

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

April 03, 2014

#### WELL WORK PLUGGING PERMIT

#### Plugging

This permit, API Well Number: 47-5500154, issued to CNX GAS COMPANY LLC , 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 all 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. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions,

please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: 11225 (HAWLEY COAL 21)

Farm Name: TIOGA LUMBER CO.

API Well Number: 47-5500154

Permit Type: Plugging
Date Issued: 04/03/2014

### **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.

1)Date		20
2)Operator's		
Well No	11225	
3) APT Well No	47- 055	- 00154

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

	APPLICATION FOR A PER	MIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas _x/ Liquid	d injection/ Waste disposal/
	(If "Gas, Production <u>x</u> or Un	derground storage) Deep/ Shallow_x
5)	Location: Elevation_3098 ft.	Watershed Sugar Camp
3,	District Rock	County Mercer Quadrangle Odd, WV
	0.14.0	
6)	Well Operator CNX Gas Company LLC	7) Designated Agent Jeremy Jones  Address One Dominion Drive
	Address 2481 John Nash Blvd Bluefield, WV 24701	Jane Lew, WV 26378
	Didefield, WV 24701	Jane Lew, WV 20070
8)	Oil and Gas Inspector to be notified	9)Plugging Contractor
	Name Gary Kennedy	Name L&D Well Services
	Address PO Box 268	Address PO Box 1192
	Nimitz, WV 25978	Vansant, VA 24656
		Received
		FEB 1 0 2014
		Office of Oil and Gas   V/V Bept. of Environmental Protection
	ification must be given to the district ok can commence.	il and gas inspector 24 hours before permitted
Wor	k order approved by inspector	Henredy Date 2/4/2014

#### API 47-55-00154 Plugging Procedure

- 1. Verify total depth 4727'.
- 2. Run free-point survey on 4-1/2" casing.
- Run tubing to TD. Set plug of expanding cement from established TD to approximately 50' below free point, utilizing a 100' gel spacer at approximately the half-way point of the wellbore.
- Cut 4-1/2" casing at free-point.
- Cement through 4-1/2" csg. while pulling 4-1/2", from top of bottom plug to approximately 100' below the 8-5/8" casing shoe. (Approx. 1140') Pull remaining 4-1/2" out of well.

NOT NEEDED

6. Run free-point survey on 8-5/8" casing.

85/8 WAS CTS

- Run tubing to previous cement top (1140'). Cement across the 8-5/8" shoe to a
  minimum of 50' above shoe, bringing cement top to approximately 50' below the 8-5/8"
  free point or to surface, whichever is necessary.
- NOT NORMED 8. If necessary, cut and pull free 8-5/8" casing. DO NOT NEED TO CUT
  - 9. Repeat free-point and cutting procedures for 11-3/4" if 8-5/8" is cut and pulled. ONLY 23' OF
  - 10. Cement from 50' below 11-3/4" shoe to surface.
  - 11. Install 7" X 4' steel monument with API# and Date.

d. ONLY 25 OF 113/4", PULLET OUT OF HOLE. EGROUT BEHIND 85/8" CASING

NOTE: A 100' gel spacer will be placed at approximately half the well depth. Also, Expanding cement will be utilized throughout the entire cementing process.

ALL PLUGS MUST BE A MINIMUM OF 100'
CLASS A CEMENT W/ NO MORE THAN
3% CaCl2 AND NO OTHER ADDITIVES.

yse.

Received

FEB 1 0 2014

OK 9mm 4/2/14

Office of Oil and Gas
WV Dept. of Environmental Protection
04/04/2014

WK-JO

API # 47- 55-00154

. State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

HAWLEY COAL MINING CORP. Operator Well No.: HAWLEY #21-662S Farm name:

Elevation: 3,098.00 Quadrangle: ODD LOCATION:

District: ROCK County: MERCER
Latitude: 9100 Feet South of 37 Deg. 32Min. 30 Sec.
Longitude 10540 Feet West of 81 Deg. 10 Min. Sec

