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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

October 19, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-8101425, 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-80

Farm Name: PINEY LAND COMPANY

**API Well Number: 47-8101425**

**Permit Type: Plugging**

Date Issued: 10/19/2015

**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

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 September 16, 2015  
2) Operator's  
Well No. Piney Coking A-80  
3) API Well No. 47-081 - 01425

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 2,988.45' Watershed Keaton Branch of Piney Creek  
District Shady Springs County Raleigh Quadrangle Odd

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, Suite 1500  
Pittsburgh, PA 15275 Charleston, WV 25301

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Gary Kennedy Name Contractor Services, Inc.  
Address P.O. Box 268 Address 929 Charleston 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

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Office of Oil and Gas

SEP 22 2015

WV Department 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 9/21/15

2015-09-22  
8124257

# PINEY COKING COAL A-80

API # 47 – 081 – 01425  
PLUGGING PROCEDURE

## Current Configuration

LTD @ 4775' KB

13-3/8" conductor @ 40' KB, not cemented

9-5/8" - 26# LS casing @ 310' KB, cemented & grouted to surface

7" - 17# LS casing @ 1501' KB, cemented to surface

4 1/2" - 10.5# - I-60 casing @ 4743' KB w/ TOC @ 3240'

2-3/8" - 4.6# EUE tubing @ 4204' KB

Weir perfs: 4248' - 4238'

Big Lime formation: 3182' - 3815'

Middle Maxton formation: 2702' - 2772'

Upper Maxton formation: 2326' - 2408'

Workable Coal @ 245' - 247'

Open mine @ 260' - 265'

No water reported

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## 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. MIRU service rig and blow down well.
4. Lay 2" line from wellhead to pit/tank and stake down securely. Vent 4-1/2" x 7" annulus.
5. Unpack wellhead and ensure tubing is free and can be pulled.
6. Run rig tools to determine well TD and note any fluid level.
7. Lower tubing with two joints of tubing.
8. MIRU Cementing Company.
9. Pump 10 bbls 6% gel followed by 20 sacks of Class A cement for cement plug 1 from ±4272 to 4008'.
10. Displace with 15 1/2 bbls of 6% Gel.
11. POOH with tubing and let cement plug set for a minimum of eight hours.
12. Run freepoint and cut 4 1/2" casing where free. Estimate ±3230'.
13. Pick up casing 1 jt and pump 40 sacks of Class A cement for cement plug 2 from ±3200' to ±3000'.
14. Displace with 47 1/2 bbls of 6% Gel.
15. Pull casing up to 2800' and pump 40 sacks of Class A cement for cement plug 3 from 2800' to 2600'.
16. Displace with 41 bbls of 6% Gel.
17. Pull casing up to 2400' and pump 40 sacks of Class A cement for cement plug 4 from 2400' to 2200'.
18. Displace with 35 bbls of 6% Gel.
19. Pull casing up to 1550' and pump 25 sacks of Class A cement for cement plug 5 from 1550' to 1450'.
20. Displace with 23 bbls of 6% Gel.
21. Pull casing up to 305' and pump 60 sacks of expanding cement for cement plug 6 from 305' to surface.
22. TOOH with casing and lay down.
23. RDMO Cement company.
24. Place monument as required by law on top of well bore.
25. Reclaim well site.



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WV Department of  
Environmental Protection

WR-35

Date January 15, 2009  
API # 47- 081 - 01425

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

Farm Name: Piney Land Company Operator Well No.: Piney Coking A-80

LOCATION: Elevation: 2985' Quadrangle: Odd  
District: Shady Spring County: Raleigh  
Latitude: 6860' feet South of 37° DEG. 37' MIN. 30" SEC.  
Longitude: 8500' feet West of 81° DEG. 07' MIN. 30" SEC.

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

Agent: Thomas S. Liberatore  
Inspector: Terry Urban  
Permit Issued: 2/13/2007  
Well Work Commenced: June 25, 2007  
Well Work Completed: August 7, 2007  
Verbal Plugging: \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_  
Total Depth (feet) 4775'  
Fresh Water Depths (ft) None Report  
Salt Water Depths (ft) None Report  
Is coal being mined in area (Y / N) ? Yes  
Coal Depths (ft) 260'-265' (OPEN)

Casing & Tubing Size	Used in Drilling	Left In Well	Cement Fill Up Cu. Ft.
13-3/8"	40'	40'	48
9-5/8"	310'	310'	177
7"	1501'	1501'	317
4-1/2"		4743'	250
2-3/8"		4204'	

OPEN FLOW DATA

Producing Formation WEIR Pay Zone \_\_\_\_\_  
Depth (ft) 4228'-4238'  
Gas: Initial Open Flow TSTM MCF/d Oil: Initial Open Flow 0 Bbl/d  
Final Open Flow 150 MCF/d Final Open Flow 0 Bbl/d  
Time of open flow between initial and final tests 8 Hours  
Static rock pressure 160 psig surface pressure after 16 Hours

