



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

Earl Ray Tomblin , Governor
Randy C. Huffman , Cabinet Secretary
www.dep.wv.gov

Wednesday, November 30, 2016
WELL WORK PERMIT
Vertical / Plugging

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

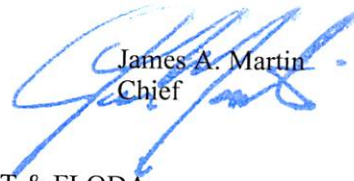
BUCKHANNON, WV 262010000

Re: Permit approval for
47-021-04604-00-00

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:
Farm Name: WHITE, ALBERT & FLODA
U.S. WELL NUMBER: 47-021-04604-00-00
Vertical / Plugging
Date Issued: 11/30/2016

Promoting a healthy environment.

12/02/2016

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.

1) Date 9/12, 2016
2) Operator's
Well No. Bourn #1
API Well No. 47-021 04604

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil / Gas X / Liquid injection / Waste disposal /
(If "Gas, Production X or Underground storage) Deep / Shallow x

5) Location: Elevation 1223 Watershed Cub Run of Crooked Fork
District Center County Gilmer Quadrangle Normentown

6) Well Operator Ross and Wharton Gas 7) Designated Agent Mike Ross Po Box 219
Company, INC. Address Coalton WV 26257
Address Rt. 5, Box 29,
Buckhannon WV 26201

Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Danny Mullins Name R & R WELL SERVICE
Address ~~124 Bid Trace Fork Rd.~~ 220 Jack Acres Rd. Address 42 LYNCH RIDGE
Harts WV 25524 Buckhannon, WV WALTON, WV 25286
PHONE 304 932 6844 26201

10) Work Order: The work order for the manner of plugging this well is as follows:

Remove all equipment used to produce well

Gel hole TD 3269

Cement 3269 to 2200

Free point cut and pull 4 1/2 @ +/- 1600'

Cement 1650-¹⁵⁵⁰~~2550~~ over cut

Gel 1550-1275

Cement 1275 to 1175

Gel 1175 to 775

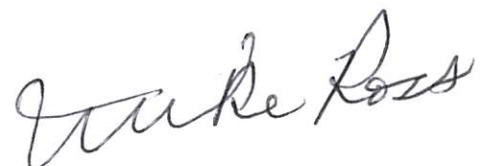
Cement 775 to 675

Gel 675 to 100'

Cement 100' to surface

Set monument with proper API

Gel between all plugs



Signature Danny Mullins Date 10-14-16

12/02/2016

10/14/16



IV-35
(Rev 8-81)

Date September 24, 1987

RECEIVED
SEP 25 1987

State of West Virginia
Department of Mines
Oil and Gas Division

Operator's
Well No. BOURN #1
Farm BOURN
API No. 47 - 021 - 4604

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 1223 Watershed CLUB RUN
District: CENTER County GILMER Quadrangle NORMANTOWN 7.5'

COMPANY MIKE ROSS INC., dba Ross & Wharton Gas Co. Inc.

ADDRESS 9 1/2 Franklin St., Buckhannon, WV 26201

DESIGNATED AGENT MIKE ROSS

ADDRESS 9 1/2 Franklin St., Buckhannon, WV 26201

SURFACE OWNER A. R. White

ADDRESS Rt. 1, Perkins, WV 26334

MINERAL RIGHTS OWNER Robert Bourn et. al.

ADDRESS Rt. 1, Box 32, Rosedale, WV 26636

OIL AND GAS INSPECTOR FOR THIS WORK Craig

Duckworth ADDRESS Box 107, Davison Rt. Cassaway, WV 26624

PERMIT ISSUED September 4, 1987

DRILLING COMMENCED September 8, 1987

DRILLING COMPLETED September 12, 1987

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	728	728	160 sks.
7			
5 1/2			
4 1/2		3218	290 sks
3			
2			
Liners used			

DM

GEOLOGICAL TARGET FORMATION Injun & Balltown Depth 2250-3075 feet

Depth of completed well 3269 feet Rotary XX / Cable Tools -----

Water strata depth: Fresh --- feet; Salt none feet

Coal seam depths: none Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Injun & Balltown Pay zone depth 2250-3075 feet

