



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

Monday, August 5, 2019

WELL WORK PLUGGING PERMIT
Coal Bed Methane Well Plugging

CNX GAS COMPANY LLC
POST OFFICE BOX 1248

JANE LEW, WV 263786506

Re: Permit approval for L-66
47-049-01411-00-00

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: L-66
Farm Name: DULANEY, TINA L.
U.S. WELL NUMBER: 47-049-01411-00-00
Coal Bed Methane Well Plugging
Date Issued: 8/5/2019

I

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

1) Date _____, 2019
2) Operator's
Well No. L-66
3) API Well No. 47-049 - 01411

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 1272 Watershed Flat Run
District Mannington County Marion Quadrangle Mannington

6) Well Operator CNX Gas Company, LLC 7) Designated Agent Christopher 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 Sam Ward Name Contractors Services Incorporated of WV
Address P.O. Box 2327 Address 929 Charleston Road
Buckhannon WV 26201 Spencer, WV 25276

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

RECEIVED
Office of Oil and Gas

JUL 19 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  Date 7/11/2019

Well: L-66 (Dulaney)

API#: 47-049-01411 P

District: Mannington

County: Marion

Elevation: 1599'

L-66 Proposed Plugging and Abandonment Procedure

1. Run in and tag TD (~1340') and determine if slotted liner is present
2. If no pressure on well fill slotted liner w/ Pea Gravel (1 ton= ~20 Cu. Ft. fill). If pressure on well a plug will need to be set at top of slotted liner.
3. If using Pea Gravel run in and verify top of gravel is at top of slotted liner
4. Run in well and shoot off and remove any uncemented casing
5. Run in well w/ work string and cement from Pea Gravel/Plug to surface
6. TOOH w/ work string and top off well with cement
7. 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

RECEIVED
Office of Oil and Gas

JUL 19 2019

SDW
7/11/2019

WV Department of
Environmental Protection

5/29/2019

Directions to L66

**L66 Well Plugging
Mannington District, Marion County, WV
CNX Gas Company**

From the intersection of US-250 and CR 13 (Flat Run Road) in Mannington, WV, head north on CR 13 for approximately 3.25 miles. Turn right onto CR 10 (Flyblow Road) and follow for approximately 1.7 miles, turn right on the private access road and follow to the site access road located on the left.

Nearest Fire Department: Mannington Fire Department

RECEIVED
Office of Oil and Gas

JUL 19 2019

WV Department of
Environmental Protection

DATE: August 4, 2004
 API#: 47-4901411

State of West Virginia
 Department of Environmental Protection
 Office of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Dulaney, Tina L. Operator Well No.: L-66

LOCATION: Elevation: 1599 Quadrangle: Mannington

District: Mannington County: Marion
 Latitude: 5738.0 Feet South of 39 Deg. 37 Min. 30 Sec.
 Longitude: 6736.66 Feet West of 80 Deg. 17 Min. 30 Sec.

Company: CNX Gas Company LLC (North)

| | Casing & Tubing | Used In Drilling | Left In Well | Cement Fill Up Cu. Ft. |
|---|-----------------|------------------|--------------|--|
| Address: 1800 Washington Road Pittsburgh, PA 15241 | | | | |
| Agent: Edwin Merrifield | | | | |
| Inspector: Steve Mossor | | | | |
| Date Permit Issued: 4/07/2003 | | | | |
| Date Well Work Commenced: Existing Borehole | | | | |
| Date Well Work Completed: Converted to well | | | | RECEIVED Office of Oil and Gas |
| Verbal Plugging: | | | | |
| Date Permission granted on: | | | | MAR 19 2019 |
| Rotary Cable Rig | | | | |
| Total Depth (feet): 1340 | | | | |
| Fresh Water Depth (ft.): | | | | WV Department of Environmental Protection |
| Salt Water Depth (ft.): | | | | |
| Is coal being mined in area (N/Y)? No | | | | |
| Coal Depths (ft.): 1330 | | | | |

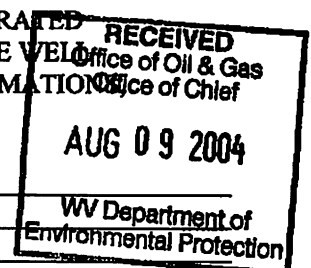
OPEN FLOW DATA

Producing formation Pittsburgh Coal Seam Pay zone depth (ft) 1330
 Gas: Initial open flow 160 MCF/d Oil: Initial open flow 0 Bbl/d
 Final open flow 160 MCF/d Final open flow 0 Bbl/d
 Time of open flow between initial and final tests 0 Hours
 Static rock pressure 1 psig (surface pressure) after - Hours

