

### 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

May 30, 2014

### WELL WORK PLUGGING PERMIT

### Plugging

This permit, API Well Number: 47-8101292, issued to CABOT OIL & GAS CORPORATION, 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

Operator's Well No: A-76

Farm Name: PINEY COKING COAL LAND

API Well Number: 47-8101292

Permit Type: Plugging Date Issued: 05/30/2014

## **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. 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 April 30 , 20 14
2) Operator's
Well No. Piney Coking Coal A-76
3) API Well No. 47-081 -01292

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

	OFFICE OF	
	APPLICATION FOR A PERM	AIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liquid	i injection / Waste disposal /
		derground storage) Deep/ Shallow X
5)	Location: Elevation 2,282.29'	Watershed Pines Ck. of Stonecoal Ck. of Winding Gulf of Guyandotte River
	District Slab Fork	County Raleigh Quadrangle Odd
<i>E</i> 1	Well Operator Cabot Oil & Gas Corporation	Whitney Johnson
0)	Address Five Penn Center West, Ste. 401	7) Designated Agent Whitney Johnson Address P.O. Box 450
	Pittsburgh, PA 15276	Glasgow, WV 25086
8)	Oil and Gas Inspector to be notified	9)Plugging Contractor
	Name Gary Kennedy	Name Shreve's Well Service
	Address P.O. Box 268	Address 3473 Triplett Road
	Nimitz, WV 25978	Spencer, WV 25276
	Work Order: The work order for the mann	ner of plugging this well is as follows:
		ner of plugging this well is as follows:
		ner of plugging this well is as follows:
		Received
10)		Received

### PINEY COKING COAL A-76 API # 47 - 081 - 01292 PLUGGING PROCEDURE

### **Current Configuration**

DTD @ 4443'

16" - 65# conductor @ 57' KB not cemented

9 5/8" - 32# LS casing @ 228' KB, cemented to surface

7" - 17# LS casing @ 1069' KB w/ TOC @230'

Squeeze perfs @ 218' would not circulate

4 1/2" - 10.5# - J-55 casing @ 3490' KB w/ TOC @ 2184'

2-3/8" - 4.6# tubing @ 3121' KB

Class A cement plugs from 4150' - 4000' & 3750' - 3600'

6% gel between plugs

Big Lime perfs: 2995' - 3005', 3090' - 3100', & 3140' - 3150'

Maxton formation: 1816' – 1837' (not perforated) Ravencliff formation: 905' – 962' (not perforated) Coal @ 120' – 122', 130' – 132', & 180' – 182'

Fresh water @ 80'

Received

MAY - 6 2014

Office of Oil and Gas WV Dept. of Environmental Protection

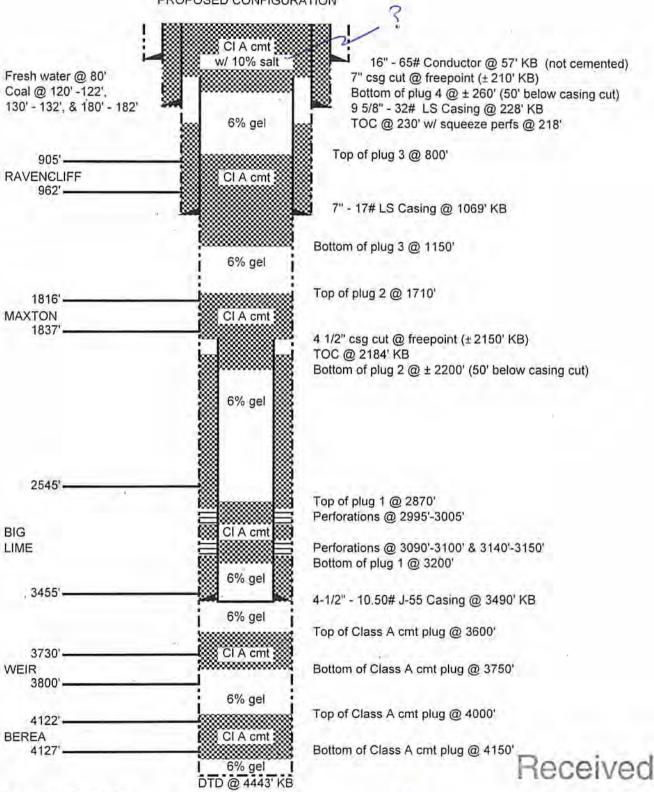
### **PROCEDURE**

- 1. Contact Pineville District Office a minimum of 48 hours prior to starting work
- 2. Contact state inspector a minimum of 24 hours prior to starting work.
- 3. Lay 2" line from wellhead to pit/tank and stake down securely. Vent 4-1/2" x 7" annulus.
- 4. Unpack wellhead.
- 5. Run rig tools to determine well TD and note any fluid level.
- 6. MIRU service rig and blow down well.
- 7. MIRU Cementing Company.
- 8. Lower tubing to 3200'.
- Pump 10 barrels of 6% Gel followed by 25 sacks of Class A cement for Cement Plug 1 from 3200' to 2870'.
- 10. Displace with 11 bbls of 6% Gel.
- POOH with tubing and let cement plug set for a minimum of four hours.
- 12. Run freepoint and cut 4 1/2" casing where free. Estimate ±2150'.
- 13. POOH with casing.
- 14. TIH with tubing to 50' inside 4 1/2" casing (±2200') and pump 25 bbls of 6% Gel.
- 15. Pump 90 sacks of Class A cement for Cement Plug 2 from 2200' to 1700'.
- 16. Displace with 6.5 bbls of 6% Gel.
- Pull tubing up to 1150' and pump 70 sacks of Class A cement for Cement Plug 3 from 1150' to 800'.
- 18. Displace with 3 bbls of 6% Gel.
- 19. Run freepoint and cut 7" casing where free. Estimate ±210'.
- POOH with casing.
- 21. TIH with tubing to 700' and pump 10 bbls of 6% Gel.
- 22. Pull tubing up to 50' inside 7" casing (±260').
- 23. Pump 87 sacks of Class A cement with 10 % salt added for Cement Plug 4 from 260' to surface.
- 24. TOOH with tubing and lay down.
- 25. RDMO Cement company
- 26. Erect Monument according to Law.
- 27. RDMO.