Gas: Initial open flow 40 Mcf/d Oil: Initial open flow -- Bbl/d

Final open flow 220 Mcf/d Final open flow -- Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 420 psig (surface measurement) after 72 hours shut in

(If applicable due to multiple completion--)

Second producing formation _____ Pay zone depth _____ feet

Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after _____ hours shut in

SIC. 4604

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

Fractured September 15, 1987

1st Stage - Perfs 3104-3086, 500 Gals. Acid, 30,000# 20/40 Sand, N2 198,000 SCF

2nd Stage - Perfs 2509-2389, 750 Gals. Acid, 30,000# 20/40 Sand, N2 156,000 SCF

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Clay			0	4	<p style="text-align: center;">RECEIVED SEP 25 1987</p> <p style="text-align: center;">DIVISION OF OIL & GAS DEPARTMENT OF ENERGY</p> <p>Show of gas</p> <p>Show of gas TD</p>
Sand			4	105	
Shale			105	133	
Sand			133	416	
Red Rock & Shale			416	648	
Sand			648	683	
Red Rock & Shale			683	695	
Sand			695	771	
Red Rock & Shale			771	1202	
Sand			1202	1330	
Shale			1330	1368	
Sand			1368	1440	
Shale			1440	2022	
Maxon			2022	2073	
Shale			2073	2122	
Little Lime			2112	2144	
Pencil Cave			2144	2157	
Big Lime			2157	2250	
Big Injun			2250	2326	
Sandy Shale			2326	3060	
Balltown			3060	3075	
Sandy Shale			3075	3269	

(Attach separate sheets as necessary)

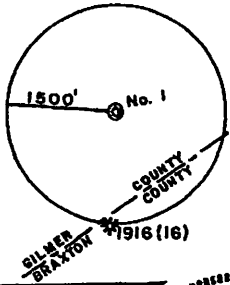
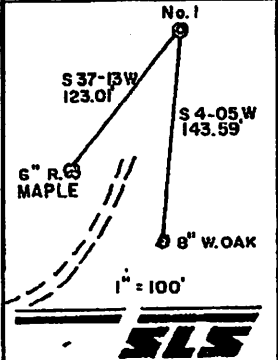
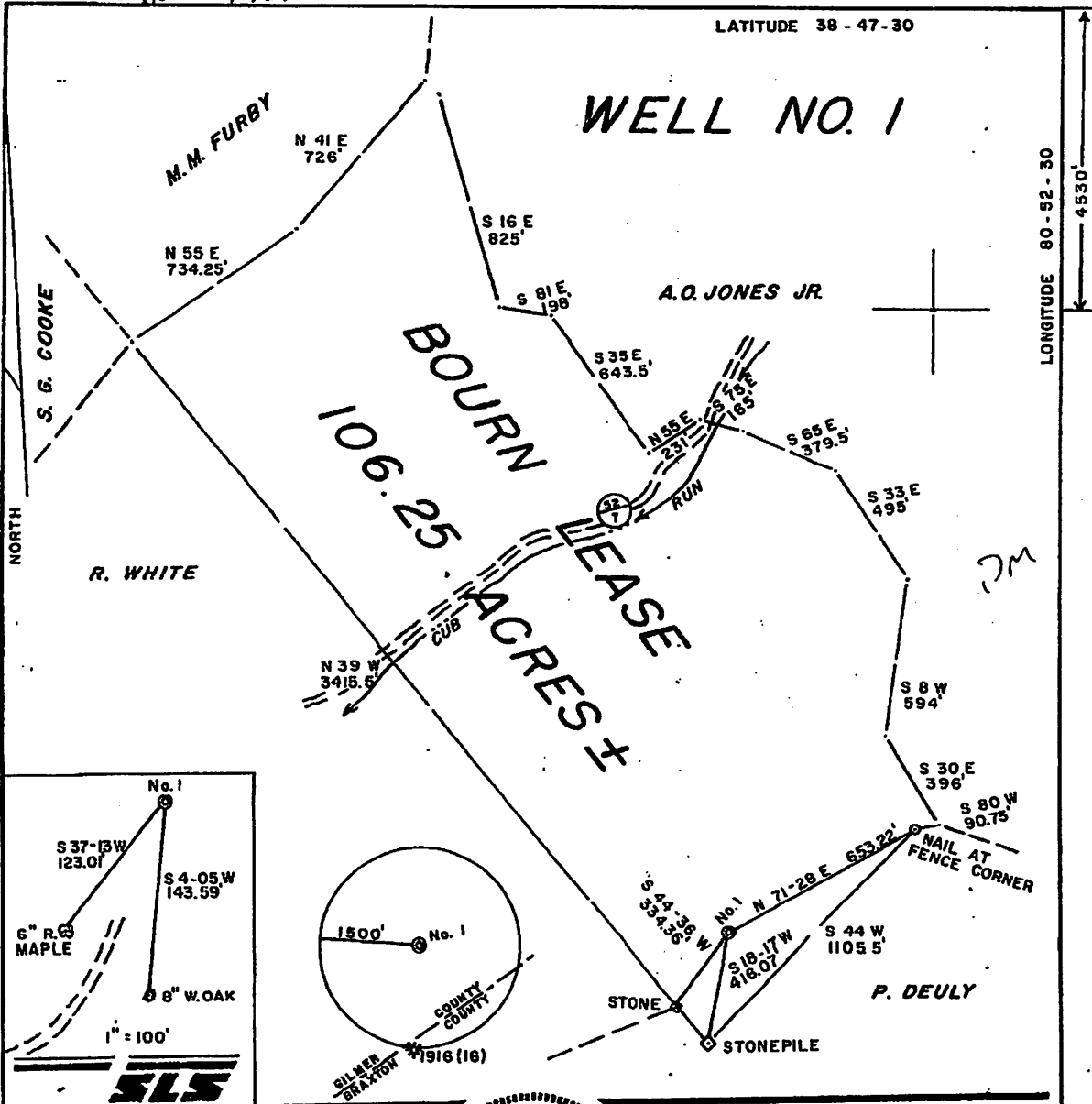
Mike Ross Inc., dba Ross & Wharton Gas Co. Inc.

