

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 09, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4701729, 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

Chief

James Martin

Operator's Well No: 6112

Farm Name: ALAWEST, INCORPORATED

API Well Number: 47-4701729

Permit Type: Plugging Date Issued: 07/09/2014

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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.

WW-4B Rev. 2/01

1)Date		, 20
2) Operator	's	
Well No.	6112	
3) API Well	No. 47- 647	- 01729

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 _/ Liqui	d injection / Waste disposal /
90		nderground storage/ Shallow_x
		21 - A 51 A
5)	Location: Elevation 1125 ft.	Watershed Clear Fork
	District Sandy River	County_McDowell Quadrangle_Davy, WV
6)	Well Operator CNX Gas Company LLC	7) Designated Agent_Jeremy Jones
-	Address 2481 John Nash Blvd	Address One Dominion Drive
	Bluefield, WV 24701	Jane Lew, WV 26378
	MANAGEMENT CONTRACTOR OF THE CONTRACTOR	August and a second a second and a second an
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 25978	Vansant, VA 24656
	Work Order: The work order for the man	mer of plugging this well is as follows:
		mer of plugging this well is as follows:
		RECEIVED Gas
		RECEIVED Gas
	see attached work order procedures	RECEIVED Office of Oil and Gas
otio	see attached work order procedures	RECEIVED Office of Oil and Gas

API 47-47-01729 Plugging Procedure

- Verify total depth 3747'. 1.
- 2. Run free-point survey on 4-1/2" casing.
- 3. 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. 4.
- 5. Cement through 4-1/2" csg. while pulling 4-1/2", from top of bottom plug to approximately 100' below the 7" casing shoe. (Approx. 808') Pull remaining 4-1/2" out of well.
- Bond log 7" casing. 6.
- 7. Run tubing to previous cement top (808'). Cement across the 7" shoe to a minimum of 50' above shoe, bringing cement top to approximately 50' below the 7" free-point or to surface, whichever is necessary.
- If necessary, cut and pull free 7" casing. 8.
- 9. Repeat bond log and cutting procedures for 9-5/8" if 7" is cut and pulled.
- Cement from 50' below 9-5/8" shoe to surface. 10.
- Install 7" X 4' steel monument with API# and Date. 11.

Piffice of Oil and Gas Environmental Protection

Environmental Protection 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.

6112



47-47-01729

123/4"@ 20'

95/8"@ 165' - 605KS Cenent

7" 17#4+ @ 708' - 2005KS CIMENT

40" 9.5#kr@ 3747' - 1355ks Coment

DTO@ 3758'

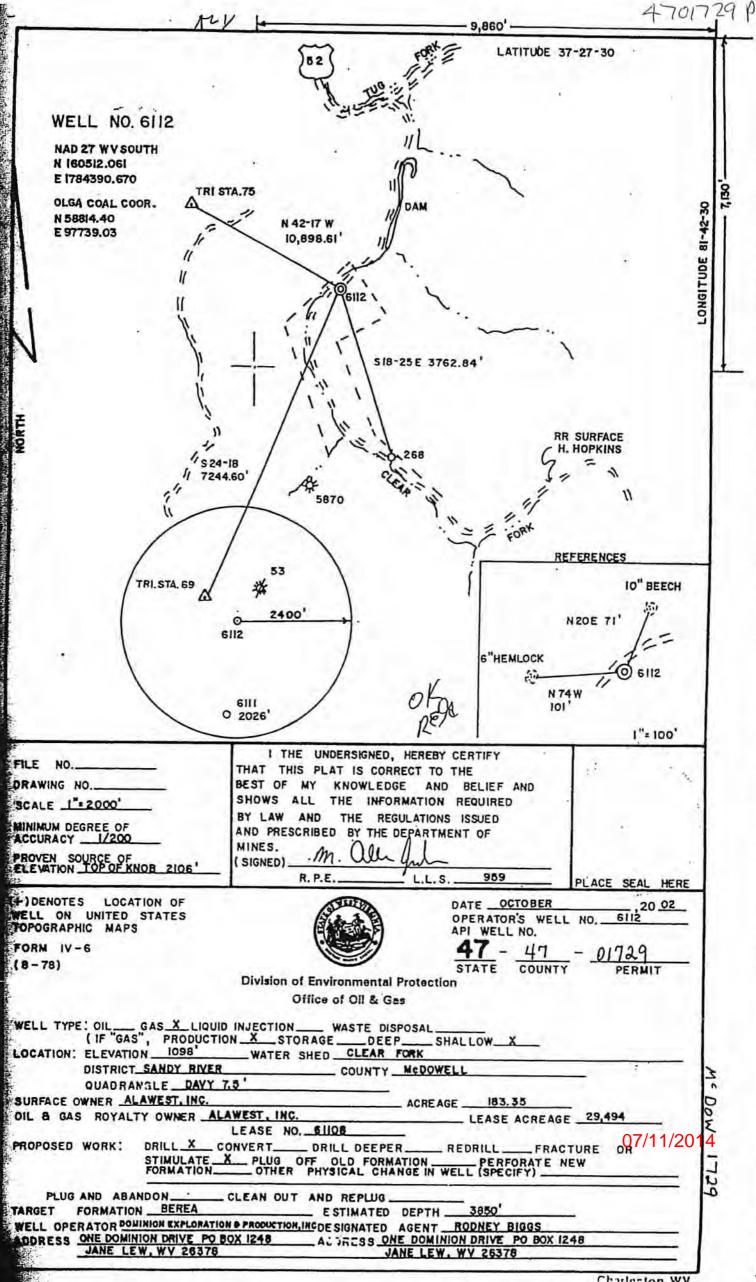
Upper Big Lime 2512'-2526' 14 Holes Lower Big Lime 2821'-2841' 12 Holes Berca 3546'-3556' 20 Holes