Second Producing Formation \_\_\_\_\_ Pay Zone \_\_\_\_\_  
Depth (ft) \_\_\_\_\_  
Gas: Initial Open Flow \_\_\_\_\_ MCF/d Oil: Initial Open Flow \_\_\_\_\_ Bbl/d  
Final Open Flow \_\_\_\_\_ MCF/d Final Open Flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock pressure \_\_\_\_\_ psig surface pressure after \_\_\_\_\_ Hours

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

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Office of Oil & Gas

JAN 16 2009  
WV Department of  
Environmental Protection

For: CABOT OIL & GAS CORPORATION  
By: W. J. [Signature] Drilling Superintendent  
Date: 1/16/09

JAN 23 2009

RAL  
1425

STAGE	PERFS	ACID 15% HCl	FOAM	SAND (lbs)	NITROGEN (scf)	BDP	ATP	MTP	ISIP
1-WEIR	4228-4238(40)	500	75Q	80,340	1,100,000	3411	2580	2711	2000

FORMATION

TOP

BOTTOM

REMARKS

SILT/SHALE	SURFACE	1633	
RAVENCLIFF	1633	1676	
SILT/SHALE	1676	1684	
AVIS	1684	1724	
SILT/SHALE	1724	2325	
MAXTON	2325	2409	
SILT/SHALE	2409	2870	
LITTLE LIME	2870	2972	
PENCIL CAVE	2972	3194	
BIG LIME	3194	3801	
POCONO	3801	4050	
SILT/SHALE	4050	4243	
WEIR	4243	4321	
SHALE	4321	4775	

TD

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SEP 22 2015  
WV Department of  
Environmental Protection

81014257

WW-4A  
Revised 6-07

1) Date: September 16, 2015  
2) Operator's Well Number  
Piney Coking A-80  
3) API Well No.: 47 - 081 - 01425

**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</u>	Name <u>See Attached Sheet</u>
Address <u>c/o E.M. Payne, III, 130 Main Street</u>	Address _____
<u>Beckley, WV 25801</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Piney Land Company</u>
_____	Address <u>c/o E.M. Payne, III, 130 Main Street</u>
(c) Name _____	<u>Beckley, WV 25801</u>
Address _____	Name _____
_____	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>Nimtz, WV 25978</u>	Address <u>110 Sprint Drive</u>
Telephone <u>304-382-8402</u>	<u>Bountville, TN 37617</u>

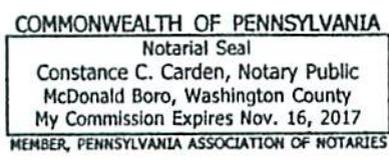
**TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:**

- (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  
 Its: Regulatory Supervisor  
 Address 2000 Park Lane, Suite 300  
Pittsburgh, PA 15275  
 Telephone 412-249-3850



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Office of Oil and Gas  
SEP 17 2015  
Notary Public

Subscribed and sworn before me this 16th day of September  
Constance C. Carden  
 My Commission Expires November 16, 2017

**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).

8101425P

COAL OPERATORS  
PINEY COKING A-80  
47-081-01425

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

Kentucky Fuel Corporation ✓  
818 N. Eisenhower Dr.  
Beckley, WV 25801

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SEP 17 2015

WV Department of  
Environmental Protection

810425P

WW-9  
(2/15)

API Number 47 - 081 - 01425  
Operator's Well No. Piney Coking A-80

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 08145

Watershed (HUC 10) Keaton Branch of Piney Creek Quadrangle Odd

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

Will a pit be used? Yes  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:

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

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, 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. 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? \_\_\_\_\_

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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

Subscribed and sworn before me this 16th day of September, 20 15  
Constance C. Carden

My commission expires 11/16/2017

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

**Cabot Oil & Gas Corporation**

Proposed Revegetation Treatment: Acres Disturbed 2.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20/20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch Pulp Fiber at 1000 to 1500 lbs. Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
(Grain Rye - 100) (Red Clover - 5) (Fescue - 40)	
(Annual Rye - 20) (White Clover - 5)	
(Perennial Rye - 10) (Alta Sweet Clover - 5)	
(Yellow Clover - 5) (Birdsfoot Trefoil - 10)	

Seed Type	lbs/acre
(Grain Rye - 100) (Red Clover - 5) (Fescue - 40)	
(Annual Rye - 20) (White Clover - 5)	
(Perennial Rye - 10) (Alta Sweet Clover - 5)	
(Yellow Clover - 5) (Birdsfoot Trefoil - 10)	

