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**west virginia** department of environmental protection

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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

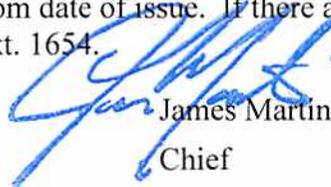
**WELL WORK PLUGGING PERMIT**

**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 penalties 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.



James Martin  
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

**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.

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### CONDITIONS

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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.

1) Date April 30, 2014  
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 OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil \_\_\_ / Gas X / Liquid injection \_\_\_ / Waste disposal \_\_\_ /  
(If "Gas, Production X or Underground 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

6) Well Operator Cabot Oil & Gas Corporation 7) Designated Agent Whitney Johnson  
Address Five Penn Center West, Ste. 401 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

10) Work Order: The work order for the manner of plugging this well is as follows:  
See Attached Sheet

Received

MAY - 6 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector *Gary Kennedy* Date 5/5/14

8101292P

# 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 perms @ 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 perms: 2995' - 3005', 3090' - 3100', & 3140' - 3150'  
Maxton formation: 1816' - 1837' (not perforated)  
Ravenclyff formation: 905' - 962' (not perforated)  
Coal @ 120' - 122', 130' - 132', & 180' - 182'  
Fresh water @ 80'

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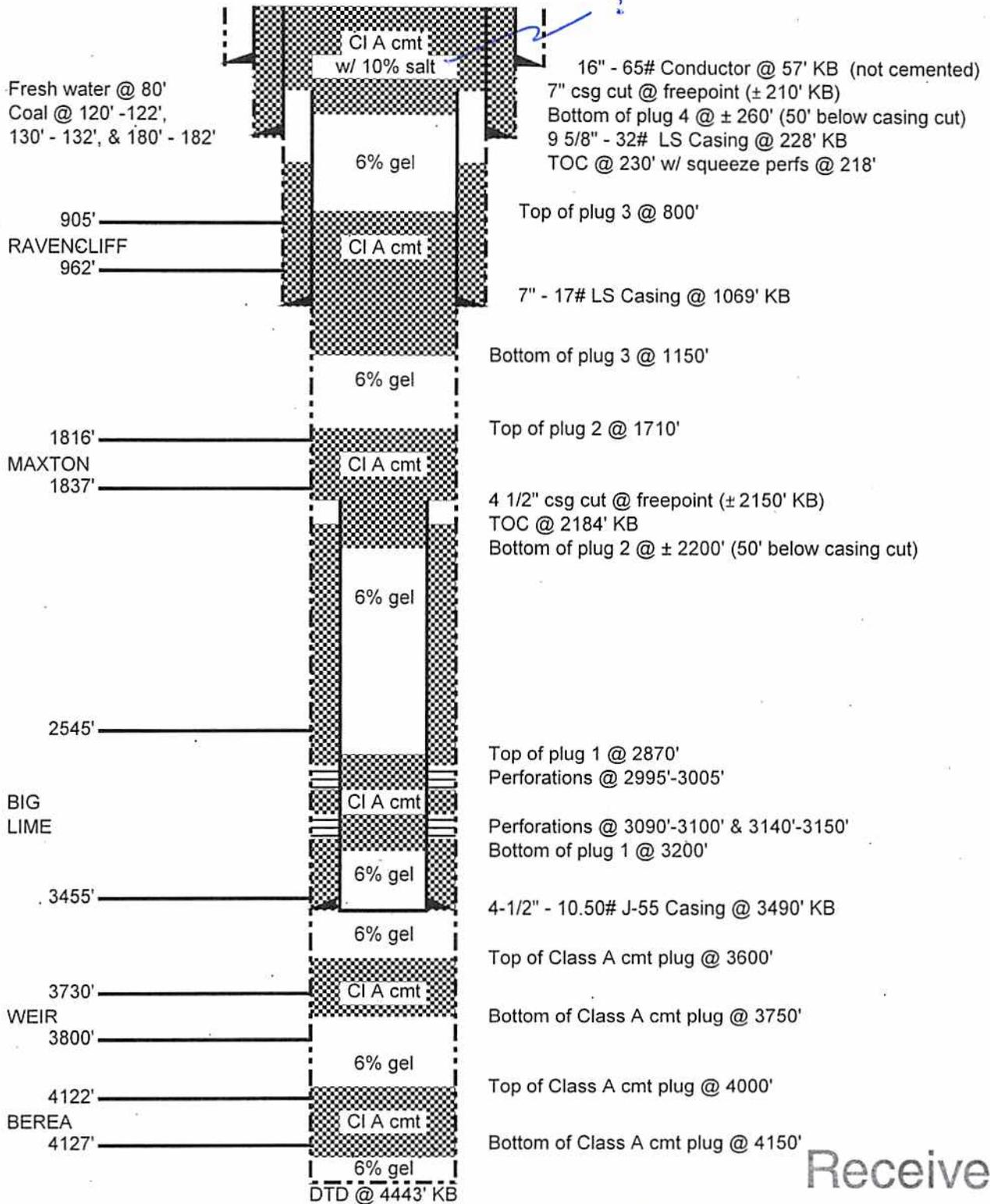
Office of Oil and Gas  
WV Dept. of Environmental Protection

### 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'.
9. 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.
11. 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.
17. 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'.
20. 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.

NO MORE THAN 3% CaCl<sub>2</sub>

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



Schematic is not to scale

Received

T.O.M. 03/4/13 6 2014

fr 13

WR-35

Date December 18, 2002  
API # 47 - 081 - 01292

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

Farm Name: Piney Land Co. Operator Well No.: Piney A-76

LOCATION: Elevation: 2276' Quadrangle: Odd  
District: Slab Fork County: Raleigh  
Latitude: 5,220' feet South of 37° DEG. 37' MIN. 30" SEC.  
Longitude: 1,500' feet West of 81° DEG. 12' MIN. 30" SEC.

