



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

Thursday, March 09, 2017
WELL WORK PERMIT
Horizontal 6A / Plugging

CNX GAS COMPANY LLC (A)
POST OFFICE BOX 1248

JANE LEW, WV 263786506

Re: Permit approval for PEN 20 KHS
47-085-10107-00-00

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: PEN 20 KHS
Farm Name: COKELEY, LAWRENCE & ANGELA
U.S. WELL NUMBER: 47-085-10107-00-00
Horizontal 6A / Plugging
Date Issued: 3/9/2017

Promoting a healthy environment.

03/10/2017

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.

8510107P

WW-4B
Rev. 2/01

1) Date 1/16, 20 17
2) Operator's
Well No. PEN20KHS
3) API Well No. 47-085 - 10107

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 ___

5) Location: Elevation 1081' Watershed North Fork Hughes River
District Clay County Ritchie Quadrangle Ellenboro, WV 7.5'

6) Well Operator CNX Gas Company LLC 7) Designated Agent Chris Turner
Address 1000 CONSOL Energy Drive Address P.O. Box 1248
Canonsburg, PA 15317 Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Michael Goff Name Coastal Drilling
Address 1558 Auburn Rd Address 130 Meadow Ridge Road, STE 24
Pullman, WV 26421 Mount Morris, PA 15349

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

SEE PLUGGING MARKER VARIANCE

RECEIVED
Office of Oil and Gas

JAN 25 2017

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

WV Department of
Environmental Protection

Work order approved by inspector MAG Date 1/19/17

03/10/2017

PLUGGING MARKER VARIANCE

The Office of Oil and Gas is ^{going} considering granting a general variance to the requirements under 35CSR4-5.5b of erecting a monument upon the plugging of certain wells. If granted, the following conditions will be met:

- 1) the well will be surveyed and a plat constructed as required under 22-6 of the WV Code and 35CSR4,
- 2) a readily visible, permanent offset marker, in as close proximity as reasonably possible, will be erected and will provide distance and bearing information to the plugged well,
- 3) the plugging affidavit (form WR-38), will document the absence of a monument at the well location and document the existence and location of the offset marker,
- 4) a steel plate no smaller than one square foot shall be affixed to the well casing no deeper than three feet below the ground surface and be inscribed with the api number of the well.

To qualify under the general variance, an operator may make a variance request to the Chief of the Office of Oil and Gas for a specific well(s) in conjunction with a showing of good cause by the surface owner.

Plugging Marker Variance

McLaughlin, Jeffrey W

From: McLaughlin, Jeffrey W
Sent: Wednesday, February 15, 2017 1:21 PM
To: 'Hanley, Matt'
Cc: Smith, Gene C
Subject: RE: PEN20 P&A Applications
Attachments: Plugging Marker Variance.pdf

Matt,

I have attached the Plugging Marker Variance Document for your review. Although the document says we are considering this variance, we have actually approved this in general terms. Please take note that we are approving the use of one offset marker of sufficient size to provide the distance and bearing information from the offset marker to the plugged well. Since there will be five plugged wells tied to one offset marker, you will need to reference the individual plugged well API number along with the distance and bearing information on said offset marker.

I will attach a copy of the plugging marker variance to each issued plugging permit. It will become a condition of the permit and you will need to follow its instructions. If you have any questions, feel free to email them to me or phone.

Regards,

Jeff McLaughlin, B. S. Petroleum Eng.
Technical Analyst, Office of Oil & Gas
WV Dept. of Environmental Protection
Phone: 304-926-0499 ext. 1614

From: Hanley, Matt [mailto:MattHanley@consolenergy.com]
Sent: Wednesday, February 15, 2017 8:28 AM
To: McLaughlin, Jeffrey W <Jeffrey.W.McLaughlin@wv.gov>
Subject: RE: PEN20 P&A Applications

Good Morning Jeff:

I was able to catch up with our P&A team, and they would like to request an offset marker per our discussion. The marker will be placed in conspicuous location, and list the API and coordinates for each of the 5 wells being plugged. If you could make some type of note in the plugging procedure that this approach will be used, rather than individual markers, I'd appreciate it.