the

NO MORE THAN 3% Calls

# Piney Coking Coal A-76 API 47-081-01292 PROPOSED CONFIGURATION



Schematic is not to scale

Me

T. OH AD/4/13 6 2014

						tr.
VR-35		4 96		Date	Dagamba	- 10 2000
VIV-33				API#		r 18, 2002
		. State of We	et Virginia	API#	47 - 081 -	01292
		Division of Environ			1	01
				1	1	
*		Section of C			. 1.	30.00
		Well Operator's Re	eport of well work	K	7	
arm Name:		Piney Land Co.	Operator Well	No.: Piney	A-76 .	Street
OCATION:	Elevation:	2276'	Quadrangle;	Odo	-	der
	District:	Slab Fork	County:	Raleig	gh	
	Latitude:	5,220' feet South	of 37° DEG.	37' MIN.	30" SEC.	
	Longitude:	1,500' feet West o	f 81° DEG.	12' MIN.	30" SEC.	
			Casing &			Coment Elli
				Head in Dellina	Latte Wall	Cement Fill
	Cabat Oil 9 Ca	Comment of	Tubing Size	Used in Drilling	Left In Well	Up Cu. Ft.
ompany:	Cabot Oil & Ga		16"	57'	57'	
		East, Suite 500				-
	Charleston, W	V 25301	9 5/8"	228'	228'	196 sks
alak-		There of the				
gent:	144	Thomas S. Liberatore	7"	1069'	1069	176 sks
spector:	_	Carlos Hively			1000	100000000000000000000000000000000000000
ermit Issued	_	10/4/2002	_ 7"	Squeeze Perfs @	218'	50 sks
	ommenced:	October 16, 2002		74,755,7116	TOTAL	0.0 0.1.0
Vell Work Co		December 9, 2002	4 1/2"		3490'	90 sks RFC
erbal Plugg	ing:		4 112		3430	50 3K3 KI C
ermission g	ranted on:		2 3/8"		21201	1
Rotary X	Cable		2 3/0		Recei	ved
otal Depth (		4472', PBTD @ 3600'				
resh Water		80'				
Salt Water D					MAY - 6	2014
	mined in area (	(/N)? No	-			-011
		130'-132', 180'-182'		1	-	1
		130-132, 100-102			Office of Oil ar	nd Gas
PEN FLOV	V DATA				Dept. of Environme	ental Protection
9		500	Pay Z			
roducing F	ormation	BIG LIME	Depth	(ft)3(	090' - 3150'	
	Open Flow	TSTM MCF	=/d Oil: lr	nitial Open Flow	0	Bbl/d
				inal Open Flow	0	Bbl/d
Sas: Initial C	nen Flow	190 Commingled MCF		men elenin ien		
Sas: Initial C Final C	pen Flow	190 Commingled MCF		Hours		
Sas: Initial C Final C Time of o	pen flow betwee	n initial and final tests	4	Hours 62 Hours		
Gas: Initial C Final C Time of o	pen flow betwee		ressure after	62 Hours		
Gas: Initial C Final C Time of o Static rock p	pen flow betwee	n initial and final tests  145 psig surface p	4 ressure after Pay Z	62 Hours		
Gas: Initial C Final C Time of o Static rock p	pen flow betwee	n initial and final tests  145 psig surface p	ressure after	62 Hours		
Sas: Initial C Final C Time of o Static rock po Second Pro	pen flow betwee ressure ducing Formati	n initial and final tests  145 psig surface p	ressure after Pay Z Depth	62 Hours		Bbl/d
Final C Final C Time of o Static rock po Second Pro Gas: Initial C	pen flow betwee ressure ducing Formati	n initial and final tests  145 psig surface properties  on BIG LIME  TSTM MCF	ressure after Pay Z Depth	62 Hours cone (ft) 29 hitial Open Flow	995' - 3005'	The Control of the Co
Final C Final C Time of o static rock pro- second Pro- Gas: Initial C Final C	pen flow between ressure ducing Formation pen Flow open Flow	n initial and final tests  145 psig surface properties  on BIG LIME  TSTM MCF  190 Commingled MCF	ressure after Pay Z Depth	62 Hours Cone I (ft) 29 Initial Open Flow Final Open Flow	995' - 3005'	Bbl/d Bbl/d
Sas: Initial C Final C Time of o Static rock po Second Pro Sas: Initial C Final C Time of o	pen flow between ressure ducing Formati Open Flow Open Flow pen flow between	n initial and final tests  145 psig surface properties  on BIG LIME  TSTM MCF  190 Commingled MCF in initial and final tests	ressure after Pay Z Depth F/d Oil: Ir F/d F	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours	995' - 3005' 0 0	The state of the s
Final C Final C Time of o Static rock po Second Pro Gas: Initial C Final C Time of o Static rock po	pen flow between ressure ducing Formati Dpen Flow Dpen Flow pen flow between ressure	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF in initial and final tests  145 psig surface properties of the surface proper	ressure after Pay Z Depth F/d Oil: In F/d F 4 ressure after	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours	995' - 3005' 0 0	Bbl/d
Final C Final C Time of o Static rock pro- Gas: Initial C Final C Time of o Static rock pro- ROTE: ON BR	pen flow between ressure ducing Formati Dpen Flow Dpen Flow pen flow between ressure DACK OF THIS FOR	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF  in initial and final tests  145 psig surface properties of the properties of	ressure after Pay Z Depth F/d Oil: In F/d F 4 ressure after .) DETAILS OF PE	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours	995' - 3005' 0 0	Bbl/d
Gas: Initial C Final C Time of o Static rock pro- Gas: Initial C Final C Time of o Static rock pro- NOTE: ON BA	pen flow between ressure ducing Formati Open Flow Open flow between ressure ACK OF THIS FOILS, PHYSICAL CHA	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF  in initial and final tests  145 psig surface properties of the put THE FOLLOWING: 140 ANGE, ETC. 2.) THE WELL L.	ressure after Pay Z Depth F/d Oil: In F/d F 4 ressure after .) DETAILS OF PE OG WHICH IS SYS	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours	995' - 3005' 0 0	Bbl/d
Gas: Initial C Final C Time of o Static rock po Gas: Initial C Final C Time of o Static rock po NOTE: ON BA	pen flow between ressure ducing Formati Open Flow Open flow between ressure ACK OF THIS FOILS, PHYSICAL CHA	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF  in initial and final tests  145 psig surface properties of the properties of	ressure after Pay Z Depth F/d Oil: In F/d 4 ressure after .) DETAILS OF PE OG WHICH IS SYS THE WELLBORE	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours REFORATED INTER	995' - 3005' 0 0	Bbl/d
Gas: Initial C Final C Time of o Static rock po Gas: Initial C Final C Time of o Static rock po NOTE: ON BA	pen flow between ressure ducing Formati Open Flow Open flow between ressure ACK OF THIS FOILS, PHYSICAL CHA	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF  in initial and final tests  145 psig surface properties of the put THE FOLLOWING: 140 ANGE, ETC. 2.) THE WELL L.	ressure after Pay Z Depth F/d Oil: In F/d 4 ressure after .) DETAILS OF PE OG WHICH IS SYS THE WELLBORE	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours	995' - 3005' 0 0	Bbl/d
Final C Final C Time of o Static rock po Gecond Pro Gas: Initial C Final C Time of o Static rock po NOTE: ON BA	pen flow between ressure ducing Formati Open Flow Open flow between ressure ACK OF THIS FOILS, PHYSICAL CHA	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF  in initial and final tests  145 psig surface properties of the properties of	ressure after Pay Z Depth F/d Oil: In F/d 4 ressure after .) DETAILS OF PE OG WHICH IS SYS THE WELLBORE	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours REFORATED INTER	995' - 3005' 0 0 EVALS, FRACTU	Bbl/d RING OR
Final C Time of o tatic rock pro- econd Pro- Gas: Initial C Final C Time of o static rock pro- OTE: ON BA TIMULATING	pen flow between ressure ducing Formati Open Flow Open flow between ressure ACK OF THIS FOILS, PHYSICAL CHA	n initial and final tests  145 psig surface properties on BIG LIME  TSTM MCF  190 Commingled MCF  in initial and final tests  145 psig surface properties of the properties of	ressure after Pay Z Depth F/d Oil: In F/d 4 ressure after .) DETAILS OF PE OG WHICH IS SYS THE WELLBORE CABOT OIL & C	62 Hours cone (ft) 29 hitial Open Flow Final Open Flow Hours 62 Hours REFORATED INTER	995' - 3005' 0 0 EVALS, FRACTU	Bbl/d

