



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 17, 2019
WELL WORK PLUGGING PERMIT
Vertical Plugging

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

BUCKHANNON, WV 262010000

Re: Permit approval for 1-192
47-041-03107-00-00

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: 1-192
Farm Name: COX, J. B.
U.S. WELL NUMBER: 47-041-03107-00-00
Vertical Plugging
Date Issued: 4/17/2019

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 4, 2019 **04/19/2019**
2) Operator's Well No. J.B. Cox 1-192
3) API Well No. 47-041 - 03107

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

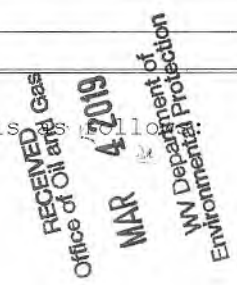
5) Location: Elevation 988' Watershed Rock Run
District Courthouse County Lewis Quadrangle Peterson

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 Barry Stollings
Address 28 Conifer Dr.
Bridgeport, WV 26330
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
- 6% Gel between plug's
- Set cement plug 4550' to TD (4924') plug
- Set 100' cement plug across casing cut
- ~~Set cement plug 3950' to 4050'~~ ^{4050'} Set cement plug 3100' to ~~3250'~~ ^{3250'} 100' above top perf
- Set cement plug 1850' to 1950' (Big Lime & Blue Monday) Set cement plug 900' to 1000', elevation plug (salt bearing strata)
- Set cement plug 400' to 500' 8" casing plug and ground water protection plug
- Set cement plug 100' to surface (surface plug). Tag plug's as necessary, Set monument with API number



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

Work order approved by inspector Barry Stollings Date 2-26-19

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

Perforate: 10 - 0.39" holes from 4683 - 4816
 Pack: with 15,000 lbs. 80/100 sand, 30,000 lbs 20/40 sand, 20 lbs/1000 gals WG-12, 15N, CLASTA, 1% KCl, 500 gals 15% HCl downhole.
 Perforate: 19 - 0.39" holes from 3206 - 4006
 Pack: with 20,000 lbs 80/100 sand, 40,000 lbs 20/40 sand, 15 lbs/1000 gals WG-12, 15N, CLASTA, 1% KCl, 1000 gals 15% HCl.

LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all gas and salt water, coal, oil and
Sand			0	25	
Sand & Shale			25	50	
Sand & Shale			50	195	
Sand			195	230	
Sand & Shale			230	255	
Sand & Red Rock			255	930	
Sand			930	1051	
Sand & Shale			1051	1400	
Sand			1400	1445	
Sand & Shale			1445	1475	
Sand			1475	1550	
Sand Rock & Sand			1550	1720	
Sand & Shale			1720	1850	Top of E Log @ 1850'
Sand & Shale			1850	1960	
Light Lime			1960	2036	
Light Injun			2036	2160	
Sand			2160	2230	
Sand & Shale			2230	2596	
Ordovician			2596	2660	
Sand & Shale			2660	2880	
Fifth Sand			2880	2910	
Sand & Shale			2910	4786	
Wenonah			4786	4820	
Sand & Shale			4820	4924	
Total Depth			4924		

RECEIVED
 Office of Oil and Gas
 MAR 4 2019
 WV Department of
 Environmental Protection

(Attach separate sheets to complete as necessary)