Also – Thank you for bringing this alternative to our attention!

Sincerely,
Matt

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-085-10107 County Ritchie District Ellenboro
Quad Pennsboro Pad Name PEN 20 Field/Pool Name N/A
Farm name Lawrence & Angela Cokeley Well Number PEN 20KHS
Operator (as registered with the OOG) Noble Energy, Inc.
Address 1000 Noble Energy Drive City Canonsburg State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing as drilled plat to be submitted by CNX Easting _____
Landing Point of Curve Northing upon completion of the well. Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1081 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)

Date permit issued 08/05/2014 Date drilling commenced _____ Date drilling ceased _____
Date completion activities began Not completed Date completion activities ceased na
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 398' Open mine(s) (Y/N) depths N
Salt water depth(s) ft none noted for offsets Void(s) encountered (Y/N) depths N
Coal depth(s) ft NA Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) No

Reviewed by:

03/10/2017

API 47-085-10107 Farm name Lawrence & Angela Cokeley Well number PEN 20KHS

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/ N) * Provide details below* |
|---------------------------|-----------|-------------|-------|-------------|-------------|-----------------|---|
| Conductor | 26" | 20" | 40' | New | DH-36 | | |
| Surface | | | | | | | |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | | | | | | | |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details *approved cement variance of 2% accelerator (S001) 0.2% Antifoam (D046) 0.125 lb/sk Polyester Flake (D130)

| CEMENT DATA | Class/Type of Cement | Number of Sacks | Slurry wt (ppg) | Yield (ft ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|-----------------|-----------------|------------------------------|---------------------------|-----------------|-----------|
| Conductor | | | | | | | |
| Surface | | | | | | | |
| Coal | | | | | | | |
| Intermediate 1 | | | | | | | |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | | | | | | | |
| Tubing | | | | | | | |

Drillers TD (ft) _____ Loggers TD (ft) _____

Deepest formation penetrated _____ Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) _____

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

Well Record / Completion Report Statement: PEN20HS Conductors

A formal well record for this well does not exist due to the extent of operations completed. The plugging procedure was based upon the originally permitted depth for setting conductor (40').

PENS20HS CONDUCTOR PLUGGING PROCEDURE

1. Move rig and equipment on location
2. Run in 20" casing with sandline and tag TD (Around 40')
3. Once TD has been found run in 20" casing with tubing to TD (Around 40')
4. Cement 20" casing from TD to surface using Class A cement (TD-surface)
5. Once cement is at surface pull tubing out of well
6. Install flat plate on well as monument with API#, Company Name, Well Name and date plugged
7. Fill cellar in with gravel
8. Rig down and move off well

If it becomes necessary to deviate from this method, approval from the WV DEP Oil & Gas Division will be obtained before proceeding.

Work Order approved by Inspector: Michael Doff Date: 1/19/17

RECEIVED
Office of Oil and Gas
JAN 25 2017
WV Department of
Environmental Protection

WW-4A
Revised 6-07

1) Date: 1/16/2017
2) Operator's Well Number PEN20KHS
3) API Well No.: 47 - 085 - 10107

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>Lawrence B. and Angela Cokeley</u> | Name <u>N/A - No Coal</u> |
| Address <u>4573 Bonds Creek Rd.</u> | Address _____ |
| <u>Pennsboro, WV 26415</u> | _____ |
| (b) Name _____ | (b) Coal Owner(s) with Declaration |
| Address _____ | Name <u>N/A - No Coal</u> |
| _____ | Address _____ |
| _____ | _____ |
| (c) Name _____ | Name _____ |
| Address _____ | Address _____ |
| _____ | _____ |
| 6) Inspector <u>Michael Goff</u> | (c) Coal Lessee with Declaration |
| Address <u>1558 Auburn Rd</u> | Name <u>N/A - No Coal</u> |
| <u>Pullman, WV 26421</u> | Address _____ |
| Telephone <u>304-549-9823</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 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 CNX Gas Company LLC
 By: *Michael Naylor*
 Its: Manager - Gas Permitting
 Address 1000 CONSOL Energy Drive
Canonsburg, PA 15317
 Telephone 724-485-3011

Subscribed and sworn before me this 16th day of January, 2017
Sara M. Micoli
My Commission Expires 03/11/2019

COMMONWEALTH OF PENNSYLVANIA
 NOTARY SEAL
 Sara M. Micoli, Notary Public
 Cecil Twp., Washington County
 My Commission Expires March 11, 2019
 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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.