Office of Oil and Gas

MAY 30 2014

WAY Department of
Environmental Protection



WR-35 Rev (5-01)

DATE: 05/13/03 API#: 47 047 01729

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

farm name: Alawest, Incorported	Oper	ator Well No.:_	6112	
LOCATION: Elevation: 1098'	Qua	adrangle:Day	y 7.5	
District: Sandy River	Con	unty: Mc	Dowell	
Latitude: 7130 Feet South of 37 D	eg. 27 Min. 30	Sec.	-	
Longitude 6950 Feet West of 81 Deg	g.42 Min. 30 Sec			
Company: <u>Dominion Exploration & Production</u>	Casing &	Used in	Left in well	Cement fill
	Tubing	drilling	Liete in Weil	up Cu. Ft.
Address: P O Box 1248	Tubing	urming		up Cara
Jane Lew, WV 26378				
Agent: Rodney J. Biggs				
Inspector: Ronald Scott			V-	
Date Permit Issued: 12/02/2002				
Date Well Work Commenced: 03/10/03	12 3/4"	20*	20'	Sand In
Date Well Work Completed: 03/20/03				
Verbal Plugging: N/A	9 5/8"	165	165'	60 sks
Date Permission granted on: N/A		5.2		201
Rotary X Cable Rig	7"	708'	708	200 sks
Total Depth (feet): 3758'		20101	27.47	
Fresh Water Depth (ft.): N/A	4 1/2"	3747	3747'	
74			1	Office of Oil & Ga
Salt Water Depth (ft.): N/A				Permitting
Y I believe make of the cases ONIONS N		-		1111 A L 0000
Is coal being mined in area (N/X)? N Coal Depths (ft.):70-71',130-131',638-				JUL 2 1 2003
643'				WV Department of
045	2		Sn Sn	vironmental Protec
OPEN FLOW DATA			L.	er strangt victor, victor
Berea			3546-3556	
Producing formation Lower B L		Pay zone depth		1'
Gas: Initial open flow Trace M	ICF/d Oil: Initial	open flow	0Вы/d	
Final open flow 1.04M 1	MCF/d Final o	pen flow 0	Bbl/d	alle
Time of open flow between initial	and final tests	12 H	ours	
Static rock Pressure 650 ps	ig (surface pressu	re) after 12	Hours	
	5.21			****
Second producing formationUppe	r B Lime	Pay zone dept	h (ft) 2512-2	526
	/d Oil: Initial ope		_Bbl/d	
Final open flow * MCF/			_Bbl/d	
Time of open flow between initial	and final tests		urs	
	(surface pressure)	after *	Hours	
*Comingled	TIN POLY OUT	a the property of	OF DEDECT A	PRD .
NOTE: ON BACK OF THIS FORM PUT T INTERVALS, FRACTURING OR STIMUL	TATING DUVER	AL CHANGE	ETC 2) THE W	E07/11/20
LOG WHICH IS A SYSTEMATIC DETAIL	ILED GEOLOGIC	AL RECORD C	F ALL FORMA	TIONS.
LAND WILLIAM A SISTEMATIC DETAIL				

03/20/2003 FRACED AS FOLLOWS:

BEREA, 3546 - 3556', 20 HOLES, 75Q FOAM FRAC, TOT SAND 25,487#, 111 BBL, 250 MSCFN2, BD 2910#, AVG RATE 20 BPM, AVG PRESS 2265#, ISIP 2010# LOWER B LIME, 2821 - 2841', 12 HOLES, 2000 GAL 28% HCL, 117 BBLS TW, 29,891 SCFN2, BD 3190#, AVG RATE 12 BPM, AVG PRESS 2195#, ISIP 1270# UPPER B LIME, 2512 - 2526', 14 HOLES, 2000 GAL 28% HCL, 122 BBLS, BD 1740#, AVG RATE 14 BPM, AVG PRESS 2295#, ISIP 1720#.

