV 26201	Address
	2300 - 1200 CLASS A CEMBUT PLUG Run 6% Gel between each plug 2130 - 1980 Set Cement Plug TO CO 1550 - 1450 Set Cement Plug ACROSS 1200 - 1100 Set Cement Plug TO CO SET 100' CLASS A CEMENT PLUG ACROSS 85/8 100 - 0 Set Cement Plug Set Monument with API Number	
	Free point A	ill casery and pull
	ification must be given to the district o	il and gas inspector 24 hours before permitted
Work	c order approved by inspector	Mlls Date 3-1-17



(Rev 8-81) JUN - 6 1983

State of Mest Wirginia

Department of Mines Bil und Cas Bivision

Date	Dece	mber 6	, 19	82
opera vell	No.	1-S-2	39	
	Lovey			
API N	No. 47	- 007	-	1731

C.L & GAS FIVISION

DEPT. OF MINES WELL OPERATOR'S REPORT

OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection (If "Gas," Production X / Undergrou	/ Wast and Storag	te Disposa ge/ Dee	1/ Sha	llow/)	
LOCATION: Elevation: 1140 Watershed Pla	ntation F	ork of Ste	er Creek		
District: Birch County Braxto	n	Quadrangl	e Rosedal	е	
17					
COMPANY Stonestreet Lands Company					
ADDRESS P.O. Box 350 Spencer, W.Va. 25276		10000 /0	7.51	Cement	
DESIGNATED AGENT 0.V. Stonestreet	Casing	Used in	Left	fill up	
ADDRESS P.O. Box 350 Spencer, W.Va. 25276	Tubing	Drilling	In well	Cu. ft.	
SURFACE OWNER Anna J. Williams etal	Size 20-16 Cond.				
ADDRESS Sutton, W.Va.	13-10"				
MINERAL RIGHTS OWNER Anna J. Williams etal	9 5/8				
ADDRESS Sutton, W.Va.	8 5/8	200	200	60 sks	CTS
OIL AND GAS INSPECTOR FOR THIS WORK Robert	7				
Bates ADDRESS 109 Minnich St. Weston, WV	5 1/2				
PERMIT ISSUED Sept. 28, 1981	4 1/2		2338	70 sks rfc	
DRILLING COMMENCED 2-15-82	3				
DRILLING COMPLETED 2-19-82	2				
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REMORKING. VERBAL PERMISSION OBTAINED ON	Liners used				
GEOLOGICAL TARGET FORMATION Big Injun		Dent	-h	2288 feet	
Depth of completed well 2358 feet R					
Water strata depth: Fresh 75 feet;	Salt	feet			
Coal seam depths: None	Is coal	being mine	ed in the	area? No	
OPEN FLOW DATA					
Producing formation Big Injun	Pay	zone dept	h2108	LCCC	2
Gas: Initial open flow 0 Mcf/d	Oil: Ini	tial open	flow 0	Bb1/d	50
Final open flow 430 Mcf/d	Fin	al open fl	Low 0	Bbl/d	
Time of open flow between initi	al and fi	nal tests		urs	8
Static rock pressure 490 psig(surface	measurem	ent) after	24 hou	rs shut in	2
(If applicable due to multiple completion-	-) Prod	uction tes	t co-ming	led	ž,
Second producing formation Blue Monday	Pay	zone dept	th	feet	`
Gas: Initial open flow 0 Mcf/d		tial open		Bb1/d	1731
		nal open f		Bbl/d	`
Time of open flow between initi				urs	
Static rock pressure 490 psig(surface	measureme	ent) after	24 hou	rs shut in	

04/21/2017

(Continue on reverse side)

jaie .