Odd 1

RAL-1292

Plug back to the Big Lime as follows: 4472'-4150' w/6% gel; 4150'-4000' w/30 sks Class A w/3% CaCl and 1/4 lb flake; 4000'-3750' w/6% gel; 3750'-3600' w/30 sks Class A w/3% CaCl and 1/4 lb flake; 3600'-3450' w/6% gel.

Perf the 1st stage (Big Lime) from 3140'-3150' and 3090'-3100' w/21 holes per zone (42 holes total) using 14 gram charges in a 3 1/8" HSC. Broke down 1st stage w/12 bbl 15% HCl and 48 bbl foam. BD 3212 psi. Treated the 1st stage w/Clear Frac using 68971lb sand, 910.7 Mscf N2, and 331.3 bbl Dirty fluid. Displaced w/N2 to the perfs due to the pressure end of the Pumper/Pod breaking down. Job was designed for 80000lb sand. ISIP=3313 psi. 5 min SIP=3144 psi. 10 min SIP=3095 psi. ATP=3050 psi. MTP=3500 psi. AIR=19.5 bbl/min. MIR=20.5 bbl/min

Perf 2nd stage w/42 holes (4 SPF) from 2995'-3005' using 14 gram charges in a 3 1/8" HSC.

75Q Foam frac BL 2nd stage (42 H 2995-3005') w/ 40,000# 20/40 sand, 8 bbl 15% HCl, 200 bbl water, 580,000 scf N2. BD=1510, ATP=3100 psi, Average rate=21.1 bpm @ 14,200 scfm. Max pressure=3444, PISIP=2970, 5 min=2439, 10 min.=2195. Frac gradient=1.1

FORMATION	+	TOP	ВОТТОМ	REMARKS
SILT/SHALE	001	surface	252	
SHALE		252	810	
SILT/SHALE		810	905	
RAVENCLIFF		905	962	
SILT/SHALE		962	1110	
AVIS		1110	1150	
SILT/SHALE		1150	1816	
MAXTON		1816	1837	
SILT/SHALE		1837	2275	
LLIME '		2275	2545	
B.LIME		2545	3455	
SILT/SHALE	- 20	3455	3730	
WEIR		3730	3800	
SHALE		3800	4122	
BEREA		4122	4127	
SILT/SHALE		4127	4472	12