Overburton	0	15
Sandstone	15	70
Coal	70	71
Sandy Shale	71	130
Coal	130	131
Sandstone	131	450
Sandy Shale	450	638
Coal	638	643
Sandstone	643	825
FORMATION TO	PS .	
U Ravencliff	825	903
L Ravencliff	1253	1313
Avis Lime	1364	1412
U Maxton	1720	1875
M Maxton	1896	1955
L Maxton	2135	2174
Little Lime	2241	2480
Big Lime	2480	2863
Price FM	2863	3460
Sunbury	3460	3512
Berea Sand	3512	3585
LTD		3760'
		-, 50

Wek:

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MAY 3 U 2014

WV Department of Environmental 1/20te4tion

WW-4A Revised 6-07

Date: Operator's Well Numl	er	
The state of the state of	6112	
2) ADI Wall Nov 47	047	01770

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

(a) Name	ner(s) to be served:	5) (a) Coal Operator	
(d) Littline	Alawest, Inc.	Name	none
Address	PO Box 920	Address	
	Welch, WV 24801		
(b) Name			ner(s) with Declaration
Address		Name	Alawest, Inc.
		Address	PO Box 920
			Welch, WV 24801
(c) Name		Name	
Address		Address	
Inspector	Gary Kennedy	(c) Coal Less	see with Declaration
Address	PO Box 268	Name	none
	Nimitz, WV 25978	Address	
Telephone	304-382-8402		ived this Form and the following documents:

Well Operator CNX Gas Company LLC By: Its: 2481 John Nash Blvd Address Bluefield, WV 24701 2014 Office of Oil and Gas Telephone 304-323-6568 Subscribed and sworn before me, this day of Notary Public BEVERLY A. WEBB My Commission Expires NOTARY PUBLIC and phone number, as a part of our sor third parties in the normal or bout our Commonwealth of Virginia Oil and Gas Privacy Notice

Reg. #7502381

My Commission Expires June 30, 2015

The Office of Oil and Gas processes your personal information, such as name, address

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.

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Office of Oil and Gas

MAY 3 U 2014

W/V Department of
Environmental Protection

4701729P

WW-9 Rev. 5/08

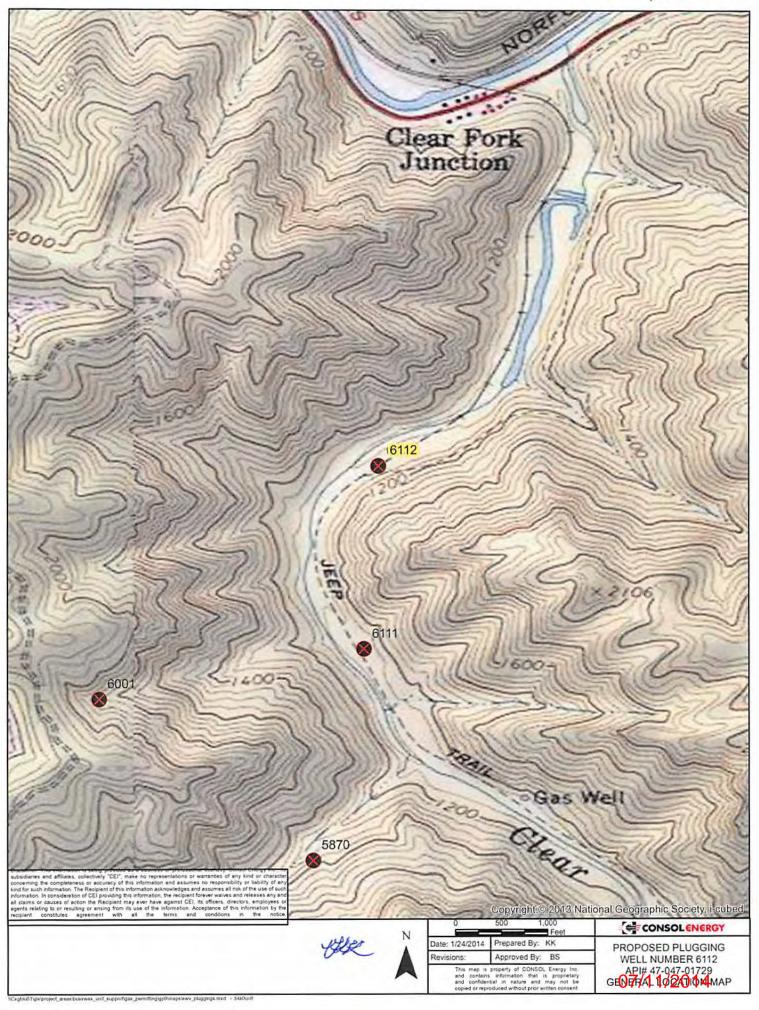
P	age	of	
API Number 47 -	047	01729	
Operator's Well No.	6112		

