



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, April 26, 2019
WELL WORK PLUGGING PERMIT
Vertical Plugging

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

BUCKHANNON, WV 262010000

Re: Permit approval for 1
47-021-03012-00-00

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: 1
Farm Name: CONOR DEWALL
U.S. WELL NUMBER: 47-021-03012-00-00
Vertical Plugging
Date Issued: 4/26/2019

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 February 26, 2019 **04/26/2019**
2) Operator's
Well No. L.B. Bonnett #1
3) API Well No. 47-021 - 03012 **P**

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 ___ or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 1035' Watershed Barnett Run
District Glenville County Gilmer Quadrangle Glenville

6) Well Operator Ross & Wharton Gas Co. Inc. 7) Designated Agent Mike Ross
Address 354 Morton Ave. Address P.O. Box 219
Buckhannon, WV 26201 Coalton, WV 26257

8) Oil and Gas Inspector to be notified Name Danny Mullins
Address 220 Jack Acres Rd.
Buckhannon, WV 26201
9) Plugging Contractor Name N/A
Address _____

10) Work Order: The work order for the manner of plugging this well is as follows:
Free point and recover casing's & tubular's **★ 4 1/2" FREEPOINT ≈ 4200' + W.M.**
6% Gel between plug's **• SET 100' CEMENT PLUG ACROSS CUT.**
Set cement plug 6250' to TD (6614') Plug 100' above top perf
Set 100' cement plug across casing cut
Set 100' cement plug 4700' to 4800', Set 100' cement plug 3000' to 3100'
Set 100' cement plug 1500' to 1600' (Big Lime), Set cement plug 1000' to 1100' elevation plug
Set cement plug 550' to 650'(8" casing plug, freshwater protection plug)
Set cement plug 100' to surface (surface plug) Tag plug's as necessary, Set Monument with API numbers,

RECEIVED
Office of Oil and Gas

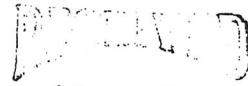
MAR 8 2019

WV Department of
Environmental Protection

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Danny Mullins Date 3-4-19

OG-10
Rev. - 9-71



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD 4

Rotary X Oil _____
Cable _____ Gas X _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Quadrangle Glenville

Permit No. G11-3012

~~Eastern American Energy Corp. dba~~
~~Pacific States Gas & Oil~~
Address P.O. Box N Glenville, W.Va. 26351
Farm L.B. Bonnett Acres 250
Location (waters) Barnett Run
Well No. E.A. #1 Elev. 1035
District Glenville County Gilmer
The surface of tract is owned in fee by William J. Dwyer, Jr.
Address Glenville, W.Va. 26351
Mineral rights are owned by L.B. Bonnett
Address Glenville, W.Va. 26351
Drilling Commenced 4-29-78
Drilling Completed 5-5-78
Initial open flow N/A cu. ft. _____ bbls.
Final production 60,000 cu. ft. per day _____ bbls.
Well open 4 hrs. before test 2300 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	596	596	Surface
7			
5 1/2			
4 1/2	6552	6552	450 SKS
3			
2			
Liners Used			

DM

Well treatment details:

Attach copy of cementing record.

Perf: 8-0.49" Holes @ 6377, 6390, 6465, 6474, 6482, 6489, 6495, 6501

Frac: 1,000 Gals. 15% HCL, 520 BBL H₂O, 750 Lbs. WG-12 Water Gel, 36 Gal. Pen-5, 36 Gal/ GBW-3
24 gal CLA-STA, 10,000 lbs. 80/100 sand, 40,000 lbs. 20/40 sand, 30.25 tons CO₂.
Injection Rate @ 16.9 BBL H₂O and 4 BBL CO₂ Per Minute.

Coal was encountered at 293-297 Feet 537-540 Inches
Fresh water @ 35' Feet _____ Salt Water _____ Feet _____
Producing Sand Devonian Shale Depth 6377-6501

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Surface Fill			0	10		
Sand and Shale			10	66		
Sand			66	85		
Red Rock & Shale			85	98		
Sand			98	110		
Sand & Shale			110	160		
Sand			160	178		
Red Rock			178	202		
Sand & Shale			202	293		
Coal			293	297		
Sand & Shale			297	492		
Sand			492	537		
Coal			537	540		
Sand & Shale			540	970		
Shale			970	1015		
Sand & Shale			1015	1542		
Little Lime			1542	1577		
Blue Monday			1577	1594		
Big Lime			1594	1673		
Big Injun			1673	1753		
Shale			1753	1887		
Weir			1887	1956		
Shale			1956	4554		
Benson			4554	4568		

E Log Top

(over)

* Indicates Electric Log tops in the remarks section.

