

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Thursday, January 26, 2017 WELL WORK PERMIT Vertical / Plugging

CABOT OIL & GAS CORPORATION (A) 2000 PARK LANE, SUITE 300

PITTSBURGH, PA 15275

Re: Permit approval for 86

47-047-00199-00-00

This well work permit 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 any additional specific 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 permitted well work, 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 35 CSR 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 at (304) 926-0450.

James A. Martin

Chief

Operator's Well Number: 86

Farm Name: POCAHONTAS LAND U.S. WELL NUMBER: 47-047-00199-00-00

Vertical / Plugging

Date Issued: 1/26/2017

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.

WW-4B Rev. 2/01

1) Date December 12 , 20 16	
2)Operator's	_
Well No. Pocahontas Land 86	
3) API Well No. 47-047 -00199	

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

	APPLICATION FOR A PERM	AIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liquid	d injection / Waste disposal /
•		derground storage) Deep/ Shallow X
	(12 000, 110000010 01 0	sergreated beerage, beep, bharrow_x
5)	Location: Elevation 1866.85'	Watershed UT of Wolfpen Br. of Clear Fk. of Tug Fk. of the Big Sandy
-,	District Big Creek	County McDowell Quadrangle Davy
	District	Quadrangle
6)	Well Operator Cabot Oil & Gas Corporation	7) Designated Agent Phillip Hill - Cabot Oil & Gas Corporation
-,	Address 2000 Park Lane, Suite 300	Address 900 Lee Street East, Suite 1500
	Pittsburgh, PA 15275	Charleston, WV 25301
8)	Oil and Gas Inspector to be notified	O. D
0 /	Name Brian Ferguson	9) Plugging Contractor  Name Contractor Services, Inc.
	Address 708 Manor Drive	Address 929 Charleston, Road
	Beckley, WV 25801	Spencer, WV 25276
	Deckley, WV 20001	Spencer, WV 25276
		Received
		Office of Oil & Gas
		DEC 2 2 2016
	fication must be given to the district oi	.l and gas inspector 24 hours before permitted
Wor}	order approved by inspector	Date

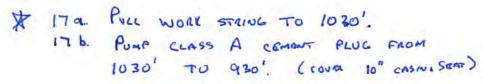
## Pocahontas Land #86 API # 47 – 047 – 00199 PLUGGING PROCEDURE

#### **Current Configuration**

TD @ 4433'
13-3/8" – 48# casing @ 174' on shoe
10-3/4" – 32.75# casing @ 975' on packer
8-5/8" – 24# casing @ 1950' on shoe
7" – 23# casing @ 4411' with bottom 400' cemented
Coal @ 93' – 96', 949' – 950', & 370' – 372'
Berea @ 4403' – 4431' & frac'd open hole
Big Lime@ 3237' – 3746' with no gas show
Gas show @ 1813'

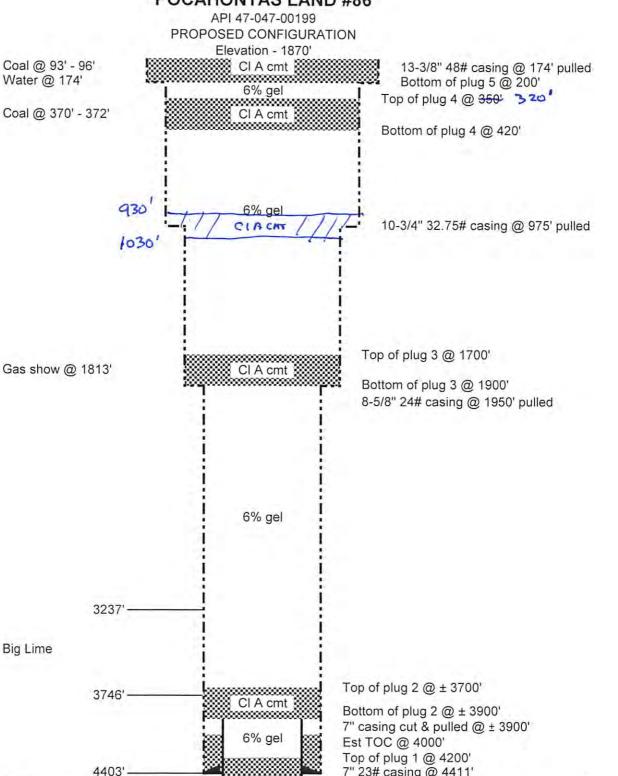
#### **PROCEDURE**

- 1. Contact Pineville Office a minimum of 48 hours prior to starting work.
- 2. Contact State Inspector a minimum of 24 hours prior to starting work.
- 3. MIRU service rig and blow down well. Have vacuum truck available to catch any fluids circulated from well.
- 4. Lay 2" line from wellhead to pit/tank and stake down securely.
- 5. Unpack wellhead.
- 6. TIH with 2-3/8" work string to 4430'.
- 7. MIRU Cementing Company.
- 8. Pump 40 bbls 6% gel followed by 45 sks of Class A cement for plug 1 from 4430' to 4200'.
- 9. Displace w/ 16 bbls of 6% Gel.
- 10. TOOH with work string. Let cement plug set for a minimum of eight hours.
- 11. Run freepoint and cut 7" casing where free. Estimate ±3900'.
- 12. Pick up on 7" casing and pump 60 sks of Class A cement for plug 2 from 3900' to 3700'.
- 13. Displace w/ 145 bbls of 6% Gel.
- 14. TOOH with 7" casing.
- 15. Pull 8-5/8", 10-3/4", & 13-3/8" casing strings. If unable to pull, run freepoint on casing strings, cut casing above freepoint, and POOH with casing.
- 16. TIH w/ work string to 1900' and pump 95 sks of Class A cement for cement plug 3 from 1900' to 1700'.
- 17. Displace w/ 6 ½ bbls of 6% Gel.
- 18. Pull work string up to 420'.
- 19. Pump 100 bbls 6% gel followed by 50 sks of Class A cement for cement plug 4 from 420' to 350'. 320'.
- 20. Displace w/ 1 1/4 bbls of 6% Gel.
- 21. Pull work string up to 200'.
- 22. Pump 225 sks of Class A cement for plug 5 from 200' to surface.
- 23. TOOH with work string and lay down.
- 24. RDMO Cementing Company.
- 25. Place monument as required by law on top of well bore.
- 26. Reclaim well site.



Received
Office of Oil & Gas
DEC 2 2 2016

#### **POCAHONTAS LAND #86**



CI A cmt

DTD @ 4433

Berea frac'd open hole

Schematic is not to scale

4431'

7" 23# casing @ 4411'

