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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, February 24, 2020  
WELL WORK PLUGGING PERMIT  
Coal Bed Methane Well Plugging

CNX GAS COMPANY LLC  
1000 CONSOL ENERGY DR

CANONSBURG, PA 15370

Re: Permit approval for 2D3  
47-049-01558-00-00

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: 2D3  
Farm Name: MCDOWELL, WILLIAM & A<sup>+</sup>  
U.S. WELL NUMBER: 47-049-01558-00-00  
Coal Bed Methane Well Plugging  
Date Issued: 2/24/2020

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**

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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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

47-049-01558 P

WW-4B  
Rev. 2/01

1) Date 1/15, 2020  
2) Operator's  
Well No. 2D3  
3) API Well No. 47-049 - 01558 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 x or Underground storage \_\_\_ ) Deep \_\_\_ / Shallow x

5) Location: Elevation 1404 Watershed Campbells Run  
District Mannington County Marion Quadrangle Hundred

6) Well Operator CNX Gas Company LLC 7) Designated Agent Anthony Kendziora  
Address 1000 Consol Energy Dr. Address 1000 Consol Energy Dr  
Canonsburg, PA 15317 Canonsburg PA 15317

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Sam Ward Name Coastal Drilling east LLC  
Address P.O. Box 2327 Address 70 gums Springs Road  
Buckhannon, WV 26201 Morgantown WV 26508

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

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FEB 13 2020

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 [Signature] Date 2/7/2020

Well: 2D3 (McDowell)

API#: 47-049-01558

District: Mannington

County: Marion

Elevation: 1404'

2D3 Proposed Plugging and Abandonment Procedure

1. Run in and tag TD (~1135) with wireline or small sandline tools. Confirm TD is inside slotted casing. (Make call to CNX if tagging high to come up with game plan)
2. Once TD has been reached, proceed to fill slotted casing with pea gravel. (1 ton= ~20 Cu. Ft. fill)
3. Once pea gravel has been placed in casing verify top of gravel
4. Once top of pea gravel has been verified TIH with tubing and prepare to cement
5. Place 50' cement plug on top of pea gravel
6. TOOH with cement string
7. Rig up wireline and tag cement plug
8. TOOH and prepare to run Bond Log on 8 5/8" casing if Bond Log tool will go to bottom
9. Run Bond Log from top of cement to surface to verify casing is cemented to surface. If cement top ~~is~~ found to not be at surface notify CNX and prepare to pull uncemented casing  
is
10. If cement on 8 5/8" is at surface or once uncemented has been pulled prepare to cement well to surface
11. TIH with work string to cement plug and cement well to surface
12. TOOH w/ work string and top off well with cement
13. Install 6"x14' monument (10' below grade, 4' above grade). Monument must contain API#, Well Name, Company Name and Date Plugged