B2

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Shale			4568	4786		
Elk			4786	4990		
Shale			4990	6509		
Chert			6509	6614		
TD			6614			

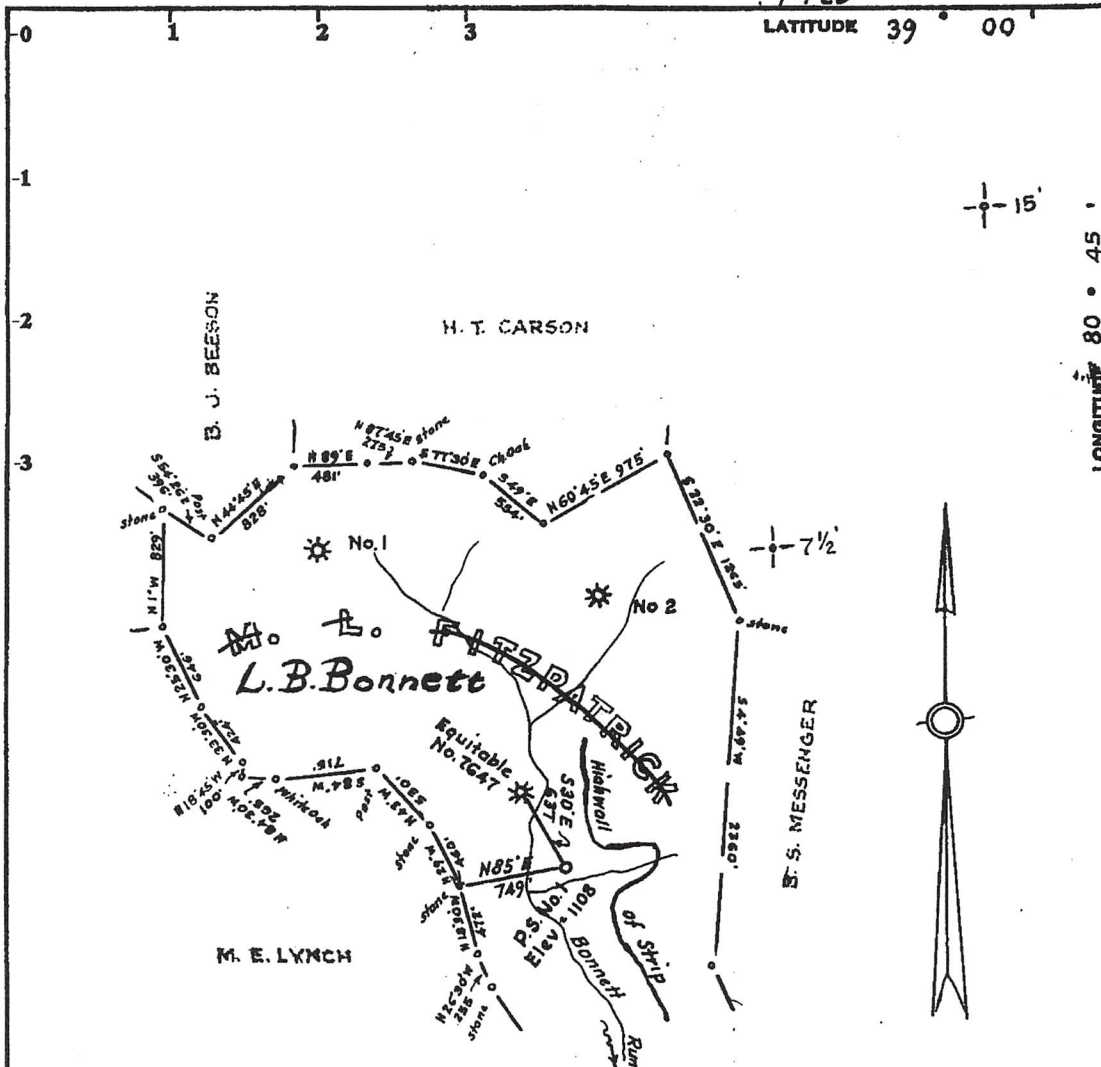
Date November 13, 1978

APPROVED [Signature]

Owner

By Executive Vice President
(Title)

1423



Well location is on the area on which the coal has been removed

Surface owned by: William J. Dwyer, Jr. Glenville, W. Va.