Company: Cabot Oil & Gas Corporation  
900 Lee Street East, Suite 500  
Charleston, WV 25301

Agent: Thomas S. Liberatore  
Inspector: Carlos Hively  
Permit Issued: 10/4/2002  
Well Work Commenced: October 16, 2002  
Well Work Completed: December 9, 2002  
Verbal Plugging: \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_  
Total Depth (feet) 4472', PBSD @ 3600'  
Fresh Water Depths (ft) 80'  
Salt Water Depths (ft) \_\_\_\_\_  
Is coal being mined in area (Y/N)? No  
Coal Depths (ft) 120'-122', 130'-132', 180'-182'

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
16"	57'	57'	
9 5/8"	228'	228'	196 sks
7"	1069'	1069'	176 sks
7" Squeeze Perfs @ 218'			50 sks
4 1/2"		3490'	90 sks RFC
2 3/8"		3122'	
		MAY - 6 2014	

Office of Oil and Gas  
WV Dept. of Environmental Protection

OPEN FLOW DATA

Producing Formation BIG LIME  
Gas: Initial Open Flow TSTM MCF/d  
Final Open Flow 190 Commingled MCF/d  
Time of open flow between initial and final tests 4 Hours  
Static rock pressure 145 psig surface pressure after 62 Hours

Pay Zone  
Depth (ft) 3090' - 3150'  
Oil: Initial Open Flow 0 Bbl/d  
Final Open Flow 0 Bbl/d

Second Producing Formation BIG LIME  
Gas: Initial Open Flow TSTM MCF/d  
Final Open Flow 190 Commingled MCF/d  
Time of open flow between initial and final tests 4 Hours  
Static rock pressure 145 psig surface pressure after 62 Hours

Pay Zone  
Depth (ft) 2995' - 3005'  
Oil: Initial Open Flow 0 Bbl/d  
Final Open Flow 0 Bbl/d

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1.) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2.) THE WELL LOG WHICH IS SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE

For: CABOT OIL & GAS CORPORATION

By: W.A. [Signature] Drilling Superintendent  
Date: 03/05/03

WAK

Odd 1

8101292A

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	BOTTOM	REMARKS
SILT/SHALE	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	
L.LIME	2275	2545	
B.LIME	2545	3455	
SILT/SHALE	3455	3730	
WEIR	3730	3800	
SHALE	3800	4122	
BEREA	4122	4127	
SILT/SHALE	4127	4472	

Received

MAY - 6 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection*JSK*

WW-4A  
Revised 6-07

1) Date: April 30, 2014  
2) Operator's Well Number  
Piney Coking Coal A-76  
3) API Well No.: 47 - 081 - 01292

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

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Piney Land Company, C/O E.M. Payne, III</u>	Name <u>Pocahontas Coal Company, LLC</u>
Address <u>130 Main Street Law Building</u> ✓	Address <u>109 Appalachian Drive</u> ✓
<u>Beckley, WV 25801</u>	<u>Beckley, WV 25801</u>
(b) Name <u>Roger D. &amp; Mary E. Stowers</u>	(b) Coal Owner(s) with Declaration
Address <u>P.O. Box 37</u> ✓	Name <u>Piney Land Company, C/O E.M. Payne, III</u>
<u>Josephine, WV 25857</u>	Address <u>130 Main Street Law Building</u> ✓
	<u>Beckley, WV 25801</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 268</u>	Name <u>Pocahontas Coal Company, LLC</u>
<u>Nimitz, WV 25978</u>	Address <u>110 Sprint Drive</u> ✓
Telephone <u>(304) 382-8402</u>	<u>Blountville, TN 37617</u>

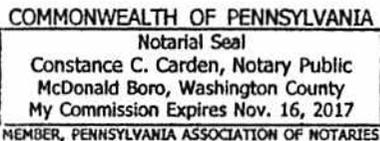
**TO THE PERSONS NAMED ABOVE:** You should have received this Form and the following documents:

- (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 Environmental 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 Cabot Oil & Gas Corporation  
 By: Kenneth L. Marcum *Kenneth L. Marcum*  
 Its: Regulatory Supervisor  
 Address Five Penn Center West, Ste. 401  
Pittsburgh, PA 15276  
 Telephone (412) 249-3850



Subscribed and sworn before me this 30th day of April, 2014  
Constance C. Carden Notary Public  
 My Commission Expires November 16, 2017

RECEIVED  
Office of Oil and Gas  
MAY 05 2014

**Oil and Gas Privacy Notice**

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 [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

8101292A

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*Piney A-76 P/A*

Sent To: Pocahontas Coal Company, LLC  
 110 Sprint Drive  
 Blountville, TN 37617 ✓

PS Form 3800

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*USPS Piney A-76 P/A*

Sent To: Pocahontas Coal Company, LLC  
 109 Appalachian Drive  
 Beckley, WV 25801 ✓

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*USPS Piney A-76 P/A*

Sent To: Roger D. & Mary E. Stowers  
 P.O. Box 37  
 Josephine, WV 25857 ✓

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*USPS Piney A-76 P/A*

Sent To: Piney Land Company; C/O E.M. Payne, III  
 130 Main Street Law Building  
 Beckley, WV 25801 ✓

PS Form 3800

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Cabot Oil & Gas Corporation OP Code \_\_\_\_\_

Watershed (HUC 10) Pines Ck. of Stonecoal Ck. of Winding Gulf of Guyandotte River Quadrangle Odd

Elevation 2,282.29' County Raleigh District Slab Fork

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes \_\_\_\_\_ No X

Will a pit be used for drill cuttings? Yes \_\_\_\_\_ No X

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes \_\_\_\_\_ No X If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- \_\_\_\_\_ Land Application
- \_\_\_\_\_ Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- \_\_\_\_\_ Reuse (at API Number \_\_\_\_\_ )
- \_\_\_\_\_ Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain No treated pit wastes will be produced)

