

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

Monday, August 07, 2017 WELL WORK PERMIT Coal Bed Methane Well / Plugging

CNX GAS COMPANY LLC POST OFFICE BOX 1248

JANE LEW, WV 263786506

Re: Permit approval for L-67 47-061-01470-00-00

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: L-67

Farm Name: GREIG, TIMOTHY, ETAL U.S. WELL NUMBER: 47-061-01470-00-00

Coal Bed Methane Well / Plugging

Date Issued: 8/7/2017

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.

WW-4B Rev. 2/01

1)Date	_	, 20 <u>17</u>
2)Operator's		
Well No. L67		
3) API Well No.	47 - 061	- 01470

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

	VIII-02 VI	V V
	APPLICATION FOR A PERI	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas x/ Liquid	d injection/ Waste disposal/
	(If "Gas, Production X or Und	derground storage) Deep/ ShallowX
5)	Location: Elevation 1506.70	Watershed Miracle Run
	District Battelle	County Monongalia Quadrangle Mannington
6)	Well Operator CNX Gas Company, LLC	7) Designated Agent Christopher Turner
0,	Address 1000 Consol Energy Drive	Address P.O. Box 1248
	Canonsburg, PA 15317	Jane Lew, WV 26378
	<u> </u>	
8)	Oil and Gas Inspector to be notified	9)Plugging Contractor
0,	Name Gayne J Knitowski	Name Coastal Drilling East LLC
	Address P.O. Box 108	Address 70 Gums Springs Road
	Gormania WV 26720	Morgantown, WV 26508
	Odinana W Zorzo	Worgantown, VV 20000
		RECEIVED Office of Oil and Gas JUL 1 3 2017 WV Department of Environmental Projection
worl	k can commence. $ u$	il and gas inspector 24 hours before permitted Date 7/6/2017
MOT	k order approved by inspector	Date 1/0/001/

Plugging Work Order for Greig L-67

API Number 47-061-01470

Elevation 1506 Original Permit Issued- 3/03/2003

- 1. Verify TD and casing volume (~1275')
- 2. Set CIBP at lowest attainable depth (Stay above slotted liner if present)
- 3. Grout from surface (~250sks)
- 4. Install 6" x 14' monument (10' below grade, 4' above grade) API 47-061-01470
- 5. Replain site ASAP

Work Order approved by Inspector Layne

Date: 7 6 207

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

3. TIH WITH WORK STRING OF TUBING AND PUMP CLASS A CEMENT WITH NU MORE THAN 3% CACIZ FROM TOP OF BRIDGE PLUG TO SURFACE.

A REMOVE ALL FREE CASING.