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

Perforation Intervals 2085-2108

Well Treatment

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

WELL LOG

ORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fand salt water, coal, oil and	resh gas
Clay	0	45		
Sand & Shale	45	105		
Shale	105	155		
Sand & Shale	155	225		
Red Rock	225	385		
Sand & Shale	385	505		
Red Rock	505	715		
Sand & Shale	715	850		
Sand	850	1000		
Shale	1000	1140		
Sand & Shale	1140	1160		
Shale	1160	1386		
Sand & shale	1386	1410		
Shale	1410	1476		
Sand & Shale	1476	1538		
Shale	1538	1580		
Sand & shale	1580	1596		
Shale	1596	1610		
Salt sand	1610	1638	`	
Shale	1638	1660		
Salt sand	1660	1708		
Shale	1708	1788		
Salt sand	1788	1804		
Shale	1804	1818		
Salt sand	1818	1884		
Shale	1884	2014		
Little Lime	2014	2040		
Blue Monday	2040	2098		
Big Lime	2098	2170	_	
Big Injun	2170	2288	OF HECE	-,.
Shale	2288	2358	TD Office	IV
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(Attach separate sheets as necessary) Vironmental Protection

General Manager

Regulation 2.02(i) provides as follows:

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

WW-4A Revised 6-07 1) Date: February 16, 2017
2) Operator's Well Number
Duffield, Lovey

3) API Well No.: 47 - 007 - 01731

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	r
(a) Name	Roger White &/or Cheryl		Name	N/A
Address	HC 84 Box 18		Address	
	Frametown, WV 26623			
(b) Name			(b) Coal Ow	wner(s) with Declaration
Address			Name	N/A
			Address	
(a) Na			Nome	
(c) Name			Name	
Address			Address	
6) Inspector	Danny Mullins		(c) Coal Les	ssee with Declaration
Address	220 Jack Acres Road		Name	N/A
	Buckhannon, WV 26201		Address	
Telephone	304-932-6844			
-				
accompany Protection the Applic	ying documents for a permit, with respect to the well at the	to plug and abandon a he location described n mailed by registere	well with the Chief of the on the attached Application of or certified mail or de	operator proposes to file or has filed this Notice and Application and he Office of Oil and Gas, West Virginia Department of Environmental ion 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 Operator	r Ross & Wharton (Mik	keRoss Inc)
		By:	1 11050 A THIRTIDE (IVIII	B. D. A.
		Its:	President	Ke post
		Address	PO Box 219	REOL
		13UU1000	Coalton, WV 26257	Office of EIVED
		Telephone	304-472-4289	Office of Oil and Gas
		F		MAR 0 6 2017
C-11-1-1		:- 16th	day of February, 201	
Subscribed and	sworn before me th	()	day of February, 201	Publication Publication
My Commission	n Expires September	27 2020		NOTARY PUBLIC IT OF
wiy Commission	II EXPITES September.	21, 2020		STATE OF WEST MIRSINIA BRENDA K BUSH (CO)
Oil and Gas Priv	acy Notice			BRENDA K BUSHTCC NON 20 GUM STREET BUCKHANNON. WV 26201 My Commission Expires September 27. 2020
The Office of Oil	and Gas processes you	r personal inform	nation, such as nam	ne, address and phone probation for the

The Office of Oil and Gas processes your personal information, such as name, address and phone number, acceptant 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 deprivacyoffier@wv.gov.

Mike Ross Inc.

(304) 472-4289 (Office) Box 219 Coalton, WV 26257 (304) 472-7405 (Fax)

February 15, 2017

Roger &/ or Cheryl White HC 84 Box 18 Frametown, WV 26623

Re: Duffield, Lovey 1-S-239; Duffield, Lovey 2-S-244; Duffield, Lovey 3-S-245; Duffield, Lovey 4-S-246 Plugging Permits

Dear Roger &/or Cheryl:

Mike Ross Inc. is in the process of applying for a permit to plug the above referenced well. Enclosed are copies of the Notice and Application for well plugging permits and the location plats.

Please note the instructions on the surface owner waiver. If you have no objection to the plugging being done, please sign the waiver and return it to our office.

If you have any questions, please do not hesitate to contact this office.

Thank you,

Mike Ross Inc.