Well Operator

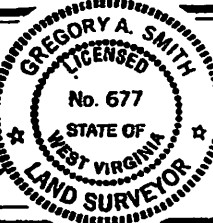
By: Mike Ross

Date: September 24, 1987

10762
 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 ..., encountered in the drilling of a well."



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DEPARTMENT OF ENERGY.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE AUGUST 29, 19 87
OPERATORS WELL NO. BOURN NO. 1
API WELL NO. 47 - 021 - 4604
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 1544 (20-78)
SCALE 1" = 500'
PROVEN SOURCE OF ELEVATION: TOP OF KHDR ELEV. 1467'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 1223' WATERSHED CUB RUN OF CROOKED FORK
DISTRICT CENTER COUNTY GILMER QUADRANGLE NORMANTOWN 75'

SURFACE OWNER A.R. WHITE ACREAGE 106.25
ROYALTY OWNER ROBERT BOURN et al. LEASE ACREAGE 106.25
LEASE NO. _____

PROPOSED WORK:
DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION INJUN
ESTIMATED DEPTH 2500'

WELL OPERATOR MIKE ROSS INC DBA ROSS & WHARTON GAS CO. INC. DESIGNATED AGENT MIKE ROSS
ADDRESS BOX 173 COALTON, WV 26257 ADDRESS BOX 173 COALTON, WV 26257

COUNTY NAME
PERMIT

12/02/2016

WW-4A
Revised 6-07

1) Date: 9/12/16
2) Operator's Well Number
Bourn #1 _____
3) API Well No.: 47 - 021-04604 -

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

4) Surface Owner(s) to be served: 5) (a) Coal Operator
(a) Name Kay Henline, 3728 Gassaway Rd. Name None
Address Normantown WV 25267 Address _____

(b) Name _____ (b) Coal Owner(s) with Declaration
Address _____ Name _____
P.O. _____

(c) Name _____ Address _____
Address _____

6) Inspector Danny Mullins (c) Coal Lessee with Declaration
Address 124 Bid Trace Fork Rd. 220 Jack Acres Rd.
Harts WV 25524 Buckhannon, WV
Telephone 304 932 6844 26201

