

04/26/2019



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, April 24, 2019
WELL WORK PLUGGING PERMIT
Vertical Plugging

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

BUCKHANNON, WV 262010000

Re: Permit approval for 8
47-021-03717-00-00

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: 8
Farm Name: I.L. MORRIS
U.S. WELL NUMBER: 47-021-03717-00-00
Vertical Plugging
Date Issued: 4/24/2019

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. 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 15, 04/26/2019
2) Operator's
Well No. J.E. Hayes #8
3) API Well No. 47-021 - 03717

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 918' Watershed Dry Run
District Glennville County Gilmer Quadrangle Glennville
- 6) Well Operator Ross & Wharton Gas Co. Inc. 7) Designated Agent Mike Ross
Address 354 Morton Ave. Address P.O. Box 219
Buckhannon, WV 26021 Coalton, WV 26257
- 8) Oil and Gas Inspector to be notified Name Danny Mullins 9) Plugging Contractor Name N/A
Address 220 Jack Aces Rd. Address _____
Buckhannon, WV 26201

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

Free point and recover casing's & tubular's

6% Gel between plug's

Set cement plug 4800' to TD (5136') Set 150' cement plug 4400' to 4550', Plug 100' above top perf,

Set 100' cement plug across casing cut

Set 100' cement plug 2500' to 2600', Set 100' cement plug 1600 to 1700'

Set 100' cement plug 900' to 1000' (salt bearing strata)(elevation plug)

Set cement plug 350' to 450' (8" casing plug, freshwater protection plug)

Set surface plug 100' to 0', Tag plug's as necessary, Set monument with API number

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Notification must be given to the district oil and gas inspector work can commence.

Work order approved by inspector Danny Mullins

Date 2-22-19

47-021-03717P

FORM IV-35
(Obverse)
[08-78]

DEPARTMENT OF MINES, OIL AND GAS DIVISION

Operator's
Well No. J.E. Hays #8 **04/26/2019**

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 47 - 021-
State County
3717

WELL TYPE: Oil Gas Liquid Injection Waste Disposal
(If "Gas", Production Underground storage Deep Shallow)

LOCATION: Elevation: 948' - 1198 Watershed: Dry Run
District: Glenville County: Gilmer Quadrangles: Glenville 7 1/2

WELL OPERATOR Eastern American Energy Corp. DESIGNATED AGENT James C. Recht
Address P. O. Box N Address P. O. Box N
Glenville, WV 26351 Glenville, WV 26351

PERMITTED WORK: Drill Convert Drill deeper Redrill Fracture or stimulate
Plug off old formation Perforate new formation
Other physical change in well (specify) _____

PERMIT ISSUED ON November 26, 19 80 OIL & GAS INSPECTOR FOR THIS WORK:
Name Paul Goodnight
IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED Address Smithville, WV 26178
Phone: 477-3660

LOGICAL TARGET FORMATION: Devonian Shale Depth 5250 feet
Depth of completed well, 5136 feet Rotary Cable Tools
Water strata depth: Fresh 50/80 feet; salt, none feet.
Coal seam depths: none Is coal being mined in the area? no
Work was commenced December 6, 19 80, and completed December 11, 19 80

Casing and Tubing Program

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor	20	J-55	94		X	25	-0-	Kinds
Fresh water	5 5/8	J-55	20	X		411.95	411.95	
Intermediate								Sizes
Production	4 1/2	CW	10.5	X		5092	5092	300 sks.
Perforations	1 1/2	H 40	2.5	X		4475	4475	Deaths set
								Perforations:
								Top Bottom
								4825 4994
								4505 4509

IN-FLUX DATA

Producing formation Benson/Elk Comingled Pay zone depth 4498-4519
4758-5001 feet
Gas: Initial open flow, 64 Mcf/d Oil: Initial open flow, NA Bbl/d
After Frac final open flow, 300 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 1375 psig (surface measurement) after 24 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 Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, _____ hours

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

1st Stage - Perf: 5-0.49" holes 4994,4992,4989,4988,4987
 2-0.49" holes 4846,4825
 Frac: 20,000 lbs. 80/100, 35,000 lbs. 20/40, 15-lbs gel system,
 500 gals 15% HCL.