Office of Oil and Gas

JUL 1 3 2017

WV Department of Environmental Protection

DATE: September 2, 2004
API#: 47-610470

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

Well Operator's Report of Well Work

District: Battelle	Farm Name: Greig, Timothy, Etal		Operator We	ll No.: <u>L-67</u>	
Latitude: 4530.0 Feet South of 39 Deg. 37 Min. 30 Sec. Longitude: 10026.66 Feet West of 80 Deg. 17 Min. 30 Sec. Company: CNX Gas Company LLC (North) Casing & Used In Tubing Used In Tubing Drilling Address: 1800 Washington Road Fittsburgh, PA 15241 Agent: Edwin Merrifield Inspector: Steve Mossor Date Permit Issued: 3/03/2003 Date Well Work Commenced: Existing Borehole Date Well Work Commenced: Existing Borehole Date Well Work Commenced: Existing Borehole Date Well Work Commenced: Existing Borehole Date Permission granted on: Rotary Cable Rig Total Depth (feet): 1284 Fresh Water Depth (ft.): Sait Water Depth (ft.): Is coal being mined in area (N/Y)? No Coal Depths (ft.): 1275 OPEN FLOW DATA Producing formation Pittsburgh Coal Seam Pay zone depth (ft) Time of open flow 60 MCF/d Final open flow 0 Bbl/d Final open flow 60 MCF/d Final open flow Hours Static rock pressure psig (surface pressure) after Hours Second producing formation None Pay zone depth (ft) Time of open flow between initial and final tests Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED NEED FORM Static Pook pressure psig (surface pressure) after Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED NEED FORM Static Pook pressure Psig (surface pressure) after Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED NEED FORM Static Pook pressure Psig (surface pressure) after Hours NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED NEED FORM SCENE PSIGNER OF THE WELLBORE. Signed: Joseph D. Amana Date: September 2, 2004	LOCATION: Elevation: 1546		Quadrangle:	Mannington	
Latitude: 4530.0 Feet South of 39 Deg. 37 Min. 30 Sec. Longitude: 10026.66 Feet West of 80 Deg. 17 Min. 30 Sec. Company: CNX Gas Company LLC (North) Casing & Used In Tubing Drilling Address: 1800 Washington Road Pittsburgh, PA 15241 Agent: Edwin Merrifield Inspector: Steve Mossor Date Permit Issued: 3/03/2003 Date Well Work Commenced: Existing Borehole Date Permitsion granted on: Rotary Cable Rig Total Depth (feet): 1284 Fresh Water Depth (ft.): Is coal being mined in area (N/Y)? No Coal Depths (ft.): 1275 OPEN FLOW DATA Producing formation Pittsburgh Coal Seam Pay zone depth (ft) Time of open flow between initial and final tests Office of the second point of the sec	Distinct Devalle	•	Causes N	fananaslia	
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FORM WW-5B (8/1998)

Page 1 of 3	61-014700

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS COALBED METHANE PERMIT APPLICATION ! 45 7

l) Well	Operator: CNX Gas Company, LLC (Nor	th) 2) Well Name St. Leo Gob Well No. L-67
3) Opera	ator's Well Number <u>L-67</u>	4) Elevation 1546'
5) Well	Type: (a) Oil / or (b) If Gas: Production X /	Gas/ _/ Underground Storage/ CBM/ ShallowX/
6) Propo	osed Target Formation(s): Pittsburgh Coa	1 Seam Mine Methane
7) Propo	osed Total Depth: 1,284	_ feet
8) Appr	oximate Fresh Water Strata Depths:	Not known Permitting
9) Appr	oximate Salt Water Depths: Not kr	own
10)	Approximate Coal Seam Depths:	FEB 13 2003
11)	Does Land Contain Coal Seams Tributar	y to Active Mines? Yes X No No
12)	(a) Proposed Well Work: Convert producing CBM gob well.	an existing ventilation borehole (Well No. L-67) to a
(b)	If Stimulation Proposed, Describe Means	s to be Used to Stimulate Well:N/A
13)		n to convert an existing well (as defined in W. Va. Code n hole to a coalbed methane well? Yes X / No /
(b)	• • •	list of all formations from which production is anticipated y portion of the well. Pittsburgh Coal Only Via Existing
14)	• •	ine well be completed in some but not all coal seams for it or vent hole proposed to be converted to a well)? N/A
(b)	If yes, please attach to this Application a workable coal seams which will be penet	plan and design for the well which will protect all rated by the well.
15)	(a) Does the proposed operation inc surface? Yes/ No _X	lude horizontal drilling of a well commenced on the
(b)	If yes, please attach to this Application a and horizontal alignment and extent of the	description of such operations, including both the vertical well from the surface to total depth.