Received

Will closed loop system be used? N/A

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. no drilling proposed MAY - 6 2014

-If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_

Additives to be used in drilling medium? N/A

Office of Oil and Gas  
WV Dept. of Environmental Protection

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. No cuttings produced during plugging operation

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

-Landfill or offsite name/permit number? \_\_\_\_\_

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Kenneth L. Marcum

Company Official (Typed Name) Kenneth L. Marcum

Company Official Title Regulatory Supervisor

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Constance C. Carden, Notary Public  
McDonald Boro, Washington County  
My Commission Expires Nov. 16, 2017  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Subscribed and sworn before me this 30th day of April, 20 14

Constance C. Carden Notary Public

My commission expires 11/16/2017

Form WW-9

Operator's Well No. Piney Coking Coal A-76

Proposed Revegetation Treatment: Acres Disturbed 2.68 Prevegetation pH 6.33

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)

Mulch Pulp Fiber at 1/2-3/4 Tons/acre

Seed Mixtures

Seed Type	Area I		Seed Type	Area II	
		lbs/acre			lbs/acre
Tall Fescue		40	Tall Fescue		40
Ladino Clover		5	Ladino Clover		5

Attach:  
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: \_\_\_\_\_

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MAY - 6 2014

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WV Dept. of Environmental Protection

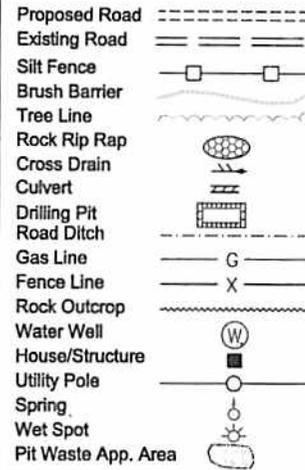
Title: Inspector Date: 5/5/14

Field Reviewed? ( ) Yes ( ) No

**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 WV 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, 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 MEASURES 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 IN ACCORDANCE 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 IN ACCORDANCE 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 IN ACCORDANCE 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
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:**

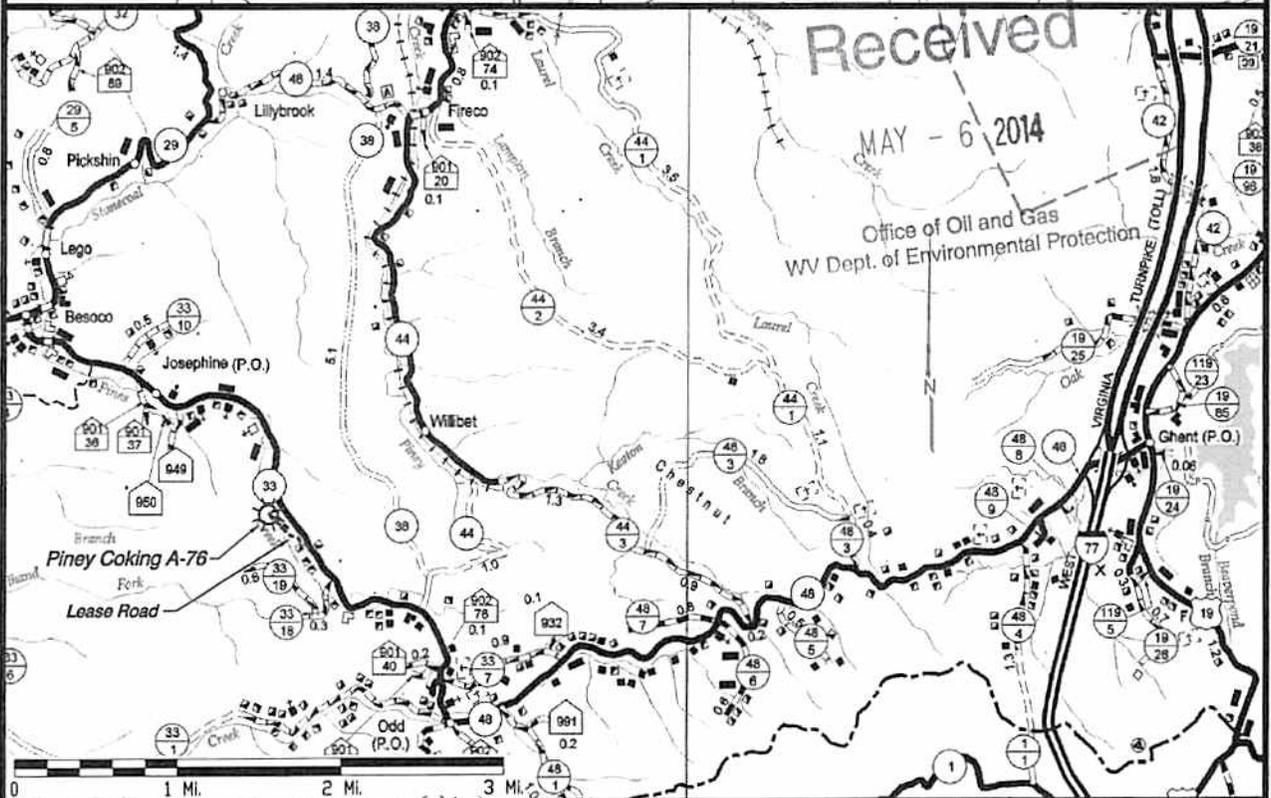
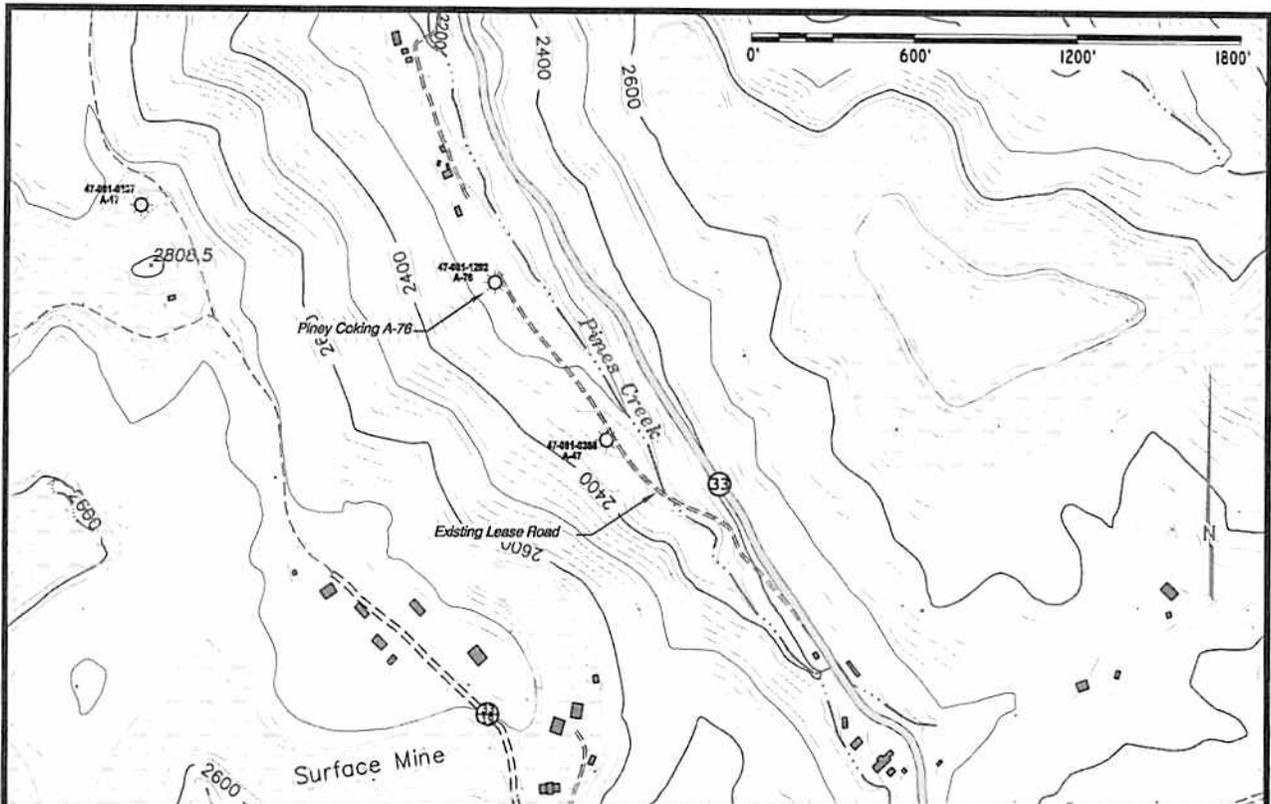
IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO FIELD VERIFY THE SIZE/CONDITION OF ALL UNDERGROUND UTILITIES, SANITARY SEWERS, STORM SEWERS, ETC. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION AND/OR EXCAVATION ACTIVITIES

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

CALL 1-800-245-4848

MAY - 6 2014

*Handwritten signature*



*WJK*

8101292P

**Cabot Oil & Gas Corporation  
Piney Coking A-76**

TOPO SECTION OF:  
United States Department of the Interior  
Geological Survey - Odd, WV 7 1/2 Quad.

**PROPOSED CULVERT INVENTORY  
(For Bid Purposes Only)**

15" (Minimum) Culverts	none proposed
------------------------	---------------

Additional Culverts and/or other drainage structures and sediment control devices may be required by the WVDEP Oil & Gas Inspector. Operator is responsible for coordination with contractor and True Line regarding any changes or additions the State may require.

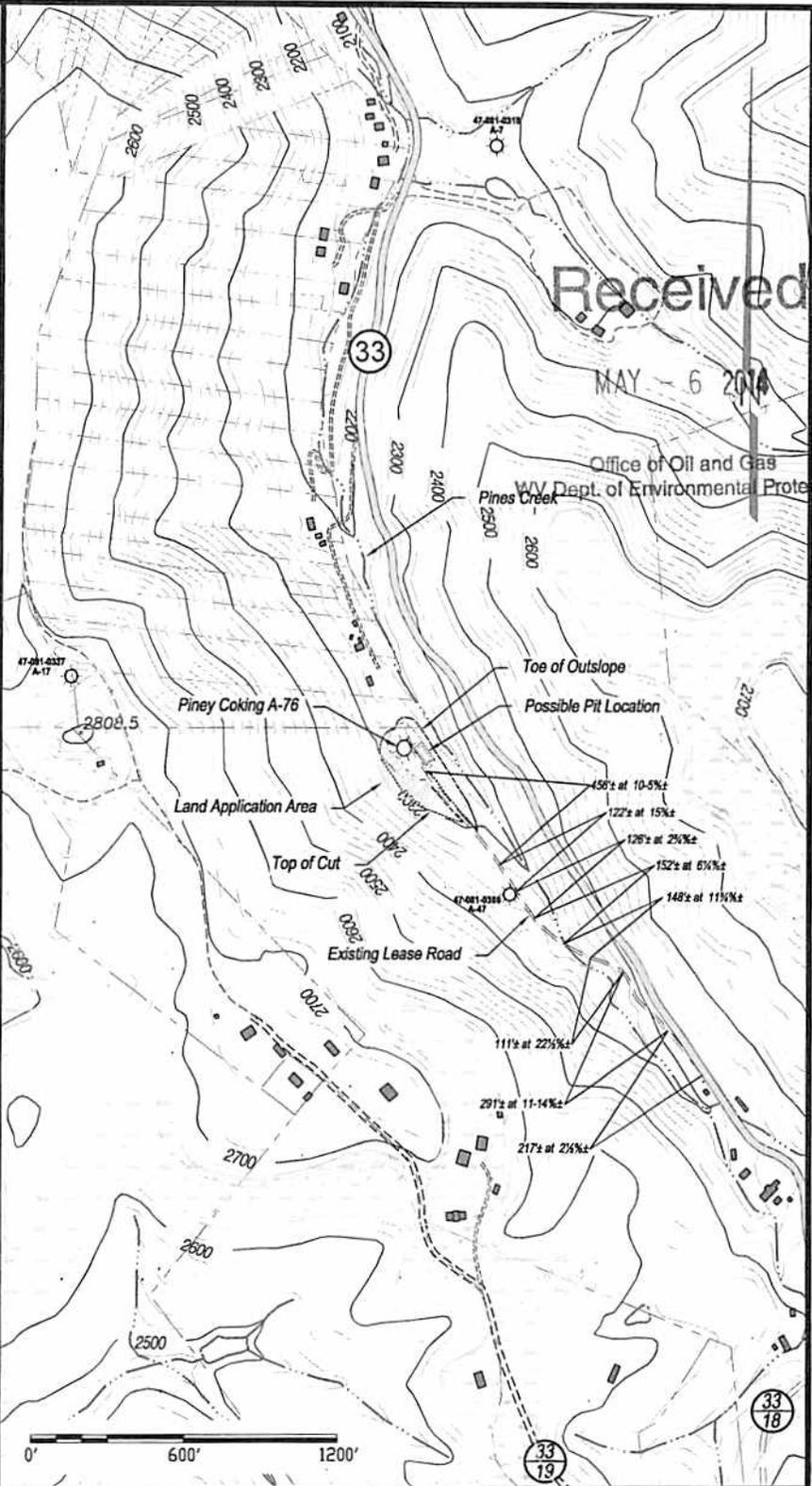
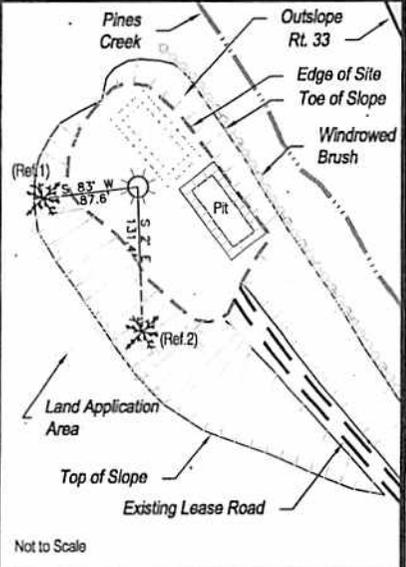
**PROJECTED EARTHEN DISTURBANCE**

Well Location Site	1.56 Acres
Access Road	1.12 Acres
Approximate Total Disturbance	2.68 Acres

**LEGEND**

Proposed Road	---
Existing Road	====
Existing Culvert	▬▬▬
Proposed Culvert (15" Min. unless noted)	▬▬▬
Proposed Stream Crossing	▬▬▬
Cross Drain	▬▬▬
Diversion Ditch	▬▬▬
Silt Fence	○-○-○
Brush Barrier	○-○-○
Tree Line	~ ~ ~
Road Ditch	▬▬▬
Gas Line	— GAS —
Fence Line	○-○-○
Water Well	⊙
House/Structure	■
Spring	⊙
Wet Spot	⊙

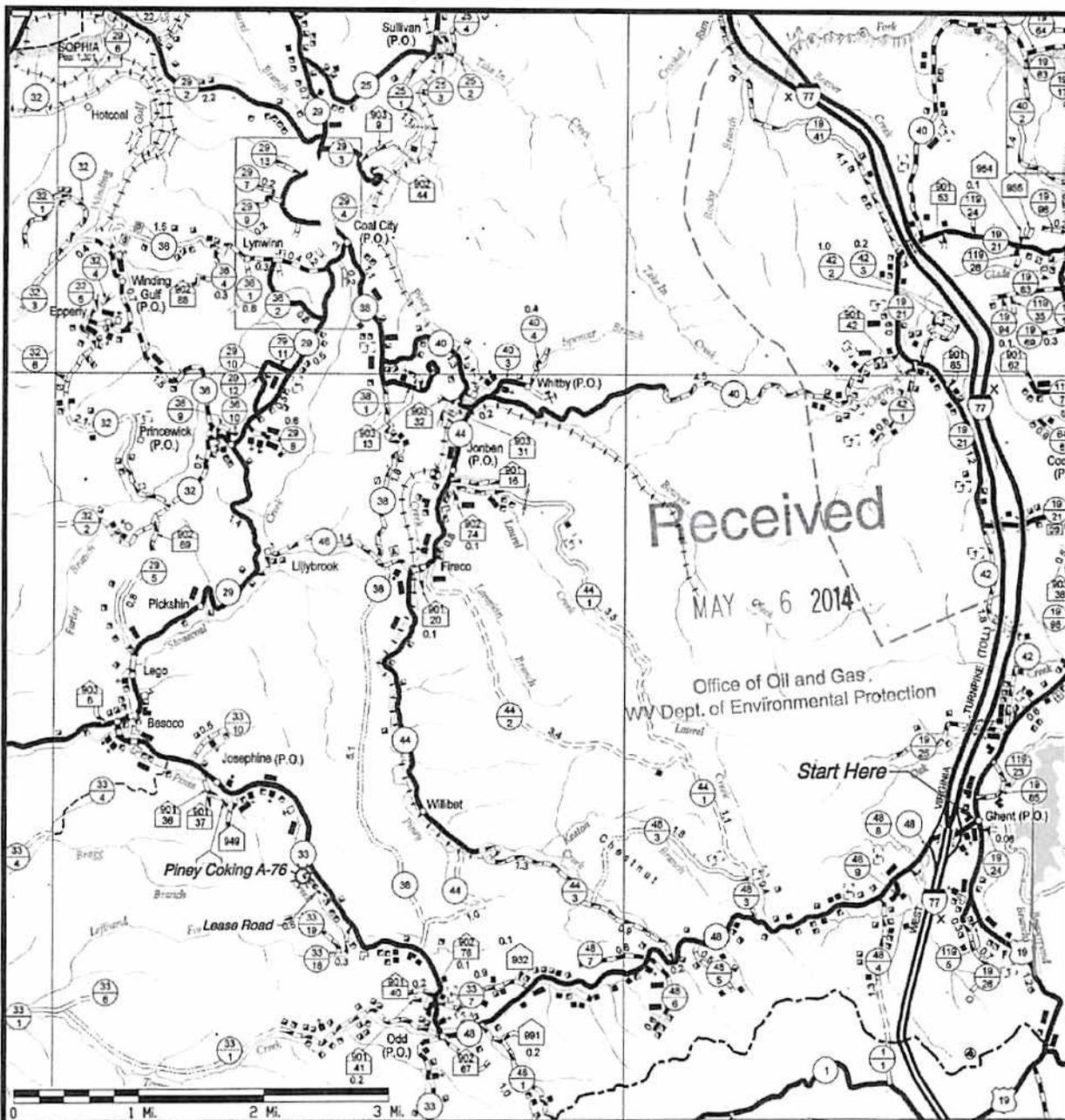
**Detail Sketch for existing Piney Coking A-76**