Received

Office of Oil & Gas

T, OH 12/01/15 DEC 2 2 2016

94-19



# DEPARTMENT OF MINES OIL AND GAS DIVISION 24

Quadrangle	Welch		OIL AND	GAS DIVISIO	N 14	•	
•	MCD-199		WELL	RECOR	D .	Oil or (	Gas Well GAS
Company	Cabot Corpo	ration					(MIND)
		West Virgin	ia	Casing an	d Used in	Left in	Packers
Farm	Pocahontas :	Land Corp.	Acres 47,520	Tubing	Drilling	Well	1.TEKELS
Location (wat			Acres	Size			
Well No	86, Serial:	1510	_Elev_ 1870	. 16		Ì	
	ig Creek	County McDe	owell.	. 18	174	7.71.	Kind of Packer
The surface of	tract is owned	in fee by	· · · · · · · · · · · · · · · · · · ·	. 13		174 979	Bottom Hole
		_Address		8%		1950	Size of 10-3/4"
			Land Corp.	614	4411	1411	<del></del>
			ield, W. Va.			44444	Depth set
Drilling comm	enced June	8. 1960		3			
Drilling compl	eted Octo	ber 17, 1960	)	2	<del>-i</del>	-:	Perf. top
			Го		T		Perf. bottom
With				Linera Used.			Perf. top
Open Flow	/10ths Water	in	Inchi		<del></del>		Perf. bottom
			Inch		اديسي ميسسيدان		
Volume	63	6,000	Co. Ft.	Casing CE	MENTED	SIZE	No. FtDate
Rock Pressure	91:0		8 hrs.				
Oil			bbis., 1st 24 hrs.		ENCOUNTERED	AT 93	FEET. 36 INCHES
WELL ACIDI	ZED			370 FE	ET 2h INC	tes 9h9	FEET_12_INCHES
				200		<u>:</u>	FEETINCHES
WELL FRACT	URED 10/26	/60 with 30,	000 gals. wat	er and 25,0	000# sand.	•~	<del>-</del>
<u> </u>							<del>:</del>
RESULT AFT	er treatmet	NT	636,000 cu	bic feet			
ROCK PRESS	URE AFTER T	REATMENT	940#·≈ 168	hrs.		·	
Fresh Water_	17):	Feet_		_Solt Water_			
-	<u> </u>						
··_ ··	1	Non-1	T		7	7	
Formation	Color	Hard or Soft	Top	Dettem	Oil, Gas or Water	Depth	Remarks
Soil		Hard or Soft	Top O		Oil, Gaa or Water	T	
Soil Slate & She		Hard or Soft	0 10	Bettem 10 93	Oil, Gas or Water	T	
Soil Slate & She	a11	Hard or Soft	0 10 93	10 93 96	Oil, Gan or Water	T	
Soil Slate & She COAL Slate & She	a11	Hard or Soft	0 10 93 96	10 93 96 172	or Water	Depth	
Soil Slate & Sho GOAL Slate & Sho Idme	all all	Hard or Soft	0 10 93 96 172	10 93 96 172	Oil, Gas or Water	T	
Soil Slate & She COAL Slate & She	all all	Hard or Soft	0 10 93 96 172 184	10 93 96 172 184 206	or Water	Depth	Remarks
Soil. Slate & She COAL Slate & She Slate & She Slate & She Sand Slate & She	in in	Hard or Soft	0 10 93 96 172 184 206	10 93 96 172 184 206 260	or Water	Depth	Remarks
Soil. Slate & She COAL Slate & She Slate & She Slate & She Sand Slate & She COAL	ញ ញ ញ	Hard or Soft	0 10 93 96 172 184 206	10 93 96 172 184 206 260 370	or Water	Depth	Remarks
Soil. Slate & She COAL Slate & She Slate & She Sand Slate & She COAL	ញ ញ ញ	Hard or Soft	0 10 93 96 172 184 206 260 370	10 93 96 172 184 206 260 370	or Water	Depth	Remarks
Soil. Slate & She COAL Slate & She Slate & She Sand Slate & She COAL Late & She		Hard or Soft	0 10 93 96 172 184 206 260 370 372 380	10 93 96 172 184 206 260 370 372 380	or Water	Depth	Remarks
Soil. Slate & She COAL Slate & She Slate & She Slate & She COAL Slate & She COAL Slate & She Coal Slate & She Coal		Hard or Soft	0 10 93 96 172 184 206 260 370 372 380	10 93 96 172 184 206 260 370 372 380 140	or Water	Depth	Remarks
Soil. Slate & She GOAL Slate & She Slate & She Slate & She Slate & She Late & She		Hard or Soft	0 10 93 96 172 184 206 260 370 3 2 380 440 480	10 93 96 172 184 206 260 370 372 380 140 480	or Water	Depth	Remarks
Soil. Slate & She GOAL Slate & She Slate & She Slate & She COAL Slate & She Ind		Hard or Soft	0 10 93 96 172 184 206 260 370 3 72 380 440 480	10 93 96 172 184 206 260 370 372 380 140 480 610	or Water	Depth	Remarks
Soil Slate & She GOAL Glate & She Idme Slate & She Sand Slate & She Slate & She Sind Late & She Sind Late & She Sand		Hard or Soft	0 10 93 96 172 184 206 260 370 3 72 380 440 480 610	10 93 96 172 184 206 260 370 372 380 140 180 654 710	or Water	Depth	Remarks
Soil. Slate & She GOAL Slate & She Slate & She Slate & She COAL Slate & She Ind		Hard or Soft	0 10 93 96 172 184 206 260 370 3 72 380 140 480 610 654 710	10 93 96 172 184 206 260 370 372 380 140 1480 6514 710 735	or Water	Depth	Remarks
Soil Slate & She GOAL Glate & She Glate & She Slate & She Glate & She		Hard or Soft	0 10 93 96 172 184 206 260 370 3 72 380 140 480 610 654 710	10 93 96 172 184 206 260 370 372 380 140 1480 6514 710 735 878	or Water	Depth	Remarks
Soil Slate & She COAL Slate & She		Hard or Soft	0 10 93 96 172 184 206 260 370 3 72 380 140 480 654 710 735 878	10 93 96 172 184 206 260 370 372 380 140 1480 6514 710 735 878 915	or Water	Depth	Remarks
Soil Slate & She COAL Slate & She		Hard or Soft	0 10 93 96 172 184 206 260 370 3 72 380 140 480 610 654 710	10 93 96 172 184 206 260 370 372 380 140 1480 6514 710 735 878	or Water	Depth	Remarks
Soil Slate & She COAL Slate & She		Soft	0 10 93 96 172 184 206 260 370 3 2 380 440 480 610 654 710 735 878 915 935 949	10 93 96 172 184 206 260 370 372 380 140 650 651 710 735 878 915 915 915	or Water	Depth	Remarks  Hole full.
Soil Slate & She COAL Slate & She		Soft	0 10 93 96 172 184 206 260 370 3 2 380 440 480 610 654 710 735 878 915 935 949	10 93 96 172 184 206 260 370 372 380 140 650 651 710 735 878 915 915 915 915 915	or Water	Depth	Remarks  Hole full.
Soil Slate & She COAL Slate & She		Soft	0 10 93 96 172 184 260 370 372 380 440 610 6514 710 735 878 915 915 919	10 93 96 172 184 206 260 370 372 380 140 654 710 735 878 915 915 915 915 915 915	or Water	Depth 174	Remarks  Hole full.
Soil Slate & She		Soft	0 10 93 96 172 184 206 260 370 3 72 380 440 610 654 710 735 878 915 915 919 950 997	10 93 96 172 184 206 260 370 372 380 140 480 654 710 735 878 915 915 915 915 926	or Water	Depth 174	Remarks  Hole full.
Soil Slate & She COAL Slate & She		Soft	0 10 93 96 172 184 206 260 370 3 72 380 440 610 654 710 735 878 915 915 919 950 997 1048 1056	10 93 96 172 184 206 260 370 372 380 140 654 710 735 878 915 915 925 927 1056 1066	or Water	174 23A5678	Remarks  Hole full.
Soil Slate & She GOAL GLATE & She GLATE &		Soft	0 10 93 96 172 184 206 260 370 3 72 380 440 610 654 710 735 878 915 915 915 915 916 1056	10 93 96 172 184 206 260 370 372 380 140 654 710 735 878 915 935 949 950 997 1056 1066 1134	or Water	174 23A5678	Remarks  Hole full.
Soil Slate & She COAL Slate & She		Soft	0 10 93 96 172 184 206 260 370 3 72 380 440 610 654 710 735 878 915 915 919 950 997 1048 1056	10 93 96 172 184 206 260 370 372 380 140 654 710 735 878 915 915 925 927 1056 1066	or Water	Depth  174  2345678  CF 1950  OEC 1950  OEC 1950	Remarks  Hole full.