FORM WW-5(B)_(8/1998)

Page 2 of <u>3</u> 61-01476

CASING AND TUBING PROGRAM

TYPE	SPECIFICA	ATIONS	FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For Drilling	Left in Well	Fill-up (cu. ft.)
Conductor						
Fresh Water						
Coal						
Intermediate						
Production						
Tubing						
Liners						

PACKERS:

PLEASE SEE ATTACHED WELL REPORT	Office of Oil & Gas Parmiding
	FFR 13 2003
For Office of Oil and Gas Use Only	WV Department of Invitenmental Protection
Fee(s) paid: Well Work Permit Reclamation Fund WPCP	•
Plat	ent

Form WW-5(B)

Page 3 of 3 61-01470CP

CONSOLIDATION COAL COMPANY 1800 WASHINGTON ROAD PITTSBURGH PA

WELL NUMBER _	L-67				MINE,	Loveridge
DATE STARTED _	Nov	ember 1987		DATE COMPLE	TED	November 1987
CONTRACTOR _	Unkno	own				
TOTAL DEPTH (In Fee		1,284		(APPROX)		
CASING IN		SLOTTED _	300			
	•	5-1/4-INCH	1,275 None			RECEIVED Office of Oil & Gas Permitting
	PA	CKER SIZE _	3' 6"			FEB 18 2003
CEMENT	290	- i - i - i - i - i - i - i - i - i - i	[SKS]		Er	WV Department of nvironmental Protection

OK S.M. 2-18-03 WW-71CBM (Rev. 5/98)

COALBED METHANE WELL WORK PERMIT APPLICATION NOTICE BY PUBLICATION

Notice is hereby given:

Pursuant to West Virginia Code 22-21-9, notice is hereby given that the undersigned well operator-applicant proposes to file a Notice of an Application for a Coalbed Methane Well Permit, a plat or map showing the well location, and (unless the application is to plug a well) a Construction and Reclamation Plan with the Chief of the Office of Oil and Gas of the West Virginia Department of Environmental Protection, with respect to two (2) wells on the surfaces of tracts of land described below:

Name:

Timothy Greig, et al

Timothy Greig, et al L-70

Well: Acres:

L-67 60.25

60.25

Watershed: Right Branch of Miracle Run

Right Branch of Miracle Run

County:

District: Battelle Monongalia

Battelle Monongalia Route 9

Access: Route 9

The well work for which permits are sought is generally described as follows: Convert existing ventilation boreholes (2 Wells Listed Above, L-67 & L-70) to producing CBM gob wells.

This publication may be the only notice that surface, gas, coal; and coalbed methane owners of record will receive.

Pursuant to West Virginia Code 22-21-10, (1) The owners of record of the surface of the tract on which the coalbed methane well is to be located; (2) The owners of record of the surface of any tract which is to be utilized for roads or other land disturbance; (3) Each coal owner and each coal operator (i) from whom a consent and agreement provided for in 22-21-7 is required, or (ii) whose coal seam will be penetrated by the proposed coalbed methane well or is within seven hundred fifty feet of any portion of the well bore; and (4) Each owner and lessee of record and each operator of natural gas surrounding the well bore and existing in formations above the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whichever is shallower. may file comments with the chief as to the location or construction of the applicant's proposed well within fifteen days after the application is filed with the chief.

Pursuant to West Virginia Code 22-21-11 the owner or operator of any coal seam whose interests may be adversely affected by a coalbed methane well may, within fifteen days after the applications are filed with the chief, file objections in writing to such proposed drilling with the chief, setting out the grounds on which such objections are based.

Copies of the Notice and Application and accompanying documents-may be obtained from the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, 1356 Hansford Street, Charleston, WV 26101 (Telephone (304)558-6342).

WELL OPERATOR-APPLICANT CNX Gas Company, LLC (North) FEB 1 3 2003 ADDRESS 1800 Washington Road, Pittsburgh, PA 15241

TELEPHONE (412) 831-4566

vay Deportment of Environmental Protection

01470

WW-4A	
Revised	6-07

2)	Operator's Well Number	
L67		

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

3) API Well No.: 47 -

4)		ner(s) to be served:	5) (a) Coal Operator		
	(a) Name	DOGWOOD VALLEY LLC	Name	See Attached.	
	Address	16989 AIRPORT RD	Address		
		LINESVILLE PA 16424-7617			
	(b) Name		(b) Coal Own	ner(s) with Declaration	
	Address		Name	See Attached.	
		7	Address		
	(c) Name		Name	-	
	Address		Address		RECEIVED
					Office of Oil and Gas
6) 1	Inspector	Gayne J Knitowski	(c) Coal Less	see with Declaration	uu 1 9 2017
	Address	P.O. Box 108	Name	N/A	JUL 1 3 2017
		Gormania WV 26720	Address		WV Dopartment of
	Telephone	304-546-8171			Environmental Protection

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 Supervisor
A 2713	Address	1000 Consol Energy Drive
8 8 8		Canonsburg, PA 15370
	Telephone	(724) 485-4035

Subscribed and sworp before me this ______ day of ______ UMU _____ 1017 _____ Notary Public

COMMONWEALTH OF PENNSYLVANIA NOTARIAL SEAL

Lori L. Walker, Notary Public Richhill Twp., Greene County My Commission Expires Feb. 23, 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 deprivacyoffier@wv.gov.

WW-4A Attachment

Greig L-67 API# 47-061-01470

Coal Owner(s):

Consolidation Coal Company 1000 CONSOL Energy Drive Canonsburg, PA 15317

Dogwood Valley, LLC 16989 Airport Rd Linesville, PA 16424-7617

Coal Operator:

The Marion County Coal Company 46226 National Rd W St. Clairsville, OH 43950

> RECEIVED Office of Oil and Gas

> > JUL 1 3 2017

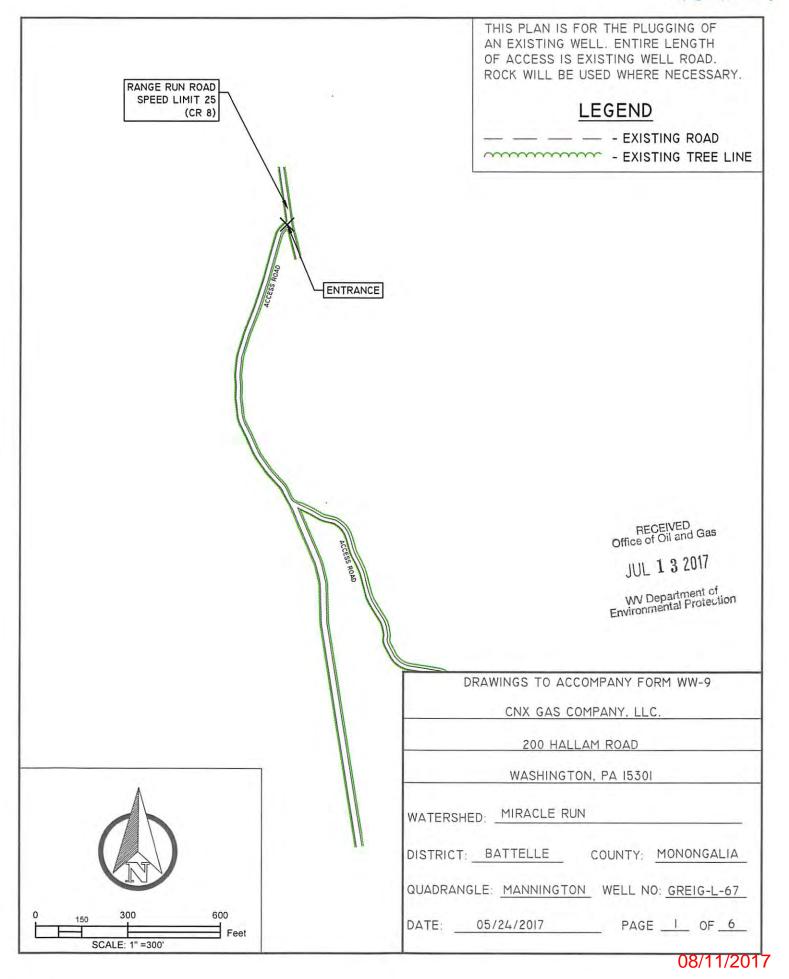
WV Department of Environmental Protection WW-9 (5/16)

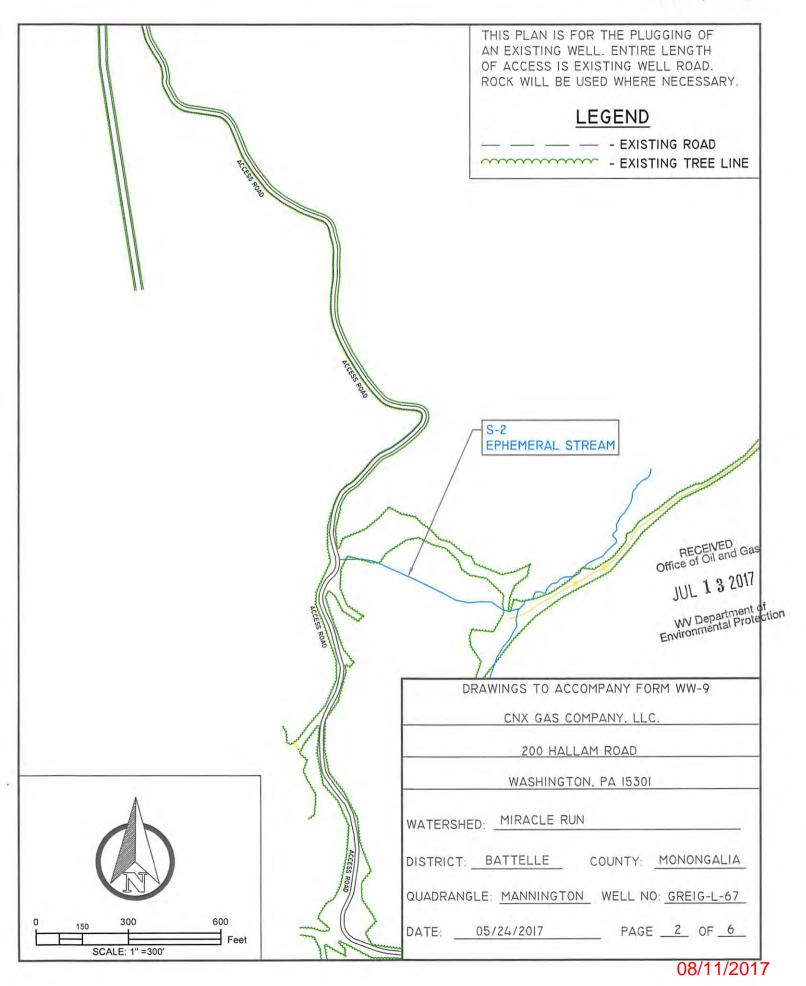
API Number 47 - 0	61	_ 01470
Operator's Well No.		

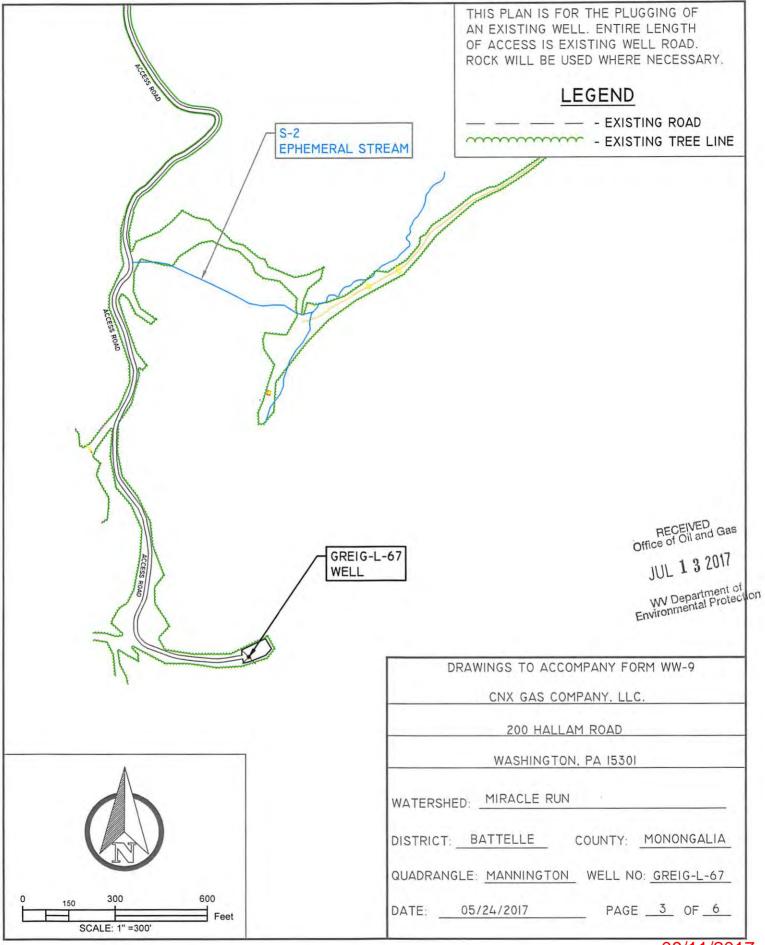
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