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

Watershed		pany LLC			OP Code	4944580	40	
	Clear Fork		Qua	drangle	Davy, WV			
evation	1125 ft.	County	McDowell		District_	Sandy	River	
escription o	f anticipated 🎮 Waste:	water for p	lugging of al	bandone	d gas we	1.		NO
ill a synthet	tic liner be used in the p	oit? N/A						
oposed Dis	posal Method For Treat Land App							
		ind Injection (UI	C Permit Numbe	2D05503	19			- Š
		API Number						
	Off Site D Other (Ex	ispposal (Supply plain	form WW-9 for	disposal lo	cation)			
oposed Wo	rk For Which Pit Will I	Be Used:						
	Drilling			Swabbing	8			
	Workover	plain a pumper tr	uck with flowbac	Plugging	e used in lieu	of a nit	WIL	
	the permit are enforces		ations of any tar					rstand that
I cer oplication foo otaining the enalties for s	tion can lead to enforce tify under penalty of lorm and all attachmen information, I believe submitting false information	aw that I have p	ersonally examir at, based on my	ned and am	familiar wi	th the inforviduals immam aware REC	mation submediately retailed to the control of the	nitted on tesponsible are significated Gas
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I cer oplication for otaining the enalties for s ompany Off	tify under penalty of lorm and all attachmen information, I believe submitting false informaticial Signature	aw that I have p ts thereto and the that the information, including th	ersonally examinat, based on my tion is true, acce possibility of fi	ned and am	familiar wing those indicomplete. I sonment.	th the inforviduals impart am aware REC	mation submediately rethan there and only and on	nitted on the sponsible are significed Gas
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			EGEND				
Property Boundary			Diversion 4		ининини		
Road = = = = =	=====		Spring (→			
Existing Fence — X — X — X — Planned Fence — / — / — / —			Wet Spot				
			Drain Pipe w	ith size in inches	₍₃		
Stream			Waterway	\longleftrightarrow	$\rightarrow \hookrightarrow \hookrightarrow$		
Open Ditch	··->		Cross Drain	7/////			
Rock ESSESS	•		Artificial Fil	ter Strip XXXXX	XXXXXXXXXXXX		
North N	1		Pit: cut walls	· 63	MID.		
Buildings			Pit: compact	ed fill walls	THE STATE OF THE S		
Water wells W			Area for Lar	nd Application of Pit	Waste		
Drill site				(= = -			
Proposed Revegetation Treatme	ent: Acres Disturbed	1.5		Prevegetation pH	6.5		
	Tons/acre or to corr		7.0				
Lime based on pr		ect to pH					
Fertilizer (10-20-20 or	equivalent) 550	lbs/a	acre (500 lbs min	nimum)			
Mulch 2		Tons/ac	ere				
			Mixtures				
Area	ı			Area	п		
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 Photocopied section of involved			ication.				
Plan Approved by:	Whey Kevel	ede			Office of Oil and Gas		
	V 4 .	C			Office of Chi and		
Comments:					MAY & U DIA		
Title: Tospector			Date:	5/22/14	WV Department of Engineenmental Protect		
Field Reviewed?	Yes) Yes) No				





West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

WEED BOO	ATTOM FORMS OF D
API: 47-047-01729	WELL NO.: 6112
FARM NAME: Alawest, Inc.	C
RESPONSIBLE PARTY NAME:	CNX Gas Company LLC
	DISTRICT: Sandy River
QUADRANGLE: Davy, WV	
surface owner: Alawest,	
ROYALTY OWNER: Alawest,	Inc.
UTM GPS NORTHING: 4,143,	787 m
UTM GPS EASTING: 434,325	om GPS ELEVATION: 351 m
preparing a new well location plat for a above well. The Office of Oil and Gas the following requirements:	meters
Real-Tim Mapping Grade GPS: Post Pr	rocessed Differential RECEIVED Gas
4. Letter size copy of the top	ography map showing the well location. ata is correct to the best of my knowledge and projection quired by law and the regulations issued and ental Projections. Environmental Projection 5 / 29 / 14 Title Date
O	07/11/2014