RECEIVED
Office of Oil and Gas

MAR 0.6 2017

WV Department of Environmental Protection

75	U.S. Postal Service™ CERTIFIED MAIL® REC Domestic Mail Only	EIPT
5512	For delivery information, visit our website	at www.usps.com®,
	OFFICIAL	USE
1545	Cortified Mail Fee	7007 60.00
디	Extra Services & Fees (check box, add fee as appropriate)	
F	Return Receipt (hardcopy) \$ 2.7 S - 25	Postmark
7000	☐ Certified Mail Restricted Delivery \$	Hero
	Adult Signature Regulard D (\$ 2017	99.67
27,40	Postage s 3.57	
77	Total Postage and Fees Continue III	3/2/17
	& Environmental Protection	on
7	Roger &/or Cheryl White	
7076	S HC 84 Box 18	
	^c Frametown, WV 26623	
	PS Form 3800, April 2015 PSN 7550-02-000-9047	See Reverse for Instructions

WW-9 Rev. 5/08

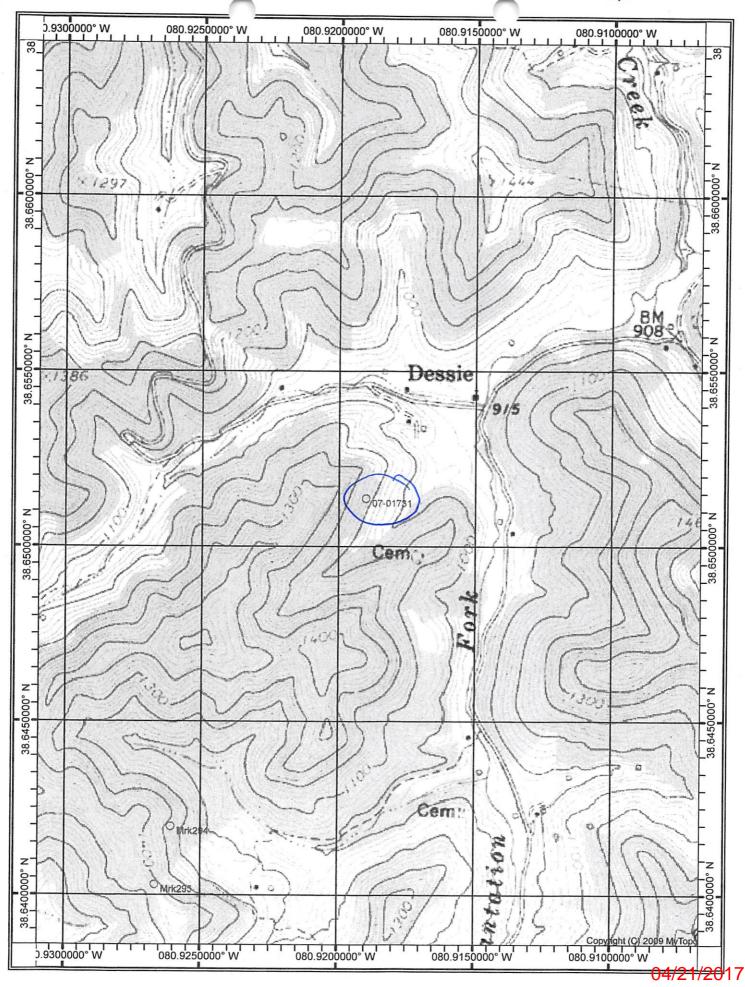
		Page _		of	
API Number	47 -	007	-	01731	
Operator's W	ell No	Duffield	l, Lovey	1-S-239	