**Note:** All cement will be Class A. All spacers will be 6% gel

Sdw  
2/7/2020

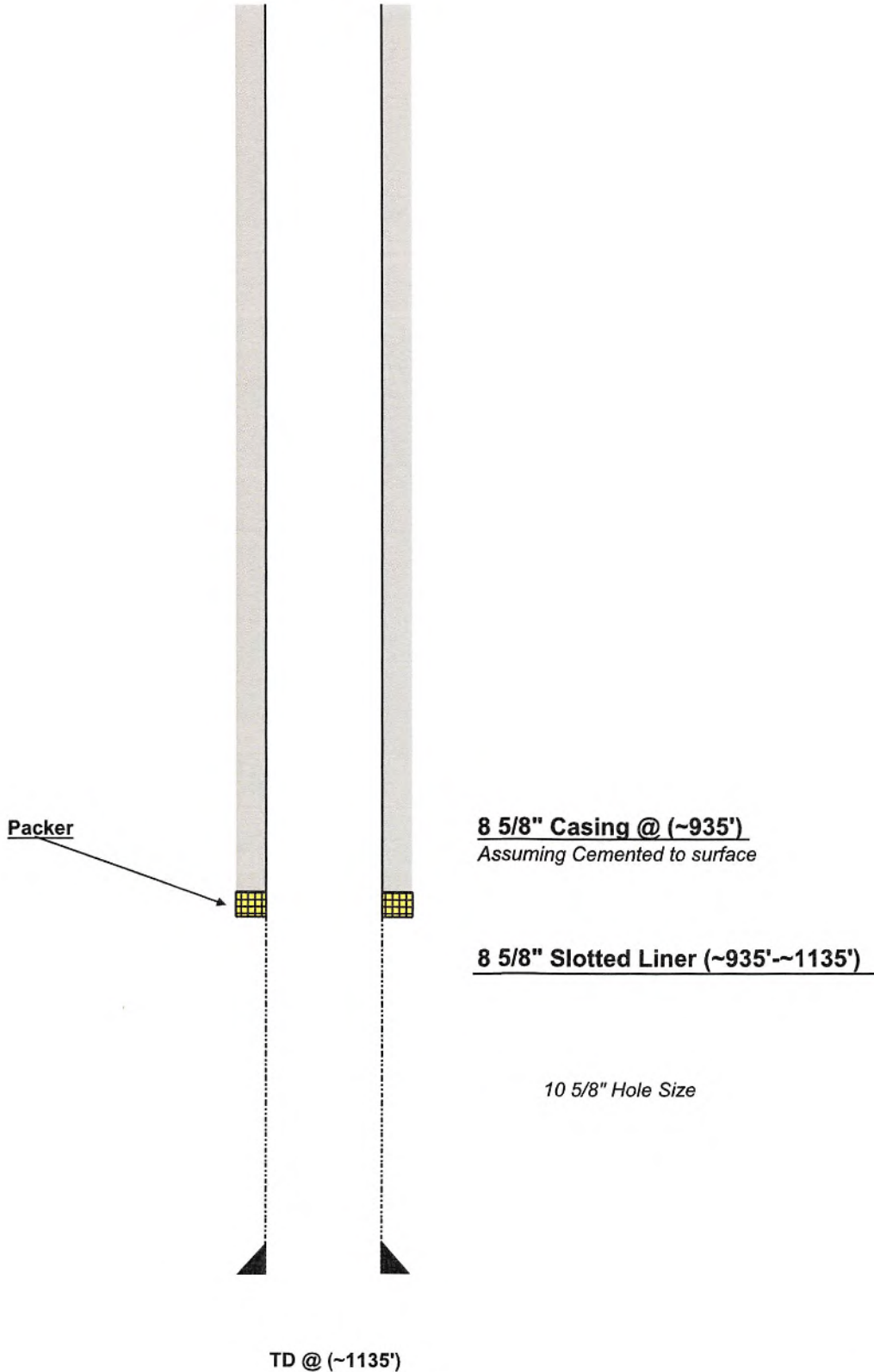
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**McDowell 2D3**  
Mannington District, Marion WV  
Original Completion : ?  
API #47-049-01558  
Elevation = 1404'



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

API 47-049-01558 County Marion District Mannington  
Quad Hundred Pad Name McDowell 2D3 Field/Pool Name \_\_\_\_\_  
Farm name McDowell William E & Alice K Well Number 2D3  
Operator (as registered with the OOG) CNX Gas Company LLC  
Address 1000 Consol 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 4387142.49 Easting 553267.92  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 1404 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 \_\_\_\_\_ Date drilling commenced \_\_\_\_\_ Date drilling ceased \_\_\_\_\_  
Date completion activities began \_\_\_\_\_ Date completion activities ceased \_\_\_\_\_  
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 \_\_\_\_\_ Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft \_\_\_\_\_ Void(s) encountered (Y/N) depths \_\_\_\_\_  
Coal depth(s) ft \_\_\_\_\_ Cavern(s) encountered (Y/N) depths \_\_\_\_\_  
Is coal being mined in area (Y/N) \_\_\_\_\_

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Reviewed by:  
SDW 2/17/2020

WR-35  
Rev. 8/23/13

API 47-049 - 01558

Farm name McDowell William E & Alice K

Well number 2D3

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							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	10.625	8.625	~1135				
Tubing							
Packer type and depth set		Formation Packer ~935'					

Comment Details \_\_\_\_\_

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

Drillers TD (ft) -1135

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

*SDW*  
*2/7/2020*

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 \_\_\_\_\_

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Environmental Protection







47-049-01558P

WW-4A  
Revised 6-07

1) Date: 1/15/20  
2) Operator's Well Number  
203  
3) API Well No.: 47 - 049 - 01558