Received  
MAY - 6 2014

Office of Oil and Gas  
WV Dept. of Environmental Protection

*Handwritten signature*



**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.
2. At Odd, WV observe the post office on the left. Beyond the post office, bear right onto Raleigh County Rt. 33.
3. From the Odd WV Post Office, follow Raleigh County 33 a distance of 1.6 miles to the existing lease road on the left.
4. 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.

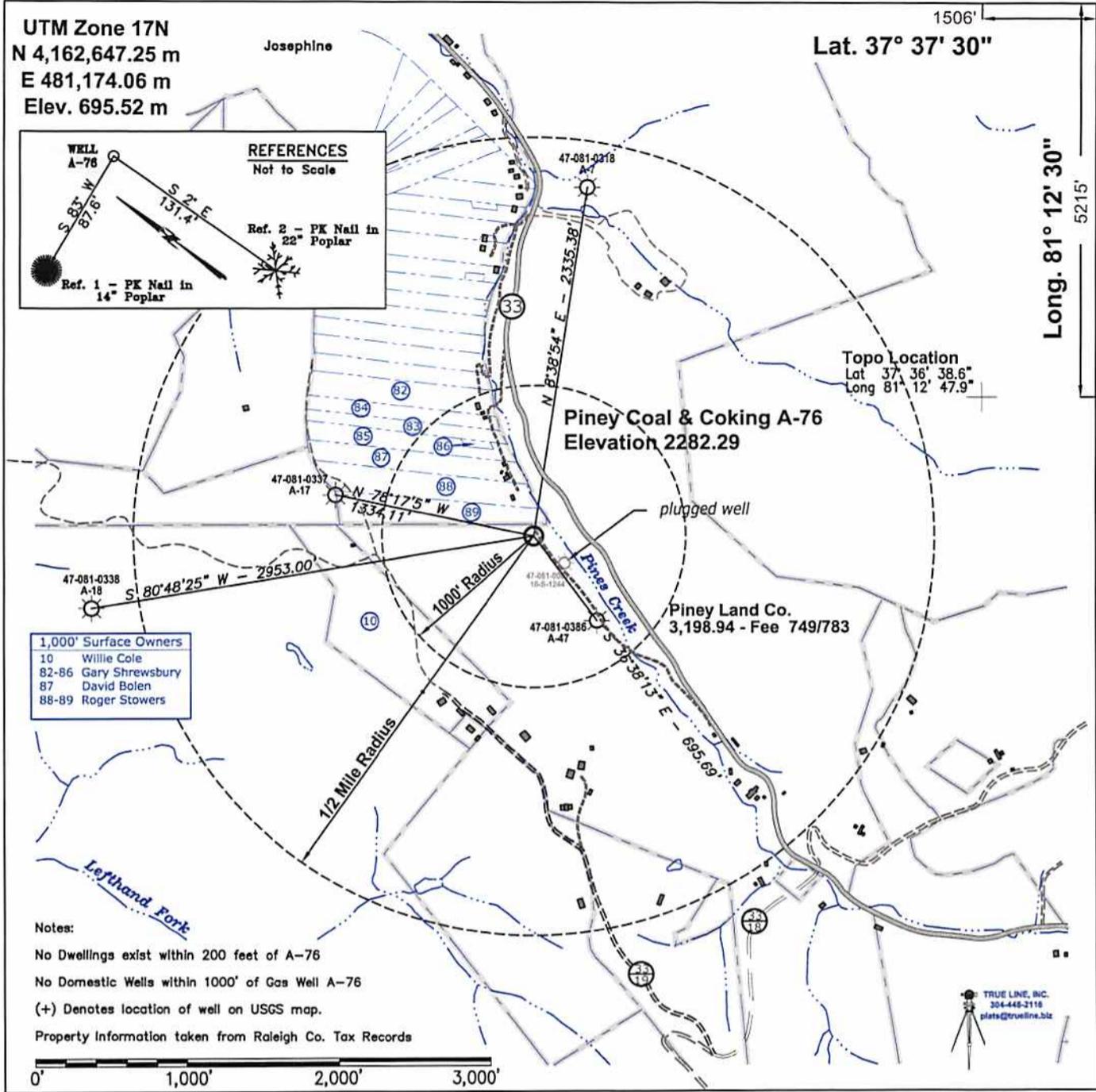
 Cabot Oil & Gas Corporation

**Piney Coking A-76**

February 28, 2014  
Driving Directions

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

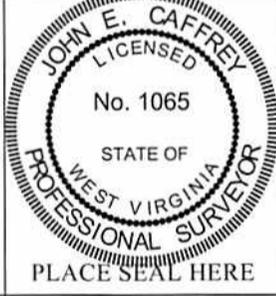
*Handwritten signature or initials in blue ink.*