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name Ross & Wharton (Mil	ke Ross Inc.)		OP Code	305680		
Watershed Plantation Fork of Steer C	reek	Quadrangle	Rosedale			
Elevation 1140	County Braxton		District	Birch		
Description of anticipated Pit Waste: Plu	gging Fluid					
Will a synthetic liner be used in the pit?	es 20 ml.	ANY	WELL E	PROPERCY	OFF-SITE	•
Reuse (at API)	on jection (UIC Permit N Number sal (Supply form WW-	9 for disposal	location)			zvn
Proposed Work For Which Pit Will Be Use Drilling Workover Other (Explain		Swabb Pluggi	ing ng			
Company Official (Typed Name) Mike Company Official Title Presiden	d Gas of the West Virging law. Violations of a faction. That I have personally experted and that, based of the information is true including the possibility. Ross t	nia Departme ny term or co xamined and on my inquir e, accurate, any of fine or in	ent of Environmentation of the am familiar way of those income complete.	nental Protection general permith with the informedividuals imme	on. I understand the and/or other appliation submitted or ediately responsible	nat the icable n this le for
Subscribed and sworn before me this 161	:hday of_Feb	oruary		20_17		
Brenda	th day of Feb	<u></u>	Note	ory Public	~~~~	2
¥	er 27, 2020			NO STATE BRI	OFFICIAL SEAL OTARY PUBLIC OF WEST VIRGINIA ENDA K BUSH O GUM STREET HANNON, WY 26201	

L	EGEND
Property Boundary	Diversion (C.C.C.)
Road = = = = = = = = = = = = = = = = = = =	Spring
Existing Fence — X — X — X —	Wet Spot 🖐
Planned Fence///	Drain Pipe with size in inches
Stream	Waterway \longleftrightarrow \longleftrightarrow \longleftrightarrow
Open Ditch	Cross Drain
Rock 635885	Artificial Filter Strip
North N	Pit: cut walls
Buildings	Pit: compacted fill walls
Water wells	Area for Land Application of Pit Waste
Drill site	
Proposed Revegetation Treatment: Acres Disturbed 1 Acre	e Prevegetation pH 6.5
Lime Tons/acre or to correct to pH	6.5
Fertilizer (10-20-20 or equivalent)lbs/a	acre (500 lbs minimum)
MulchTons/ac	cre
Saad	Mixtures
Secu	Minutes
Area I Seed Type lbs/acre	Area II Seed Type lbs/acre
	Seed Type 105/2010
Fescue	
Contractors Mix	
Attach: Drawing(s) of road, location,pit and proposed area for land appl	ication
Drawnig(s) of road, location, pit and proposed area for faild appr	
Photocopied section of involved 7.5' topographic sheet.	Office of Oil and Gas MAR 0 6 2017 En WV Denove
Plan Approved by:	MAR 0 6 2017
Fian Approved by	~ WV Don
Comments:	Environment of
	WV Department of Environmental Protection
Title: President	Date: February 16, 2017
Field Reviewed? () Yes () No





West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

	CILITOI I OI	uvi. OI b	
API: 47-007-001731	WI	ELL NO.: 1-S-	239
FARM NAME: Duffield, Lo	ovey		
RESPONSIBLE PARTY NAME:	Mike Ross	8	
	DISTF		ck
QUADRANGLE: Burnsville)		
surface owner: Roger	White &/or C	heryl	
ROYALTY OWNER:Anna J	. Williams Et. Al.	ő	F
UTM GPS NORTHING: 4278	8092.2		
UTM GPS EASTING: 5070	45.8 _{GPS}	ELEVATION:	1140
The Responsible Party named above preparing a new well location plat for above well. The Office of Oil and Gothe following requirements: 1. Datum: NAD 1983, Zone height above mean sea letter 2. Accuracy to Datum – 3.0 3. Data Collection Method: Survey grade GPS: Post Preparency of the preparen	or a plugging permit of as will not accept GPS e: 17 North, Coordinate of the coordi	or assigned API nu S coordinates that te Units: meters, A	mber on the do not meet
Real-T	ime Differential	_	
Mapping Grade GPS: Post		al	
	l-Time Differential _		
4. Letter size copy of the to I the undersigned, hereby certify this belief and shows all the information prescribed by the Office of Oil and O	data is correct to the required by law and the	best of my knowle	edge and
Mikekon	President	Ap	oril 1, 2014
Signature	Title		Date