Attach:  
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

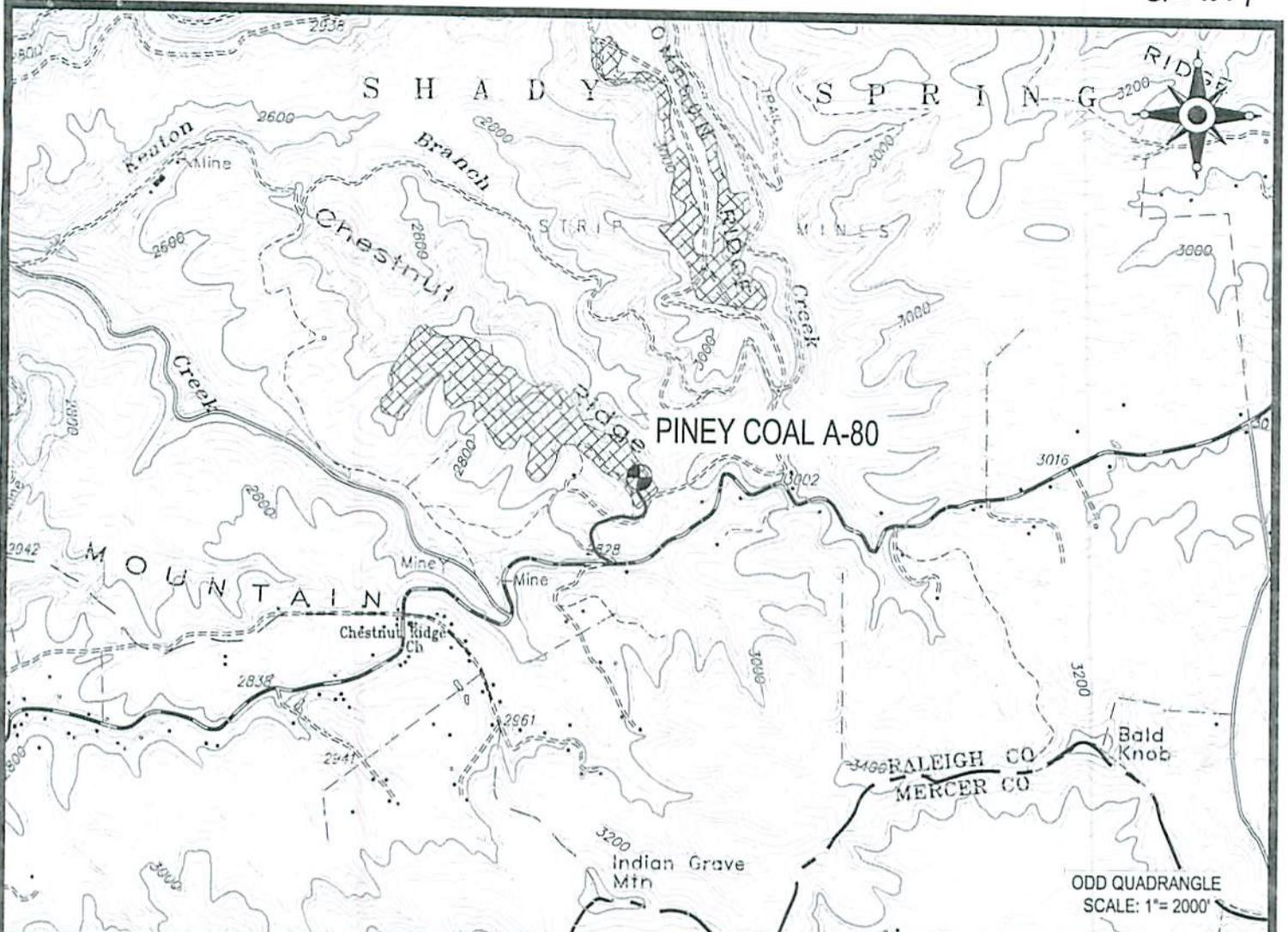
Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Jimmy Kennedy*

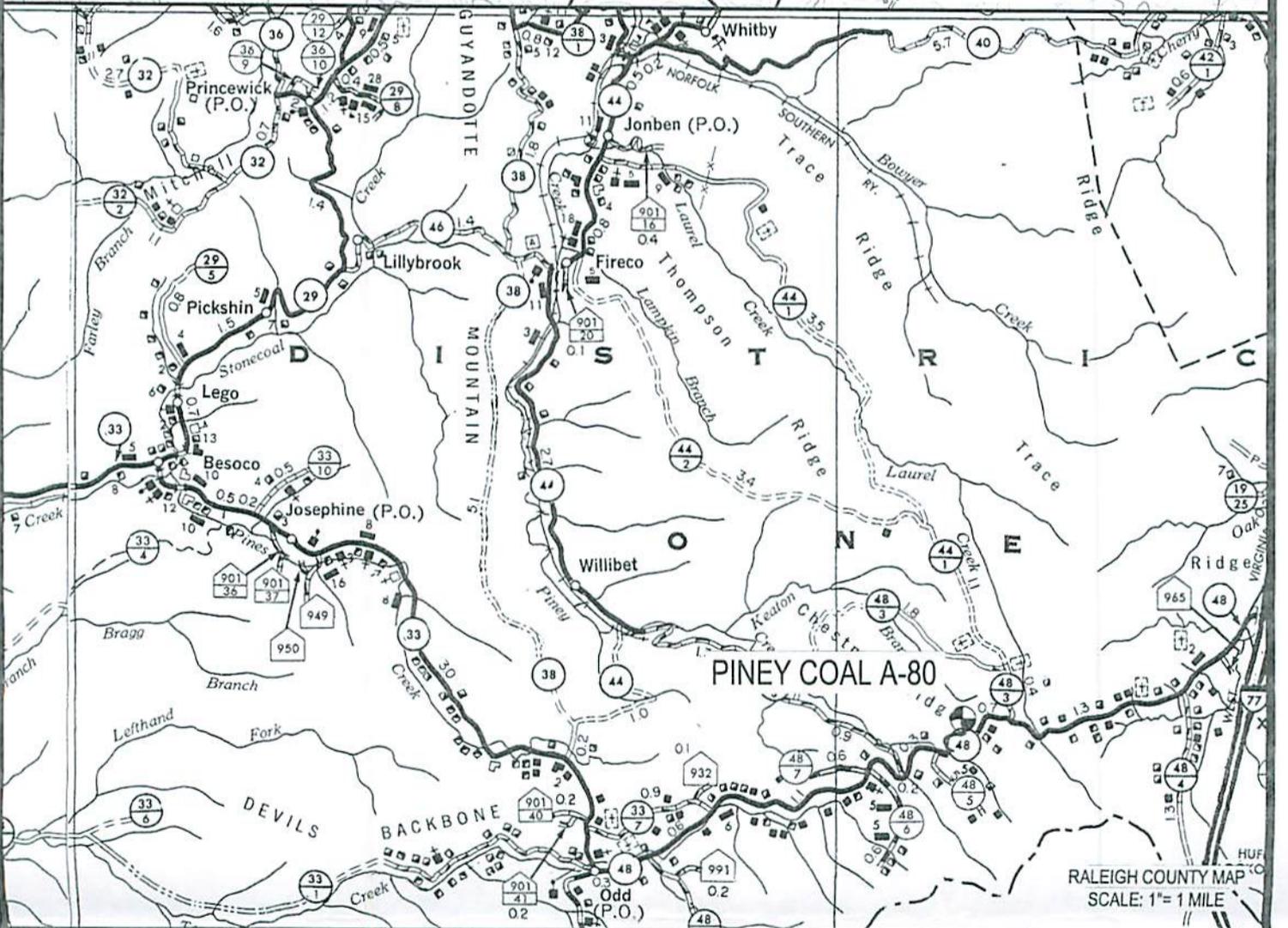
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: *Inspector* Date: *9/21/15*