Minimum Error of Closure 1 in 200'

Source of Elevation Elev. Well No 7647 = 1035

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: *W. S. Messenger*
Squares: N S E W

Map No. _____

Company EASTERN AMERICAN ENERGY CORP DBA PACIFIC STATES GAS and OIL, INC

Address PO Box 67, Glenville, W. Va. 26351

Farm L.B. Bonnett M. E. Lynnch, WILLIAM J. Dwyer

Tract _____ Acres 250 Lease No. _____

Well (Farm) No. PS No 1 Serial No. _____

Elevation (Spirit Level) 1108

Quadrangle Glenville 7 1/2, Glenville 15

County Gilmer District Glenville

Engineer W. S. Messenger

Engineer's Registration No. 1227 LLS 200

File No. _____ Drawing No. _____

Date March 27, 1978 Scale 1" = 1000'

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP

FILE NO. GIL-3012 - Frac

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing. **47-021**

47-021-03012 P

04/26/2019

WW-4A
Revised 6-07

1) Date: February 26 2019
2) Operator's Well Number
L.B. Bonnett #1
3) API Well No.: 47 - 021 - 03012

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: Conor Dewart, Address: 176 B Jessie's Run Rd., Cocks Mill, WV 26342
(b) Name: _____, Address: _____
(c) Name: _____, Address: _____
6) Inspector: Danny Mullins, Address: 220 Jack Acres Rd., Buckhannon, WV 26201, Telephone: 1-304-932-6844
5) (a) Coal Operator Name: N/A, Address: _____
(b) Coal Owner(s) with Declaration Name: N/A, Address: _____
(c) Coal Lessee with Declaration Name: N/A, Address: _____

TO 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.

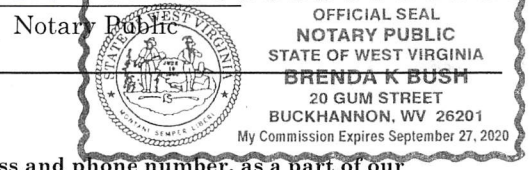
Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental 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 & Wharton Gas Co. Inc.
By: [Signature]
Its: President
Address: 354 Morton Ave., Buckhannon, WV 26201
Telephone: 1-304-472-4289

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Office of Oil and Gas
MAR 8 2019

Subscribed and sworn before me this 27th day of February, 2019

My Commission Expires September 27, 2020



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.

04/26/2019

WW-9
(5/16)

API Number 47 - 021 - 003012
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) Barnett Run Quadrangle Glenville

Do you anticipate using more than 5,000 bbls of water to complete 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 No If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

- 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 system be 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 Gas 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 *Mike Ross*
Company Official (Typed Name) Mike Ross
Company Official Title President

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Office of Oil and Gas

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WV Department of
Environmental Protection

Subscribed and sworn before me this 27th day of February

Brenda K Bush

My commission expires September 27, 2020



Proposed Revegetation Treatment: Acres Disturbed 1 Prevegetation pH 6.5

Lime 2 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	<u>30</u>	Fescue	<u>30</u>
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: *[Signature]*

Comments: _____

Title: OOG Inspector

Date: 3-4-19

Field Reviewed? () Yes () No

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WV Department of
Environmental Protection

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): Barnett Run Quad: Glenville
Farm Name: _____

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

N/A

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

N/A

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

Barnett Run

4. Summarize all activities at your facility that are already regulated for groundwater protection.

N/A

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MAR 8 2019

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

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 provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