## Received

MAY - 6 2014

Office of Oil and Gas WV Dept. of Environmental Protection

de

WW-4A	
Revised	6-07

1) Date:	April 30, 2014	
2) Operato	or's Well Number	
	g Coal A-76	

3) API Well No.: 47 -

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

(a) Name Address	Pinou Land Company	5) (; , C/O E.M. Payne, III	a) Coal Operato Name	Pocahontas Coal Company, LLC
Address			Address	109 Appalachian Drive
	130 Main Street L		Address	
0 1 17	Beckley, WV 258		- 410 10	Beckley, WV 25801
(b) Name	Roger D. & Mary	E. Stowers		wner(s) with Declaration
Address	P.O. Box 37	raez	_ Name	Piney Land Company, C/O E.M. Payne, III
	Josephine, WV 2	5857	Address	130 Main Street Law Building
(c) Name			Name	Beckley, WV 25801
Address			_ Name Address	
Address			- Address	<del></del>
6) Inspector	Gary Kennedy		(c) Coal Le	ssee with Declaration
Address	P.O. Box 268		Name	Pocahontas Coal Company, LLC
*********	Nimitz, WV 2597	8	Address	110 Sprint Drive
Telephone	(304) 382-8402		-	Blountville, TN 37617
			_	
The reason However, y	you received these documerou are not required to take	any action at all.	nts regarding the appli	
(2) The part of the reason However, y  Take notice accompany Protection, the Applica	you received these docume ou are not required to take a e that under Chapter 22-6 or ring documents for a permit with respect to the well at	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described or en mailed by registered	nts regarding the appli e, the undersigned wel well with the Chief of t the attached Applicat or certified mail or de	I operator proposes to file or has filed this Notice and Application and he Office of Oil and Gas, West Virginia Department of Environmentation and depicted on the attached Form WW-6. Copies of this Notice
(2) The part of the reason However, y  Take notice accompany Protection, the Applica	you received these docume ou are not required to take a that under Chapter 22-6 or ring documents for a permit with respect to the well at ation, and the plat have be	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described or en mailed by registered e day of mailing or delive	its regarding the appliance, the undersigned well with the Chief of the attached Application certified mail or dery to the Chief.	I operator proposes to file or has filed this Notice and Application and 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 is
The reason However, y Take notice accompany Protection, the Applica	you received these docume ou are not required to take a that under Chapter 22-6 or ring documents for a permit with respect to the well at ation, and the plat have be	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described on en mailed by registered a day of mailing or delive	e, the undersigned well with the Chief of the the attached Application certified mail or dery to the Chief.  Cabot Oil & Ga	I operator proposes to file or has filed this Notice and Application an 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 is a Corporation
The reason However, y Take notice accompany Protection, the Applica	you received these docume ou are not required to take a that under Chapter 22-6 or ring documents for a permit with respect to the well at ation, and the plat have be	ents is that you have right any action at all.  of the West Virginia Code to plug and abandon a withe location described on en mailed by registered aday of mailing or delive Well Operator By:	e, the undersigned well with the Chief of the attached Application certified mail or dry to the Chief.  Cabot Oil & Galkenneth L. Mar	I operator proposes to file or has filed this Notice and Application an 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 is a Corporation
The reason However, y Take notice accompany Protection, the Applica certain circ	you received these docume you are not required to take a te that under Chapter 22-6 or ring documents for a permit with respect to the well at ation, and the plat have be umstances) on or before the	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described on en mailed by registered aday of mailing or delive the Well Operator By:  Its:	the undersigned well with the Chief of the attached Application certified mail or dry to the Chief.  Cabot Oil & Ga Kenneth L. Mar Regulatory Sup	reum Kenned Domen
The reason However, y Take notice accompany Protection, the Applice certain circ	you received these docume you are not required to take a e that under Chapter 22-6 or ring documents for a permit with respect to the well at ation, and the plat have be numstances) on or before the	ents is that you have right any action at all.  of the West Virginia Code to plug and abandon a withe location described on en mailed by registered aday of mailing or delive Well Operator By:	the undersigned well with the Chief of the the attached Application certified mail or dry to the Chief.  Cabot Oil & Ga  Kenneth L. Mar  Regulatory Sup	I operator proposes to file or has filed this Notice and Application an 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 is a Corporation for the Company of the Corporation for
The reason However, y Take notice accompany Protection, the Applica certain cire  OMMONWEALTH OF Notarial Constance C. Cardel McDonald Boro, Was	you received these docume ou are not required to take a ce that under Chapter 22-6 oring documents for a permit with respect to the well at action, and the plat have becomestances) on or before the unstances) on or before the PENNSYLVANIA Seal n, Notary Public shington County	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described or en mailed by registered a day of mailing or delive  Well Operator By: Its: Address	the undersigned well with the Chief of the attached Application certified mail or dry to the Chief.  Cabot Oil & Ga  Kenneth L. Mar  Regulatory Sup  Five Penn Cent	I operator proposes to file or has filed this Notice and Application an 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 is a Corporation forcum
The reason However, y  Take notice accompany Protection, the Applice certain eire  DMMONWEALTH OF Notarial Constance C. Cardee McDonald Boro, Was My Commission Expin	you received these docume ou are not required to take a ce that under Chapter 22-6 or fing documents for a permit with respect to the well at ation, and the plat have be umstances) on or before the permit with respect to the well at a strong and the plat have be umstances) on or before the strong and the plat have be umstances. On or before the strong are the permit with the permit with the property of the prop	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described on en mailed by registered aday of mailing or delive the Well Operator By:  Its:	the undersigned well with the Chief of the the attached Application certified mail or dry to the Chief.  Cabot Oil & Ga  Kenneth L. Mar  Regulatory Sup	I operator proposes to file or has filed this Notice and Application an 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 is a Corporation forcum  Dervisor ter West, Ste. 401  15276
The reason However, y Take notice accompany Protection, the Applicate certain eire  OMMONWEALTH OF Notarial Constance C. Carder McDonald Boro, Was My Commission Expine	you received these docume ou are not required to take a ce that under Chapter 22-6 or fing documents for a permit with respect to the well at ation, and the plat have be umstances) on or before the permit with respect to the well at a strong and the plat have be umstances) on or before the strong and the plat have be umstances. On or before the strong are the permit with the permit with the property of the prop	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described or en mailed by registered a day of mailing or delive  Well Operator By: Its: Address	the undersigned well with the Chief of the attached Application certified mail or dry to the Chief.  Cabot Oil & Ga  Kenneth L. Mar  Regulatory Sup  Five Penn Cent	I operator proposes to file or has filed this Notice and Application an 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 is a Corporation forcum  Term  Term  Dervisor  ter West, Ste. 401  15276
The reason However, y Take notice accompany Protection, the Applice certain circ  OMMONWEALTH OF Notarial Constance C. Carder McDonald Boro, Was My Commission Expire	you received these docume ou are not required to take a ce that under Chapter 22-6 or fing documents for a permit with respect to the well at ation, and the plat have be sumstances) on or before the unstances) on or before the Seal n, Notary Public shington County es Nov. 16, 2017	ents is that you have right any action at all.  If the West Virginia Code to plug and abandon a withe location described or en mailed by registered e day of mailing or delive  Well Operator By:  Its:  Address  Telephone	c, the undersigned well with the Chief of the attached Application certified mail or dry to the Chief.  Cabot Oil & Gale Kenneth L. Mar Regulatory Sup Five Penn Center Pittsburgh, PA (412) 249-3850	I operator proposes to file or has filed this Notice and Application and 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 is a Corporation forcum  Dervisor ter West, Ste. 401  15276