Company: STONEWALL GAS COMPANY 909 E. MAIN ST., P.O. BOX 157 RICHMOND, VA 23213-0000	1 &	Used in		Cement  Fill Up   Cu. Ft.
Agent: JESSE A. SHELL	Size	1	1	
Inspector: RODNEY DILLON Permit Issued: 07/22/93 Well work Commenced: 09-02-93	11 3/4	23	23	NONE
Well work Completed: 09-11-93 Verbal Plugging Permission granted on:	8 5/8	1040	1040	255 SKS
Rotary X Cable Rig Total Depth (feet) 4727 Fresh water depths (ft) 95, 319,	4 1/2	4690	1 4690	448 SKS
665 Salt water depths (ft) None Reported Is coal being mined in area (Y/N)? N			E & E I V E D ce of Off & Gas ——— Permitting	<u> </u>
Coal Depths (ft): 95, 437, 500			18_2001	
OPEN FLOW DATA		Enviro	VV Division of nmental Protection	the same
Time of open flow between i	nitial an	d final te	sts 1	Hours
Static rock Pressure 620 psi	g (surfac	e pressure	after 16	8 Hours
Second producing formation  Gas: Initial open flow MCF  Final open flow MCF	/d oil: I	nitial oper	depth (ft n flow flow	Bb1/c
Time of open flow between i	nitial an	d final te	SCS	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 FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

or:	STONEWALL GAS COMPANY		
	STONEWALL GAS COMPANY		
	Bir II all al	DAV M	DDDA

NOVEMBER

FREAR, JR. PETROLEUM ENGINEER

1	STAGES	Water :	FRAC	9/16/93 D	ATE			
	ZONES	PERFS		HOLES	BBL	BP	ISIP	
W	eir	4570-4	590'	13	700	2200	0	

FORMATION	COLOR	HARD/		TOP	BOTTOM	REMARKS
SAND		SOFT	0	60		
SANDY SHALE		SOFT	60	95	GAS CK	2530 NO SHOW
COAL	BLACK	SOFT	95	98	GAS CK	2933 NO SHOW
SANDY SHALE	GRAY	HARD	98	110	Ond On	3271 NO SHOW
SAND	GRAY	HARD	110	330		3708 10/10 1" W/W
SANDY SHALE	GRAY	SOFT	330	437		3924 ODOR
COAL	BLACK	SOFT	437	441		4077 8/10 1" W/W
SAND	GRAY	SOFT	441	495		4200 8/10 1" W/W
SANDY SHALE	GRAY	HARD	495	500		4603 8/10 1" W/W
COAL	BLACK	SOFT	500	505		4005 0/10 1 11/11
SANDY SHALE	GRAY	SOFT	505	662		
SAND	BROWN	SOFT	662	735	-	TD 8/10 1" W/W
SANDY SHALE	BROWN	HARD	735	770		1D 8/10 1 W/W
SHALE RR	BROWN	HARD	770	810		
SANDY SHALE		HARD	810	1050		
SHALE	GRAY	SOFT	1050	1215		
SAND	GRAY	SOFT	1215	1290		
SANDY SHALE		SOFT	1290	1580		
SAND	BROWN	HARD	1580	1615		
SANDY SHALE		HARD	1615	1940		
SAND	GRAY	HARD	1940	1960		RECEIVED
SANDY SHALE		SOFT	1960	2300		Office of Oil & Gas
SAND	BROWN	SOFT	2300	2435		Permitting
SANDY SHALE	GRAY	HARD	2435	2490		
SAND	GRAY	SOFT	2490	2690		MAY 18 2001
SANDY SHALE		SOFT	2690	2760		WV Division of
SAND	BROWN	HARD	2760	2885		Environmental Protection
SANDY SHALE		SOFT	2885	2956		Citronian Foreston
SAND	GRAY	SOFT	2956	3080		
SANDY SHALE		HARD	3080	3190		
B. LIME	GRAY	SOFT	3190	4175		
RED SAND	BROWN	SOFT	4175	4200		
SHALE	BROWN	HARD	4200	4455		
SAND	BROWN	HARD	4455	4590		
SANDY SHALE		SOFT	4590	4727		
TD			4727			