2nd Stage-Perf: 8-0.49" holes 4504--4509
 Frac: 20,000 lbs, 80/100, 35,000 lbs. 20/40, 20 lbs. gel system,
 500 gals. 15% HCL.

LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all and salt water, coal, oil and
			0	5	
			5	10	
l & Shale			10	65	
l			65	80	
l, Shale, Red Rock			80	90	
l			90	120	
le & Red Rock			120	236	
l & Shale			236	800	
l			800	1113	
l & Shale			1113	1206	
l			1206	1367	
l & Shale			1367	1432	
l			1432	1445	
l & Shale			1445	1510	Top E Log @ 1500
l			1510	1560	
e			1560	1618	
le Lime			1618	1660	
Lime			1660	1738	
Injun			1738	1823	
e			1823	1890	
			1890	2024	
e			2024	4498	
on			4498	4519	
e			4519	4758	
			4758	5001	
e			5001	5136	
l Depth			5136		

JM

(Attach separate sheets to complete as necessary)

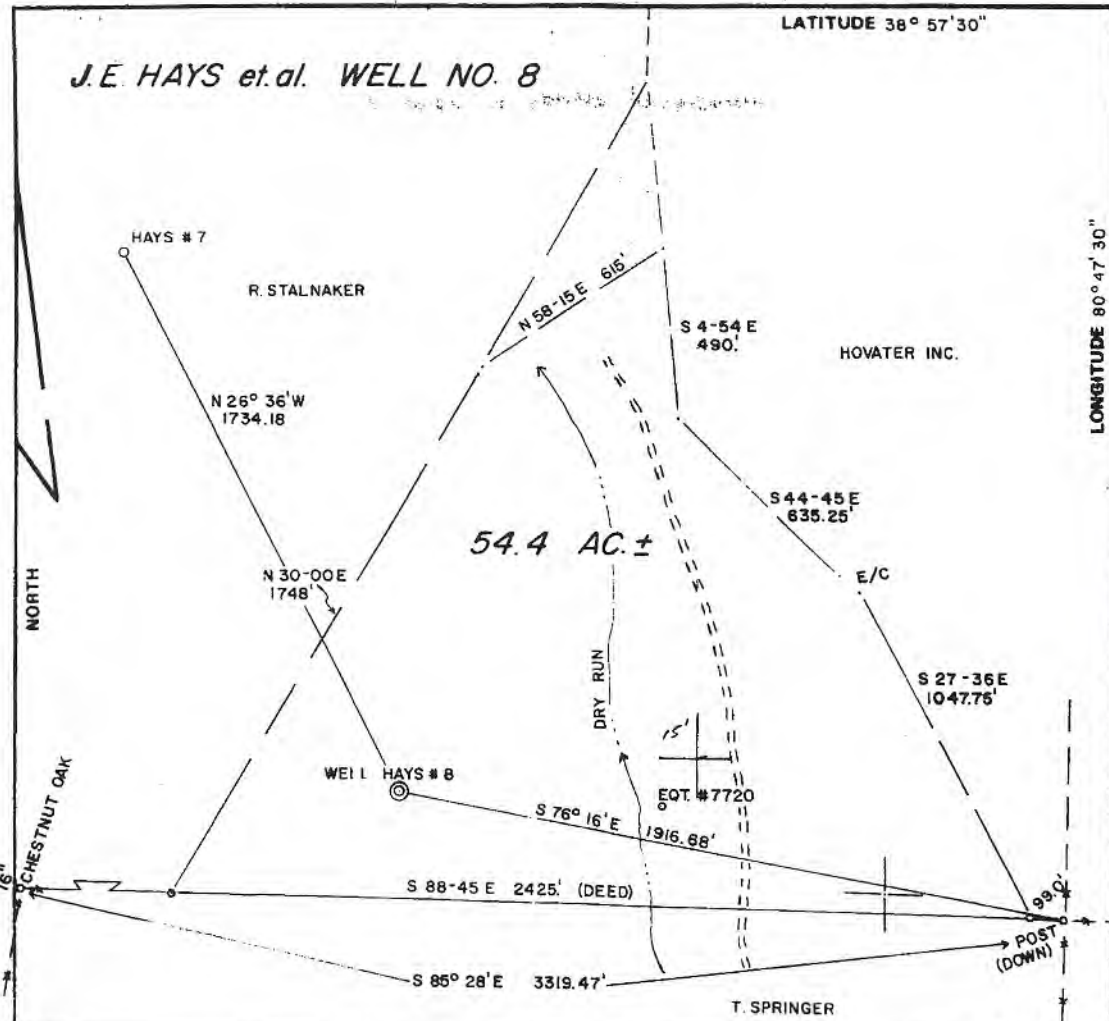
Eastern American Energy Corporation
 Well Operator
[Signature]
 By E. H. McCullough, III
 Its Vice-President

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E: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic, detailed geological record of all formations, including coal, encountered in the production of a well."