Field Reviewed? ( ) Yes ( ) No



ODD QUADRANGLE  
SCALE: 1" = 2000'



RALEIGH COUNTY MAP  
SCALE: 1" = 1 MILE

 Cabot Oil & Gas Corporation

**PINEY COAL A-80**  
LOCATION MAP

*SK*



**CUNNINGHAM**  
LAND SURVEYING & MAPPING SERVICES, LLC

• 5213 STEPHEN WAY •  
• CROSS LANES, WEST VIRGINIA 25313 •  
• VOICE (304) 561-4129 • FAX (304) 776-0703 •  
• E-MAIL ADDRESS • DKCUNNINGHAM@SUDDENLINK.NET •

LOCATED ON THE WATERS OF KEATON BRANCH  
OF PINEY CREEK  
SHADY SPRING DISTRICT, RALEIGH COUNTY, WV  
ODD QUADRANGLE

PROJECT NO. CABOT	DWG. NO. PINEY COAL A-80 LOC
DATE: 04-28-14	SCALE: AS NOTED
CHK'D BY: D.K.C.	
DRAWN BY: G. PERKINS   FILE: C:\PROJECT FOLDER\CABOT	

**GENERAL NOTES:**

THIS DRAWING REPRESENTS 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 UNFORESEEN 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 GUIDELINES AND REQUIREMENTS OF WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL MANUAL.

ALL CULVERTS SHOWN ON THIS DRAWING ARE PROPOSED AND WILL BE A MINIMUM OF 15" IN DIAMETER UNLESS OTHERWISE NOTED.

DITCH LINES AND CULVERTS WILL BE INSTALLED WHENEVER PRACTICAL. HOWEVER PORTIONS OF THE EXISTING/PROPOSED ROADS WHICH ARE LOCATED IN SOLID ROCK SHALL NOT REQUIRE DITCHES OR CROSS DRAINS, UNLESS OTHERWISE WARRANTED BY FIELD CIRCUMSTANCES.

SUPPLEMENTAL DRAINAGE AND/OR SEDIMENT CONTROL STRUCTURES MEASURES IN ADDITION TO THOSE SHOWN ON THE ATTACHED DRAWINGS WILL BE INSTALLED WHEN AND WHERE DEEMED NECESSARY. SUCH ADDITIONAL MEASURES MAY CONSIST OF EITHER STRAW BALES, SILT FENCES OR OTHER MEASURES OUTLINED IN THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

SEDIMENT BASINS (TRAPS) WILL BE CONSTRUCTED AT ALL CULVERTS AND CROSS DRAINS INLETS AS REQUIRED IN THE WEST VIRGINIA DEPARTMENT OF OIL AND 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.

A SEDIMENT BARRIERS OF EITHER BRUSH, STRAW BALES, FILTER FENCE, ETC. WILL BE INSTALLED AND MAINTAINED BELOW THE OUT FALL OF ALL PROPOSED CULVERTS AND AT ALL OTHER STORM WATER DRAINAGE POINTS FROM EITHER THE ROADWAY OR THE LOCATION.

ALL NECESSARY TIMBER OR BRUSH WILL BE REMOVED FROM ROUTE OF THE ROADWAY AND LOCATION BY CLEANING AND GRUBBING ACTIVITIES. ANY SALVAGEABLE TIMBER WILL BE CUT AND STACKED TO THE SIDE OF THE ROADWAY OR REMOVED TO A STOCKPILE AREA. THE REMAINING TIMBER OR BRUSH WILL BE CUTUP AND WIND ROWED BELOW THE OUTSLOPE OF THE CONSTRUCTION AREAS TO BE UTILIZED AS A SEDIMENT BARRIER.

SEPARATE PERMITS WILL BE OBTAINED FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION FOR ALL POINTS OF INGRESS AND EGRESS FROM COUNTY AND STATE ROADS. THESE INGRESS AND EGRESS POINTS WILL BE MAINTAINED IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS. A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 8" OF CRUSHED STONE WILL BE CONSTRUCTED FOR A MINIMUM DISTANCE OF 50' FROM THE INGRESS AND EGRESS POINTS OF ALL PUBLIC ROADWAYS IN ACCORDANCE WITH CURRENT WEST VIRGINIA DEPARTMENT OF TRANSPORTATION REGULATIONS.

ALL CULVERTS SHOWN ON THE ATTACHED DRAWINGS ARE TO BE CONSIDERED PERMANENT AND WILL REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE. A STABILIZED OUTLET CONTROL DEVICE SUCH AS RIP RAP, NATURAL STONE, BRUSH, ETC. WILL BE INSTALLED BELOW THE OUT FALL OF ANY ROADWAY CULVERT(S) WHICH ARE NOT LOCATED IN A STREAM OR CREEK.

PERMANENT CROSS DRAINS OR WATER BARS WILL BE INSTALLED AS AN INTEGRAL PART OF THE RECLAMATION PROCESS AND SHALL BE SPACED IN ACCORDANCE WITH AS-BUILT ROADWAY SLOPES AND TABLE 11-4 OF THE WEST VIRGINIA DEPARTMENT OF OIL AND GAS EROSION AND SEDIMENT CONTROL FIELD MANUAL.

TEMPORARY SEEDING AND MULCHING WILL BE UTILIZED TO PROVIDE A VEGETATIVE COVER ON ALL DISTURBED AREAS I.E. ROADWAYS, LOCATION, ROAD/LOCATION SLOPES AND ANY OTHER AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES.

THE LOCATION OF DRILLING PIT(S) MAY BE ADJUSTED TO THE MOST ENVIRONMENTAL SAFE SIDE TO MEET THE REQUIREMENTS OF THE WVDEP.

**CONTRACTORS NOTE:**

IT IS THE RESPONSIBILITY OF THE CONSTRUCTION CONTRACTOR TO FIELD VERIFY THE LOCATION AND CONDITION OF ALL UNDERGROUND UTILITIES, SANITARY SEWERS, STORM SEWERS, ETC. PRIOR TO THE COMMENCEMENT OF ANY/OR CONSTRUCTION ACTIVITIES. DIG WITH C.A.R.E. CALL MISS UTILITY 1-800-245-4848.

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SEP 22 2015  
WV Department of  
Environmental Protection