WW-4A Revised 6-07

Date:     Operator's Well Number	er	
	11225	
3) API Well No.: 47 -	055	00154

## STATE OF WEST VIRGINIA

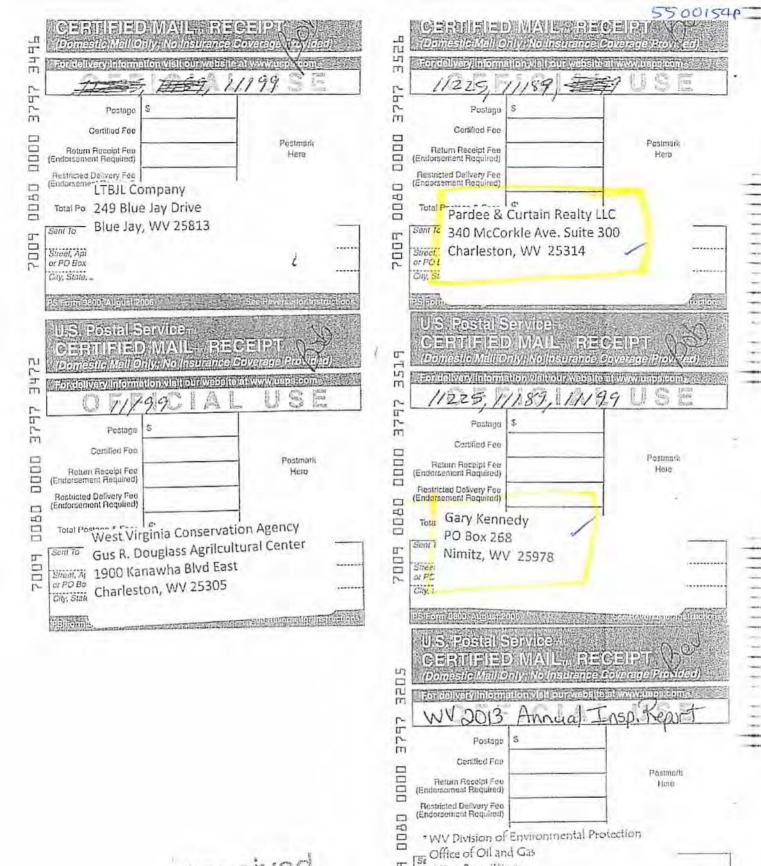
<ol> <li>Surface Ow (a) Name</li> </ol>	ner(s) to be served: Pardee & Curtain Realty LLC	5) (a) Coal Operator Name	none
Address	340 McCorkle Ave. Suite 300	Address	
	Charleston, WV 25314		
(b) Name		(b) Coal Ow	ner(s) with Declaration
Address		Name	Pardee & Curtain Realty LLC
		Address	340 McCorkle Ave.
			Charleston, WV 25314
(c) Name		Name	
Address	h	Address	
6) Inspector	Gary Kennedy	(c) Coal Les	see with Declaration
Address	PO Box 268	Name	none
	Nimitz, WV 25978	Address	
Telephone	304-382-8402		
TO THE PE	RSONS NAMED ABOVI	E: You should have rece	ived this Form and the following documents:
(1) The	application to Plug and Abandon a We its and the plugging work order; and	ell on Form WW-4B, which	sets out the parties involved in the work and describes the
		location on Form WW-6.	

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	Dagging
By:	Ed tamini	LIGGELACA
Its:	Attorney-in-Fact	
Address	2481 John Nash Blvd	FED 1 0 2014
	Bluefield, WV 24701	PEB 10 2014
Telephone	304-32/6568	
Subscribed and sworn before me this 6	lay of February 2014	Office of Oil and Gas WV Dept. of Environmental Protection
My Commission Expires (6 30 114	LOTARY PUBLIC	
Oil and Gas Privacy Notice	Commonwealth of Virginia Fig. #7502381  Ty Commission Expires June 30, 2015	
Гhe Office of Oil and Gas processes your personal inf <del>örn</del>	nation, such as name, address and phone nu	

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 www.gov.