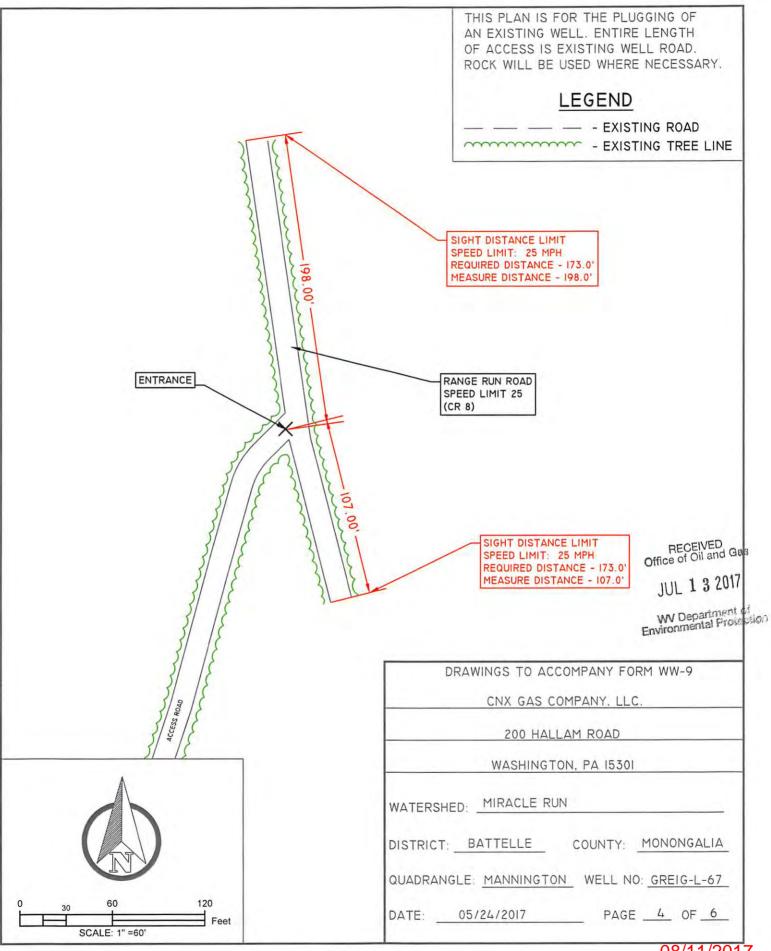
Loids/ Collinas bisi	OSAL & RECEASIATION TEAM	
Operator Name CNX Gas Company, LLC		
Watershed (HUC 10) Miracle Run		
Do you anticipate using more than 5,000 bbls of water to comp	lete the proposed well work? Yes No	
Will a pit be used? Yes No No		
If so, please describe anticipated pit waste:		
Will 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		
	Number)	
Off Site Disposal (Supply form WW	V-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 systembe used? If so, describe: no		
Drilling medium anticipated for this well (vertical and horizontal	al)? Air, freshwater, oil based, etc.	TED, Gas
-If oil based, what type? Synthetic, petroleum, etc	al)? Air, freshwater, oil based, etc. na REGEN Office of Oil	and Gab
Additives to be used in drilling medium? na	JUL 1	3 5011
Drill cuttings disposal method? Leave in pit, landfill, removed	offsite, etc. na www.Depa	rtment of
-If left in pit and plan to solidify what medium will be	used? (cement, lime, sawdust)Environment	al Protection
Permittee shall provide written notice to the Office of Oil and O	as of any load of drill cuttings or associated waste rejected at any	
	within 24 hours of rejection and the permittee shall also disclose	
		