Second producing formation None Pay zone depth (ft) _____
 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
 Static rock pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATION INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Joseph P. Aman
 By: Joseph P. Aman
 Date: August 4, 2004



MAR 14 11

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
COALBED METHANE PERMIT APPLICATION 4 457

1) Well Operator: CNX Gas Company, LLC (North) 2) Well Name St. Leo Gob Well No. L-66

3) Operator's Well Number L-66 4) Elevation 1599'

5) Well Type: (a) Oil _____ / or Gas _____ /
(b) If Gas: Production X / Underground Storage _____ / CBM _____ /
Deep _____ / Shallow X /

6) Proposed Target Formation(s): Pittsburgh Coal Seam Mine Methane

7) Proposed Total Depth: 1,340 feet

8) Approximate Fresh Water Strata Depths: Not known

9) Approximate Salt Water Depths: Not known

10) Approximate Coal Seam Depths: Pittsburgh @ 1,330'

11) Does Land Contain Coal Seams Tributary to Active Mines? Yes X / No _____ /

12) (a) Proposed Well Work: Convert an existing ventilation borehole (Well No. L-66) to a producing CBM gob well.

(b) If Stimulation Proposed, Describe Means to be Used to Stimulate Well: N/A

13) (a) Does the proposed operation plan to convert an existing well (as defined in W. Va. Code § 22-6-1) or a vertical ventilation hole to a coalbed methane well? Yes X / No _____ /

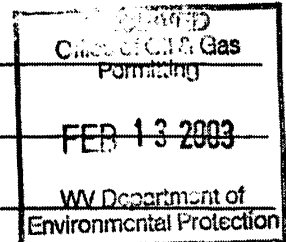
(b) If yes, please attach to this Application a list of all formations from which production is anticipated and a description of any plans to plug any portion of the well. Pittsburgh Coal Only Via Existing Casing.

14) (a) Will the proposed coalbed methane well be completed in some but not all coal seams for production (except for a gob well or vent hole proposed to be converted to a well)?
Yes _____ / No _____ / N/A

(b) If yes, please attach to this Application a plan and design for the well which will protect all workable coal seams which will be penetrated by the well.

15) (a) Does the proposed operation include horizontal drilling of a well commenced on the surface? Yes _____ / No X /

(b) If yes, please attach to this Application a description of such operations, including both the vertical and horizontal alignment and extent of the well from the surface to total depth.

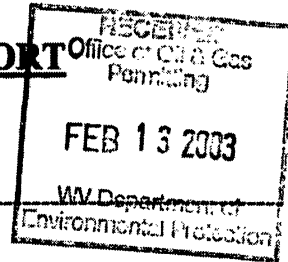


CASING AND TUBING PROGRAM

| TYPE | SPECIFICATIONS | | FOOTAGE INTERVALS | | CEMENT |
|--------------|----------------|-------|-------------------|-----------------------------|--------|
| | Size | Grade | Weight per ft. | For Drilling / Left in Well | |
| Conductor | | | | | |
| Fresh Water | | | | | |
| Coal | | | | | |
| Intermediate | | | | | |
| Production | | | | | |
| Tubing | | | | | |
| Liners | | | | | |

PACKERS:

PLEASE SEE ATTACHED WELL REPORT



For Office of Oil and Gas Use Only

Fee(s) paid: ^{\$250.} Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-5B Bond _____ Agent
 CK #354259154 (Type)

CONSOLIDATION COAL COMPANY
1800 WASHINGTON ROAD
PITTSBURGH PA

WELL NUMBER L-66

MINE Loveridge

DATE STARTED October 1987

DATE COMPLETED October 1987

CONTRACTOR Unknown

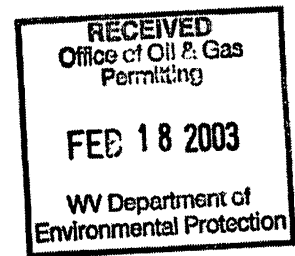
TOTAL DEPTH OF HOLE 1,340 (APPROX)
[In Feet]

CASING IN HOLE: SLOTTED 300
[In Feet]

5-1/4-INCH 1,335
7-INCH None

PACKER SIZE 3' 6"

CEMENT 310 [SKS]



OK S.M
2-18-03

47-049-01411P

WW-4A
Revised 6-07

1) Date: _____
2) Operator's Well Number
L-66 _____
3) API Well No.: 47 - 049 - 01411

