

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 PERMIT Coal Bed Methane Well / Plugging

CNX GAS COMPANY LLC 1000 CONSOL ENERGY DR

CANONSBURG, PA 15370

Re:

Permit approval for L-61 47-049-01407-00-00

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-61

Farm Name: HELDRETH, DALLAS F.

U.S. WELL NUMBER: 47-049-01407-00-00

Coal Bed Methane Well Plugging

Date Issued: 10/4/2019

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	е			,	20 19	
2) Ope:	rator	's				
Wel:	l No.	L-61				
3)API	Well	No.	47-049		- 01407	

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

	APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liquid (If "Gas, Production X or Und	d injection/ Waste disposal/ derground storage) Deep/ Shallow X
5)	Location: Elevation 1157	Watershed Flat Run
	District Mannington	County Marion Quadrangle Mannington
6)	Well Operator CNX Gas Company, LLC Address 1000 Consol Energy Drive Canonsburg, PA 15317	7) Designated Agent Christopher Turner Address P.O. Box 1248 Jane Lew, WV 26378
8)	Oil and Gas Inspector to be notified Name	9) Plugging Contractor 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 mannese attached.	er of plugging this well is as follows:
		RECEIVED Office of Oil and Gas
		AUG 2 2 2019
		WV Department of Environmental Protection
	fication must be given to the district of can commence.	.1 and gas inspector 24 hours before permitted

Work order approved by inspector Sluterell Date 8/13/19

47-049-01407P

Well: L-61 (Heldreth)

API#: 47-049-01407

District: Mannington

County: Marion

Elevation: 1157'

L-61 Proposed Plugging and Abandonment Procedure

- 1. Run in and tag TD (~905') 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 AT & AS

ATTACHED

GI3(19 RECEIVED Office of Oil and Gas

AUG 2 2 2019

WV Department of Environmental Protection

Well: HELDRETH L-61

District: MANNINGTON

Elevation: 1158

API No .: 47 - 049 - 01407 P

County: MARION

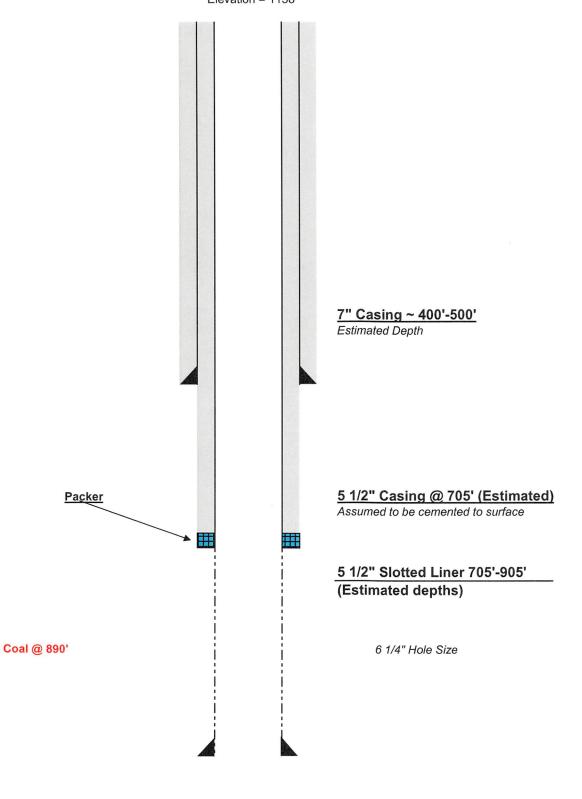
Loveridge Mine

*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.

Heldreth L-61

Mannington District, Marion WV
Original Completion:?
API #47-049-01407
Elevation = 1158'



TD @ 905'

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#:	47-049-01407

Farm name: Heldreth, Dallas F.	Operator Well	l No.: L-61		
LOCATION: Elevation: 1158	_ Quadrangle: _	Mannington		
District: Mannington	County: Mario	n		
Latitude: 7852.0 Feet South of 39 Deg.				
Longitude 2898.33 Feet West of 80 Deg.	. <u>20</u> Min	. <u>00</u> Sec	•	
Company: CNX Gas Company LLC				
1000 Consol Energy Drive	Casing &	Used in	Left in well	Cement fill
Address.	Tubing	drilling	4001 5001	up Cu. Ft.
Canonsburg, PA 15317	7"	~400'-500'	~400'-500'	To Surface
Agent: Anthony Kendziora	5"	~705'	~705'	To Surface
Inspector: Sam Ward	5" Slotted	~200'	~200'	
Date Permit Issued: 1/21/2003				
Date Well Work Commenced: Existing Borehole	Packer		~705'	
Date Well Work Completed: Converted to well				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 905				
Total Measured Depth (ft): 905				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.): 890	 	 	_	
Void(s) encountered (N/Y) Depth(s)		<u> </u>	<u> </u>	<u></u>
OPEN FLOW DATA (If more than two producing formation	-		ita on separate si	heet)
,,	zone depth (ft)			
Gas: Initial open flow 114 MCF/d Oil: Initial open f Final open flow 114 MCF/d Final open flow		b1/d 5/d		
Time of open flow between initial and final tests 0	Hours			
Static rock Pressure psig (surface pressure) at	fterHou	rs		
Caranda madusina famuski na None				
Second producing formation None Pay zo Gas: Initial open flow MCF/d Oil: Initial open f	one depth (ft)	 bl/d		RECEI V ED
Final open flow MCF/d Final open flow				Office of Oil and Gas
Time of open flow between initial and final tests	Hours			OCT - 4 2019
Static rock Pressurepsig (surface pressure) at	fterHou	rs		1407 Damaia arant - 6
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indithat the information is true, accurate, and complete.	and am familiar viduals immedia	with the infornately responsible	nation submitted e for obtaining t	wy Department of Environmental Protection on this document and the information I believe
Patrick Tank		4010	2/2010	
Patrick Taylor Signature			2/2019 Date	