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

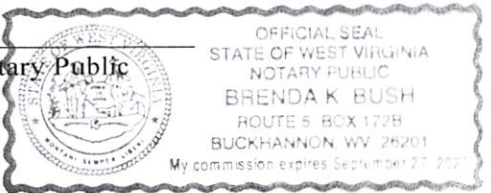
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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 Ross and Wharton Gas Company, INC.
By: Mike Ross
Its: Owner
Address RT 5, Box 29, Buckhannon, WV 26201

Telephone 304 472 4289

Subscribed and sworn before me this 14 day of October 2016
Sept 27, 2020 Brenda K Bush
My Commission Expires _____
Notary Public



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 depprivacyofficer@wv.gov.

SURFACE OWNER WAIVER

Operator's well
Bourn #1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

	Date _____	Name _____	
Signature		By _____	
		Its _____	Date _____

Signature _____ Date _____

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Ross and Wharton Gas Company, INC. OP Code _____

Watershed (HUC 10) Cub Run of Crooked fork Quadrangle Normantown _____

Elevation 1223 County Gilmer District Center

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes _____ No x

Will a pit be used for drill cuttings? Yes _____ No x

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes _____ No x If so, what ml.? x

Proposed Disposal Method For Treated Pit Wastes:

- _____ Land Application
- _____ Underground Injection (UIC Permit Number _____)
- _____ Reuse (at API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- X _____ Other (Explain no flfluids are expected in return, All fluids captured if returned into tank _____)

Will closed loop system be used? _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Brine water

-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? No Pit brine Wter if any in tank

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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 Mike Ross

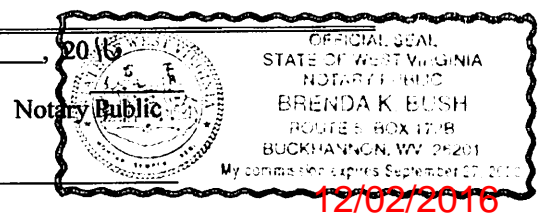
Company Official (Typed Name) Mike Ross

Company Official Title C.O.B.

Subscribed and sworn before me this 14 day of October

Brenda K Bush

My commission expires September 27, 2020



12/02/2016

Proposed Revegetation Treatment: Acres Disturbed _____ Prevegetation Ph 6.0
0.5 _____

