



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

Friday, October 4, 2019

WELL WORK PLUGGING PERMIT
Coal Bed Methane Well Plugging

CNX GAS COMPANY LLC
1000 CONSOL ENERGY DR

CANONSBURG, PA 15370

Re: Permit approval for L-46
47-049-01396-00-00

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-46
Farm Name: CARPER, JAMES P.
U.S. WELL NUMBER: 47-049-01396-00-00
Coal Bed Methane Well Plugging
Date Issued: 10/4/2019

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

47-049-01396P

WW-4B
Rev. 2/01

1) Date _____, 20 19
2) Operator's
Well No. L-46
3) API Well No. 47-049 - 01396

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 ~~1202~~ 1368' 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.

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AUG 22 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 *S. J. W...* Date 8/13/2019

47-049-01396 P

Well: L-46 (Carper)

API#: 47-049-01396

District: Mannington

County: Marion

Elevation: 1202' 1368'

L-46 Proposed Plugging and Abandonment Procedure

1. Run in and tag TD (~940') 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

SEE ATTACHED SHEET FOR ★ 4 & ★ 5.

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Well: L-46 CARPER

District: MANINGTON

Elevation: 1368'

API No.: 47-049-01396 P

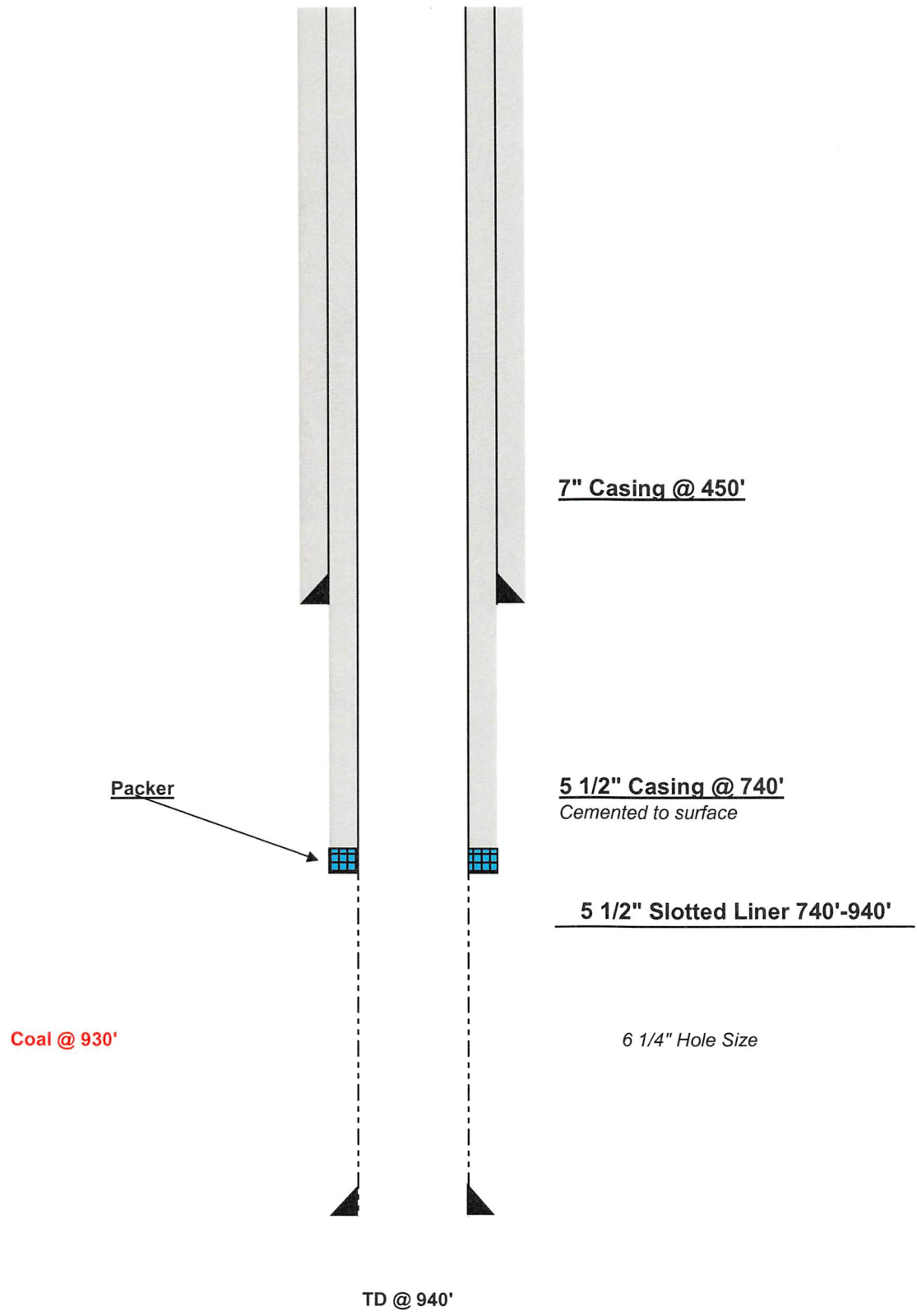
County: MARION

Loveridge Mine

- *4. This well should not have any uncemented casing, with the exception of the slotted portion of the 5 ½" casing. Do not remove.