Were core samples taken? YesNo	Were cuttings caught during drilling?	YesNo
Were Electrical, Mechanical or Geophysical logs record	ded on this well? If yes, please list	
NOTE: IN THE AREA BELOW PUT THE FRACTURING OR STIMULATING, PHYSICAL DETAILED GEOLOGICAL RECORD OF THE COAL ENCOUNTERED BY THE WELLBORE F	CHANGE, ETC. 2). THE WELL LOG WHICI E TOPS AND BOTTOMS OF ALL FORMA	H IS A SYSTEMATIC
Perforated Intervals, Fracturing, or Stimulating:		
Plug Back Details Including Plug Type and Depth(s):		
Formations Encountered: Surface:	Top Depth /	Bottom Depth
Supplemental information requested per WV	DEP not at time of well completion	
Have very little information on well basing ca	sing depths off of offset well designs	
		RECEIVED Office of Oil and that

OCT - 4 2019

01407

WW-4A	
Revised	6-07

1)	Date:
2)	Operator's Well Number
L-61	

049

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 -

	ner(s) to be served:		a) Coal Operato		
(a) Name	FRANKLIN E & TRACIE	A HELDRETH	Name	Consolidation Coal Company	
Address	1703 FLAT RUN RD		_ Address	46226 National Rd.	
	MANNINGTON WV 265	82		Saint Clarisville, OH 43950	
(b) Name			_ (b) Coal O	wner(s) with Declaration	
Address			Name	Wheeling Dollar Savings & Trust Co	
			$_$ Address	527 S. Main St.	
				Zelienople, PA 16063	
(c) Name			Name		
Address			Address		
6) Inspector	Sam Ward		(c) Coal Le	ssee with Declaration	
Address	P.O. Box 2327		Name	Consolidation Coal Company	
Address	Buckhannon WV 26201		Address	46226 National Rd.	
Telephone	304-389-7583		_	Saint Clarisville, OH 43950	
reiephone	304-303-7303		_	Samt Stantonne, St. 1888	
Take notic accompan Protection the Applic	you are not required to take a see that under Chapter 22-6 o ying documents for a permit with respect to the well at	any action at all. If the West Virginia Code to plug and abandon a v the location described or en mailed by registered	e, the undersigned wel well with the Chief of t in the attached Applica or certified mail or d	cation which are summarized in the install operator proposes to file or has filed the Office of Oil and Gas, West Virginia tion and depicted on the attached Form belivered by hand to the person(s) name	us Notice and Application and Department of Environmental WW-6. Copies of this Notice,
		Well Operator	CNX Gas Company,	LLC	
MMONWEALTH O	F PENNSYLVANIA	By:	Erika Whetstone	nite Hightie	
NOTARIA		Its:	Permitting Manager		
Douglas E. Smith,		Address	1000 Consol Energy	Drive	
Cecil Twp., Wash			Canonsburg, PA 153	17	
	SOCIATION OF NOTARIES	Telephone	724-485-4035		RECEIVED
		rerepriess			Office of Oil and Gas
Subscribed and	l sworn before me th	is <u>2/5</u> da	ay of Ago	st, 2019	AUG 2 2 2019
Doylas	E Smith 12-		0	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 depprivacyoffier@wv.gov.

WW-9 (5/16)