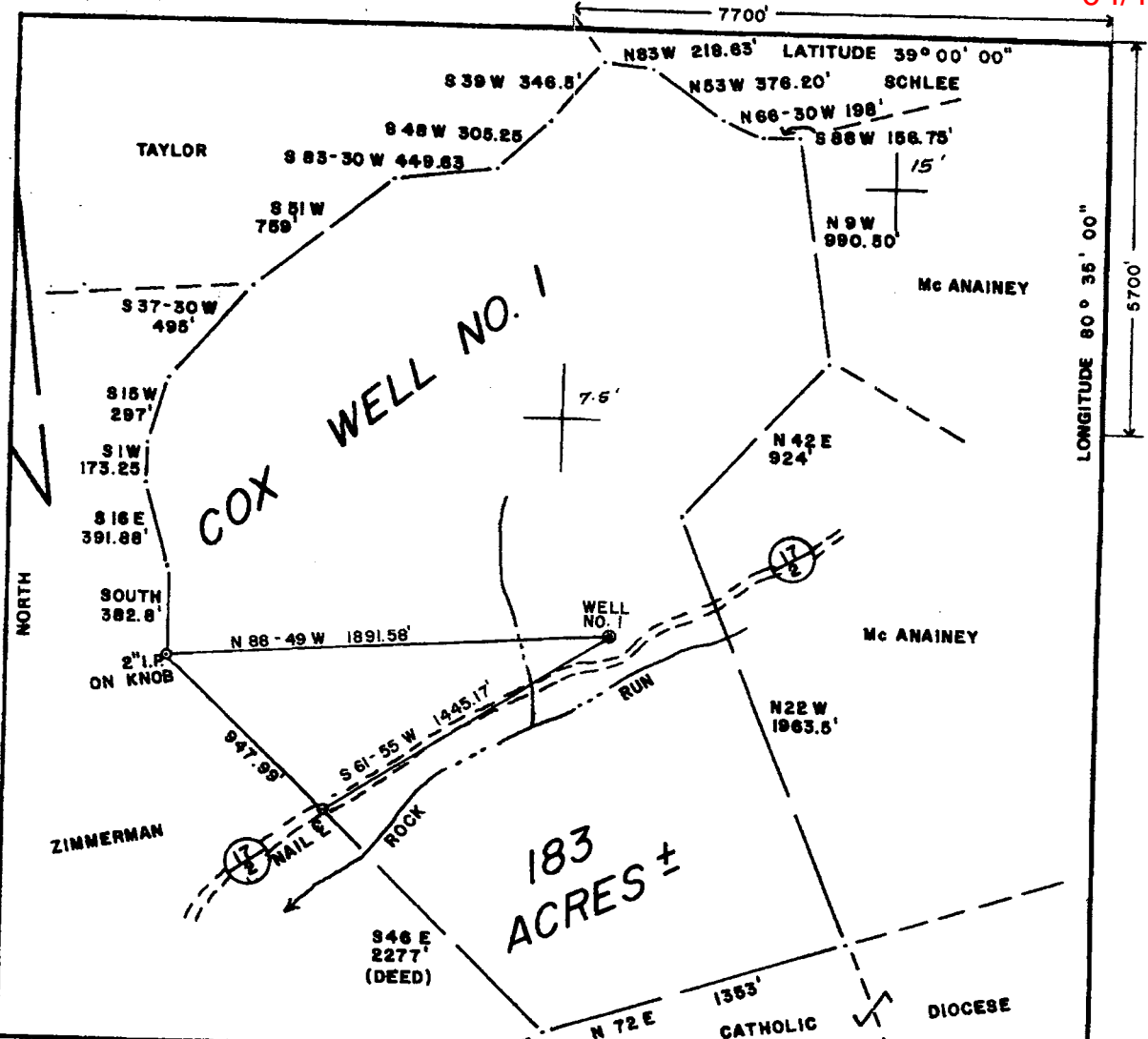
Eastern American Energy Corporation
 Well Operator

By F. H. McCullough, III

Vice-President

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 drilling of a well."