- *5. Once the slotted casing is filled with pea gravel, which will mitigate cement slurry loss to the open Pittsburgh Coal Seam, then lightly pump enough Class A cement to form a 30' to 50' Cement Plug. WOC for 5 hours. Tag cement plug and add Class A cement until a 100' Class A cement plug has been established. WOC a minimum of 5 hours and then fill the rest of the wellbore to the surface with Class A cement.

Carper L-46
Mannington District, Marion WV
Original Completion : 6/1983
API #47-049-01396
Elevation = 1368'



47-049-01396P

WR-35
Rev (9-11)

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

DATE: October 4, 2019
API #: 47-049-01396

Farm name: Carper, James P. Operator Well No.: L-46

LOCATION: Elevation: 1368' Quadrangle: Mannington

District: Mannington County: Marion
Latitude: 6644 Feet South of 39 Deg. 37 Min. 30 Sec.
Longitude 4151.66 Feet West of 80 Deg. 20 Min. 00 Sec.

Company: CNX Gas Company LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
1000 Consol Energy Drive Canonsburg, PA 15317	7"	450'	450'	To Surface
Agent: Anthony Kendziora	5"	740'	740'	To Surface
Inspector: Sam Ward	5" Slotted	200'	200'	
Date Permit Issued: <u>12/02/2002</u>				
Date Well Work Commenced: <u>Existing Borehole</u>	<u>Packer</u>		<u>740'</u>	
Date Well Work Completed: <u>Converted to well</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): <u>940</u>				
Total Measured Depth (ft): <u>940</u>				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>930</u>				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Pittsburgh Coal Seam Pay zone depth (ft) 930
Gas: Initial open flow 114 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 114 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

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Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments 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.

Patrick Taylor
Signature

10/02/2019
Date

Were core samples taken? Yes _____ No _____

Were cuttings caught during drilling? Yes _____ No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list _____

NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: _____ Top Depth _____ / _____ Bottom Depth
Surface: _____

Supplemental information requested per WV DEP not at time of well completion

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WW-4A
Revised 6-07

1) Date: _____
2) Operator's Well Number
L-46 _____
3) API Well No.: 47 - 049 - 01396

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

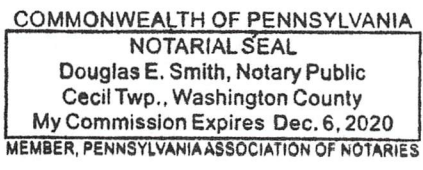
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>JAMES P & FRANCES E CARPER</u>	Name <u>Consolidation Coal Company</u>
Address <u>1739 FLAT RUN RD</u>	Address <u>46226 National Rd.</u>
<u>MANNINGTON WV 26582</u>	<u>Saint Clarisville, OH 43950</u>
(b) Name _____	(b) Coal Owner(s) with 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 Clarisville, 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 CNX Gas Company, LLC
 By: Erika Whetstone
 Its: Permitting Manager
 Address 1000 Consol Energy Drive
Canonsburg, PA 15317
 Telephone 724-485-4035

Subscribed and sworn before me this 21st day of August, 2019
Douglas E. Smith Notary Public
 My Commission Expires 12-6-2020

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AUG 22 2019

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 depprivacyoffier@wv.gov.

WV Department of Environmental Protection

WW-9
(5/16)

API Number 47 - 049 - 01396
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
8/13/19*

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.

Company Official Signature Erika Whetstone

Company Official (Typed Name) Erika Whetstone

Company Official Title Permitting Manager

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WV Department of
Environmental Protection

Subscribed and sworn before me this 21st day of August, 20 19

Douglas E. Smith

Notary Public

My commission expires 12-6-2020

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Douglas E. Smith, Notary Public
Cecil Twp., Washington County
My Commission Expires Dec. 6, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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]