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.



### U.S. Postal Service 114 CERTIFIED MAIL, RECEIPT 96 (Domestic Mail Only; No Insurance Coverage Provided) 244 MOVPOUR Postage 47 Certified Fee LOOD Return Receipt Fee (Endorsement Required) 1 2014 Here Restricted Delivery Fee (Endorsement Required) 0090 Mey 176 PHA Total Postane & Fees S Sent To Pocahontas Coal Company, LLC m Street, 110 Sprint Drive or POB Blountville, TN 37617 City, Sta uctions





WW-9 (5/13)

	Page of
API Number 47 - 081	- 01292
Operator's Well 1	No. Piney Coking Coal A-76

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

	poration	OP Code	
Watershed (HUC 10) Pines Ck. of Stonecoal Ck. of	Winding Gulf of Guyandotte River Quad	rangle Odd	
Elevation _2,282.29'	County Raleigh	District Slab Fo	rk
Do you anticipate using more than 5,000 b	obls of water to complete the pro	posed well work? Yes	No X
Will a pit be used for drill cuttings? Yes	s No_X		
If so, please describe anticipated	pit waste:		
Will a synthetic liner be used in the	he pit? Yes No X	If so, what ml.?	
Proposed Disposal Method For T	reated Pit Wastes:	Alk	
Land Application			
	njection ( UIC Permit Number_ Number		
	sal (Supply form WW-9 for disp	oosal location)	
	No treated pit wastes will		Raceive
Vill closed loop system be used? N/A			MECCIAO
			MAY = 6 2014
Drilling medium anticipated for this well?			
-If oil based, what type? Synthet			FOIL and Gas
Additives to be used in drilling medium?	N/A	WV	Dept. of Environmental P
Drill cuttings disposal method? Leave in p	pit, landfill, removed offsite, etc	No cuttings produced during p	lugging operation
-If left in pit and plan to solidify	what medium will be used? (cer	ment, lime, sawdust)	
-Landfill or offsite name/permit n	number?	· ·	4
I certify that I understand and agon August 1, 2005, by the Office of Oil an provisions of the permit are enforceable blaw or regulation can lead to enforcement  I certify under penalty of law the application form and all attachments the	nd Gas of the West Virginia Dep by law. Violations of any term action. hat I have personally examined ereto and that, based on my i the information is true, accura-	artment of Environmental Protor condition of the general per land am familiar with the in inquiry of those individuals inte, and complete. I am away	ection. I understand the rmit and/or other appli formation submitted or mmediately responsibl
penalties for submitting false information,	including the possibility of the		
penalties for submitting false information, Company Official Signature	nell Mare		OF PENNSYLVANIA
Company Official Signature Kenn	nett L. Marcum	COMMONWEALTH	irial Seal
penalties for submitting false information,  Company Official Signature  Company Official (Typed Name) Kenn	nett L. Marcum	COMMONWEALTH Note Constance C. C McDonald Boro, My Commission	
penalties for submitting false information, Company Official Signature Company Official (Typed Name) Kenn Company Official Title Regulatory Su	neth L. Marcum upervisor	COMMONWEALTH Note Constance C. C McDonald Boro, My Commission	arial Seal arden, Notary Public Washington County expires Nov. 16, 2017
penalties for submitting false information, Company Official Signature Company Official (Typed Name) Kenn Company Official Title Regulatory Su	nett L. Marcum	COMMONWEALTH Note Constance C. C McDonald Boro, My Commission I NEMBER, PENHSYLVANIA	arial Seal arden, Notary Public Washington County expires Nov. 16, 2017

species tre regulation the	atment: Acres Disturbe	<sub>d</sub> 2.68	Prevegetation pl	6.33
Lime 2	Tons/acre or to c	6.5	reregention pr	
Fertilizer (10-20-2	o or equivalent) 500	lbs/acre (500 lbs m	inimum)	
Mulch Fulp Fi	iber at 1/2-3/4	Tons/acre		
		Seed Mixtures		
	Area I	*		ea II
Seed Type	lbs/acre	24.5	Seed Type	lbs/acre
all Fescue	40	Tall Fescue	9	40
adino Clover	5	Ladino Clo	ver	5
an Approved by:	Huy Kenve	0	Doc	eived
			100	
				- 6 2014
			YAM	- 6 2014
			YAM	
				-

### **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.
- 2.) ALL ROADS SHOWN THEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES AND REQUIREMENTS OF THE WY DEP OIL & GAS EROSION AND SEDIMENT CONTROL MANUAL.
- 3.) 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, POR-TIONS 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 CUL-VERT(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 WY-DEP.