FILE NO. 4-55
 DRAWING NO. _____
 SCALE 1" = 800'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS
ELEV. 821'

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. 877

PLACE SEAL HERE

RECEIVED
 Office of Oil and Gas

MAR 4 2019

WV Department of Environmental Protection

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



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE AUGUST 24, 19 81
 OPERATOR'S WELL NO. 1
 API WELL NO. _____
47-04-3107
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION ELEVATION 988' WATER SHED ROCK RUN
 DISTRICT COURTHOUSE RURAL COUNTY LEWIS
 QUADRANGLE PETERSON 7.5'
 SURFACE OWNER CLARA ANN MORAN et al. ACREAGE 183
 OIL & GAS ROYALTY OWNER JAMES T. COX HEIRS et al. LEASE ACREAGE 183
 LEASE NO. _____
 PROPOSED WORK: DRILL X 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 DEVONIAN SHALE ESTIMATED DEPTH 5200'
 WELL OPERATOR EASTERN AMERICAN ENERGY DESIGNATED AGENT DONALD SUPCOE
 ADDRESS P.O. BOX N ADDRESS P.O. BOX N
GLENNVILLE W.V. 26351 GLENNVILLE W.V. 26351

04/19/2019

WW-4A
Revised 6-07

1) Date: February 4, 2019
2) Operator's Well Number
J.B. Cox #1-192
3) API Well No.: 47 - 041 - 03107

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

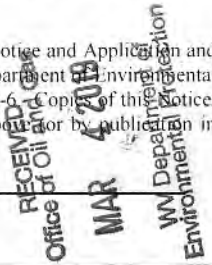
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Clara & Mary Moran</u>	Name <u>N/A</u>
Address <u>c/o Kevin Riley</u>	Address _____
<u>600 Terrace Ave.</u>	_____
(b) Name <u>Weston, WV 26452</u>	(b) Coal Owner(s) with Declaration
Address _____	Name <u>N/A</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Barry Stollings</u>	(c) Coal Lessee with Declaration
Address <u>28 Conifer Dr.</u>	Name <u>N/A</u>
<u>Bridgeport, WV 26330</u>	Address _____
Telephone <u>1-304-552-4194</u>	_____

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 reverse 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 Company Inc.
 By: [Signature]
 Its: President
 Address 354 Morton Ave.
Buckhannon, WV 26201
 Telephone 1-304-472-4289

Subscribed and sworn before me this 4th day of February 2019

[Signature: Brenda K Bush]

Notary Public

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 depprivacyofficer@wv.gov.

04/19/2019

WW-9
(5/16)

API Number 47 - 041 - 03107
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 Company Inc. OP Code 306580

Watershed (HUC 10) Rock Run Quadrangle Peterson

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

Subscribed and sworn before me this 4th day of February, 2019

Brenda K Bush

Notary Public

My commission expires September 27, 2020



RECEIVED
Office of Oil and Gas
MAR 4 2019
WV Department of Environmental Protection

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: Benny Stiles

Comments: _____

RECEIVED
Office of Oil and Gas
MAR 4 2019
WV Department of
Environmental Protection

Title: inspector Date: 2-26-19

Field Reviewed? () Yes () No

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

Operator Name: Ross & Wharton Gas Company Inc.

Watershed (HUC 10): Rock Run Quad: Peterson

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.

Rock Run

RECEIVED
Office of Oil and Gas
MAR 4 2019
WV Department of
Environmental Protection

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.