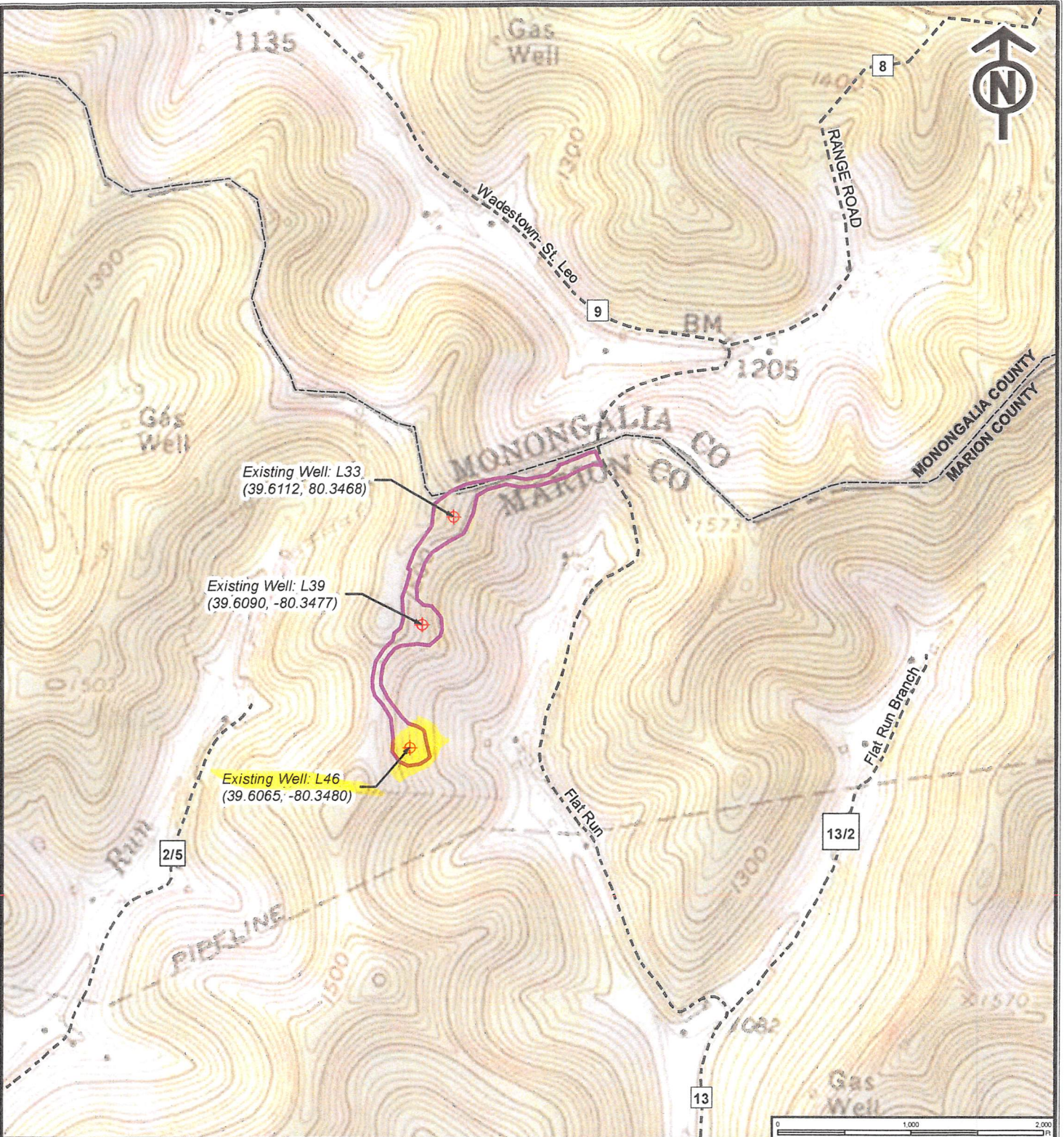
Comments: _____

Title: COG Inspector





Date: 8/13/19

Field Reviewed? () Yes (X) No

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LEGEND

-  Existing Well
-  Study Area
-  Road
-  County Boundary

Prepared By:



www.keystoneconsultants.net 412-278-2100

REV	DESCRIPTION	DATE



**L33, L39, L46 Well Plugging
Site Location Topographic Map**

Marion & Monongalia County, WV

DRAWING NUMBER: 001

DWN BY: AMW	APR BY: RDM	DATE: 6/21/2019	SCALE: 1" = 1,000 feet	SHEET: 1 OF 2
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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: 47-049-01396 WELL NO.: L-46

FARM NAME: Carper

RESPONSIBLE PARTY NAME: Erika Whetstone

COUNTY: Marion DISTRICT: Mannington

QUADRANGLE: Mannington

SURFACE OWNER: CARPER JAMES P & FRANCES E

ROYALTY OWNER: _____

UTM GPS NORTHING: 4384293.67

UTM GPS EASTING: 555976.70 GPS ELEVATION: 417.08m/1368.39 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 Whetstone
Signature

Permitting Manager
Title

8/21/19
Date

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