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>Tina & Michael Delaney</u> | Name <u>Consolidation Coal Company</u> |
| Address <u>720 Thomas Fork Rd</u> | Address <u>46226 NATIONAL RD</u> |
| <u>Mannington, WV 26582</u> | <u>SAINT CLAIRSVILLE OH 43950</u> |
| (b) Name _____ | (b) Coal Owner(s) with Declaration |
| Address _____ | Name <u>Wheeling Dollar Savings & Trust Co.</u> |
| (c) Name _____ | Address <u>527 S. Main St.,</u> |
| Address _____ | <u>Zelienople, PA 16063</u> |
| 6) Inspector <u>Sam Ward</u> | (c) Coal Lessee with Declaration |
| Address <u>P.O. Box 2327</u> | Name <u>Consolidation Coal Company</u> |
| <u>Buckhannon WV 26201</u> | Address <u>46226 NATIONAL RD</u> |
| Telephone <u>304-389-7583</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.

Commonwealth of Pennsylvania - Notary Seal
Lori L. Walker, Notary Public
Greene County
My commission expires February 23, 2023
Commission number 1260781
Member, Pennsylvania Association of Notaries

Well Operator CNX Gas Company, LLC
By: Erika Whetstone *Erika Whetstone*
Its: Permitting Manager
Address 1000 Consol Energy Drive
Canonsburg, PA 15317
Telephone 724-485-4035

RECEIVED
Office of Oil and Gas
JUL 19 2019

Commonwealth of Pennsylvania *County of Washington*
Subscribed and sworn before me this 19th day of July 2019
Lori L. Walker
My Commission Expires February 23, 2023
Notary Public

WV Department of Environmental Protection

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.

47-049-01411 P

WW-9
(5/16)

API Number 47 - 049 - 01411
Operator's Well No. _____

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) Flat Run Quadrangle Mannington

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 Waste Management or Ryan Environmental will use vacuum trucks, and properly dispose of any fluid or waste returns.)

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

*SDW
7/11/2019*

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) _____

-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.

RECEIVED
Office of Oil and Gas

Company Official Signature *Erika Whetstone*

Company Official (Typed Name) Erika Whetstone

JUL 19 2019

Company Official Title Permitting Manager

WV Department of Environmental Protection

Commonwealth of Pennsylvania County of Washington
Subscribed and sworn before me this 17th day of July, 2019

Lori L. Walker

Commonwealth of Pennsylvania - Notary Seal
Lori L. Walker, Notary Public
Greene County
My commission expires February 23, 2023
Commission number 1260781
Member, Pennsylvania Association of Notaries

My commission expires February 23, 2023

Operator's Well No. _____

Proposed Revegetation Treatment: Acres Disturbed less than 1 acre 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: [Signature]

Comments: _____

RECEIVED
Office of Oil and Gas

JUL 19 2019

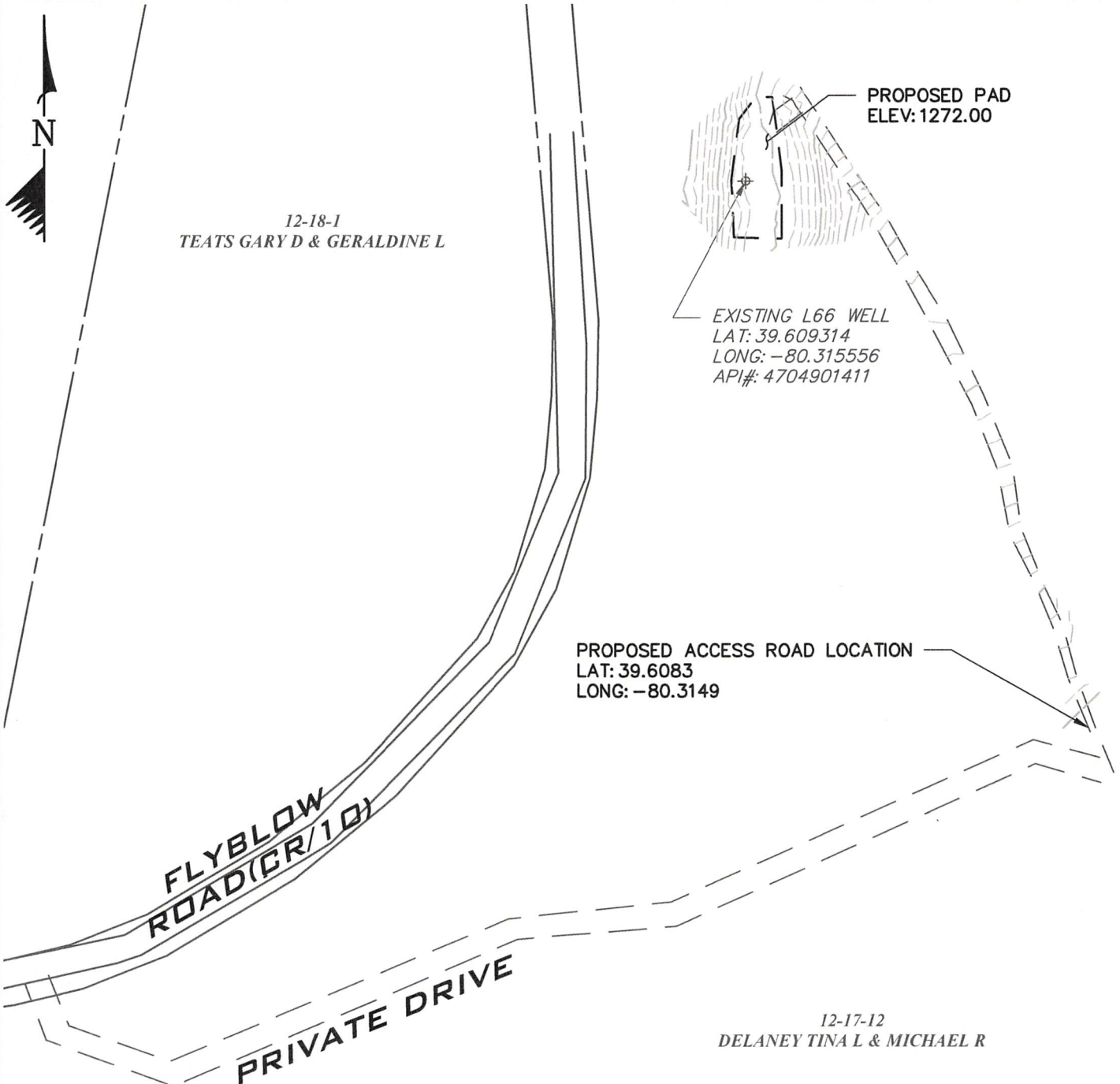
WV Department of
Environmental Protection

Title: OOG Inspector

Date: 7/11/2019

Field Reviewed? () Yes (X) No

47-049-01411 P



T:\2019\19039-027\Cadd\Drawings\19039-027-PE01-E&S Control Plan 900-301.dwg[SITE LAYOUT] LS:(19/06/2019 -- bfurman) -- LP: 6/19/2019 4:22 PM