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB SW OF LOCATION ELEV. 1198'

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 MINES.
 (SIGNED) Gregory A. Smith
 R.P.E. _____ L.L.S. 677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE NOV. 24 19 80
 OPERATOR'S WELL NO. HAYS NO. 8
 API WELL NO. _____
47 - 021 - 3717
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS.") PRODUCTION STORAGE _____ DEEP SHALLOW _____
 LOCATION ELEVATION 918' WATER SHED DRY RUN
 DISTRICT GLENVILLE COUNTY GILMER
 QUADRANGLE GLENVILLE 7.5'
 SURFACE OWNER J.E. HAYS et al. ACREAGE 54.4
 OIL & GAS ROYALTY OWNER J.E. HAYS et al. LEASE ACREAGE 54.4

PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION BENSON - ELK ESTIMATED DEPTH 5000'
 WELL OPERATOR EASTERN AMERICAN ENERGY DESIGNATED AGENT JAMES C. RECHT
 ADDRESS P.O. BOX N ADDRESS P.O. BOX N
GLENVILLE W.V. 26351 GLENVILLE W.V. 26351

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WW-4A
Revised 6-07

1) Date: February 15, 2019
2) Operator's Well Number
J.E. Hayes #8
3) API Well No.: 47 - 021 - 03717

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: (a) Name I.L. Morris, Address P.O. Box 397, Glensville, WV 26351. (b) Name, Address. (c) Name, Address. 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. 6) Inspector Danny Mullins, Address 220 Jack Acres Rd., Buckhannon, WV 26201, Telephone 1-304-932-6844.

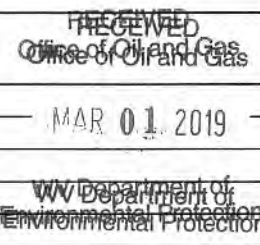
TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (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.

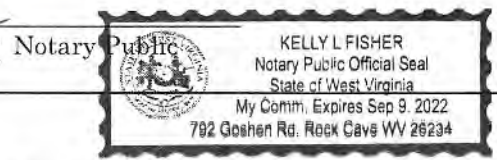
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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: Mike Ross
Its: President
Address 354 Morton Ave.
Buckhannon, WV 26201
Telephone 1-304-472-4289



Subscribed and sworn before me this 18th day of February
Kelly L. Fisher
My Commission Expires September 9, 2022



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.

04/26/2019

WW-9
(5/16)

API Number 47 - 021 - 03717
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) _____ Quadrangle _____

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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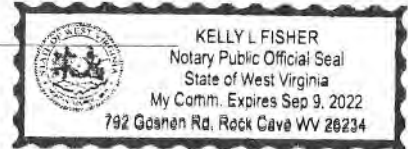
Subscribed and sworn before me this 18th day of February, 2019

MAR 01 2019

Kelly L. Fisher Notary Public

WV Department of Environmental Protection

My commission expires September 9, 2022



47-021-0377 P

04/26/2019

Form WW-9

Operator's Well No. _____

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

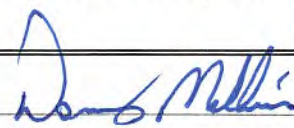
Mulch Hay Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Fescue	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: 

Comments: _____

Title: OG Inspector

Date: 2-22-19

Field Reviewed? () Yes () No

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WW-9- GPP
Rev. 5/16

Page 1 of 2
API Number 47 - 021 - 03717
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): Dry 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.

Dry Run

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

N/A

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

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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.