Formation	Color	)Iard or Soft	Top 2 4	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand Red Rock	•		1272 1332	1332			-
Slate & Shell	1		1395	1395 1463	1		
Sand Slate & Shell	7		ग्रहें	1515	i .		
Idme .	-		1515 1550	1550 1578			
SAND Slate & Shell	•	-	<b>1</b> 578	1639			·]·
Sand	L	1	1639 1716	1716	1		
Shale		1	1760	1760 1773			· ·
Sand. Lime AVIS	:		1773	1903 1962	Gas	1813	Show.
Red Rock		1	1903 1962	1962 2123	1		<b>]</b> .
Shale	÷	1	2123	2163	1		
Red Rock Sand	l <b>:</b>		2163	2237	<b>!</b>		
Shale			2237 2250	2250 2286	1.		Í
Sand Shale			2286	2305	}		
Sand		1	2305	थगर			
Red: ?ock		1	2417 2447	2147 2515	1.		
Sand			2515	2530			1
late & Shell led Rock	L	1	2530	2605	1	İ	ļ
late & Shell	_	ł	2605 2675	2675 2810		3.	
and		1	2810	2825	1		] " " " "
Slate & Shell ime	•	ļ.	2825	3010	1.		•
hale		ŀ	3010 3109	3109 3138	1		
dme			3138	3237	1		<b>.</b>
III LIME lacCrady - Re	a		3237	3746		•	
late & Shell			3746 3791	3791 3862			
KIR	•		3862	4000			
late & Shell rown Shale		]' '	1,000	4376			
EREA			4376 1403	11/103	Gas	11.00 11.00	0.00
	/=	N in		-	das	4427-4431;	olit Net
OTAL DEPTH		1	•	14133		•	
				•			τ.
	•						
		• •		·			••
							***
	•						
	6.5	3	·				
	•	: · · · ·					
4:			• • •		•		: 0
12		•	^•				
J	.					. <u></u>	~;\/``a
· · · · · · · · · · · · · · · · · · ·			· , [			7	
• • • • • • • • • • • • • • • • • • • •	· 1		.,				
		•	1				
2 3			•				
	• • • •		į	i			
		· · · · · · · · · · · · · · · · · · ·			· ·		er jami kraja pere gajila. Tiringga garan kalamat

	Date N	ovember 29		19 60
APPROVED	CABOT CORP	ORATION	٠.	Owner
Ву	700	Smin		, Owner
Gei	noral Supt.	(Title)	30	

01/27/2017

WW-4A Revised 6-07

1) Date:	December 12, 2016	
2) Operator	s's Well Number	
Pocahontas	Land 86	

3) API Well No.: 47 -

00199

#### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

(a) Name Address P.O. Box 1517 Bluefield, WV 24701  (b) Name Address Address Address  Name Pocahontas Land Corporation Address Name Pocahontas Land Corporation Address Name Pocahontas Land Corporation Address Name Pocahontas Land Corporation Address Name Pocahontas Land Corporation Address Name Address Of Inspector Address Name Address Of Inspector Brian Ferguson (c) Coal Lessee with Declaration Name See Attached Sheet  PO BManor Drive Name See Attached Sheet  Telephone  Telephone  To Manor Drive Name See Attached Sheet  PO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:  (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order, and (2) The plat (surveyor's map) showing the well location on Form WW-6.  The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side 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 plag and abandon a vell with the Chef of the Office of Oil and Gas. West Virginia Department of Environmenta Protection, with respect to the well at the location described on the attached Application and depleted on the attached Form WW-6. Copies of this Notice the Application, and the plate 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 Cabot Oil & Gas Corporation  Well Operator Cabot Oil & G		Pocanontas Lan	d Corporation	Name	See Attached Sheet
(b) Name Address Address Name Pocahontas Land Corporation Address Name Address Name Address Name Address Name Address Name Address Ochahortas Land Corporation P.O. Box 1517 Bluefield, WV 24701  (c) Name Address Name Address Ochahortas Land Corporation P.O. Box 1517 Bluefield, WV 24701  (c) Name Address Name Address Ochahortas Land Corporation P.O. Box 1517 Bluefield, WV 24701  (c) Coal Lessee with Declaration Name See Attached Sheet Address Ochahortas Land Corporation Name See Attached Sheet  Ochahortas	Address		- corporation		oco / Madriod Oricot
(b) Name Address  Name Pocahontas Land Corporation Address P.O. Box 1517 Bluefield, WV 24701  Name Address Address Address Address Address Address Address Frame Ferguson Address Address Address Address Address Address Address Address Frame Ferguson Address Frame Ferguson Address Frame Ferguson Address Address Address Address Frame Ferguson Address Frame Ferguson Address Address Address Frame Ferguson Address Frame Ferguson Address Address Frame Ferguson Address Frame Ferguson Address Address Frame Ferguson Address Address Frame Ferguson Address Frame Ferguson Address Address Frame Ferguson Address Frame Ferguson Address Address Frame Ferguson Address Address Frame Ferguson Address Address Address Frame Ferguson Address Address Address Frame Ferguson Address Address Address Address Frame Ferguson Address Address Address Address Address Address Frame Ferguson Address Ad			1701		-
Address Addres	(b) Name			(b) Coal O	wner(s) with Declaration
Address P.O. Box 1517 Bluefield, WV 24701  (c) Name Address Address  (d) Coal Lessee with Declaration  Address 708 Manor Drive Name See Attached Sheet  Beckley, WV 25801  Telephone (304) 550-6265  TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:  (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and  (2) The plat (surveyor's map) showing the well location on Form WW-6.  The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side 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 Environmenta Protection, with respect to the well at the location described on the attached Application and Generative or the well at the location described on the attached Application and depicted on the attached Form WW-6. Constitution with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Constitution in the person of the well at the location described on the attached Application and depicted on the attached Form WW-6. Consideration with respect to the Well at the person of the Well of the Well at the location described on the attached Application and depicted on the attached Form WW-6. Consideration with the Chief of the Well		-			
Bluefield, WV 24701	750000	-			
(c) Name Address    Address   Address   Address		_			
Address    Address	(c) Name			Name	Sidefield, TVV 21701
South Company of the Constance of Constance C. Carden Months of 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.   South Constance C. Carden Motard Seal Constance Const					
Address    Tolephone   Tolephone   Tolephone   Beckley, WV 25801   Address	200110000000			-	<del></del>
Address    Tolephone   Tolephone   Tolephone   Beckley, WV 25801   Address	2) Inencator	Brian Forguson		- (a) Cool I o	ages with Declaration
Telephone    Beckley, WV 25801					
Telephone (304) 550-6265  TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:  (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and (2) The plat (surveyor's map) showing the well location on Form WW-6.  The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side 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 Environmenta 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 malling or delivery to the Chief.  Well Operator  By:  Well Operator  Cabot Oil & Gas Corporation  Kenneth L. Marcum  Kenneth L. Marcum  Motarial Seal  Constance C. Carden, Notary Public  McDonald Bono, Washington County  My Commission Expires Nov. 16, 2017  Telephone  Well Operator  Cabot Oil & Gas Corporation  Kenneth L. Marcum  Motary Public  Received  Office of Oil & Gas  Office of Oil & Gas  Notary Public  Received  Office of Oil & Gas	Address				See Attached Sheet
(1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and (2) The plat (surveyor's map) showing the well location on Form WW-6.  The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side 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 Environmenta 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  By:  Well Operator  Well Operator  By:  Kenneth L. Marcum  Kenneth L. Mar	Tolonhone		001	_ Address	
(1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and  (2) The plat (surveyor's map) showing the well location on Form WW-6.  The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side 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 Environmenta 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  By:  Well Operator  By:  Kenneth L. Marcum  Kenneth L. Marcum  Montarial Seal  Address  2000 Park Lane, Suite 300  Pittsburgh, PA 15275  Telephone  Well Operator Address  Telephone  Well Operator Address  Telephone  Well Operator Address  Telephone  Notarial Seal  Address  Telephone  Notarial	retepnone	(304) 330-6265		_	<del></del>
By: Kenneth L. Marcum  Regulatory Supervisor  Address  Constance C. Carden, Notary Public McDonald Boro, Washington County My Commission Expires Nov. 16, 2017  Subscribed and sworn before me this 12th day of Weller My Commission Expires  Notary Public Marcum  Regulatory Supervisor  2000 Park Lane, Suite 300  Pittsburgh, PA 15275  (412) 249-3850  Subscribed and sworn before me this 12th day of Weller My Commission Expires  Notary Public Received  Notary Public Received  Office of Oil & Gas		you are not required to take	any action at all.	e the undersioned wel	Lonerator proposes to file or has filed this Notice and Application and
OMMONWEALTH OF PENNSYLVANIA Notarial Seal Constance C. Carden, Notary Public McDonald Boro, Washington County My Commission Expires Nov. 16, 2017  Telephone  Telepho	Take notic accompany Protection the Applic	you are not required to take that under Chapter 22-6 ying documents for a perm , with respect to the well a tation, and the plat have b	any action at all.  of the West Virginia Cod  it to plug and abandon a v  the location described or  een mailed by registered  e day of mailing or delive	well with the Chief of to the attached Applicator or certified mail or do try to the Chief.	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in
Notarial Seal Constance C. Carden, Notary Public McDonald Boro, Washington County My Commission Expires Nov. 16, 2017  Telephone  Address  2000 Park Lane, Suite 300  Pittsburgh, PA 15275  (412) 249-3850  Subscribed and sworn before me this 12th day of 12th d	Take notic accompany Protection the Applic	you are not required to take that under Chapter 22-6 ying documents for a perm , with respect to the well a tation, and the plat have b	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator	vell with the Chief of to the attached Applicate or certified mail or detry to the Chief.  Cabot Oil & Ga	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in a Corporation
Constance C. Carden, Notary Public McDonald Boro, Washington County My Commission Expires Nov. 16, 2017  Telephone  Telep	Take notic accompany Protection, the Applic certain circ	you are not required to take that under Chapter 22-6 ying documents for a perm, with respect to the well a action, and the plat have b cumstances) on or before the	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By:	vell with the Chief of to the attached Applicate or certified mail or dearly to the Chief.  Cabot Oil & GaKenneth L. Mar	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in a Corporation
McDonald Boro, Washington County My Commission Expires Nov. 16, 2017  Telephone  Pittsburgh, PA 15275  (412) 249-3850  Subscribed and sworn before me this 12th day of December 2016  Notary Public  Received  My Commission Expires  November 16, 2017  November 16, 2017	Take notic accompany Protection, the Applic certain circ	you are not required to take that under Chapter 22-6 ying documents for a perm, with respect to the well a action, and the plat have b cumstances) on or before the	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By: Its:	vell with the Chief of to the attached Application certified mail or derry to the Chief.  Cabot Oil & Ga  Kenneth L. Mar  Regulatory Sup	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in a Corporation Coum
Subscribed and sworn before me this 12th day of December 2016  Notary Public Received  My Commission Expires November 16, 2017	Take notic accompany Protection, the Applic certain circ	you are not required to take the that under Chapter 22-6 ying documents for a perm, with respect to the well a ration, and the plat have b cumstances) on or before the	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By: Its:	cell with the Chief of to the attached Applicate or certified mail or derry to the Chief.  Cabot Oil & Ga  Kenneth L. Mar  Regulatory Sup	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in Security Country Cou
Subscribed and sworn before me this 12th day of December 2016  Notary Public Received  My Commission Expires November 16, 2017  Office of Oil & Ga:	Take notic accompany Protection, the Applic certain circ of the Application of the Applic	you are not required to take that under Chapter 22-6 ying documents for a perm , with respect to the well a ration, and the plat have b cumstances) on or before the  OF PENNSYLVANIA  I Seal en, Notary Public ashington County lives Nov. 16, 2017	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By: Its: Address	cabot Oil & Ga Kenneth L. Mar Regulatory Sup 2000 Park Lane Pittsburgh, PA	the Office of Oil and Gas, West Virginia Department of Environmenta ion and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in Security County C
Office of Off & Ga	Take notic accompany Protection, the Applic certain circ COMMONWEALTH CONSTRUCTION NOTATION McDonald Boro, W	you are not required to take that under Chapter 22-6 ying documents for a perm , with respect to the well a ration, and the plat have b cumstances) on or before the  OF PENNSYLVANIA  I Seal en, Notary Public ashington County lives Nov. 16, 2017	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By: Its: Address	cabot Oil & Ga Kenneth L. Mar Regulatory Sup 2000 Park Lane Pittsburgh, PA	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in Security Country Cou
	Take notic accompany Protection, the Applic certain circ Modaria Constance C. Card McDonald Boro, W My Commission Expenser, PENNSYLVANIA ASSUBSCRIBED and CONSTRUCTION CONTINUATION CONTINU	or pennsylvania  DF PENNSYLVANIA  I Seal  een, Notary Public ashington County lifes Nov. 16, 2017  SSOCIATION OF NOTARIES	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By; Its: Address Telephone	cabot Oil & Ga Kenneth L. Mar Regulatory Sup 2000 Park Lane Pittsburgh, PA (412) 249-3850	the Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in Security Communication I
	Take notic accompany Protection, the Applic certain circ Modaria Constance C. Card McDonald Boro, W My Commission Expenser, PENNSYLVANIA ASSUBSCRIBED and DWARFAC	or pennsylvania  DF PENNSYLVANIA  I Seal  een, Notary Public ashington County lifes Nov. 16, 2017  SSOCIATION OF NOTARIES	any action at all.  of the West Virginia Cod it to plug and abandon a v the location described or een mailed by registered e day of mailing or delive  Well Operator By; Its: Address Telephone	cabot Oil & Ga Kenneth L. Mar Regulatory Sup 2000 Park Lane Pittsburgh, PA (412) 249-3850	he Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice elivered by hand to the person(s) named above (or by publication in Secure 16 Communication In Secure 16 Communication In Secure 17 Communication In Secure 17 Communication In Secure 18 Communication In Secure 18 Copies of this Notice In Secure 18 Copies of this Notic