7009

Attn: Permitting Si 601 57th Street

Ga Charleston, WV 25304

Received

FEB 10 2014

Office of Oil and Gas

WW-9 Rev. 5/08

P	age		of	
API Number 47 -	055	8	00154	
Operator's Well No.	11225			

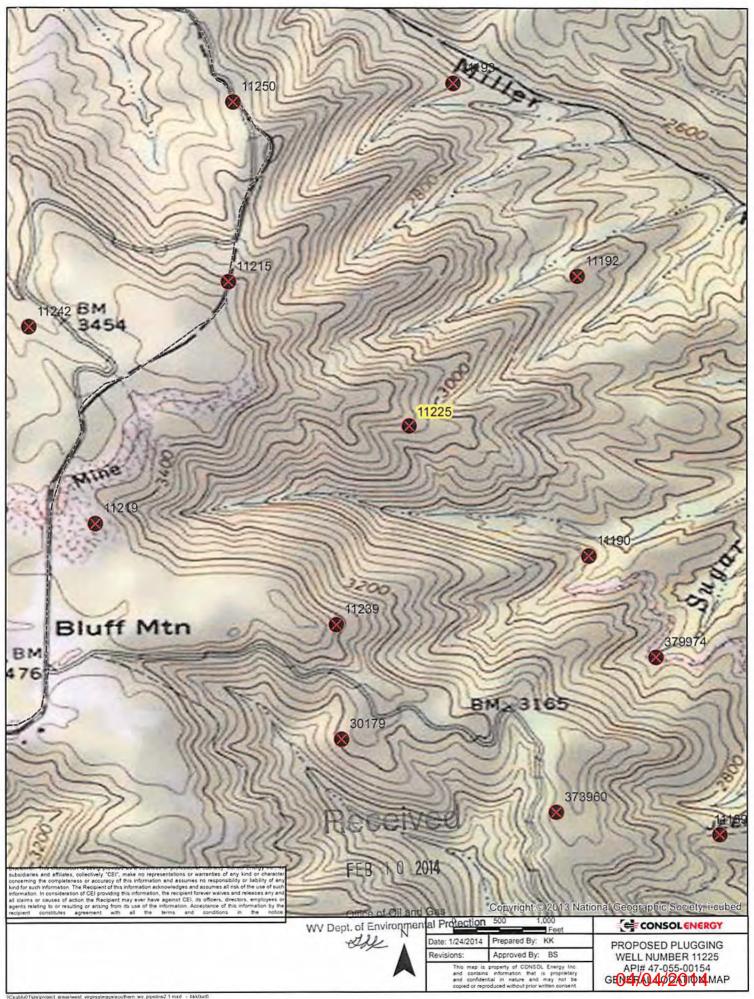
## STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Nar	me_ CNX Gas Con	npany LLC		OP Code	494458046	
Watershed_	Sugar Camp Bra	nch	Quadran	ogle Odd, WV		
Elevation	3098 ft.	County_	Mercer	District_	Rock	
Description o	f anticipated Pit Waste	water for	plugging of abar	ndoned gas we	11.	
Will a synthe	tic liner be used in the	pit? N/A	THE			
Proposed Dis	posal Method For Trea Land App					
			UIC Permit Number_	2D0550319		)
		t API Number_	0 to 4 to 10			
	Off Site I Other (E		ly form WW-9 for disp	oosal location)		
Proposed Wo	rk For Which Pit Will	Be Used:				
	Drilling			vabbing		
	X Other (F	r volsin a pumper	truck with flowback tar	ugging nk will be used in lie:	u of a pit.	
law or regula I cer application foottaining the penalties for: Company Off	the permit are enforced tion can lead to enforce tify under penalty of the permit and all attachment information, I believe to submitting false information of the permitting false in the permitten f	ement action. law that I have that thereto and the that the information, including	personally examined that, based on my in nation is true, accurat the possibility of fine of	and am familiar wi quiry of those indi e, and complete.	th the informati	on submitted on this ately responsible for
	nd sworn before me thi	5 (0 th	day of Februa	۲ŋ,:	20 14	
	Bour	Jul	L BEVEF	IV A WEBB	ry Public	Received
My commissi	on expires 0	30/14	Common	ARY PUBLIC wealth of Virginia #7502381 n Expires June 30, 20	015	FEB 1 0 2014
			100			04/04/2014 Sas Dept. of Environmental Prote