### DRAWING LEGEND

Proposed Road	
Existing Road	===
Silt Fence	-0-0-
Brush Barrier	
Tree Line	S 191 What
Rock Rip Rap	63330
Cross Drain	414
Culvert	222
Drilling Pit	EA
Road Ditch	
Gas Line	— G—
Fence Line	x
Rock Outcrop	
Water Well	(W)
House/Structure	
Utility Pole	
Spring	- A
Wet Spot	244
Pit Waste App. A	rea (

SPACING OF CULVER	RTS BY GRADE
ROAD GRADE (%)	DISTANCE
2-5	500-300
6-10	300-200
11-15	200-100
16-20	100

SPACING OF CROSS DRAINS 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 CON-STRUCTION CONTRACTOR TO FIELD VERIFY THE SIZE/CONDITION OF ALL UNDERGROUNC UTILITIES, SANITARY SEWERS, STORM SEW-ERS, 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

MAY - 6 2014



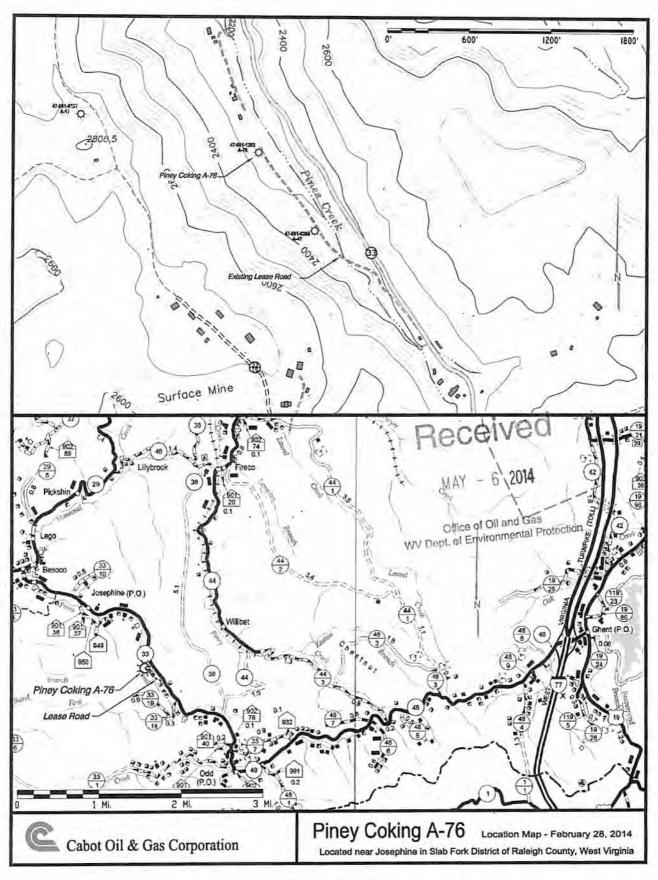
Cabot Oil & Gas Corporation Oll and Gas

Piney Coking A-76

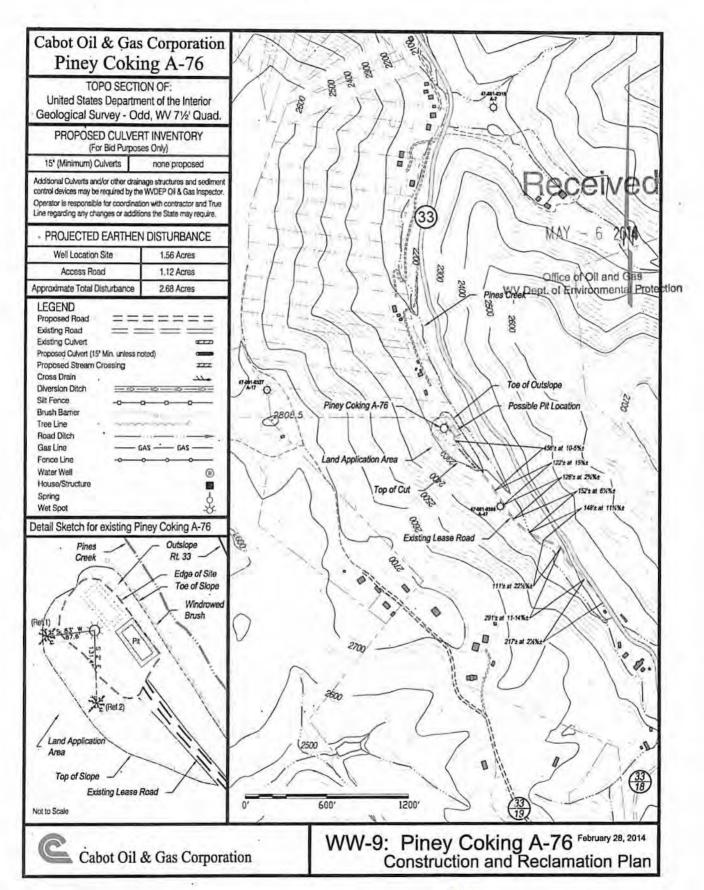
February 28, 2014

actionLocated near Josephine in Slab Fork District of Raleigh County, West Virginia

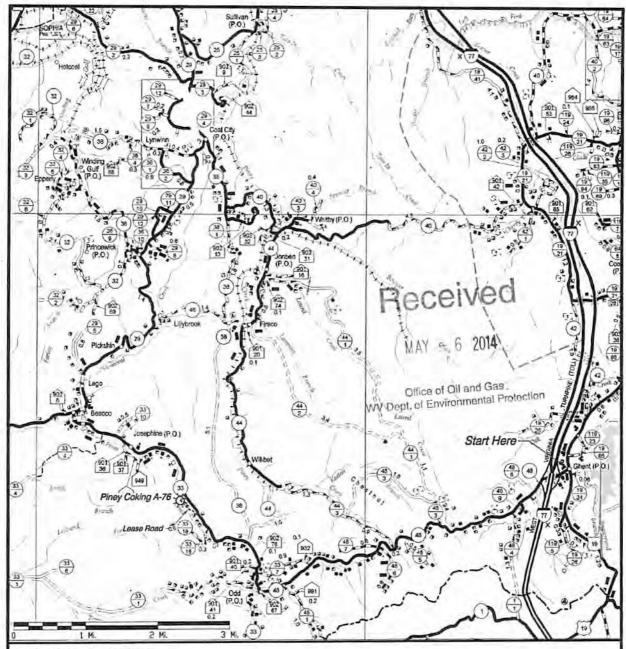








Ste



- Driving Directions:

  1. Beginning in Ghent, WV at the intersection of U.S. Rt. (19) and Raleigh County Rt. (48) near the I-77 Exit 28, follow Rte (48) in a westerly direction toward Odd, WV; a distance of approximately 5½ miles.
- At Odd, WV observe the post office on the left. Beyond the post office, bear right onto Rallegh County Rt. (33).
- 3. From the Odd WV Post Office, follow Rallegh County(33)a distance of 1.6 miles to the existing lease road on the left.
- The lease road drops steeply below the county road. Follow the lease road for 0.3 miles, crossing Pines Creek, past gas well A-47 on the left to the Piney Coking A-76 well site.



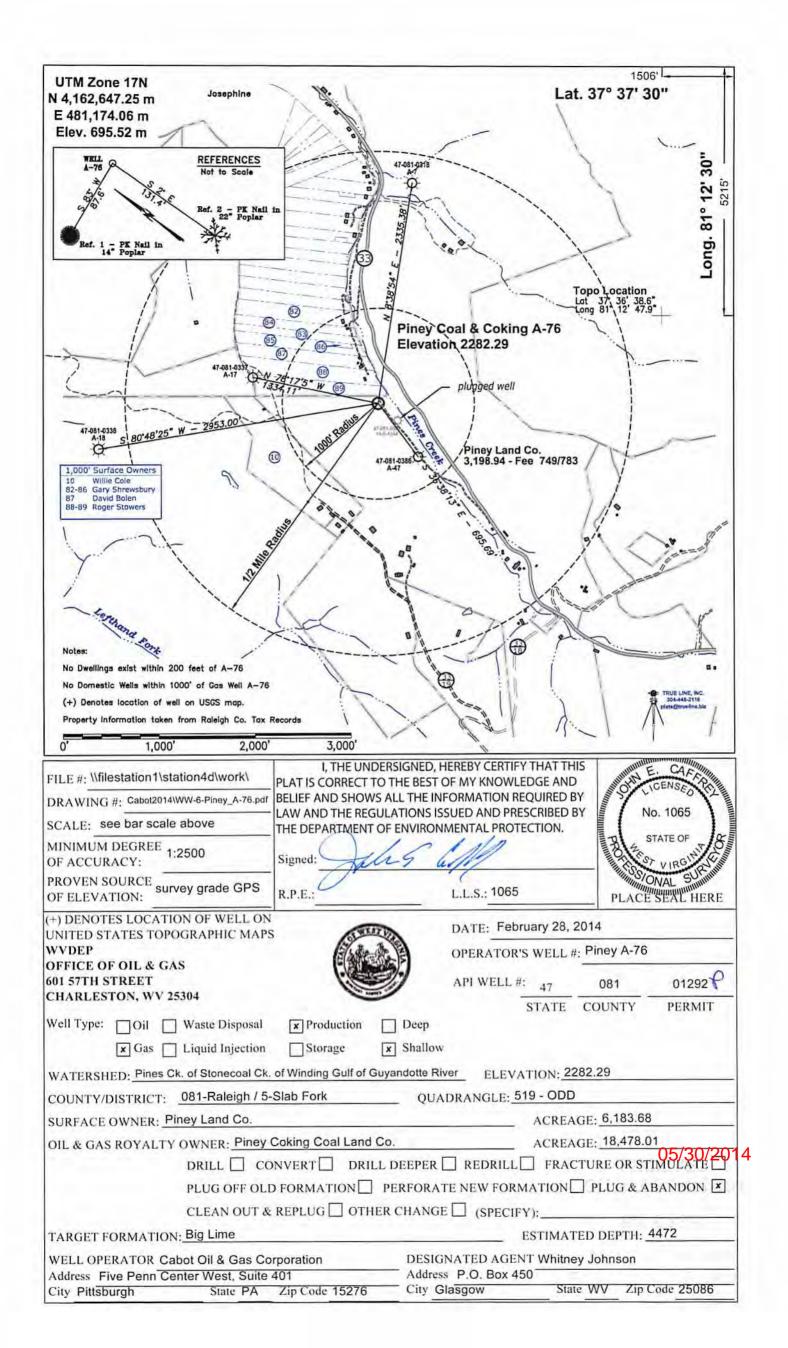
Cabot Oil & Gas Corporation

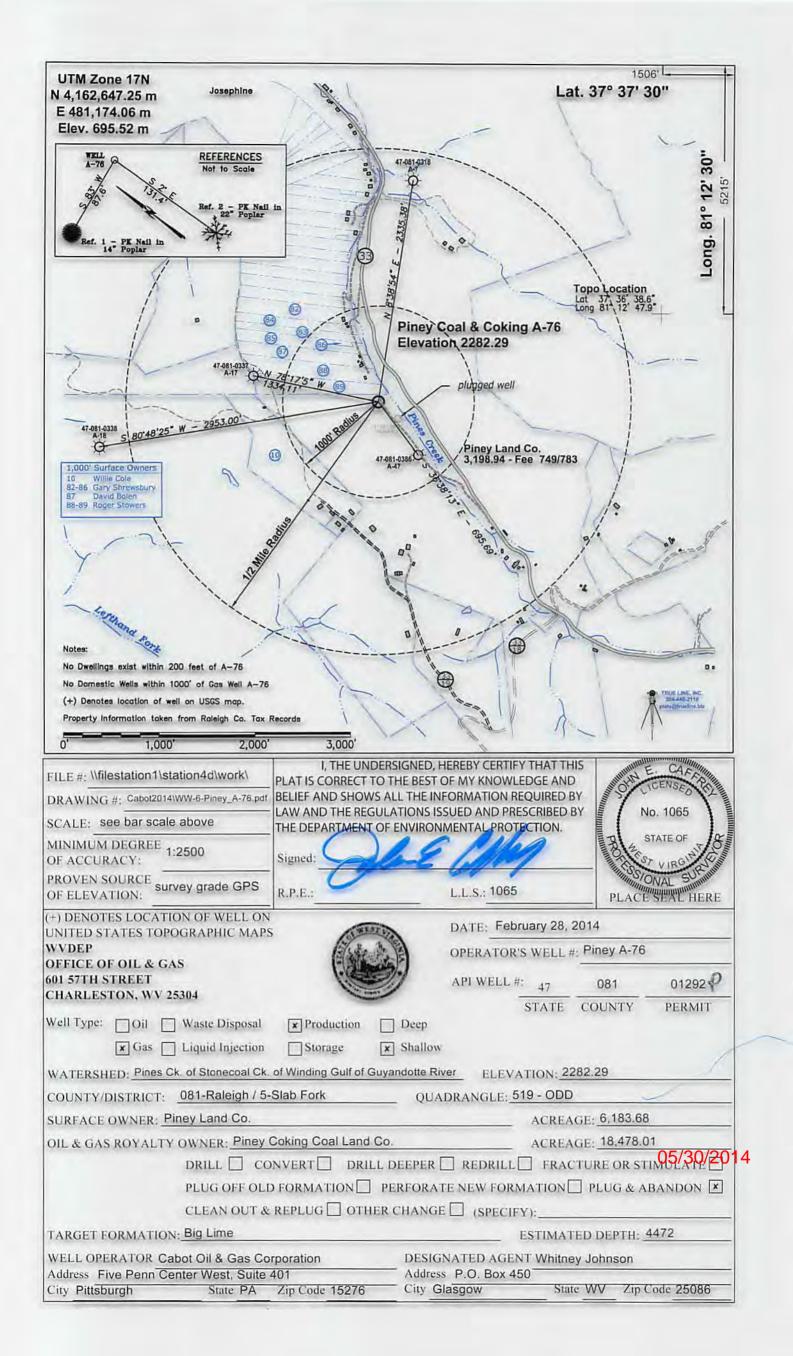
Piney Coking A-76

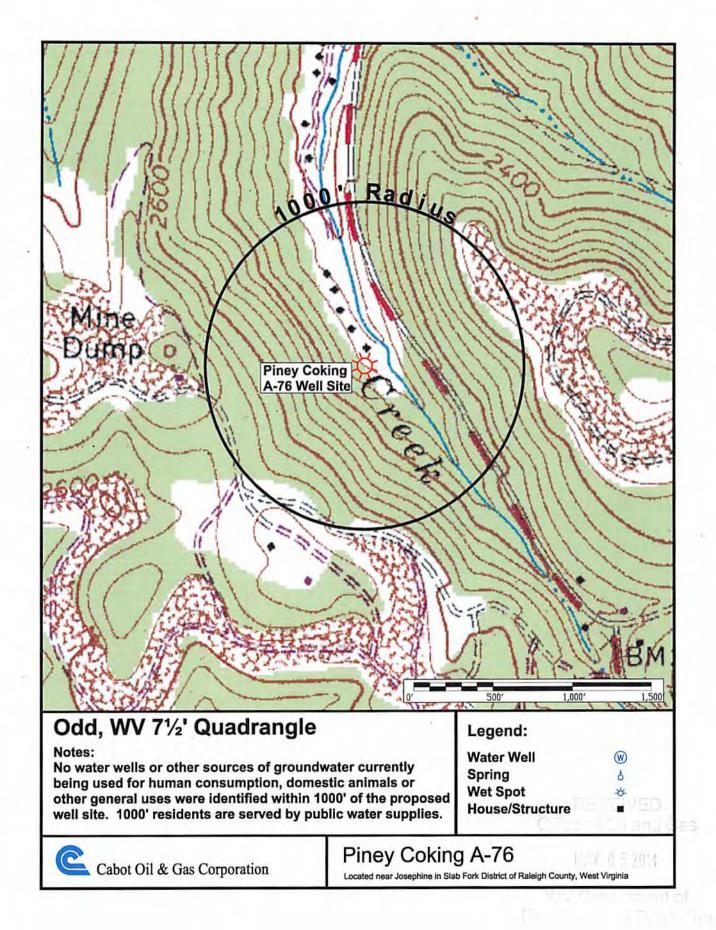
February 28, 2014 Driving Directions

Located near Josephine in Slab Fork District of Raleigh County, West Virginia.











CERTIFIED MAIL

April 30, 2014

Gary Kennedy P.O. Box 268 Nimitz, WV 25978

Re:

Piney Coking Coal A-76

Slab Fork District, Raleigh County, WV

API # 47-081-01292

Written Application to plug and abandon wellbore

Dear Mr. Kennedy:

Enclosed are the following forms for the subject well:

Marin

Form WW-4A Notice of Application to Plug and Abandon Well (1 copy)

Application for a Permit to Plug and Abandon (1 copy)

Well Location Plat 
Certified Copy of WVDEP Well Location Plat

Form WW-9 Reclamation Plan and Site Registration Application (1 copy)

Copies of the Well Permit Application and Voluntary Statement of No Objection have been sent to the appropriate surface owner(s) and coal operator(s), owner(s) and lessee(s) for signature.

Please make necessary recommendations and sign the Reclamation Plan before forwarding to Chief, Division of Oil & Gas, 601 57<sup>th</sup> Street, Charleston, WV 25304

If you have any questions or need additional information, please contact me at 412-249-3850.

Sincerely.

Kenneth L. Marcum Regulatory Supervisor Received

MAY - 6 2014

Office of Oil and Gas
WV Dept. of Environmental Protection



April 30, 2014

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

RE: Piney Coking Coal A-76

Slab Fork District, Raleigh County, WV

API # 47-081-01292

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