Lime _____ 2Tons/acre or to correct to pH _____

Fertilizer type _____ 10-20-20 _____

Fertilizer amount _____ 500 lbs/acre

Mulch _____ 2 Tons/acre

Seed Mixtures

DM

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KENTUCKY FESCUE	40	SAME	
ALSIKE CLOVER	5		
ANNUAL RYE	16		

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

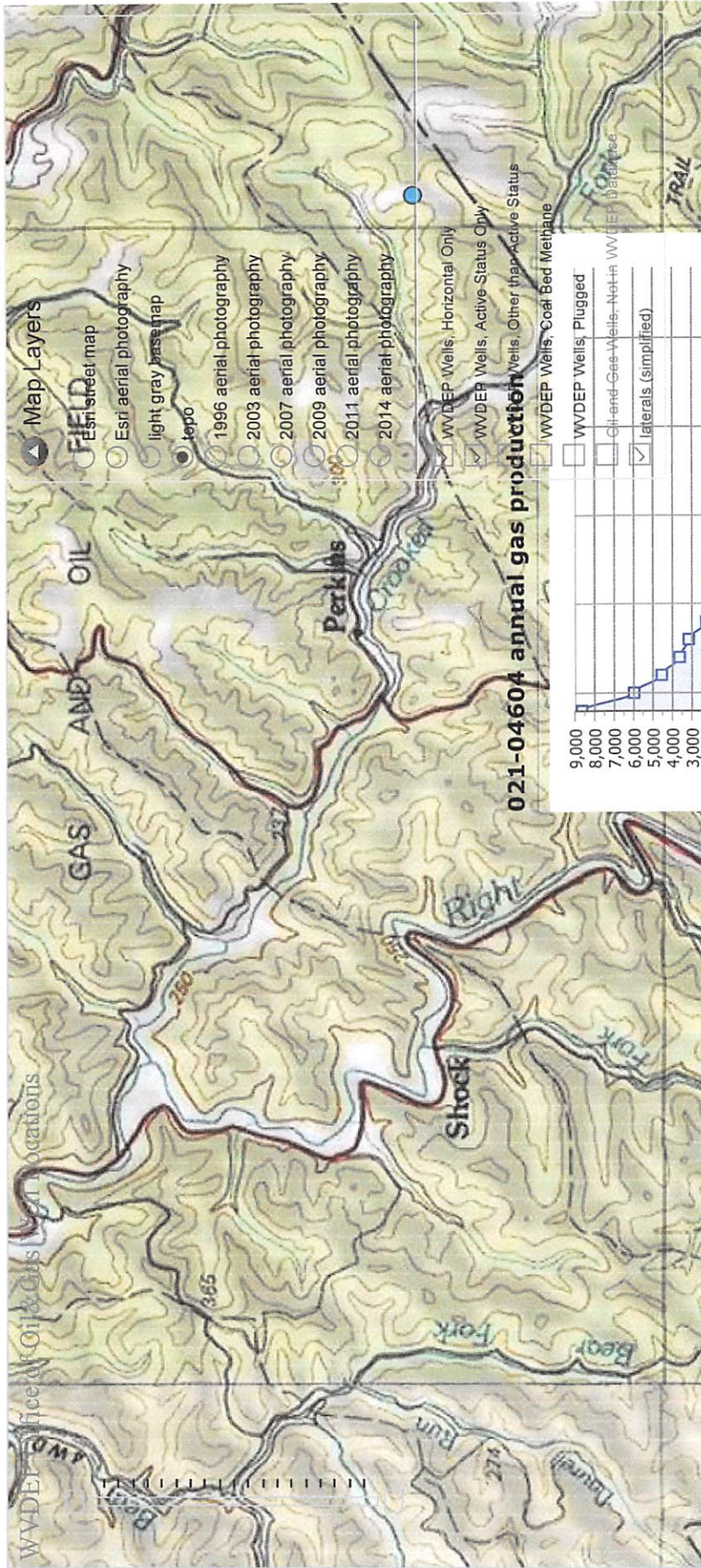
Plan Approved by: _____

Comments: _____

Title: _____ Date: _____

Field Reviewed? () Yes () No

2104604P



Attribute Search Result Table Location Search Legend About

#	API	Permit Type	Issued	Operator	Well Status	Well Type	Well Use	Well Num
1	021-04604	Other Well	1987-9-11	ROSS AND WHARTON GAS COMPANY, INC.	Abandoned Well	Vertical	Gas Production	BOURNE 1

12/02/2016

WW-7
8-30-06



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

API: 47 021 04604 WELL NO.: Bourn #1
 FARM NAME: Robert Bourn Lease
 RESPONSIBLE PARTY NAME: Ross and Wharton Gas Company, INC.
 COUNTY: Gilmer DISTRICT: Center
 QUADRANGLE: Normantown
 SURFACE OWNER: Kay Henline
 ROYALTY OWNER: Robert Bourn (etal)
 UTM GPS NORTHING: 4292323
 UTM GPS EASTING: 510293 GPS ELEVATION: 1223

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 Processed Differential _____

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.

Trucke Ross
Signature

C. O. B.
Title

10/14/16
Date

12/02/2016

2104604 P

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

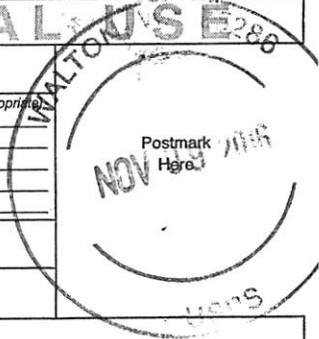
For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

7015 1520 0000 0958 9206

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage	\$
Total Postage and Fees	\$



Sent To **KAY HENLINE**
 Street and Apt. No., or PO Box No. **3728 Cassaway Rd**
 City, State, ZIP+4® **Normantown MD 21067**

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions