

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

July 06, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-10901292, 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: WB-72, PLC-16

Farm Name: POCAHONTAS LAND CORP.

API Well Number: 47-10901292

Permit Type: Plugging
Date Issued: 07/06/2015

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.

1)Date	,	20
2) Operator's		
Well No.	13055	
3) APT Well No.	47- 109	- 01292

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	d injection/ Waste disposal/
	(If "Gas, Production _x or Und	derground storage/ Shallow_X_
5)	Location: Elevation 1587 ft.	Watershed Turkeywallow Branch
	District Center	County Wyoming Quadrangle Pineville, WV
C \	Well Operator CNX Gas Company LLC	7) Designated Agent_Matthew Imrich
6)	Address 2481 John Nash Blvd	Address One Dominion Drive
	Bluefield, WV 24701	Jane Lew, WV 26378
8)	Oil and Gas Inspector to be notified	
	Name Gary Kennedy	Name L&D Well Services
	Address PO Box 268	Address PO Box 1192
	Nimitz, WV 24978	Vansant, VA 24656
		Received MAY 1 g 2015 Office of Oil and Gas Well Pent, of Environmental Protection
work	fication must be given to the district of can commence.	and gas inspector 24 hours before permitted New Date 5/15/15

API 47-109-01292 (13055/WB72) Plugging Procedure

<u>ltem#</u>	Responsible Party	Description
1.	CNX	Verify total depth to 2272' (4 ½").
2.	Pinnacle	Run E-Log to consist of density, gamma ray, deviation, caliper, ccl to determine the location of the lowest minable coal and verify Pocahontas #3 Seam location (PMC depth shows at approximately 824' G.L.).
3.	CNX	Run Free Point Survey on 4 1/2" casing.
4.	CNX	Run tubing to TD. Set Class A 3% CaCl cement plug from TD to at least 100' above the Ravencliff Formation perforations (1409'). Pump 100' of 6% gel spacer from 1409' to 1309'. Pump Class A 3% CaCl cement from top of Gel to approximately 300' below the P3 or lowest minable coal seam (approx. 1124').
5.	CNX	Cut 4 ½" casing at approximately 839' or at free point and pull casing.
6.	Pinnacle	Washover 4 $\frac{1}{2}$ " casing to remove annular cement to a depth of 15' below the Pocahontas #3 coal seam (if necessary).
7.	Pinnacle	Cut 4 $\frac{1}{2}$ " casing 15' below the Pocahontas #3 coal seam and remove from well (if necessary).
8.	CNX	Run bond log on 7" casing to determine top of cement.
9.	Pinnacle	Section mill the 7" casing from 10' above the Pocahontas 3 Seam to 5' below the seam for a total of 20'.
10.	Pinnacle	Perforate casing with 1 shot every 100' from 1050' to 100'.
11.	CNX	Run tubing to previous gel top, and pump expanding cement from there to at least 100' above the Pocahontas #3 seam. Cement plug from previous top of gel to 724'.
12.	CNX	Pump Class A cement to surface. Class A Cement plug from 724' to 0'. Received

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Office of Oil and Gas

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Item#	Responsible Party	Description	
13.	CNX	Install a 4'x4-1/2" monument with API# and Date.	
14.	CNX	Reclaim site.	
	Pinnacle	Note: If the 4-1/2" casing has an excessive amount of cement above Pocahontas #3 seam, then an alternative method will be used instead washing over the 4-1/2" casing. The 4-1/2" will be section milled for	ead of

across the Pocahontas #3 seam.

10' above the Pocahontas #3 seam to 5' below the seam for a total of 20'. The 7" will then be perforated with 10 shots/foot for a total of 10'

Received

MAY 1 8 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

WR-35

JAN 2 3 1995

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

Permitting Office of Oil & Gas

Well Operator's Report of Well Work

Farm Name:

POCAHONTAS LAND

Operator Well Number:

B-72 16

Left in

Well

963

Elevation:

Latitude:

1587

Quadrangle: PINEVILLE

Drilling

36

963

District: CENTER 7380 Feet South of

37 Deg.

County: WYOMING 32 Min.

30.00 Sec.

Cement Fill

Up in SKS

CTS

API #: 47-109-01292

Longitude:

3160 Feet West of

81 Deg.

35 Min.

Casing and Used in

Tubing

9 5/8

0.00 Sec.

BOWIE Company:

P.O. Drawer 1430

Clarksburg, WV 26302-1430

Agent:

William H. Bowie

Rodney G. Dillon Inspector: Permit Issued:

11/25/92 12/16/92 Well Work Commenced: Well Work Completed: 12/22/92

Verbal Plugging

Permission granted on: Rotary: ⊠ Cable: □ Total Depth (feet):

Fresh Water Depths (ft):

2450

85,240,515

4 1/2" 2272

2272 150

Salt Water Depths (ft): N/A

Is Coal Being Mined in the Area? (Y/N) Yes Coal Depths (ft) 100-2,380-85,510-12,570-72,590-92

OPEN FLOW DAT

Producing formation RAVENCLIFF Gas: Initial open flow --Final open flow: --

, MAXTON

Pay zone depth (ft) 2093' - 2131'

N/A BBL/day MCF/day Oil: Initial open flow: Final open flow: MCF/day

N/A BBL/day Hours

Static Rock Pressure --

Time of open flow between initial and final tests psig (surface pressure) afte

Hours

Producing formation Gas: Initial open flow

MCF/day Oil: Initial open flow:

Pay zone depth (ft) 1509' - 1597' BBL/day

Final open flow: MCF/day Final open flow: Time of open flow between initial and final tests BBL/day 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 FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELBORE.

> BOWIE For:

> > By:

leve Bow 1-18-95 Date:

Stage 1 Frac: (2004-2131) 13 HOLES, 500 GAL 15% HCL, 350 SKS SAND, 560 BBL 75Q N2 FOAM

Stage 2 Frac: (1500-1507) 29 HOLES, 500 GAL 18% HCL, 300 SKS SAND, 475 BBL GELLED H20

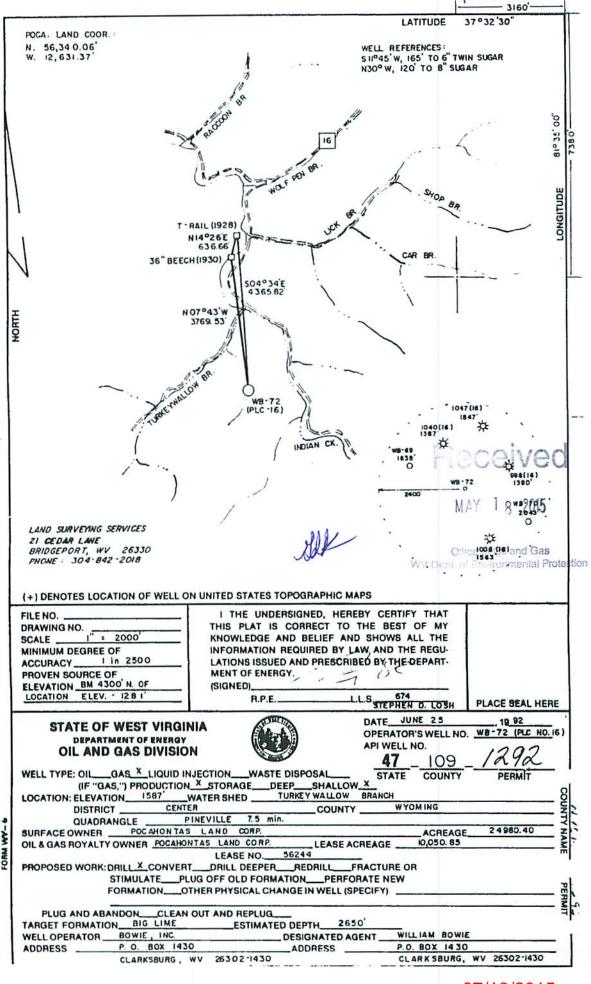
Stage 3 Frac: Stage 4 Frac:

Stage 6 Frac:

	FORMATION	TOP	воттом	COMMENT
1.	SAND	0	40	
2.	SAND & SHALE	40	370	1/2" H20 @ 220
3.	COAL	370	375	1" H20 @ 375
4.	SAND & SHALE	375	525	
5.	COAL	525	530	
6.	SAND & SHALE	530	1110	
7.	SAND	1110	1150	
8.	SHALE	1150	1500	
9.	RAVENCUFF	1500	1610	GAS SHOW
10.	AVIS	1610	1650	
11.	SHALE	1650	1960	
12.	MAXTON	1980	2220	
13.	SHALE & SANO	2220	2448	DTD
14.		0	0	
15.		0	0	
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18.		0	0	
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MAY 1 8 2015

Office of Oil and Gas
WV Dept. of Environmental Protection



07/10/2015

 WW-4A			1) Da	to		
Revised 6-07				erator's Well Numb	or	
nevised 0-07			<i>2)</i> Op		13055	
			3) API	[Well No.: 47 -	109	- 01292
		TATS	E OF WEST VIRGI	NIA		
ď	EPARTMENT OF EN				OIL AND GA	S
				ID ABANDON A W		
	ner(s) to be served:	5)) (a) Coal Operator			
(a) Name	Pinnacle Land Company		Name	Mechel North America (co	oal above the Poca	4 Seam)
Address	PO Box 338		Address	818 North Eisenhower Dr	tve	
	Pineville, WV 24874			Beckley, WV 25801		
(b) Name			(b) Coal Ow	ner(s) with Declara	tion	
Address			Name	Natural Resource Partner		
			Address	PO BOX 252	7	
				Huntington, W: 257		7
(c) Name			Name			
Address			Address		-	
;					-	
C) Torontoni	Onellanate					· · · · · · · · · · · · · · · · · · ·
6) Inspector	Gary Kennedy			see with Declaration		
Address	PO Box 268		Name	Pinnacle Mining Company	LLC (coal in Poca	3 and Poca 4 Seams)
	Nimitz, WV 25978		Address	PO Box 338		
Telephone	304-382-8402			Pineville, WV 24874		
(2) The part of the reason However, y Take notice accompany Protection, the Applica	its and the plugging work ordered to comment is out are not required to take any act that under Chapter 22-6 of the Wing documents for a permit to plug with respect to the well at the location, and the plat have been maiumstances) on or before the day of	that you have ri ion at all. 'est Virginia Co g and abandon a ation described of led by registered	ghts regarding the applica de, the undersigned well or well with the Chief of the on the attached Application d or certified mail or deliv	perator proposes to file or h Office of Oil and Gas, Wes n and depicted on the attach	as filed this Notice t Virginia Departme ted Form WW-6. C	and Application and ant of Environmental opies of this Notice,
	We	ell Operator	CNX Gas Company LL	c		
	By	-	11 2	1-		
	lts.		All Tana	E. L	·	
i e		dress	637 Claypool Hill Mail R	ract/		
	Au	W1022	Cedar Bluff, VA 26637	T		
	m-1	anhana				
	Te	ephone	276-586-5137			
Subscribed and	sworn before me this		ay of Ma	ONOTATY Publ	ic.	
My Commission	Expires	1 B	EVERLY A. WEBB.		- <u>-</u>	
-	• • • • • • • • • • • • • • • • • • • •	Con	nmonwealth of Virgini	a l		
Oil and Gas Priva	cy Notice	My Comm	Reg. #7502381 ission Expires June 3	0. 2015		

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.goy. WW-9 Rev. 5/08

	Page		of	
API Number 47 -	109	-	01292	
Operator's Well No	13055	5		

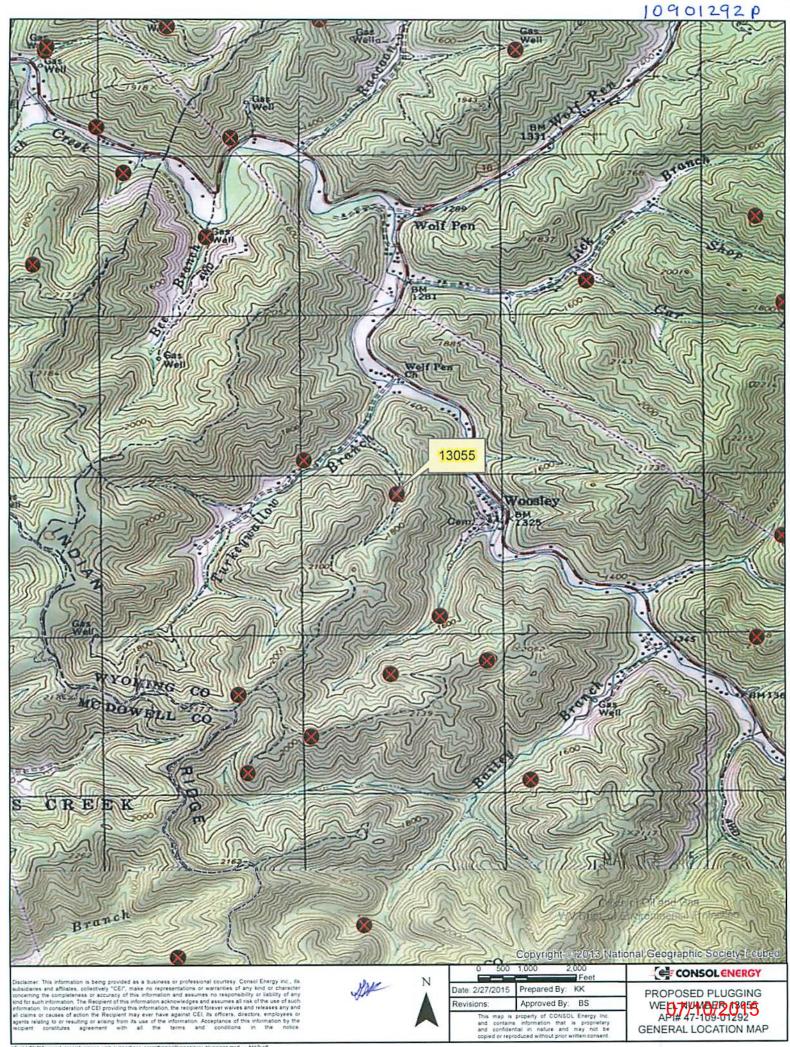
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

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

	MIT FOR OIL AND GAS PIT V	VASTE DISCHARGE	
Operator Name CNX Gas Company LL	С	OP Code494458046	<u> </u>
Watershed Turkey Wallow Branch	Quadrangle	Pineville, WV	
Elevation 1587 ft Co	_{unty_} Wyoming	_{District} _ Center	
Description of anticipated Pit Waste:Wa	ter for plugging of aband	doned gas well.	NO PIT WASTI
Will a synthetic liner be used in the pit? N/A			2 W M
Proposed Disposal Method For Treated Pit Was Land Application X Underground Injection Reuse (at API Number)	stes: on (UIC Permit Number_2D055 ber_	0319	
Off Site Dispposal (Supply form WW-9 for disposal		
Other (Explain			
Proposed Work For Which Pit Will Be Used: Drilling Workover X Other (Explain_a pu	Swabbi Pluggin Imper truck with flowback tank wil	g	
I certify that I understand and agree to on August 1, 2005, by the Office of Oil and Garprovisions of the permit are enforceable by law law or regulation can lead to enforcement action. I certify under penalty of law that I application form and all attachments thereto obtaining the information, I believe that the penalties for submitting false information, including the information of the penalties for submitting false information, including the information of the penalties for submitting false information, including the penalties for submitting false information.	s of the West Virginia Department. Violations of any term or corn. have personally examined and a and that, based on my inquiry information is true, accurate, and the possibility of fine or implementation.	at of Environmental Protection addition of the general permit a sum familiar with the informate of those individuals immediated d complete. I am aware that	n. I understand that the and/or other applicable tion submitted on this diately responsible for at there are significant.
Company Official (Typed Name) Ed Far	nning		MAY 1 8 2015
Company Official Title Permitting	Supervisor		Office of Oil and Gas
Company Criteria Time		Wat De	ent, of Environmental Protection
Subscribed and sworn before me this 3	th day of May	, 20_15Notory Public	
My commission expires	BETVILLE A. WEBB NOTARY PUBLIC Gommen was 1 Reg. #7512311 My Commission Expires June	- 7015	07/10/2015

Operator's Well No. 13055

L	EGEND
Property Boundary	Diversion (1:11/11/11/11/11/11/11/11/11/11/11/11/11
Road = = = = = = = = = = = = = = = = = = =	Spring
Existing Fence — × — × — × —	Wet Spot
Planned Fence / / /	Drain Pipe with size in inches (2)
Stream	Waterway $\longleftrightarrow \longleftrightarrow \longleftrightarrow \longleftrightarrow \longleftrightarrow$
Open Ditch	Cross Drain
Rock & SESSE	Artificial Filter Strip
North N	Pit: cut walls
Buildings	Pit: compacted fill walls
Water wells	Area for Land Application of Pit Waste
Drill site	
Proposed Revegetation Treatment: Acres Disturbed 1.5	Prevegetation pH 6.5
Lime based on pH Tons/acre or to correct to pH	7.0
The state of the s	
Fertilizer (10-20-20 or equivalent)	cre (500 lbs minimum)
Mulch 2 Tons/ac	re
iviticiions/ac	
Seed	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	
Lidillo clovei	
Attach: Drawing(s) of road, location,pit and proposed area for land applie	cation. Received
Photocopied section of involved 7.5' topographic sheet.	11000110
	MAY 1 8 2015
QU 1/ 10	MAI 18 KUJ
Plan Approved by: Hay Kuruell	1 0 V and Coo
Comments:	Office of Oil and Gas WV Dept. of Environmental Protection
A000 110 110 110 110 110 110 110 110 110	
T 1 F	elistic
Title: Ingrestor	Date: 3/12/15



WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS
API: 47-109-01292 WELL NO.: 13055
FARM NAME: Pinnacle Land Company
RESPONSIBLE PARTY NAME: CNX Gas Company LLC
COUNTY: Wyoming DISTRICT: Center
QUADRANGLE: Pineville, WV 7.5 min.
SURFACE OWNER: Pinnacle Land Company
ROYALTY OWNER: Natural Resource Partners
UTM GPS NORTHING: 447,485 m. UTM GPS EASTING: 4,152,890 m. GPS ELEVATION: 491 m.(1587')
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 MAY 18 2015
Mapping Grade GPS: Post Processed Differential Office of Oil and Gas Real-Time Differential Office of Oil and Gas
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. Signature Title Title Date