8510107A

WW-9
(5/16)

API Number 47 - 085 - 10107
Operator's Well No. PEN 20 KHS

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name CNX Gas Company LLC OP Code 494458046

Watershed (HUC 10) North Fork Hughes River/ Bonds Creek Quadrangle Ellenboro

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: N/A

Will a synthetic liner be used in the pit? Yes No If so, what ml.? N/A

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 Approved contractor will use vacuum trucks and properly dispose of fluid and waste returns.)

MAG
1/19/17

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 Matthew Hanley

Company Official (Typed Name) Matthew Hanley

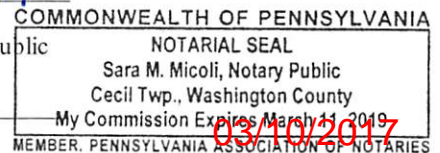
Company Official Title Manager - Gas Permitting

Subscribed and sworn before me this 16th day of January, 20 17

Sara M. Micoli

Notary Public

My commission expires 03/11/2019



8510107P

Form WW-9

Operator's Well No. PEN20 KHS

Proposed Revegetation Treatment: Acres Disturbed 18.0 Prevegetation pH 6.0

Lime 2-3 Tons/acre or to correct to pH _____

Fertilizer type 10-10-20 or equal

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw at 2 Tons/acre

Seed Mixtures

| Temporary | | Permanent | |
|---------------|----------|---------------|----------|
| Seed Type | lbs/acre | Seed Type | lbs/acre |
| Tall Fescue | 40 | Tall Fescue | 40 |
| Ladino Clover | 5 | Ladino Clover | 5 |

No additional disturbance is proposed to complete P&A. Approved reclamation plan for existing PEN20 pad remains in place.