RECEIVED
Office of Oil and Gas

JUL 19 2019

WV Department of
Environmental Protection

LEGEND

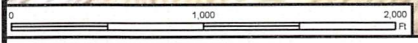
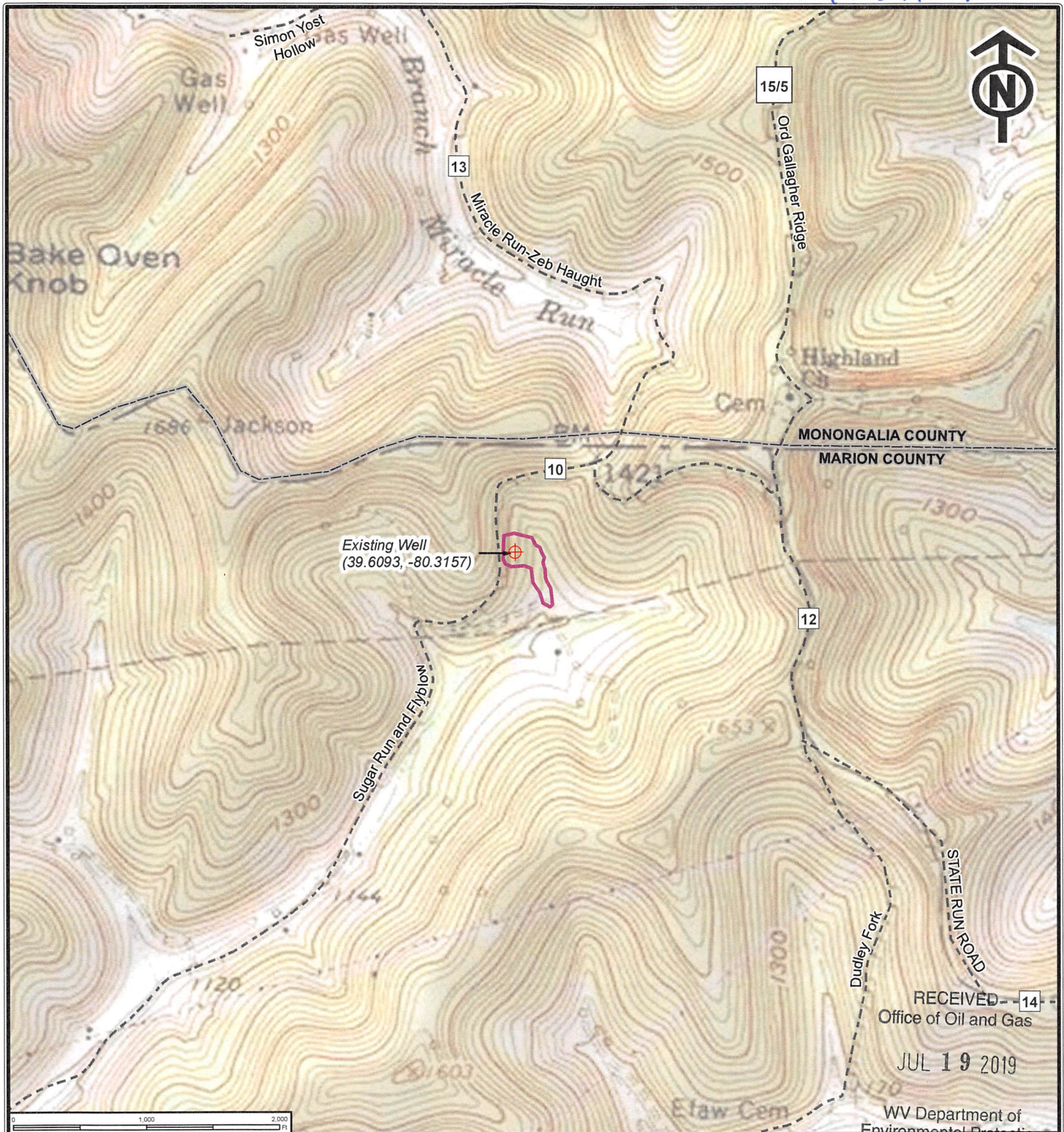
- EXISTING PAVED ROAD
- - - - - EXISTING GRAVEL ROAD
- - - - - PROPOSED GRAVEL PAD

KEYSTONE
CONSULTANTS, LLC
32 EAST MAIN STREET, CARNEGIE, PA 15106
Ph: (412) 278-2100 Fax: (304) 443-3964
www.keystoneconsultants.net

CNX
CNX GAS COMPANY, LLC
1000 CONSOL ENERGY DRIVE
CANONSBURG, PA 15317

| | |
|----------|-----------|
| DRAWN | BDF |
| CHECKED | STK |
| APPROVED | EAZ |
| SCALE | 1" = 100' |
| DATE | 6/18/2019 |

| | |
|---|-------------|
| L66 WELL PLUGGING | |
| MANNINGTON DISTRICT, MARION COUNTY, WEST VIRGINIA | |
| SITE LAYOUT | |
| REVISION | DRAWING NO. |



RECEIVED - 14
Office of Oil and Gas
JUL 19 2019
WV Department of Environmental Protection

LEGEND

- Existing Well
- Study Area
- Roads
- County Boundary

Prepared By:

KEYSTONE CONSULTANTS, INC.
www.keystoneconsultants.net 412-278-2100

| REV | DESCRIPTION | DATE |
|-----|-------------|------|
| | | |
| | | |
| | | |
| | | |

DWN BY: AMW APR BY: RDM DATE: 4/22/2019

CNX

**L66 Well Plugging
Site Location Topographic Map**

Marion County, WV

DRAWING NUMBER: 001

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

47-049-01411 P

WW-7
8-30-06



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

API: 47-049-01411 WELL NO.: L-66

FARM NAME: Delaney

RESPONSIBLE PARTY NAME: Erika Whetstone

COUNTY: Marion DISTRICT: Mannington

QUADRANGLE: Mannington

SURFACE OWNER: Tina & Michael Delaney

ROYALTY OWNER: _____

UTM GPS NORTHING: 4384619.66

UTM GPS EASTING: 558744.68 GPS ELEVATION: 387.71 m / 1272.01 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.

Erika J. Whetstone
Signature

Permitting Manager
Title

7/17/19
Date

RECEIVED
Office of Oil and Gas

JUL 19 2019

WV Department of
Environmental Protection