State of West Virginia Division of Environmental Protection Section of Oil & Gas Well Operator's Report of Well Work

Farm name: Heartwood Forestland Fund		Operato	r Well No:	PC-006A	
Location: Elevation: 1840.3'	=	Quadrangle: Pineville			
District: Center		County:	Wyo	oming	
Latitude: <u>7938</u> Feet	South of 37 West of 81 D	Deg. 35 M	in. 00 Sed).	
Company: CDX Gas, LLC P.O. Box 609 Pineville, WV 24874 Agent: Michael McCown Inspector: Barry Stollins Permit Issued: 5/10/2007 Well Work commenced: 6/6/2007	Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up Cu.ft.	
Well Work completed: 7/15/2007 Verbal plugging	13 3/8"	32'	32'	21	
Permission granted on:	9 5/8"	418'	418'	131	
Rotaryx Cable Rig Total depth (ft) 903'	7"	676'	676'	102	
Fresh water depths (ft) N/A Salt water depths (ft) N/A					
OPEN FLOW DATA Producting formation None Gas: Initial open flow N/A Mcf/d Final open flow N/A Mcf/d Time of open flow between initial and Static rock pressure psig (surface)			nitial open	flow	Bbl/d Bbl/d
Second Producing formation Mcf/d Gas: Initial open flow Mcf/d Final open flow Mcf/d Time of open flow between in Static rock pressure psig (surface)	Oil:	Initial op	Pay zone of en flow Final open hour	Bbl/d flow	(ft) _Bbl/d
Third Producing formation Mcf/d Gas: Initial open flow Mcf/d Final open flow Mcf/d Time of open flow between in Static rock pressure psig (surface)	itial and fina	Initial op F I tests:	en flow Final open	flow hours	Bbl/d
Static rock pressure psig (surfate) Note: ON BACK OF THIS FORM, PUT THE FOLICY FRACTURING OR STIMULATING, PHYSICAL CHANGI DETAILED GEOLOGICAL RECORD OF ALL FORMA WELLBORE.	TIONS, INCL	HE WELL LO	AL ENCOU T. Akers	NTERED B	MANICK!
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Date:__

Operator: PC-006A API No. 47- 109-02874 Location: Wyoming County

Details of Perforated Intervals, Fracturing or Stimulation, Physical Change, Etc. -N/A

Well Log & Geologic Record - Depths from G.L.

	Depth in feet Top Bottom		
Lithology			
Casing	0	30	
Shale	30	70	
Sandy Shale	70	128	
Shale	128	188	
Sandy Shale	188	208	
Shale	208	263	
Sandy Shale	263	343	
Shale	343	363	
Sandy Shale	363	428	
Shale	428	483	
Sandy Shale	483	583	
Shale	583	593	
Sandy Shale	593	628	
Shale	628	693	
Sandy Shale	693	718	
Shale	718	753	
Sandy Shale	753	773	
Shale	773	780	
Sandy Shale	780	853	
Shale	853	903	
Coal	903	td	
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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 Joe Manchin III, Governor Stephanie R. Timmermeyer, Cabinet Secretary www.wvdep.org

May 10, 2007

WELL WORK PERMIT

Coalbed Methane

This permit, API Well Number: 47-10902874, issued to CDX GAS, 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.

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 drilling, 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 35CSR-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 or Mr. Al Blankenship at (304) 926-0499 ext. 1653.

James Martin

Chief

Operator's Well No: PC-006A

Farm Name: HEARTWOOD FORESTLAND

API Well Number: 47-10902874

Permit Type: Coalbed Methane

Date Issued: 05/10/2007

Promoting a healthy environment.

Page 1 of 2	Date: April 10, 2007
Form <u>WW-5B</u> (9 / 97)	Operator's well number PC -006A API No. 47 - 109 - 02874C State - County - Permit

STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS COALBED METHANE PERMIT APPLICATION

109-3549

		, , , , ,
1)	Well C	perator: CDX Gas LLC. 2) Well Name PC-006A
3)	Operat	or's Well Number PC-006A 4) Elevation 1848.76'
5)	Well T	ype: (a) Oil ☐ or Gas ⊠
		(b) If Gas: Production ⊠ Underground Storage □ CBM ⊠ Deep □ Shallow □
6)	Propos	ed Target Formation(s): Pocahontas No. 4
7)	Propos	ed Total Depth: 1000'
8)	Appro	kimate Fresh Water Strata Depths: None anticipated
9)	Appro	ximate Salt Water Depths: N/A
10)	Appro	ximate Coal Seam Depths: Sewell Seam /370' & Pocahontas 4 / 910'
11)	Does I	and Contain Coal Seams Tributary to Active Mines? Yes No No
12)	(a)	Proposed Well Work: Drill a Horizontal Coalbed Methane Well
		If Stimulation proposed, describe means to be used to stimulate well:N/A
13)	(a)	Does the proposed operation plan to convert an existing well (as defined in W.Va. Code 22-6-1) or a vertical ventilation hole to a coalbed methane well? Yes \(\subseteq \text{No} \subseteq \text{No} \)
	(b)	If yes, please attach to this Application a list of all formations from which production is anticipated and a description of any plans to plug any portion of the well.
14)	(a)	Will the proposed coalbed methane well be completed in some but not all coal seams for production (except for a gob well or vent hole proposed to be converted to a well)? Yes ⊠
	(b)	If yes, please attach to this Application a plan and design for the well which will protect all workable coal seams which will be penetrated by the well. (See Casing Plan)
15)	(a)	Does the proposed operation include horizontal drilling of a well commenced on the surface? Yes \boxtimes No \square
	(b)	RECEIVED If yes, please attach to this Application a description of such operations, including both the vertical and horizontal alignment and extent of the well from the surface to total depth. See Well Plat APR 1 1 2007

WV Department of Environmental Proceeds