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: Michael Daff

Comments: _____

RECEIVED
Office of Oil and Gas
JAN 25 2017

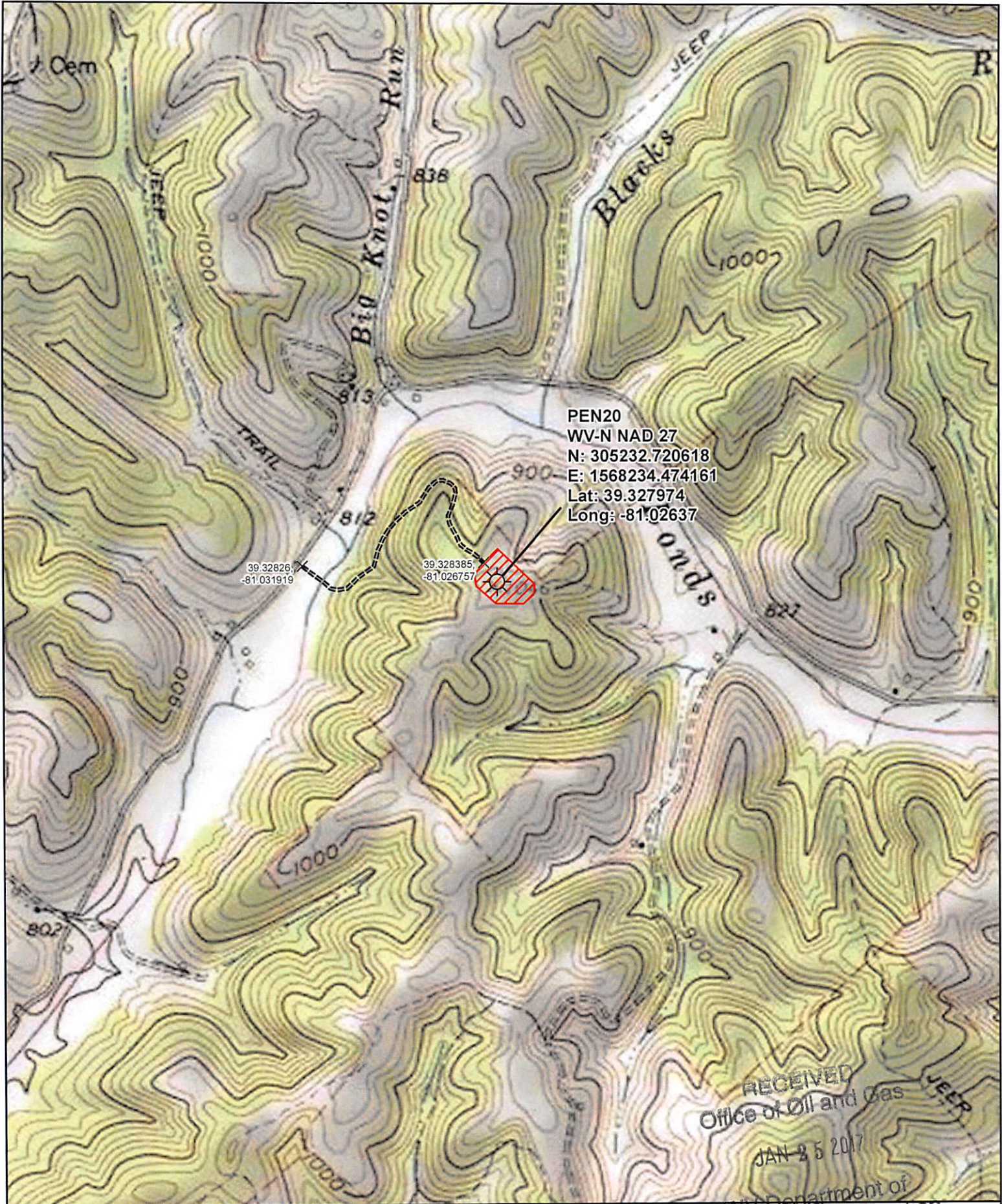
Title: Oil & Gas Inspector

Date: 1/19/17

Field Reviewed? Yes No

WV Department of Environmental Protection

03/10/2017



PEN20
 WV-N NAD 27
 N: 305232.720618
 E: 1568234.474161
 Lat: 39.327974
 Long: -81.02637

39.32826,
 -81.031919

39.328385,
 -81.026757

RECEIVED
 Office of Oil and Gas
 JAN 25 2017

WV Department of
 Environmental Protection
 CONSOL ENERGY

- Well Site
- Access Points
- Access Road
- Well Pad



| | |
|--|------------------------|
| | |
| Date: 1/17/2017 | Prepared By: J Steiner |
| Revisions: 1 | Approved By: R Hoon |
| <small>This map is property of CONSOL Energy Inc. and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.</small> | |

03/10/2017
 Topo Well Map

85 10107P

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-085-10107 WELL NO.: PEN20KHS

FARM NAME: Lawrence and Angela Cokeley

RESPONSIBLE PARTY NAME: CNX Gas Company LLC

COUNTY: Ritchie DISTRICT: Clay

QUADRANGLE: Ellenboro

SURFACE OWNER: Lawrence and Angela Cokeley

ROYALTY OWNER: See Attached Royalty Listing

UTM GPS NORTHING: 4353185.8

UTM GPS EASTING: 497732.48 GPS ELEVATION: 1081'

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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:
Survey grade GPS : Post Processed Differential

Real-Time Differential

Mapping Grade GPS : Post Processed Differential

Real-Time Differential

- 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.

Martin Hamling
Signature

Manager - Gas Permitting
Title

RECEIVED
Office of Oil and Gas
JAN 25 2017
WV Department of
Environmental Protection
1/16/2017
Date

03/10/2017