FILE #: \\filestation1\station4d\work\  
DRAWING #: Cabot2014\WW-6-Piney\_A-76.pdf  
SCALE: see bar scale above  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: survey grade GPS

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *[Signature]*  
R.P.E.: \_\_\_\_\_ L.L.S.: 1065



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304



DATE: February 28, 2014  
OPERATOR'S WELL #: Piney A-76  
API WELL #: 47 081 01292  
STATE COUNTY PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

WATERSHED: Pines Ck. of Stonecoal Ck. of Winding Gulf of Guyandotte River ELEVATION: 2282.29

COUNTY/DISTRICT: 081-Raleigh / 5-Slab Fork QUADRANGLE: 519 - ODD

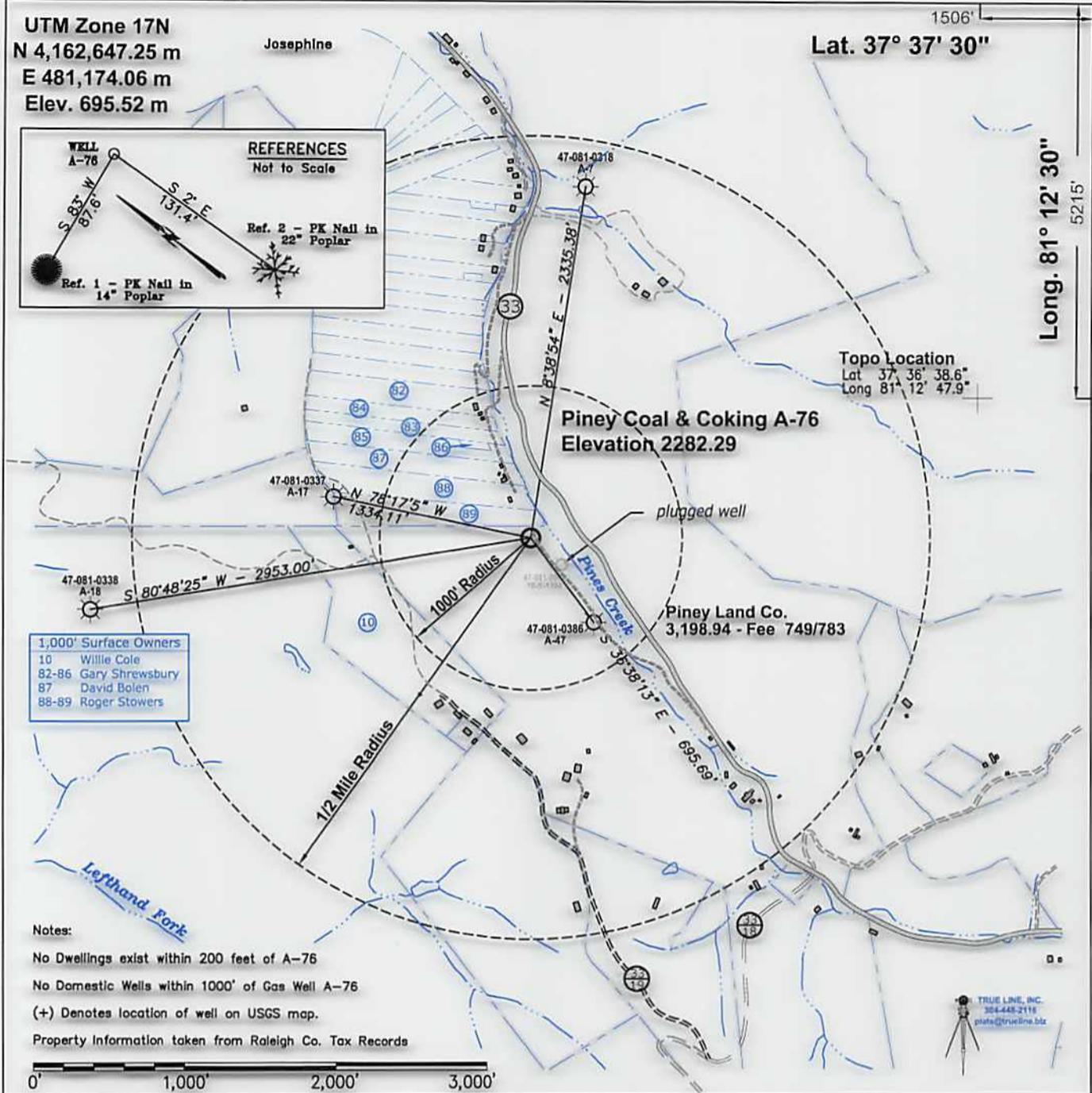
SURFACE OWNER: Piney Land Co. ACREAGE: 6,183.68

OIL & GAS ROYALTY OWNER: Piney Coking Coal Land Co. ACREAGE: 18,478.01

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION: Big Lime ESTIMATED DEPTH: 4472

WELL OPERATOR Cabot Oil & Gas Corporation DESIGNATED AGENT Whitney Johnson  
Address Five Penn Center West, Suite 401 Address P.O. Box 450  
City Pittsburgh State PA Zip Code 15276 City Glasgow State WV Zip Code 25086