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.gov. 01/27/2017

#### COAL LESSEE POCAHONTAS LAND 85 47-047-00199

National Resources, Inc. 100 Cranberry Creek Drive Beckley, WV 25801

Consol Energy, Inc. 1000 Consol Energy Drive Canonsburg, PA 15317

Baystar Coal Company, Inc. P.O. Box 1084 Bluefield, VA 24605

Concept Mining, Inc. 640 Clover Dew Dairy Road Princeton, WV 24740

Black Oak Mining, Inc. P.O. Box 13 Thorpe, WV 24888

Split Fork Mining Company P.O. Box 117 Caretta, WV 24821

Timeco Energy, Inc. P.O. Box 1030 Bluefield, WV 24605



Office of Oil & Gas DEC 2 2 2016

#### COAL OPERATOR POCAHONTAS LAND 86 47-047-00199

Sally Ann Coal Company, Inc. P.O. Box 770 Bluefield, WV 24701

Skyway Strip, Inc. P.O. Box 770 Bluefield, WV 24701

Bundy Auger Mining, Inc. 2005 Webster Road Summersville, WV 26651

Received
Office of Oil & Gas
DEC 2 2 2016

#### CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com® 9214 8969 0099 9790 1302 1504 14 Certified Mall Fee \$3.30 Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) Return Receipt (electronic) \$0.00 Certified Mail Restricted Delivery Postmark Adult Signature Required Here 2016 Poca 86 PandA Adult Signature Restricted Delivery \$ \$1.780 Total Postage a \$65430 Code: National Resources Inc. Sent To 100 Cranberry Creek Drive Beckley, WV 25801 Street, Apt. No., or PO Box No. City, State, Zip+4 12/12/2016 11:11:38 AM PS Form 3800, April 2015 See Reverse for Instructions

U.S. Postal Service

#### U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com® 9214 89L9 0099 9790 1302 1504 38 Certified Mall Fee Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) Postmark Return Receipt (electronic) \$1.35 Certified Mall Restricted Delivery Here \$0.00 Adult Signature Required 1 2 2016 86 PandA ☐ Adult Signature Restricted Delivery \$ Postage \$1.780 Total Postage and Fees Poca \$6.430 Code: Sent To Baystar Coal Company Inc. Street, Apt. No., P.O. Box 1084 Bluefield, VA 24605 or PO Box No. City, State, Zip+4 PS Form 3800, April F9/2016 11:1 \$38 Amerse for Instructions U.S. Postal Service" CERTIFIED MAIL® RECEIPT For delivery into matter. All our website at firm usps tom? \$3.30 Certified Mall Fee Extra Services & Fees (check box, add fee as approp \$0.00 Return Receipt (hardcopy) Poca 86 PandA Return Receipt (electronic) Postmark Certified Mail Restricted Delivery Here Adult Signature Recovered Adult Signature R Postage \$6.430 ode: Total Postage and Fees Black Oak Mining Inc. P.O. Box 13 Thorpe, WV 24888 Sent To Street, Apt. No., 12/12/2016 11:11:38 AM or PO Box No. City, State, Zip+4 See Reverse for Instructions PS Form 3800, April 2015



U.S. Postal Service!