Operator's Well No.	11225	
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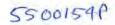
LEGEND			
Property Boundary	Diversion www.iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		
Road = = = = = = = = = = = = = = = = = = =	Spring -		
Existing Fence — X — X — X —	Wet Spat		
Planned Fence / / /	Drain Pipe with size in inches (3)		
Stream	Waterway $\longleftrightarrow$		
Open Ditch	Cross Drain		
Rock 63556	Artificial Filter Strip		
North N	Pit: cut walls		
Buildings	Pit: compacted fill walls		
Water wells W	Area for Land Application of Pit Waste		
Drill site			
Proposed Revegetation Treatment: Acres Disturbed	? Prevegetation pH 6.5		
Lime based on pH Tons/acre or to correct to pH			
Fertilizer (10-20-20 or equivalent)lbs/a	cre (500 lbs minimum)		
Mulch 2 Tons/aci	ra.		
watenronsact	C		
Seed 1	Mixtures		
Area I	Area II		
Seed Type lbs/acre	Seed Type lbs/acre		
Orchard grass 25	same as Area I		
Birdsfoot trefoil 15			
Lidino clover 10			
Attach: Drawing(s) of road, location,pit and proposed area for land applic	eation.		
Photocopied section of involved 7.5' topographic sheet.			
Plan Approved by: When Kennedy			
Comments:			
	Received		
	- (v) w		
Title: Zsepector Yes (	Date: 2/4/14 FEB 1 0 2014		
Field Reviewed? ( ) Yes (	)No		





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

	WELL LOCA	TION FORM: C	SPS
API:	47-055-00154	WELL NO	o.: 11225
FARM	I NAME: Hawley Coa		
RESPO	ONSIBLE PARTY NAME:	NX Gas Com	pany LLC
COUN	Mercer	DISTRICT:	
QUAD	RANGLE: Odd, WV	519	
SURF	ACE OWNER: Pardee &	Curtain Realty	LLC
ROYA	LTY OWNER: Pardee &	Curtain Realty	y LLC
	GPS NORTHING: 4,152,22		
	GPS EASTING: 482,08		VATION: 968 m 30981
the foll 1. 2. 3.	well. The Office of Oil and Gas wowing requirements:  Datum: NAD 1983, Zone: 17 height above mean sea level ( Accuracy to Datum – 3.05 me Data Collection Method: vey grade GPS × : Post Proces	North, Coordinate Unit MSL) – meters. eters	rs: meters, Altitude: Received
our		Differential	PLD 10 LON.
Ma	pping Grade GPS: Post Pro	cessed Differential	Office of Oil and Gas  WV Dept. of Environmental Protection
	Real-Tir	ne Differential	
belief a	Letter size copy of the topogodersigned, hereby certify this data and shows all the information required by the Office of Oil and Gas.	is correct to the best of	f my knowledge and





CNX Gas Virginia Operations 627 Claypool Hill Mall Road Cedar Bluff, VA 24609

> Bob Staton, MS, PG Permitting Agent phone: 276-596-5137

February 7, 2014

Ms. Kay Holtsclaw West Virginia DEP **Office of Oil and Gas** 601 57<sup>th</sup> Street, SE Charleston, WV 25304-2345

RE: API # 047-055-00137

047-055-00128 047-055-00154

Dear Ms. Holtsclaw;

CNX Gas Co. LLC hereby submits these applications for plugging and abandonment of the above referenced wells. If you need any additional information, please contact me.

Sincerely,

**Bob Staton** 

Permitting Agent

Received

TEBB 1100 20044

Office of Oil and Gas :
WWO option Environmental Protection