ROAD GRADE (%)	DISTANCE (FT)
1	400
2	250
5	135
10	80
15	60
20	45

ROAD GRADE (%)	DISTANCE (FT)
2-5	500-300
6-10	300-200
11-15	200-100
16-20	100



1-800-245-4848

**DRAWING LEGEND**

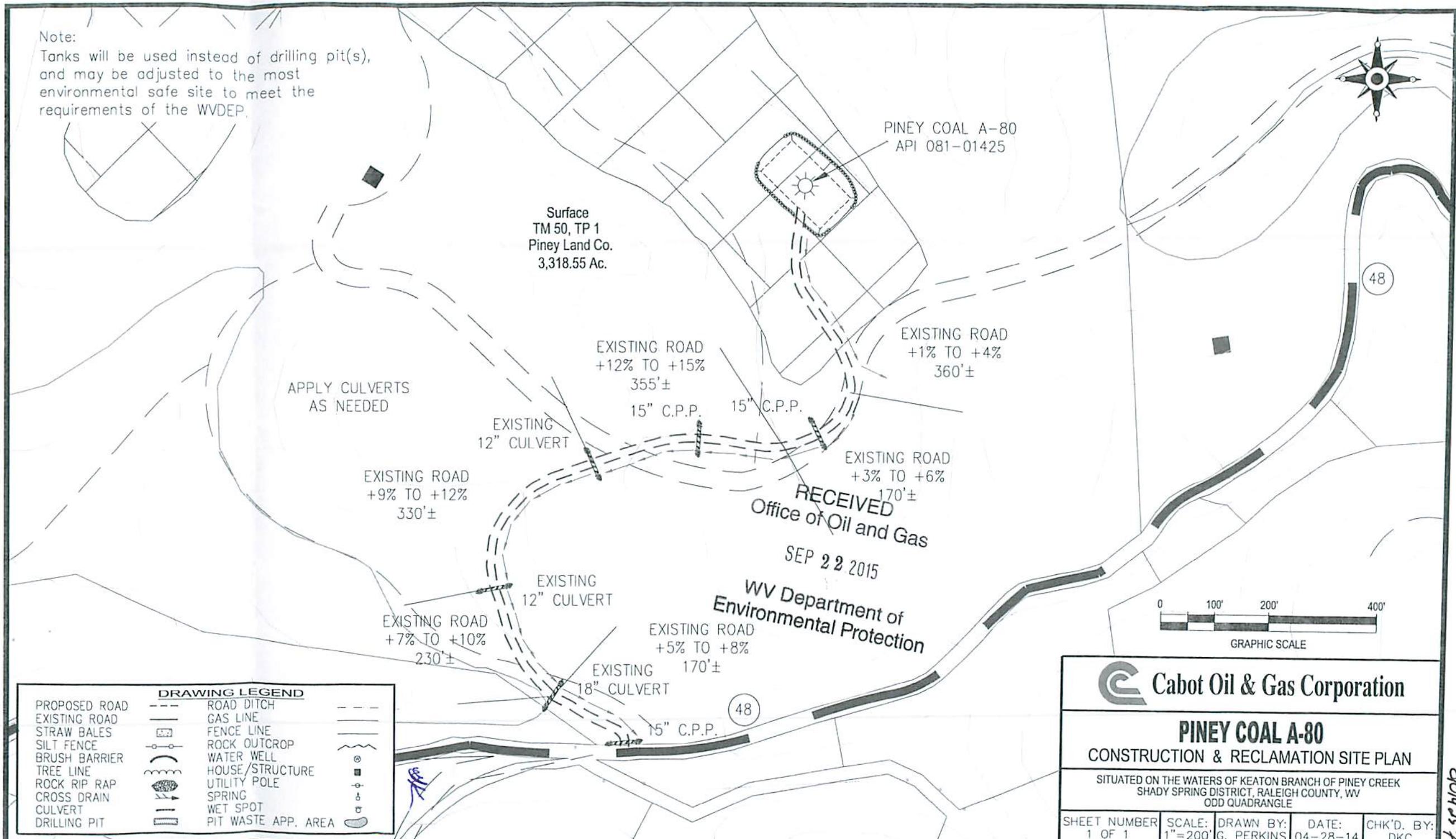
- PROPOSED ROAD -----
- EXISTING ROAD - - - - -
- STRAW BALES [Symbol]
- SILT FENCE [Symbol]
- BRUSH BARRIER [Symbol]
- TREE LINE [Symbol]
- ROCK RIP RAP [Symbol]
- CROSS DRAIN [Symbol]
- CULVERT [Symbol]
- DRILLING PIT [Symbol]
- ROAD DITCH [Symbol]
- GAS LINE [Symbol]
- FENCE LINE [Symbol]
- ROCK OUTCROP [Symbol]
- WATER WELL [Symbol]
- HOUSE/STRUCTURE [Symbol]
- UTILITY POLE [Symbol]
- SPRING [Symbol]
- WET SPOT [Symbol]
- PIT WASTE APP. AREA [Symbol]

**DRIVING DIRECTIONS FOR PINEY COAL A-80**

- 1.) FROM PINEVILLE, WV DRIVE EAST ON STATE ROUTE 10 FOR 11.7 MILES± TO STATE ROUTE 16.
- 2.) CONTINUE STRAIGHT ONTO STATE ROUTE 16 AND GO FOR 10.7 MILES± TO SECONDARY ROUTE 33.
- 3.) TURN RIGHT ONTO SECONDARY ROUTE 33 AND GO FOR 10.4 MILES± TO SECONDARY ROUTE 48.
- 4.) TURN LEFT ONTO SECONDARY ROUTE 48 AND GO FOR 2.7 MILES± TO THE BEGINNING OF THE EXISTING ACCESS ROAD, LOCATED ON THE LEFT-HAND SIDE OF THE ROAD.
- 5.) FROM THE AFOREMENTIONED SITE, FOLLOW THE EXISTING ROAD FOR APPROXIMATELY 0.3 MILE± TO THE EXISTING WELL SITE IN THE FIELD AS SHOWN ON THE "CONSTRUCTION AND RECLAMATION PLAN".

**Note:**

Tanks will be used instead of drilling pit(s), and may be adjusted to the most environmental safe site to meet the requirements of the WVDEP.



DRAWING LEGEND	
PROPOSED ROAD	ROAD DITCH
EXISTING ROAD	GAS LINE
STRAW BALES	FENCE LINE
SILT FENCE	ROCK OUTCROP
BRUSH BARRIER	WATER WELL
TREE LINE	HOUSE/STRUCTURE
ROCK RIP RAP	UTILITY POLE
CROSS DRAIN	SPRING
CULVERT	WET SPOT
DRILLING PIT	PIT WASTE APP. AREA

**Cabot Oil & Gas Corporation**

**PINEY COAL A-80**  
CONSTRUCTION & RECLAMATION SITE PLAN

SITUATED ON THE WATERS OF KEATON BRANCH OF PINEY CREEK  
SHADY SPRING DISTRICT, RALEIGH COUNTY, WV  
ODD QUADRANGLE

SHEET NUMBER 1 OF 1	SCALE: 1"=200'	DRAWN BY: G. PERKINS	DATE: 04-28-14	CHK'D. BY: DKC
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2501018

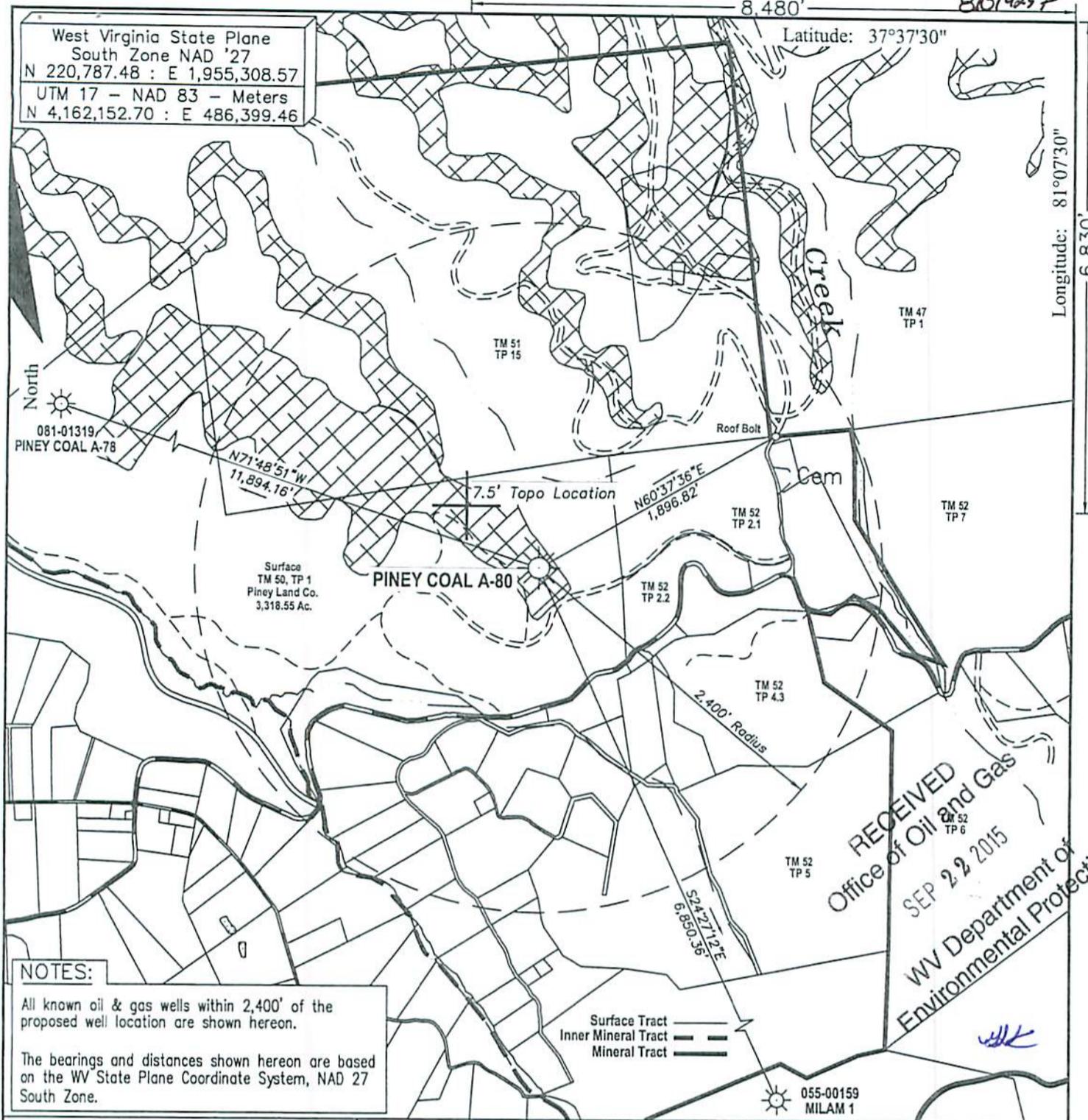
81614257

8,480'

West Virginia State Plane  
 South Zone NAD '27  
 N 220,787.48 : E 1,955,308.57  
 UTM 17 - NAD 83 - Meters  
 N 4,162,152.70 : E 486,399.46

Latitude: 37°37'30"

Longitude: 81°07'30"



NOTES:

All known oil & gas wells within 2,400' of the proposed well location are shown hereon.

The bearings and distances shown hereon are based on the WV State Plane Coordinate System, NAD 27 South Zone.

RECEIVED  
 Office of Oil and Gas  
 SEP 22 2015  
 WV Department of Environmental Protection

FILE #:  
 DRAWING #: Piney Coal A-80 ww6  
 SCALE: 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY: 1 : 12,729  
 PROVEN SOURCE OF ELEVATION: Global Positioning System (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 ENVIROMENTAL PROTECTION.