4700199P

#### CERTIFIED MAIL® RECEIPT For delivery information, visit our website at www.usps.com 9214 8969 0099 9790 1302 1504 76 Certified Mail Fee \$3.30 Extra Services & Fees (check box, add fee as appropriate, Return Receipt (hardcopy) \$1.35 Receipt F Return Receipt (electronic) \$0.00 Certified Mall Restricted Delivery Postmark Adult Signature Required Here 1 86 PandA Adult Signature Restricted Delivery \$ Postage \$1.780 Total Postage a \$6F430 Poca Timeco Energy Inc. Code Sent To P.O. Box 1030 Bluefield, WV 24605 Street, Apt. No., or PO Box No. City, State, Zip+4 12/12/2016 11:11:38 AM PS Form 3800, April 2015 See Reverse for Instruction

U.S. Postal Service"

#### U.S. Postal Service CERTIFIED MAIL® RECEIPT Domestic Mail Only For delivery information, visit our website at www.usps.com® Certified Mall Fee 8969 0099 9790 1302 1504 90 Extra Services & Fees (check box, add fee as appropriate Return Receipt (hardcopy) Postmark \$1.35 Return Receipt (electronic) TE Here ☐ Certified Mail Restricted Delivery \$0.00 86 PandA Adult Signature Required ☐ Adult Signature Restricted Delivery \$ Postage \$1.780 Total Postage and Fees \$6,430 Sent To Skyway Strip Inc. P.O. Box 770 Street, Apt. No., Bluefield, WV 24701 or PO Box No. City, State, Zip+4 PS Form 3800, April 2016 11:1738 Awerse for Instructions

#### U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only For deliver Filibritalism. ASI Sur Website In A. R. I. Sp. 3. 3. 14 \$3.30 Certified Mall Fee \$1.35 Extra Services & Fees (check box, add fee as ap \$0.00 ☐ Return Receipt (hardcopy) Received Return Receipt (electronic) Office of Oil & Gas Certified Mail Restricted Delivery Adult Signature 199780 Adult Signature F DEC 2 2 2046 Postage \$6,430 Total Postage and Fees Brian Ferguson 708 Manor Drive Beckley, WV 25801 Sent To 12/12/2016 11:11:38 AM Street, Apt. No., or PO Box No. City, State, Zip+4 See Reverse for Instructions 200 April 2015

### U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

Domestic Mail Only

4.700199P

For delivery information, visit our website at www.usps.com® Certified Mail Fee 1 8969 0099 9790, 1302 1504 69 Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) Return Receipt (electronic) \$1.35 Certified Mail Restricted Delivery Postmark 2015 Here Adult Signature Regulred \$0.00 Adult Signature Restricted Delivery \$ PandA Postage \$1.780 Total Postage and Fee Poca 86 \$6 430 Sent To Split Fork Mining Company Street, Apt. No., P.O. Box 117 or PO Box No. Caretta, WV 24821 City, State, Zip+4 PS Form 3800, April 2015016 11:1 \$98 Reverse for Instructions

#### U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only For deliver introduction, Cotton website helpen best to 43 \$3.30 Certified Mall Foo \$1 35 Extra Services & Fees (check box, add fee Receipt Return Receipt (hardcopy) \$0.00 Return Receipt (electronic) Certified Mall Restricted Delivery Postmark Poca 86 PandA Adult Signature Required Adult Signature Restricted Here Postage \$6.430 Total Postage and Fees Sally Ann Coal Company Inc. P.O. Box 770 Sent To Bluefield, WV 24701 Street, Apt. No. or PO Box No. 12/12/2016 11:11:38 AM City, State, Zip+4 PS Form 3800, April 2015 See Reverse for Instructions

U.S. Postal Service™



WW-9 (2/15)

API Number 47 - 047	- 00199
Operator's Well No.	Porahontas Land 86

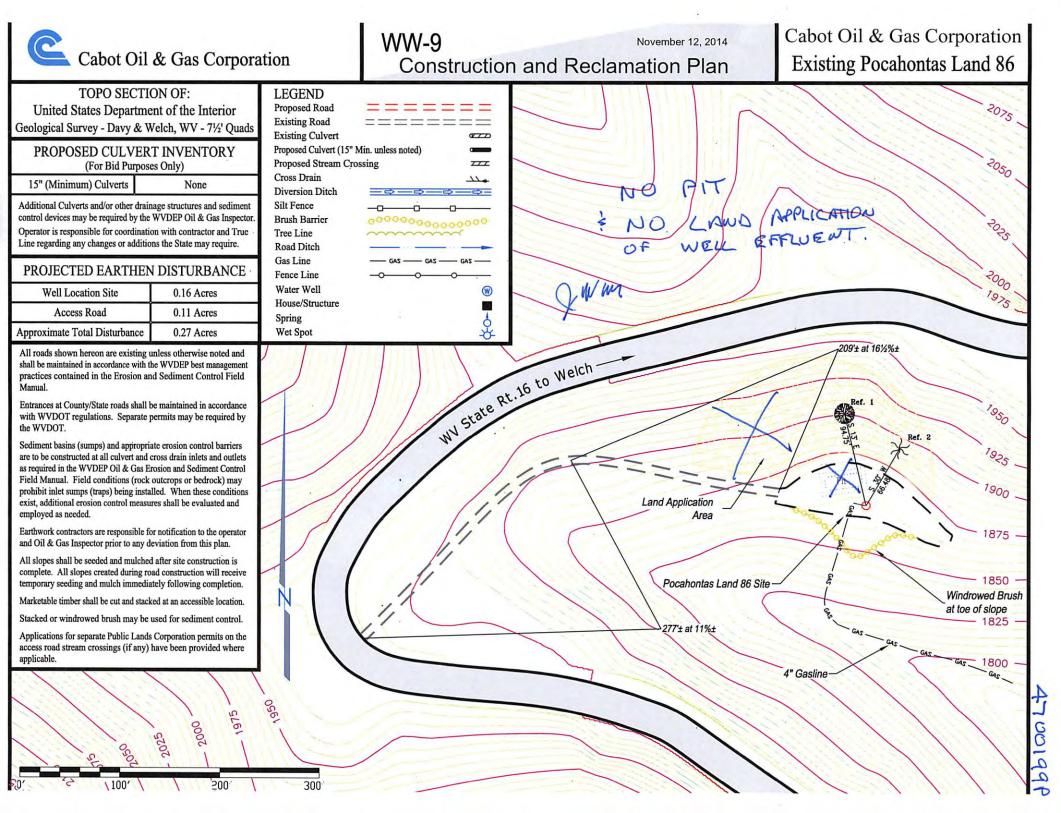
# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Cabot Oil & Gas Corporation	
Watershed (HUC 10) Wolfpen Branch of Clearfork Creek Quadr.	OP Code 08145
Do you anticipate using more than 5,000 bbls of water to complete the prop	
Will a pit be used? Yes No	Nosed well work: Tes No
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes No 🗸	If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	ANY WELL EFFLUENT MUST BE
Land Application	OF OFF-SITE PROPERTY. ONM
Underground Injection ( UIC Permit Number	
Reuse (at API Number Off Site Disposal (Supply form WW-9 for dispo	osal location)
Other (Explain No treated pit wastes will be produ	
Will closed loop system be used? If so, describe: N/A	
Drilling medium anticipated for this well (vertical and horizontal)? Air, fre	eshwater, oil based, etc. no drilling proposed
-If oil based, what type? Synthetic, petroleum, etc	
Additives to be used in drilling medium?N/A	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc.	
-If left in pit and plan to solidify what medium will be used? (cem	nent, lime, sawdust)
-Landfill or offsite name/permit number?	
Permittee shall provide written notice to the Office of Oil and Gas of any lo West Virginia solid waste facility. The notice shall be provided within 24 h where it was properly disposed.	
I certify that I understand and agree to the terms and conditions of on August 1, 2005, by the Office of Oil and Gas of the West Virginia Depa provisions of the permit are enforceable by law. Violations of any term of law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined application form and all attachments thereto and that, based on my in obtaining the information, I believe that the information is true, accurate penalties for submitting false information, including the possibility of fine of Company Official Signature  Company Official Signature	rtment of Environmental Protection. I understand that the or condition of the general permit and/or other applicable and am familiar with the information submitted on this equiry of those individuals immediately responsible for the, and complete. I am aware that there are significant
Company Official (Typed Name) Kenneth L. Marcum	
Company Official Title Regulatory Supervisor	DEC <b>2 2</b> 2016
Subscribed and sworn before me this 12 th day of New	Notany Public
	CÓMMONWEALTH OF PENNSYLVANIA  Notarial Seal
My commission expires_11/16/2017	Constance C. Carden, Notary Public McDonald Boro, Washington County My Commission Expires Nov. 06 27/2017  MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Operator's Well No. Pocahontas Land 86