**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>William E. &amp; Alice K. McDowell</u>	Name <u>Consolidated Coal Company</u>
Address <u>23146 Marble Way</u>	Address <u>46226 National Road</u>
<u>California, MD 20619</u>	<u>Saint Clairsville, OH 43950</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>William E. &amp; Alice K. McDowell</u>
	Address <u>23146 Marble Way</u>
	<u>California, MD 20619</u>
(c) Name _____	Name <u>Consolidated Coal Company</u>
Address _____	Address <u>46226 National Road</u>
	<u>Saint Clairsville, OH 43950</u>
6) Inspector <u>Sam Ward</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 2327</u>	Name <u>Consolidated Coal Company</u>
<u>Buckhannon, WV 26201</u>	Address <u>46226 National Road</u>
Telephone <u>304-3987583</u>	<u>Saint Clairsville, OH 43950</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	<u>CNX Gas Company LLC</u>	RECEIVED Office of Oil and Gas FEB 13 2020 WV Department of Environmental Protection
By:	<u>Raymond Hoon</u> <i>Raymond Hoon</i>	
Its:	<u>Senior Project Manager</u>	
Address	<u>1000 Consol Energy Dr</u> <u>Canonsburg, PA 15317</u>	
Telephone	<u>724-485-4000</u>	

*Commonwealth of Pennsylvania, County of Washington*  
 Subscribed and sworn before me this 12<sup>th</sup> day of February, 2020  
*Rebecca Zachwieja*  
 My Commission Expires November 7, 2023  
 Notary Public  
 Commonwealth of Pennsylvania - Notary Seal  
 Rebecca Zachwieja, Notary Public  
 Washington County  
 My commission expires November 7, 2023  
 Commission number 1269683  
 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](mailto:depprivacyofficer@wv.gov).















47-049-01558P

WW-9  
(5/16)

API Number 47 - 049 - 01558  
Operator's Well No. 2D3

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) Campbells Run Quadrangle Hundred

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: NA

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

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 Waste Management or Ryan Environmental will use Vacuum trucks and properly dispose of any fluid or waste return)

SDW  
2/17/2020

Will closed loop system be used? If so, describe: no

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. na

-If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_

Additives to be used in drilling medium? na

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. na

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) na

-Landfill or offsite name/permit number? na

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 Raymond Hoon

Company Official (Typed Name) Raymond Hoon

Company Official Title Senior Project Manager

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Subscribed and sworn before me this 12<sup>th</sup> day of February, 2020

Rebecca Zechin

Notary Public

My commission expires November 7, 2023

Commonwealth of Pennsylvania - Notary Seal  
Rebecca Zachwieja, Notary Public  
Washington County  
My commission expires November 7, 2023  
Commission number 1269683  
Member, Pennsylvania Association of Notaries

Proposed Revegetation Treatment: Acres Disturbed 4.2 acres Prevegetation pH \_\_\_\_\_

Lime 2-3 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch hay or straw 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Landino Clover	5	Landino Clover	5