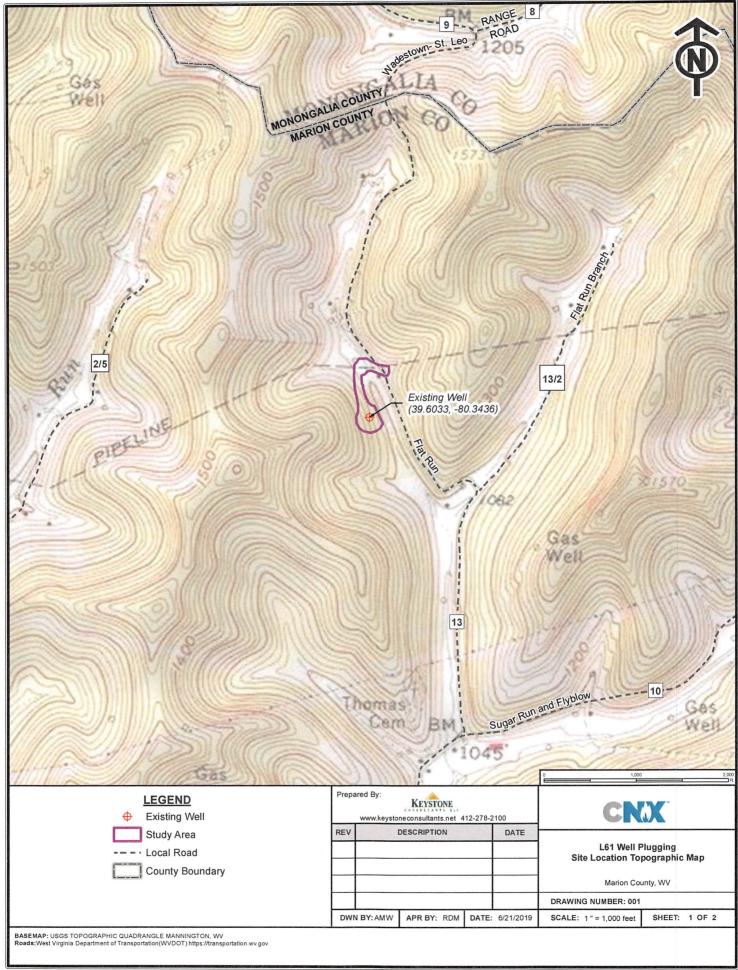
API Number 47	049	_ 01407	
Operator's Well	No		

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 4944	158046
	Quadrangle Mannington	
	15,000 bbls of water to complete the proposed well work? Yes	No V
Will a synthetic liner be	icipated pit waste: No If so, what ml.?	
Proposed Disposal Meth	od For Treated Pit Wastes:	
Underg Reuse Off Sit	application (if selected provide a completed form WW-9-GPP) ground Injection (UIC Permit Number	y dispose of any fluid or waste returns.
Will closed loop systembe used?	If so, describe: no	5000
Drilling medium anticipated for the	nis well (vertical and horizontal)? Air, freshwater, oil based, etc.	
-If oil based, what type?	Synthetic, petroleum, etc	
Additives to be used in drilling m	edium?na	<u>-</u> _
Drill cuttings disposal method? I	eave in pit, landfill, removed offsite, etcna	-
-If left in pit and plan to	solidify what medium will be used? (cement, lime, sawdust)	
-Landfill or offsite name	/permit number?	
	tice to the Office of Oil and Cas of any load of drill cuttings or a The notice shall be provided within 24 hours of rejection and th	
on April 1, 2016, by the Office of provisions of the permit are enforced or regulation can lead to enforced I certify under penalty application form and all attachme the information, I believe that the	of law that I have personally examined and am familiar with ants thereto and that, based on my inquiry of those individuals immediation is true, accurate, and complete. I am aware that adding the possibility of fine or imprisonment. Erika Whetstone	Protection. I understand that the permit and/or other applicable law the information submitted on this mediately responsible for obtaining there are significant penalties for RECEIVED Office of Oil and Gas AUG 2 2 2019
		WV Department of Environmental Protection
Subscribed and sworn before me	his 21st day of August, 20	19
Dayles & Smoth	Notary F	UMOMMONWEALTH OF PENNSYLVANIA
My commission expires $12-0$	6-2020	NOTARIAL SEAL Douglas E. Smith, Notary Public Cecil Twp., Washington County My Commission Expires Dec. 6, 2020 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

			47-049-
Form WW-9		Operator's W	/ell No
Proposed Revegetation Treatm	ent: Acres Disturbed les	ss than 1 acre Prevegetation p	Н
Lime 2-3	Tons/acre or to correct	t to pH	
Fertilizer type 10-20	-20 or equivalent		
Fertilizer amount 500		lbs/acre	
Mulch_ hay or straw	v 2	_Tons/acre	
		Seed Mixtures	
Tem	oorary	Perma	anent
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 a	will be land applied, pro	application (unless engineered plans incluvide water volume, include dimensions (L,	
Photocopied section of involve	d 7.5' topographic sheet.		
Plan Approved by:	1 Derbu	old	
Comments:			
· · · · · · · · · · · · · · · · · · ·			

Plan Approved by: Declarate	
Comments:	
	RECEIVED Office of Oil and Gas
	AUG 2 2 2019
Title: OOG Inspector Date: 8/13/19	WV Department of Environmental Protection
Field Reviewed? ()Yes ()No	



WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS		
_{API:} 47-049-01407	WELL NO.:	-61
FARM NAME: HELDRETH		
RESPONSIBLE PARTY NAME: Erika Whetstone		
COUNTY: Marion	bistrict: Ma	nnington
OUADRANGLE: Mannington		
SURFACE OWNER: FRANKLIN E & TRACIE A HELDRETH		
ROYALTY OWNER:		
UTM GPS NORTHING: 43839	33.83	
UTM GPS EASTING: 556352.	.21 GPS ELEVATI	353.23 m/1158.91 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 X Mapping Grade GPS X : Post Processed Differential X		
Mapping Grade GPS: Post Processed Differential 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.		
Endly & Culity	Permitting Manager	8/2019
Signature	Title	Date