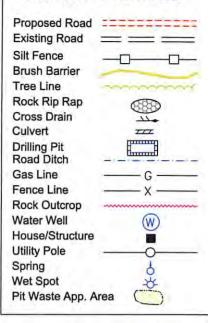
Proposed Revegetation Treatment: Acres Disturbed 0.27	Prevegetation nH 6.5		
Lime 2 Tons/acre or to correct to pH	· ·		
Fertilizer type 10-20/20 or equivalent			
500	os/acre		
Mulch Pulp Fiber at 1000 to 1500 lbs. Tons/			
10101			
See	d Mixtures		
Temporary	Permanent		
Seed Type Ibs/acre	Seed Type lbs/acre		
(Grain Rye - 100) (Red Clover - 5) (Fescue - 40)	(Grain Rye - 100) (Red Clover - 5) (Fescue - 40)		
(Annual Rye - 20) (White Clover - 5)	(Annual Rye - 20) (White Clover - 5)		
(Perennial Rye - 10) (Alta Sweet Clover - 5)	(Perennial Rye - 10) (Alta Sweet Clover - 5)		
(Yellow Clover - 5) (Birdsfoot Trefoil - 10)	(Yellow Clover - 5) (Birdsfoot Trefoil - 10)		
Attach: Orawing(s) of road, location, pit and proposed area for land ap provided)	plication (unless engineered plans including this info have bee		
Attach:  Orawing(s) of road, location, pit and proposed area for land ap provided)  Photocopied section of involved 7.5' topographic sheet.	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Orawing(s) of road, location, pit and proposed area for land ap provided)  Photocopied section of involved 7.5' topographic sheet.	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		
Attach:  Drawing(s) of road, location, pit and proposed area for land approvided)  Photocopied section of involved 7.5' topographic sheet.  Plan Approved by:	plication (unless engineered plans including this info have bee		



#### **GENERAL NOTES:**

- 1.) THESE DRAWINGS ARE A SCHEMATIC REPRESENTATION OF THE PROPOSED WELL SITE AND ACCESS ROAD. PROPOSED STRUCTURES SUCH AS THE DRILLING PIT, ROADWAY, CULVERTS, SEDIMENT BARRIERS, ETC. ARE SHOWN IN THEIR APPROXIMATE PREPLANNING CONFIGURATION. GIVEN UNFORSEEN CIRCUMSTANCES, THE AS-BUILT LOCATION OF THESE STRUCTURES MAY VARY SLIGHTLY FROM THE LOCATION SHOWN ON THE ATTACHED DRAWINGS.
- ALL ROADS SHOWN THEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES AND REQUIREMENTS OF THE WV DEP OIL & GAS EROSION AND SEDIMENT CONTROL MANUAL.
- ALL CULVERTS SHOWN ON THESE DRAWINGS ARE PROPOSED AND WILL BE A MINIMUM OF 15" IN DIAMETER UNLESS OTHERWISE NOTED.
- 4.) DITCHLINES AND CULVERTS WILL BE INSTALLED WHENEVER PRACTICAL; HOWEVER, PORTIONS OF THE EXISTING ROADS WHICH ARE LOCATED IN SOLID ROCK SHALL NOT REQUIRE DITCHES OR CROSS DRAINS, UNLESS OTHERWISE WARRANTED BY FIELD CIRCUMSTANCES.
- 5.) SUPPLEMENTAL DRAINAGE AND/OR SEDIMENT CONTROL STRUCTURES/MEASURES IN ADDITION TO THOSE SHOWN ON THE ATTACHED DRAWINGS WILL BE INSTALLED WHERE AND WHEN DEEMED NECESSARY. SUCH ADDITIONAL MEASURES MAY CONSIST OF SILT FENCES OR OTHER MEASURES AS OUTLINED IN THE EROSION AND SEDIMENT CONTROL MANUAL.
- 6.) SEDIMENT BASINS (TRAPS) WILL BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAIN INLETS AS REQUIRED IN THE WV-DEP OIL & GAS EROSION AND SEDIMENT CONTROL MANUAL. FIELD CONDITIONS SUCH AS ROCK OUTCROPS AND BEDROCK MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEA-SURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.
- 7.) SEDIMENT BARRIERS OF EITHER WINDROWED BRUSH, FILTER FENCE ET CETERA WILL BE INSTALLED AND MAINTAINED BELOW THE OUTFALL OF ALL PROPOSED CULVERTS AND AT ALL OTHER STORM WATER DISCHARGE POINTS FROM EITHER THE ROADWAY OR SITE LOCATIONS.
- 8.) ALL NECESSARY TIMBER AND BRUSH WILL BE REMOVED FROM THE PROPOSED ROADWAY AND SITE LOCATIONS BY CLEARING AND GRUBBING ACTIVITIES. ANY MARKETABLE TIMBER WILL BE CUT AND STACKED TO THE SIDE OF THE ROADWAY OR REMOVED TO A STOCKPILE AREA. THE REMAINING TIMBER AND BRUSH WILL BE CUT AND WINDROWED BELOW THE OUTSLOPE OF THE CONSTRUCTION AREAS, TO BE UTILIZED AS A SEDIMENT BARRIER.
- 9.) SEPARATE PERMITS WILL BE OBTAINED FROM THE WV-DOT FOR ALL POINTS OF INGRESS-EGRESS FROM COUNTY/STATE ROADS. THESE INGRESS-EGRESS POINTS WILL BE MAINTAINED INACCORDANCE WITH CURRENT WV-DOT REGULATIONS. A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 8" OF CRUSHED STONE WILL BE CONSTRUCTED FOR A MINIMUM DISTANCE OF 50' FROM THE INGRESS-EGRESS POINTS OF ALL PUBLIC ROADWAYS INACCORDANCE WITH CURRENT WV-DOT REGULATIONS.
- 10.) ALL CULVERTS SHOWN ON THESE DRAWINGS ARE TO BE CONSIDERED PERMANENT AND WILL REMAIN IN PLACE AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE. A STABILIZED OUTLET CONTROL DEVICE SUCH AS RIPRAP, NATURAL STONE, BRUSH, ETC. WILL BE INSTALLED BELOW THE OUTFALL OF ANY ROADWAY CULVERT(S) WHICH ARE NOT LOCATED IN A STREAM CHANNEL OR CREEK.
- 11.) PERMANENT CROSS DRAINS OR WATERBARS WILL BE INSTALLED AS AN INTEGRAL PART OF THE RECLAMATION PROCESS AND SHALL BE SPACED INACCORDANCE WITH THE AS-BUILT ROADWAY GRADES AND TABLE II-4 OF THE SEDIMENT AND EROSION CONTROL FIELD MANUAL.
- 12.) TEMPORARY SEEDING AND MULCHING WILL BE UTILIZED TO PROVIDE A VEGETATIVE COVER ON ALL DISTURBED AREAS I.E. ROADWAYS, STIE LOCATIONS, ROAD OR SITE OUTSLOPES AND ANY OTHER AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES RESULTING FROM THE PROPOSED WELL.
- 13.) THE LOCATION OF DRILLING PIT(S) MAY BE ADJUSTED TO MINIMIZE ENVIRONMENTAL IMPACTS AND MEET THE REQUIREMENTS OF THE WV-DEP.

#### **DRAWING LEGEND**



# SPACING OF CULVERTS BY GRADE ROAD GRADE (%) DISTANCE 2-5 500-300 6-10 300-200 11-15 200-100

100

16-20

SPACING OF CROSS DE	RAINS BY GRADE
ROAD GRADE (%)	DISTANCE
1	400
2	250
5	135
10	80
15	60
20	45

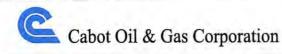
#### CONTRACTOR NOTE:

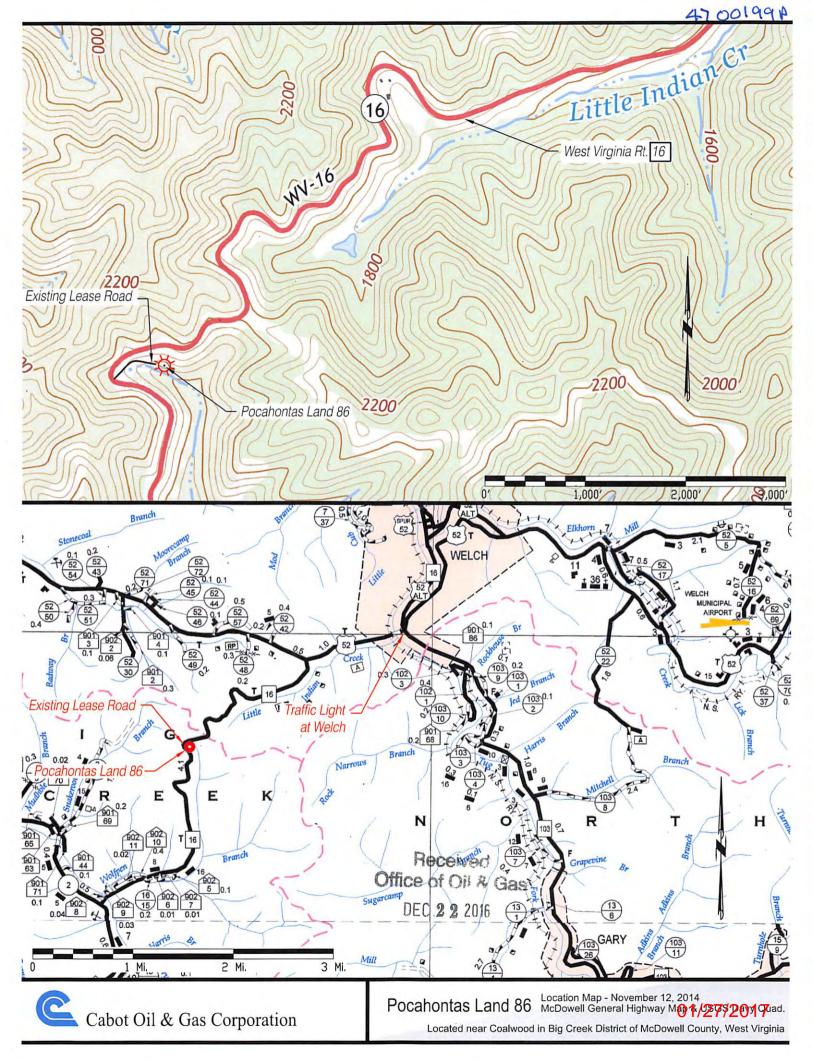
IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO FIELD VERIFY THE SIZE/CONDITION OF ALL UNDERGROUND UTILITIES, SANITARY SEWERS, STORM SEWERS, ETC. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION AND/OR EXCAVATION ACTIVITIES

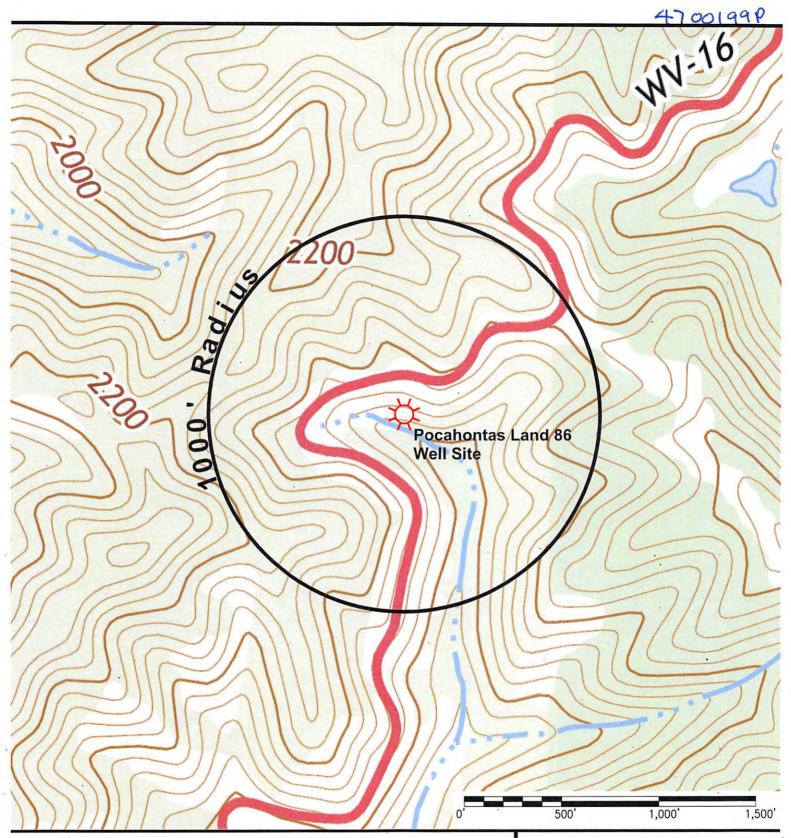
WEST VIRGINIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS NOTICE IN DESIGN STAGE.

CALL 1-800-245-4848

Office of Oil & Gas DEC 2 2 2016







## Davy WV 7½' Quadrangle

Notes:

No water wells or other sources of groundwater currently being used for human consumption, domestic animals or other general uses were identified within 1000' of the proposed well site. Water Well Office of OW& Gas
Spring

Wet Spot

DEC 2 2 2016

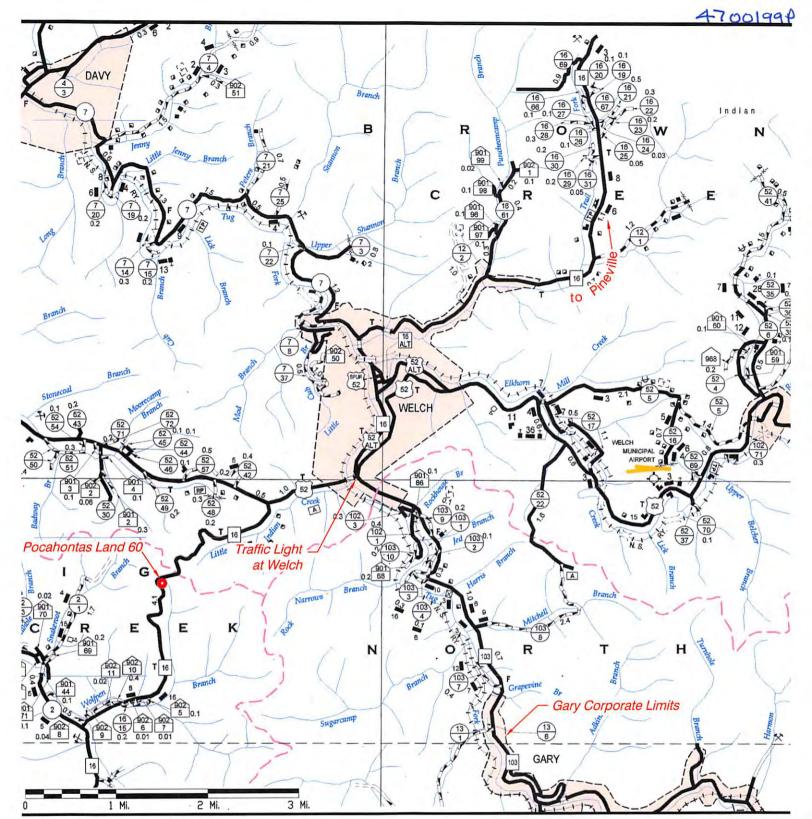
House/Structure



Pocahontas Land 86

01/27/2017

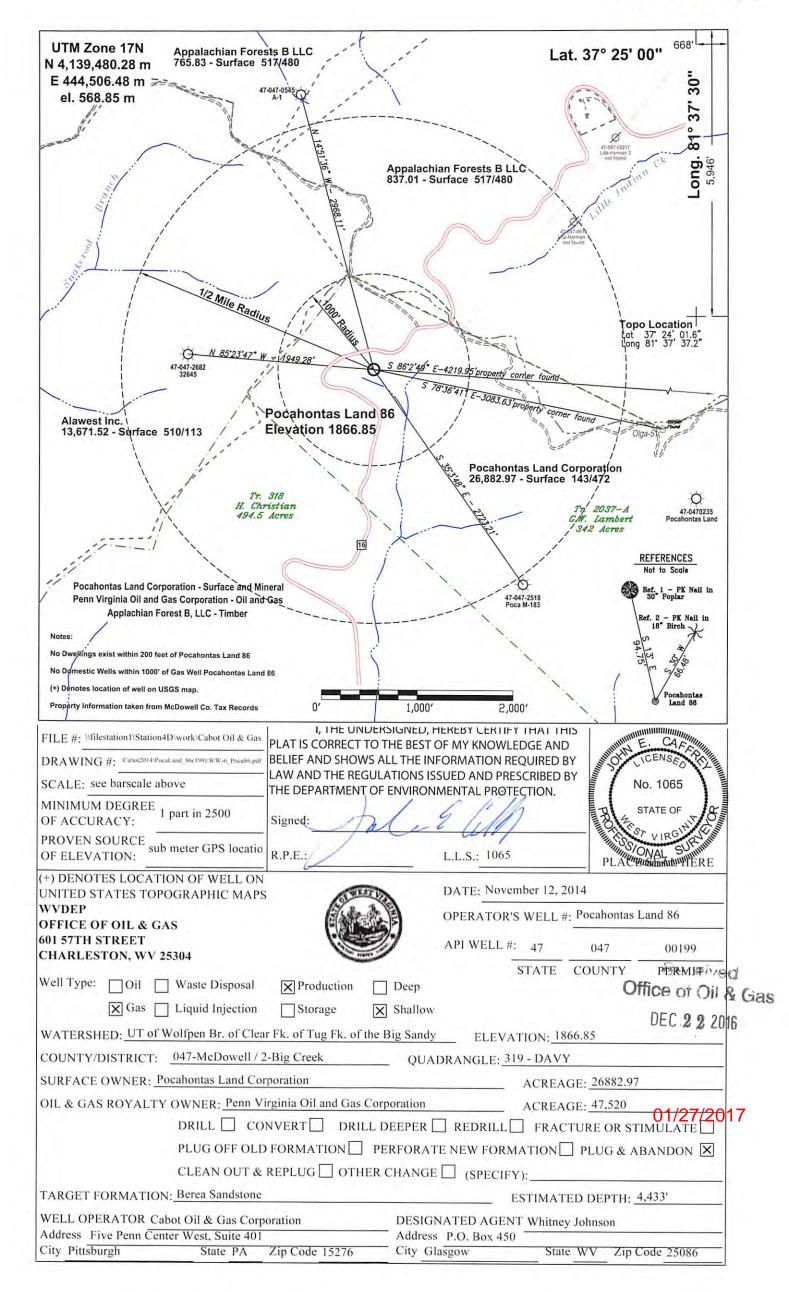
Located near Coalwood in Big Creek District of McDowell County, West Virginia

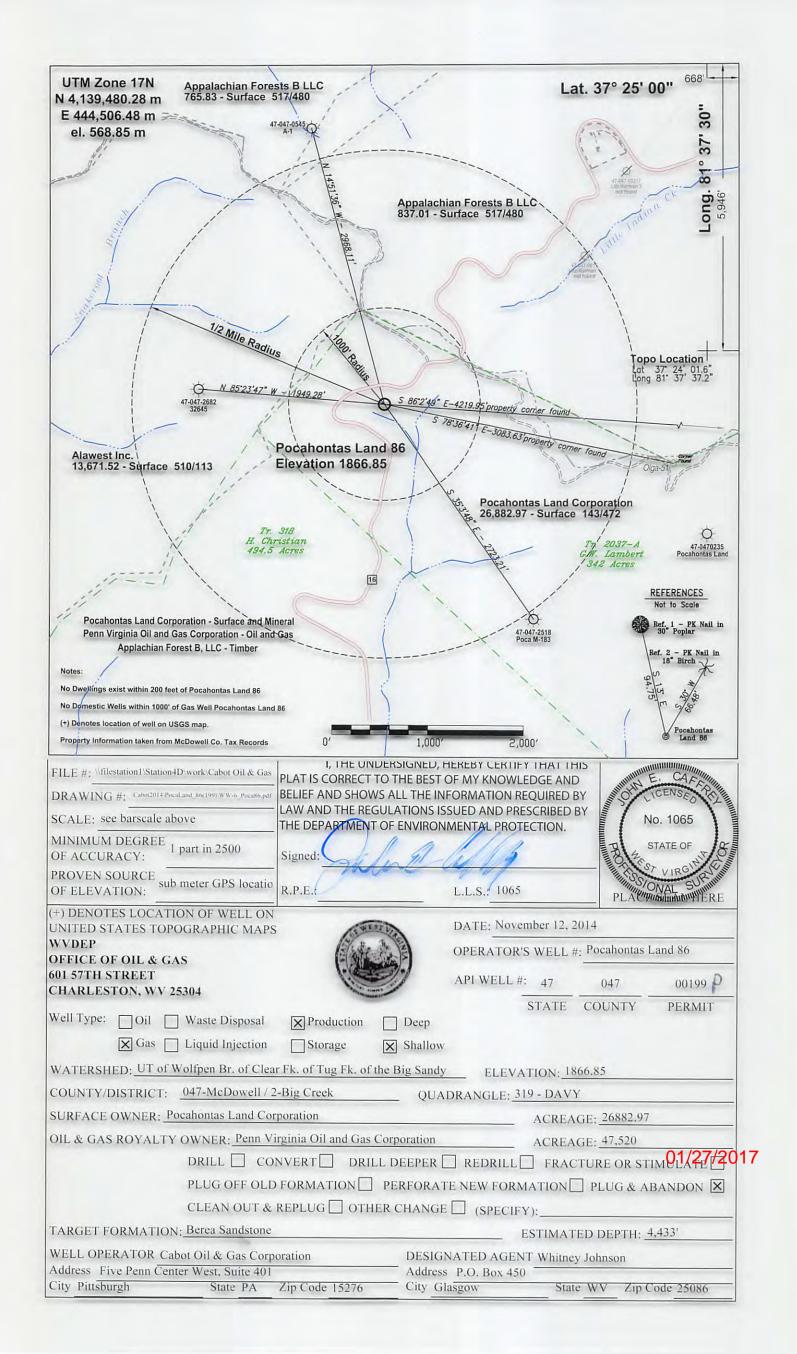


## **Driving Directions:**

- 1. From Cabot's Pineville, WV office, take WV Rt. OSouth 0.2 miles to junction with WV Rt. OSouth at the bridge over the Guyandotte River.
- 2. Turn right at the bridge onto Rt.16 South (Welch-Pineville Road) for ±19 miles to the junction of US Rt.52 in Welch, WV at the traffic light.
- 3. At the intersection with the traffic light, turn right onto US Rt. 52 north / WV State Rt. 16 south for 0.9 miles where Rt. 16 splits off lefthanded.
- 4. Turn left onto WV State Rt. 16 south for 21/4 miles. At the apex of a tight left turn, the existing lease road is on the left. Turn off Rt 16 onto the lease road.
- 5. Follow the existing lease road 486 feet to the existing Pocahontas Land 86 well site.









December 12, 2016

Chief West Virginia Division of Environmental Protection Office of Oil & Gas 601 57<sup>th</sup> Street Charleston, WV 25304

RE: Pocahontas Land 86

Big Creek District, McDowell County, WV

API # 47-047-00199

Written Application to plug and abandon wellbore

#### Dear Chief:

In accordance with Article 22-6-23 of the Code of State Regulations regarding oil and gas operations, please find attached a formal application for the plug and abandonment of the subject well.

Notices of our intention to plug this wellbore have been sent to surface owner, coal owner, and coal operators associated with this well. Copies of the certified mail receipts are attached for your records.

If you have any questions or need additional information, I can be reached at 412-249-3850.

Sincerely,

Kenneth L. Marcum Regulatory Supervisor

Office of Oil & Gas