	conditions of the GENERAL WATER POLLUTION PERMIT iss	
	ginia Department of Environmental Protection. I understand that any term or condition of the general permit and/or other applicable	
or regulation can lead to enforcement action.		41. !
	examined and am familiar with the information submitted on my inquiry of those individuals immediately responsible for obtain	
the information, I believe that the information is true, accurat submitting false information, including the possibility of fine or	e, and complete. I am aware that there are significant penalties	for
submitting talse information, including the possibility of line of	imprisonnent.	
Company Official Signature Cally White		
Company Official (Typed Name) Erika Whetstone	^ب القِينِةِ السَّامِينِينِينِينِينِينِينِينِينِينِينِينِينِ	÷ ;
Company Official Title Permitting Supervisor		
Subscribed and swom before menthis 4 day of day of	ung , 20 / 7 COMMONIMENTH OF	DEMMOVEMEN
_ Joe of Waller	Notary Public NOTARIAL S	EAL
My commission expires FD RIAD NI 23 2019	Richhill Twp., Gree	ne County
The commission expues to the contract to the commission expues to the c	My Commission Expires MEMBER, PENNSYLVANIA 2550	

Title: INSpec	XV)	 Date: 7/62017	
Field Reviewed?	()No	

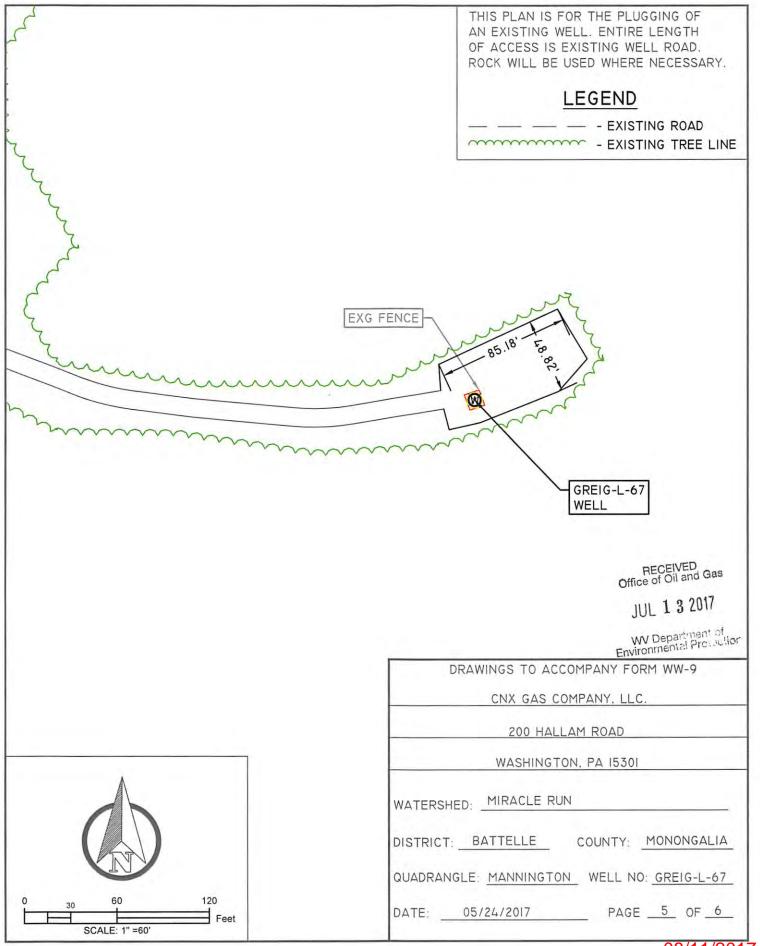


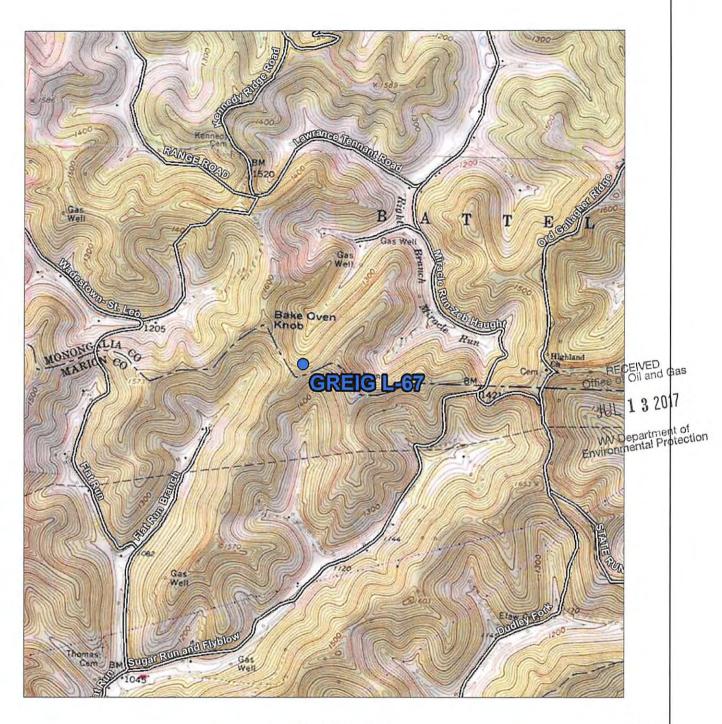