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: S. J. O'Connell

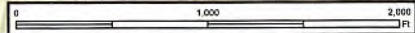
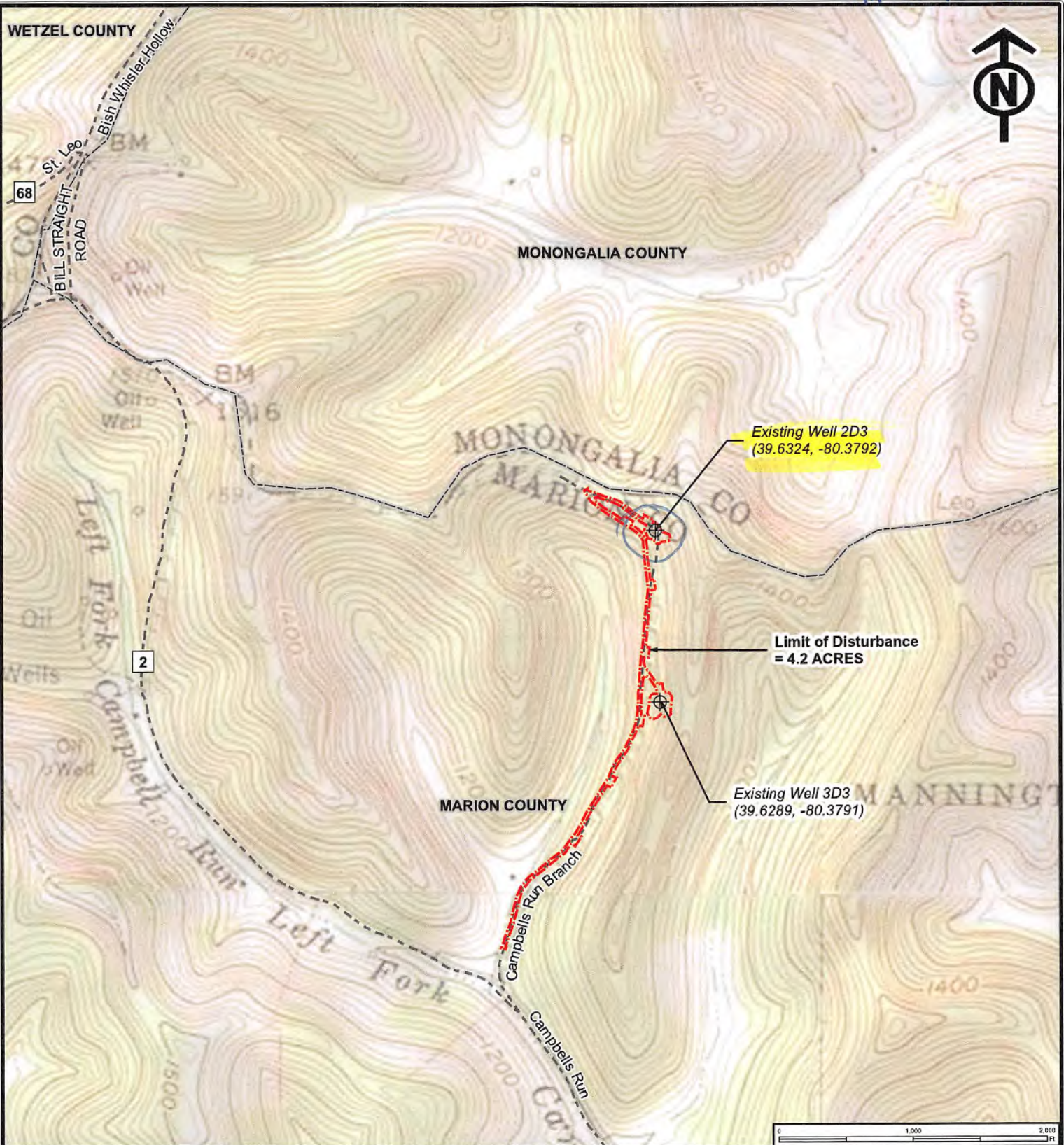
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: COG Inspector Date: 2/7/2020

Field Reviewed? ( ) Yes ( X ) No

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**LEGEND**

- Existing Well
- Limit of Disturbance
- Road
- County Boundary

Prepared By: **KEYSTONE CONSULTANTS INC**  
 www.keystoneconsultants.net 412-278-2100

REV	DESCRIPTION	DATE

DWN BY: AMW    APR BY: STK    DATE: 11/13/2019

**2D3/3D3 Well Plugging  
Site Location Topographic Map**

Marion County, WV

DRAWING NUMBER: 001

SCALE: 1" = 1,000 feet    SHEET: 1 OF 2



WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 4704901558 WELL NO.: 2D3

FARM NAME: McDowell William

RESPONSIBLE PARTY NAME: CNX Gas Company

COUNTY: Marion DISTRICT: Mannington

QUADRANGLE: Hundred

SURFACE OWNER: McDowell William E & Alice K

ROYALTY OWNER: \_\_\_\_\_

UTM GPS NORTHING: 4387142.49

UTM GPS EASTING: 553267.92 GPS ELEVATION: 428.01 m / 1404.22 ft

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 X : Post Processed Differential X

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.

*Raymond [Signature]*  
Signature

Project MANAGER  
Title

2-12-2020  
Date

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