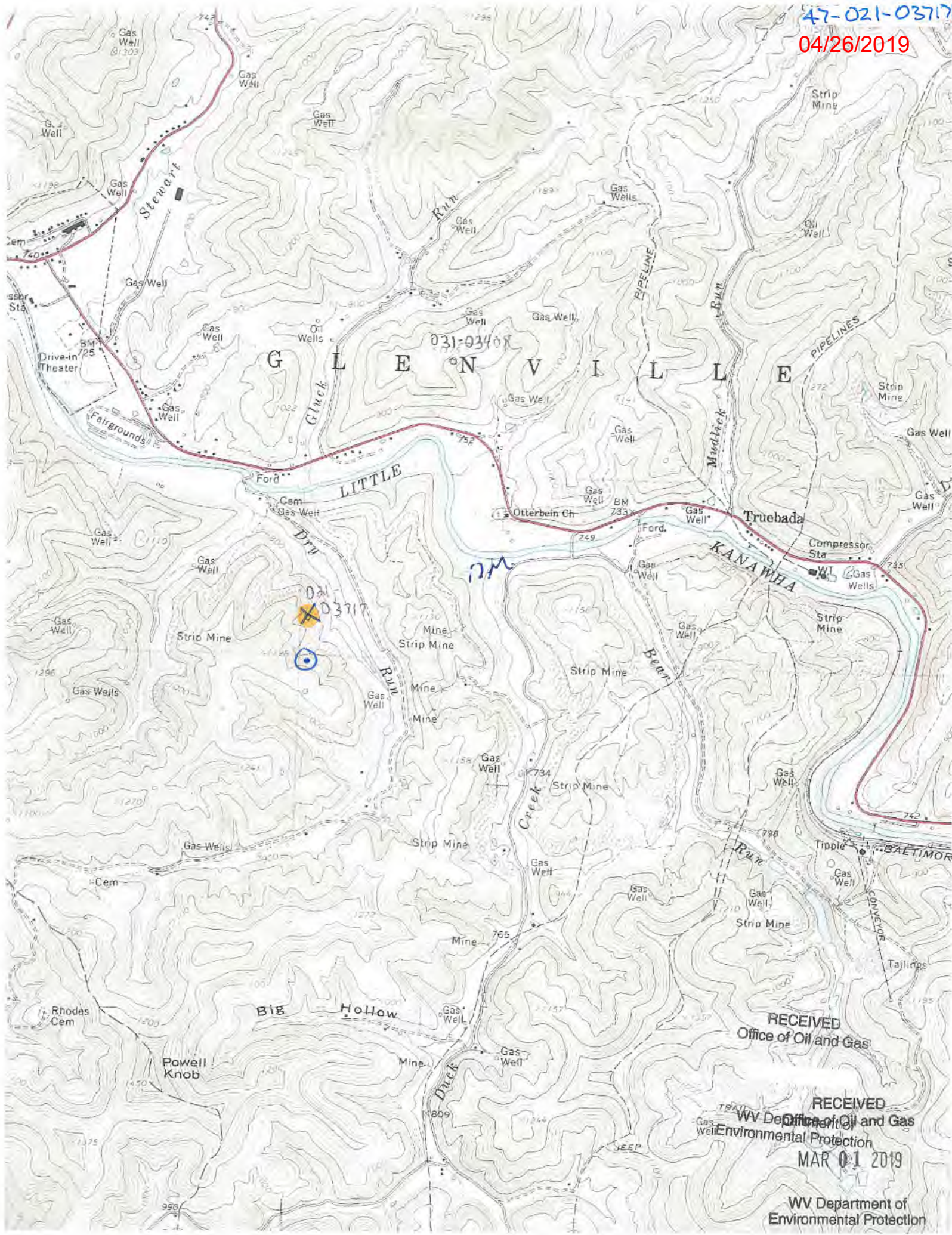
N/A

Signature: *Travis Ross*

Date: February 18, 2019

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WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-021-03717 WELL NO.: 8

FARM NAME: J.E. Hayes

RESPONSIBLE PARTY NAME: Mike Ross

COUNTY: Gilmer DISTRICT: Glenville

QUADRANGLE: Glenville

SURFACE OWNER: I.L. Morris

ROYALTY OWNER: Douglas Morris

UTM GPS NORTHING: 4308198.1

UTM GPS EASTING: 517045.7 GPS ELEVATION: 918'

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

2-18-19
Date

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