08/11/2017





LOCATION MAP
MANNINGTON, WV 7.5M USGS QUADRANGLE
SCALE: I"=2000'





Engineers and Land Surveyors Woman Owned Small Business

11023 Mason Dixon Hwy. Burton, WV 26562-9656 (304) 662-6486

LOCATION MAP

GAS WELL PLUGGING GREIG-L-67 GAS WELL BATTELLE DISTRICT MONONGALIA COUNTY, WV CNX GAS COMPANY, LLC.

CNX GAS COMPANY, LLC. 200 HALLAM ROAD WASHINGTON, PA 15301

DRAWN E	BY: LLF	
CHECKED	BY: WPF	
DATE: 05	5/24/2017	
SCALE:	I"=2000'	
WATERS	SHED:	
MIRACLE	E RUN	
PAGE _	6 OF 6	

WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LO	CATION FORM: GPS	
API: 47-061-01470	WELL NO.: L67	
FARM NAME: Greig		
RESPONSIBLE PARTY NAME:	Erika Whetstone	
COUNTY: Monongalia	DISTRICT: Battelle	
QUADRANGLE: Manningto		
SURFACE OWNER: DOGW		
UTM GPS NORTHING: 4,384,9	958.450 METERS	
UTM GPS EASTING: 557,762.	958.450 METERS 121 METERS GPS ELEVATION: 459.242 METERS	(1506.70)
preparing a new well location plat for above well. The Office of Oil and Oil a	05 meters RECEIV Office of Oil	ED Gas
	Time Differential JUL 1 S	} ZU11
Mapping Grade GPS: Pos	Environme	al Protection
	al-Time Differential	
I the undersigned, hereby certify thi	s data is correct to the best of my knowledge and required by law and the regulations issued and Gas.	
Citle of White	Permitting Supervisor	
Signature	Title Date	