N/A

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

N/A

Signature: Mike Ross

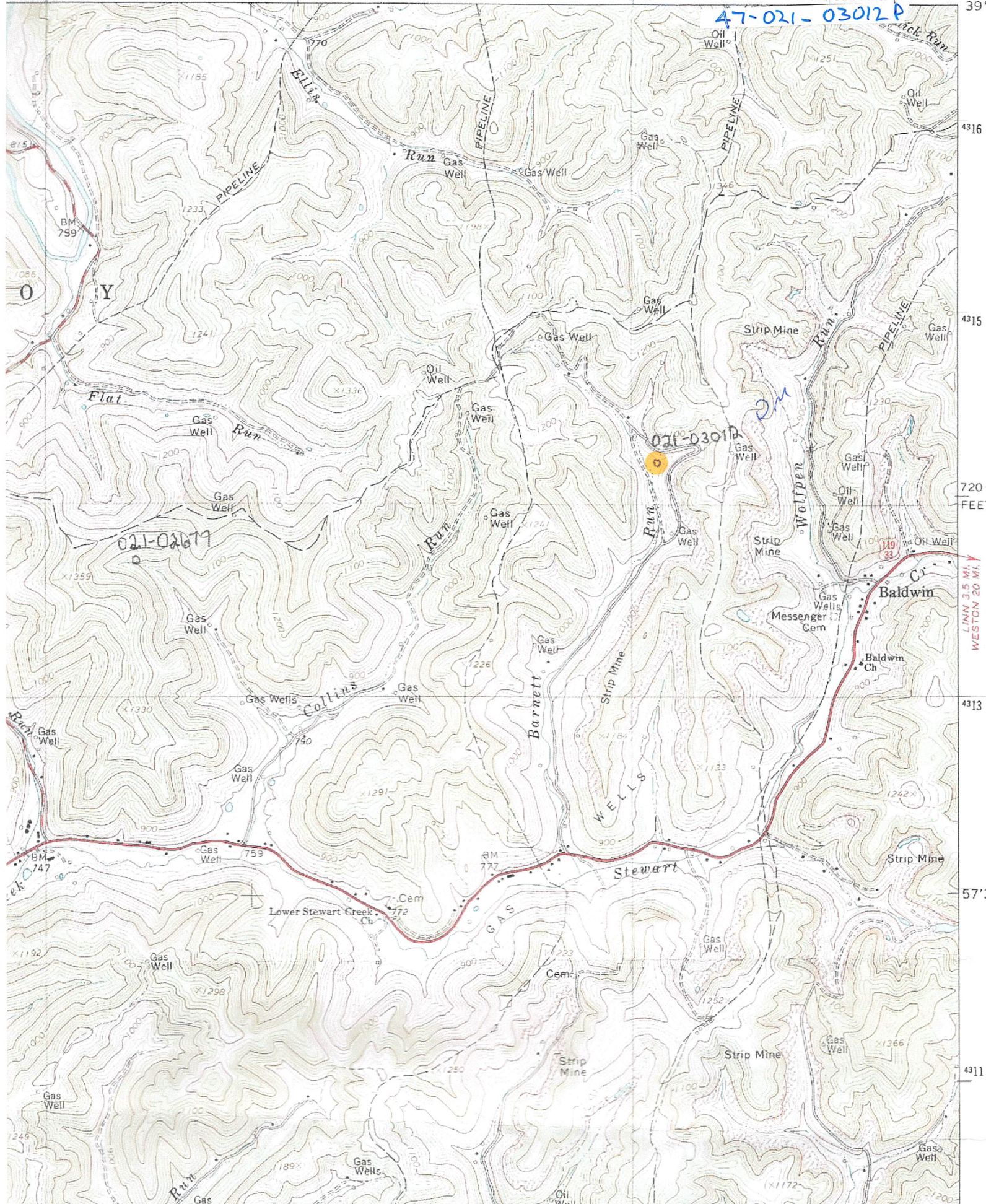
Date: February 27, 2019

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WV Department of
Environmental Protection

04/26/2019

517 47'30" 519 520 2 070 000 FEET 80°45' 39'

47-021-03012 P



WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-021-03012 WELL NO.: 1

FARM NAME: L.B. Bonnett

RESPONSIBLE PARTY NAME: Mike Ross

COUNTY: Gilmer DISTRICT: Glenville

QUADRANGLE: Glenville

SURFACE OWNER: Conor Dewall

ROYALTY OWNER: L.B. Bonnett Heirs

UTM GPS NORTHING: 4314439.0

UTM GPS EASTING: 520111.0 GPS ELEVATION: 1108'

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.

Mike Ross
Signature

President
Title

3-21-18
Date