

1) Date:	1	October 27, 2009	
2) Operator's Well	No.	LC-	-19
3) API Well No.:	47	109	01433
	State	County	Permit

4) UIC Permit No.

2D1091433

STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

5) WELL TYPE:				Gas Injec					_ /	- <u>-</u>
6) LOCATION:							rane Fork			
N . 111	District	: Ocea	ina			unty Wyon			ngle Pilot	
7) WELL OPERA						8) DESIGNA				
Ad			idan Squar				Addre		Box 6	
			t, TN 370						Creek, WV	V 25003
9) OIL & GAS IN			E NOTIFI	ED		10) DRILLIN		RACTOR		
	y Stolling					Name N	/A			
	Box 1228		=00			Address				72
Cha	pmanville	e, WV 25	508			-				
11) PROPOSED	WELL W	ORK	Drill		/ Drill	deeper	/ R	edrill	/ !	Stimulate
			Plug off	old form	ation	/ Perf	orate new	formation		Convert
			Other p	hysical	change in	well (specify)	Renew I	JIC Permit		
12) GEOLOGIC	TARGET	FORMA	TION W	Veir		Depth	3540	Feet (to	p) to 357	8 Feet (bottom)
13) Estimated De	pth of Co	mpleted V	Well, (or a	actual de	pth of exi	sting well):	4261	Fee	et	
14) Approximate	water stra	ita depths	: Fre	esh 11	0', 660'	Feet	Salt	None	Feet	
15) Approximate	coal seam	depths:	275'	-278,	303'-30	7', 592' – 596	', 734' – 7	37'		
16) Is coal being	mined in t	the area?	Yes		No					
17) Virgin reserve	oir pressu	re in targe	et formati	on 700	ps		Data fr	om wells in	field	
18) Estimated res	ervoir fra	cture pres	sure 2	407	psig (BHFI	9) 0.68				
19) MAXIMUM	PROPOSI	ED INJE	CTION O	PERAT	IONS:	Volume per ho	ur 50 BB	L Bott	om hole pre	SSUFE 2300 PSI
20) DETAILED I Brine; No Add	DENTIFI	CATION	OF MA	ΓERIAL	S TO BE	INJECTED, IN	ICLUDIN	G ADDITIV	ES Gas	Field & Gas
Brine; No Add	itive Antic	ipated							Office	e of Oll or
21) FILTERS (IF	ANY) _								Ollis	5 7009
22) SPECIFICAT	IONS FO	R CATH	ODIC PR	COTECT	ION ANI	OTHER COR	ROSION	CONTROL	None	04 (\$ 1009
										- malli
23) CASING AND	TUBING I	PROGRAI	М						IVW)eparrment o
CASING OR		SPI	ECIFICATION	ONS		FOOTAGE IN	TERVALS	CEMENT	PACKERS	ments proto
TUBING TYPE								FILL -UP	EUM	
						1-15		OR SACKS	SACKS	
	- C:		Tyr	Lst	77.1	P D '11'	T . O. T	(CU. FT.)		
	Size	Grade	Weight per ft.	New	Used	For Drilling	Left In Well			
Conductor	16		per it.			30	30		Kinds Te	nsion
Fresh Water	11 3/4	H-40	42			298	298	177		
Coal	8 5/8	J-55	24		(¢)	1553	1553	476	Sizes 4 ½	x 2 3/8
Intermediate	0 0,0									
Production	4 1/2	J-55	10.5				4186	455	Depths set	3492
Tubing	2 3/8	J-55	4.7							
Liners									Perforation	ns Weir
									Тор	Bottom
									3550	3570
										V
24) APPLICANT	S OPERA	ATING R	IGHTS w	ere acqu	ired from	UMC Corpo	ration		<u> </u>	1000
	/ le					X / dated		anuary 1, 1	995 of	f record in the
Wyor	ning		County Cle	erk's off	ice in					age(s) 147