FILE #: \\filestation1\station4d\work\  
 DRAWING #: Cabot2014\WW-6-Piney\_A-76.pdf  
 SCALE: see bar scale above  
 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: survey grade GPS

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: *[Signature]*

R.P.E.: \_\_\_\_\_ L.L.S.: 1065



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
**WVDEP**  
**OFFICE OF OIL & GAS**  
 601 57TH STREET  
 CHARLESTON, WV 25304



DATE: February 28, 2014  
 OPERATOR'S WELL #: Piney A-76  
 API WELL #: 47 081 01292  
 STATE COUNTY PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

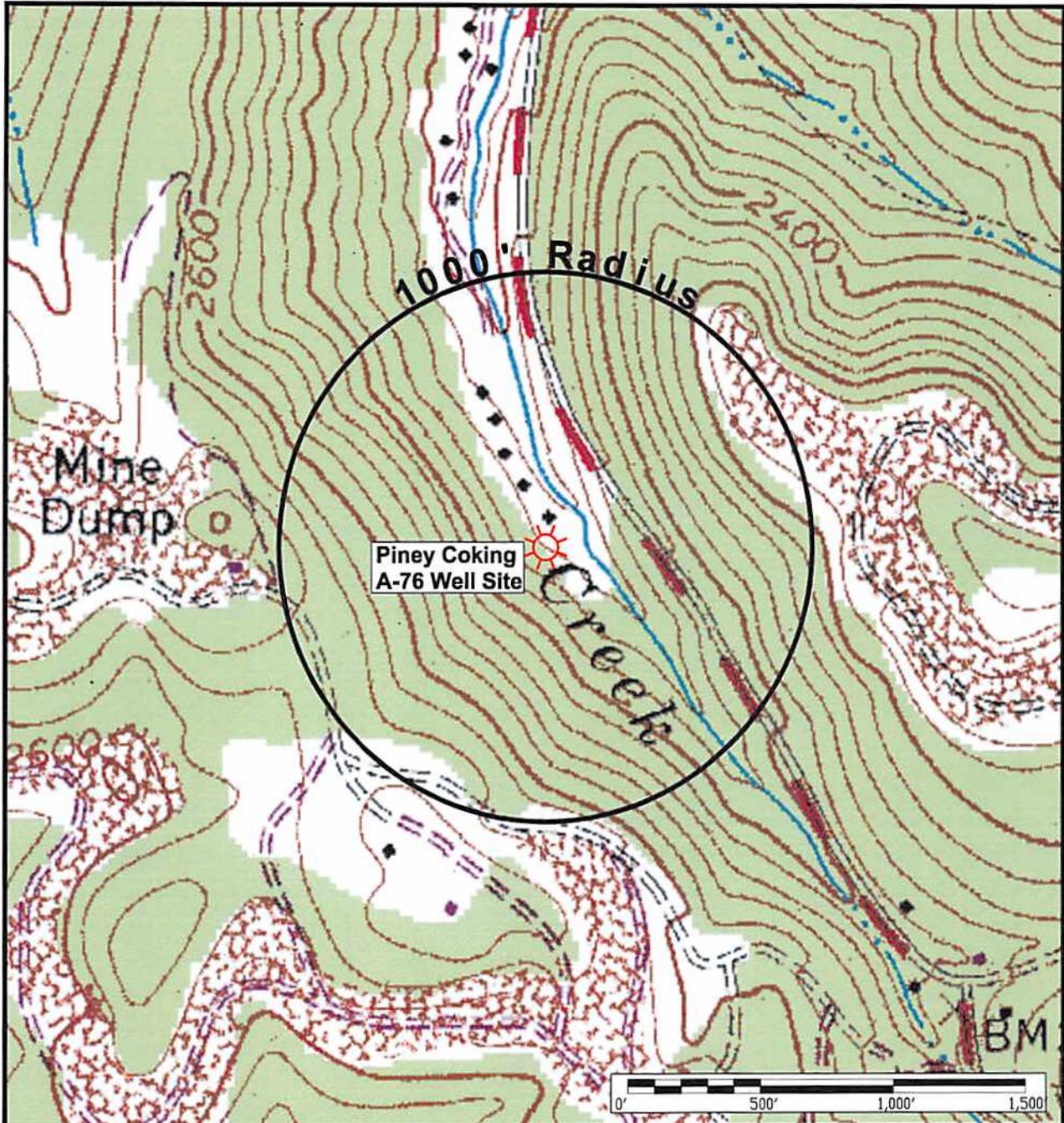
WATERSHED: Pines Ck. of Stonecoal Ck. of Winding Gulf of Guyandotte River ELEVATION: 2282.29  
 COUNTY/DISTRICT: 081-Raleigh / 5-Slab Fork QUADRANGLE: 519 - ODD

SURFACE OWNER: Piney Land Co. ACREAGE: 6,183.68  
 OIL & GAS ROYALTY OWNER: Piney Coking Coal Land Co. ACREAGE: 18,478.01

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
 CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION: Big Lime ESTIMATED DEPTH: 4472

WELL OPERATOR Cabot Oil & Gas Corporation DESIGNATED AGENT Whitney Johnson  
 Address Five Penn Center West, Suite 401 Address P.O. Box 450  
 City Pittsburgh State PA Zip Code 15276 City Glasgow State WV Zip Code 25086



### Odd, WV 7 1/2' 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. 1000' residents are served by public water supplies.

**Legend:**

- Water Well 
- Spring 
- Wet Spot 
- House/Structure 



Cabot Oil & Gas Corporation

### Piney Coking A-76

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

MAY 05 2014

8101292f



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:

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



North Region  
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,

A handwritten signature in blue ink, appearing to read 'Kenneth L. Marcum'.

Kenneth L. Marcum  
Regulatory Supervisor

RECEIVED  
Office of Oil and Gas  
MAY 06 2014  
WV Department of  
Environmental Protection