Signed: Don K Cunningham  
 R.P.E.: \_\_\_\_\_ L.L.S.: 701

PLACE SEAL HERE

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

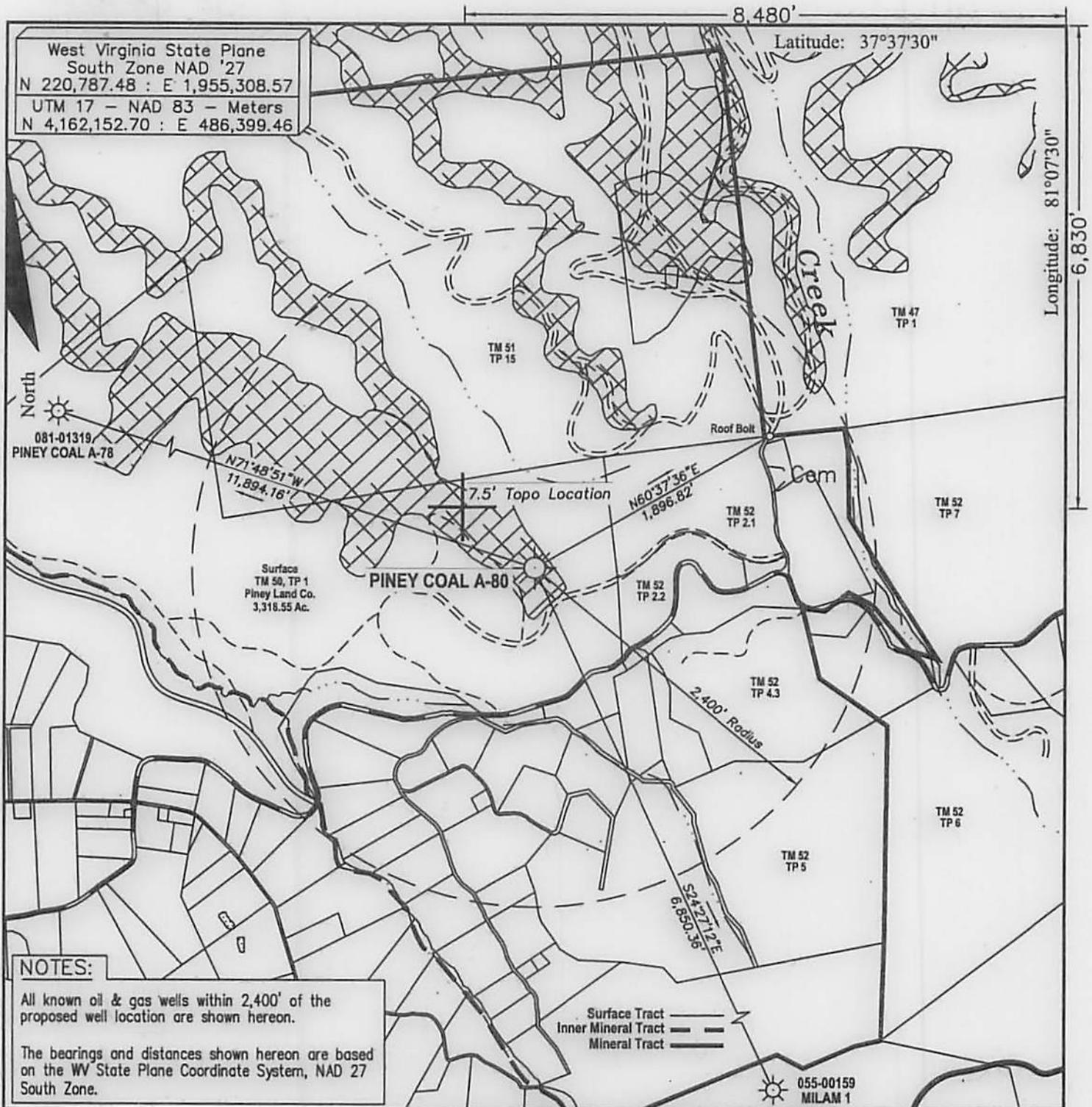


DATE: April 23, 2014  
 OPERATOR'S WELL #: Piney Coal A-80  
 API WELL #: 47 081 01425 P  
 STATE COUNTY PERMIT

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

WATERSHED: Keaton Branch of Piney Creek ELEVATION: 2,988.45'  
 COUNTY/DISTRICT: Raleigh / Shady Springs QUADRANGLE: Odd  
 SURFACE OWNER: Piney Land Co. ACREAGE: 3,318.55  
 OIL & GAS ROYALTY OWNER: Piney Land Co. ACREAGE: 18,091.20  
 LEASE #: 47-0487 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: \_\_\_\_\_ ESTIMATED DEPTH: \_\_\_\_\_  
 WELL OPERATOR Cabot Oil & Gas Corp. 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 #:

DRAWING #: Piney Coal A-80 ww6

SCALE: 1" = 1000'

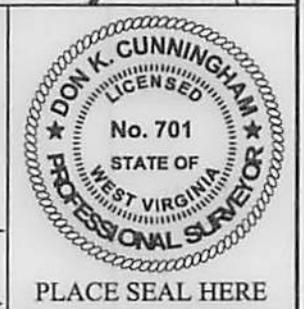
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OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304

DATE: April 23, 2014

OPERATOR'S WELL #: Piney Coal A-80

API WELL #: 47 081 01425 P  
STATE COUNTY PERMIT

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PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION: \_\_\_\_\_ ESTIMATED DEPTH: \_\_\_\_\_

WELL OPERATOR Cabot Oil & Gas Corp. 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