WW-3B (Office of Oil & Gas Use Only) 10/07

			(OFFICE USI	ONLY		
			D	RILLING	PERMIT		
Permit Number					Dat	te:	
the pertinent legal re District Oil & Gas I	equirement equirement	nts subject to (Refer to No	the condition o. 9) prior to the	ns contained he construction	erein and on the r	everse hereof. Nons, pits for any p	d to drill in accordance with fotification must be given to the permitted work. In addition, the ual permitted work has
The permitted work any modifications as				plication, plat	and (if required)	Construction and	Reclamation Plan, subject to
Permit Expires				unless wel	work is comm	enced prior to t	hat date and prosecuted
with due diligence		-		_	WOIN 10 COMMI	onoou prior to a	nar anto ana prosocatoa
		71.	1	T -	1		
Bond A	gent	Plat	Casing	Fee			
<u> </u>			1	<u> </u>		•	
PERMIT	MODIF	ICATION	S AND CON	IDITIONS (F ANY) TO TI	HE PROPOSED	WELL WORK
			. 0	FFICE USE	ONLY		
This part of Form IV	'-3(b) is to	o record the				up inspections.	
Application Receive	a	Date			Follo	w-up Inspection(Date
Well Work Started	u				"	w-up mspection(
Total Depth Reached	i —				44	66	
Well Record Receive	ed				"	46	
Reclamation Comple	eted				"	66	
OTHER INSPECTION	ONS	•					
Reason:					• V		
Reason:							

November 2, 2009

CERTIFIED MAIL 7008 1140 0000 8536 1275 Office of Oil & Gas

WV Department of Environmental Protection

WV Dept. of Environmental Protection Office of Oil & Gas Permitting Branch 601 57th Street SE Charleston, WV 25304-2345

RE: LC-19 WIW Water Injection Well API # 47-109-01433 Permit Renewal Wyoming County, West Virginia

Dear Sir or Madam:

Enclosed please find one original and a copy of the water injection permit application forms WW-3A and WW-3B for the above referenced water well to be re-permitted.

If you have any problems or questions, please call at the number listed below.

Sincerely,

Kita Gibson

Production Technician

Kita Vilson



1) Date:	C	ctol	er 27, 2	009	
2) Operator's Well	No.		I	.C-1	19
3) API Well No.:	47	-	109	-	01433
	State	-	County	•	Permit

4) UIC Permit No.

2D1091433

STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OF WASTE DISPOSAL WELL WORK PERMIT APPLICATION

5) Surface Owner(S) To Be Served 7) (a) C	
	Coal Operator
(a) Name Pocahontas Land Corporation Name	e Patriot Coal Company
Address P.O. Box 1517 Addr	ress 600 Laidley Tower
Bluefield, WV 24701	Charleston, WV 25324
	Coal Owner(S) With Declaration Of Record
Address Name	e Pocahontas Land Corporation
Addr	ress P.O. Box 1517
	Bluefield, WV 24701
(c) Name Name	е
Address Addr	ress
6) Inspector Barry Stollings 7) (c) C	Coal Lessee with Declaration Of Record
Address P.O. Box 1228 Name	
Chapmanville, WV 25508 Addr	
Telephone 304-552-4194	Charleston, WV 25324
1 elephone 304-332-4194	Charleston, WV 25524
	ess the well work is only to plug a well) which sets out the the site and access road.
THE REASON YOU HAVE RECEIVED THESE DOCUMENTAPPLICATION WHICH ARE SUMMARIZED IN THE "INSTRICTHE APPLICATION [(FORM WW-3(B)] DESIGNATED TO YOU ACTION AT ALL.	TS IS THAT YOU HAVE RIGHTS REGARDING THE UCTIONS" ON THE REVERSE SIDE OF THE COPY OF
THE REASON YOU HAVE RECEIVED THESE DOCUMEN APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRICT THE APPLICATION [(FORM WW-3(B)] DESIGNATED TO YOU	TS IS THAT YOU HAVE RIGHTS REGARDING THE UCTIONS" ON THE REVERSE SIDE OF THE COPY OF OU. HOWEVER YOU ARE NOT REQUIRED TO TAKE with the Chief of the Office of Oil and Gas, spect to a well at the location described on the attached this Notice, the Application, the plat, and the Construction mail or delivered by hand to the person(s) named above (or
THE REASON YOU HAVE RECEIVED THESE DOCUMENT APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUTHE APPLICATION [(FORM WW-3(B)] DESIGNATED TO YOU ACTION AT ALL. Take notice that under Chapter 22-6 of the West Virginia Code, the Notice and Application and accompanying documents for a Well West Virginia Department of Environmental Protection, with reapplication and depicted on the attached Form WW-6. Copies of and Reclamation Plan have been mailed by registered or certified in	TS IS THAT YOU HAVE RIGHTS REGARDING THE UCTIONS" ON THE REVERSE SIDE OF THE COPY OF OU. HOWEVER YOU ARE NOT REQUIRED TO TAKE with the Chief of the Office of Oil and Gas, spect to a well at the location described on the attached this Notice, the Application, the plat, and the Construction mail or delivered by hand to the person(s) named above (or mailing or delivery to the Chief.
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Signature:

· 8 (5: * 3550 - ,483 * 1.1 * 355= · · 2160 - ICA) : 469 (WR-37- In', prosong 479 From 2005)

> = 114d 584 2 - 10d/ 584 2 - 1232 #111 x3229

Based upon. 8 psilft gradient

November 2, 2009

CERTIFIED MAIL 7008 1140 0000 8536 1275

WV Dept. of Environmental Protection Office of Oil & Gas Permitting Branch 601 57th Street SE Charleston, WV 25304-2345

RE: LC-19 WIW Water Injection Well API # 47-109-01433 Permit Renewal Wyoming County, West Virginia Office of Oil & Gas
NOV 0 5 2009
WV Department of
Environmental Protection

Dear Sir or Madam:

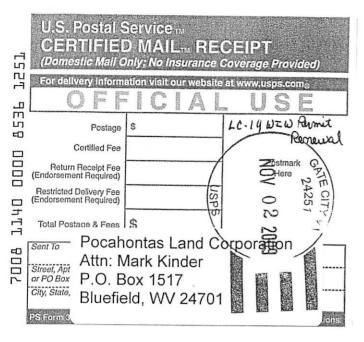
Enclosed please find one original and a copy of the water injection permit application forms WW-3A and WW-3B for the above referenced water well to be re-permitted.

If you have any problems or questions, please call at the number listed below.

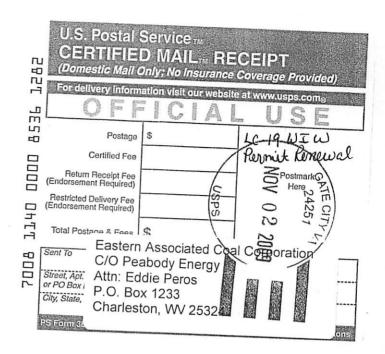
Sincerely,

Kita Gibson

Production Technician



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~ [or PO Box P.O. B	nanville, WV 2	25508	ons





RECEIVED Office of Oil & Gas

NUV (5 2009

WV Department of Environmental Protection



State of West Virginia, Wyoming County, to-wit:

I, Gaither Perry, Publisher of Independent Herald, a
paper published in the County aforesaid, do affirm that the
Notice
attached was published in said paper for 1 succes-
sive weeks, the first publication thereof being on 13 th
day of January 2010 and the subsequent pub-
lication on the day of 2010, the
day of 2010, the
201
day of 2010.
N 61 C
Politare Muy

State of West Virginia, Wyoming, to-wit:

at the front door of the being duly sworn, says that he posted a copy of the annexed

Court House of said County, on the

2010. Printer's fee \$ Taken, subscribed and sworn to before me, this day of February

MY COMMISSION BYPIRES ON CHAIRMINING STATISTICAL SEAL.

STATE OF WEST VIRGINIA

NOTARY PUBLIC
RACIAL ALL PIPS

A12 Tablott St.

Williamson, WV 25661

My Commission Extra Oct. 16, 2010

Fire 1 27th