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

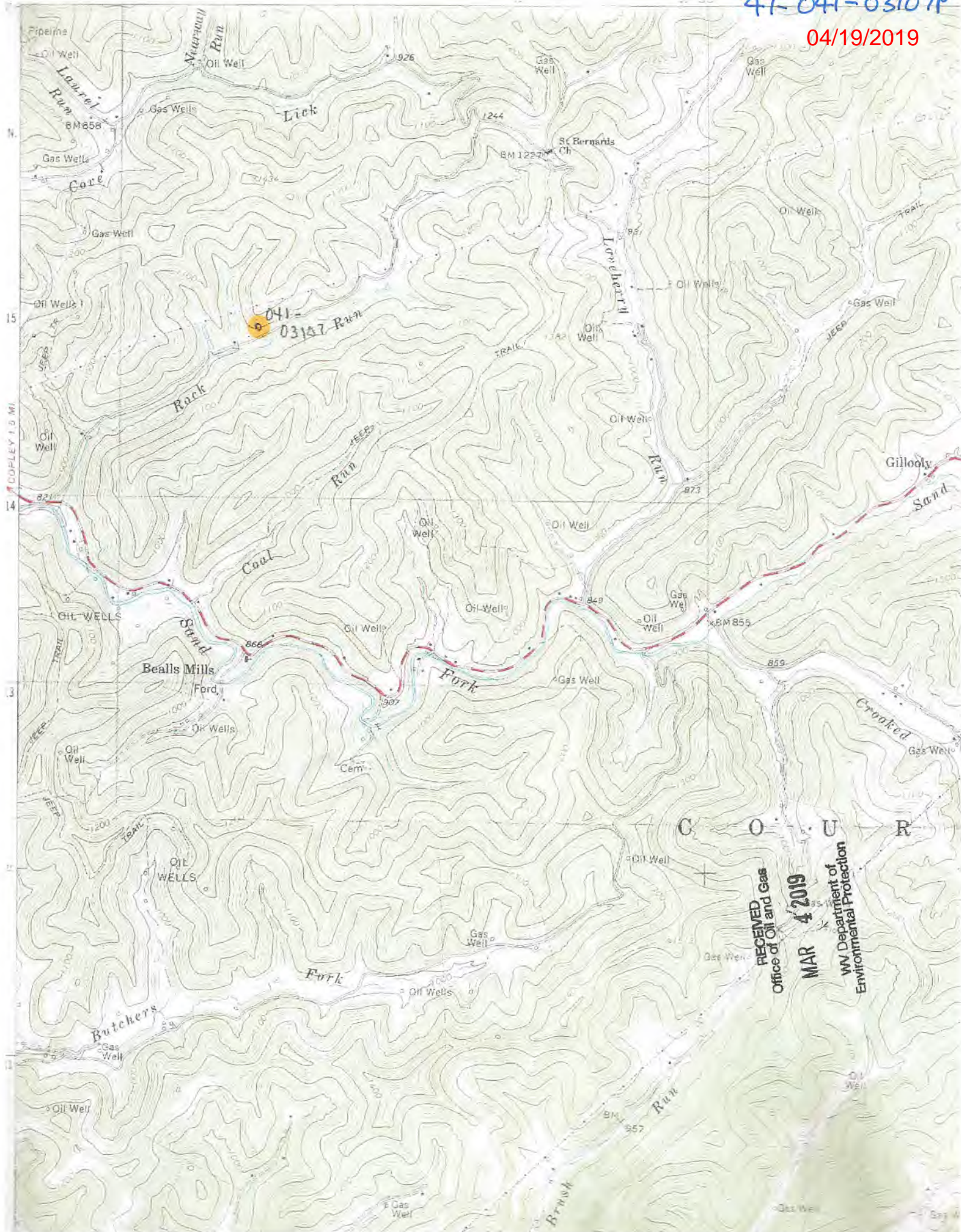
RECEIVED
Office of Oil and Gas
MAR 4 2019
WV Department of
Environmental Protection

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

N/A

Signature: *Tride Rost*

Date: February 4, 2019



RECEIVED
 Office of Oil and Gas
 MAR 4 2019
 WV Department of
 Environmental Protection

WW-7
8-30-06



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

API: 47041-03107 WELL NO.: 1-192

FARM NAME: J.B. Cox

RESPONSIBLE PARTY NAME: Mike Ross

COUNTY: Lewis DISTRICT: Courthouse

QUADRANGLE: Peterson

SURFACE OWNER: Clara & Mary Moran

ROYALTY OWNER: Brudgeman. Mary Joe & Lester

UTM GPS NORTHING: ~~4314914.4~~ 4315094

UTM GPS EASTING: ~~533716.3~~ 533766.5 GPS ELEVATION: 988'

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

Feb. 4, 2019
Date

RECEIVED
Office of Oil and Gas
MAR 4 2019
WV Department of
Environmental Protection