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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Tuesday, October 16, 2018  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

K. PETROLEUM, INC.  
81 MILL STREET, SUITE 205

GAHANNA, OH 432306510

Re: Permit approval for PLC 25  
47-109-01458-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin  
Chief

Operator's Well Number: PLC 25  
Farm Name: POCAHONTAS LAND CORP.  
U.S. WELL NUMBER: 47-109-01458-00-00  
Vertical Plugging  
Date Issued: 10/16/2018

Promoting a healthy environment.

# PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

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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.

47-109-01458 P

WW-4B  
Rev. 2/01

1) Date JULY 19TH, 2018  
2) Operator's Well No. P.L.C 25  
3) API Well No. 47-109 - 01458

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 XX / Liquid injection \_\_\_ / Waste disposal \_\_\_ /  
(If "Gas, Production \_\_\_ or Underground storage \_\_\_) Deep \_\_\_ / Shallow \_\_\_

5) Location: Elevation 1510' Watershed LICK BRANCH  
District CENTER County WYOMING Quadrangle PINEVILLE 7.5

6) Well Operator K. PETROLEUM, INC 7) Designated Agent JAM KHORAMMI  
Address 81 MILL ST. SUITE 205 Address 81 MILL ST. SUITE 205  
GAHANNA, OH 43230 GAHANNA, OH 43230

8) Oil and Gas Inspector to be notified Name GARY KENNEDY  
Address 66 OLD CHURCH LANE  
PIPESTEM, WV 25979  
9) Plugging Contractor Name PATCHWORK OIL & GAS, LLC  
Address PO BOX 168  
DAVISVILLE, WV 26142

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

PLUGGING PROCEDURE ATTACHED TO PERMIT.

SEE MSHA 101C EXEMPTION

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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 8/13/18

Work Order Attachment

47-109-01458

P.L.C #25

**Run Bond log when necessary to find cement top and/or POCA 3 coal seam. Gel spacers in between all cement plugs.**

1. Prepare plugging permit application.
2. Certify to surface and coal owners as necessary.
3. Certify to designated State inspector for signature.
4. Once all signatures are obtained, copy for our records and certify at the state level for approval.
5. Receive plugging permit good for 2 years.
6. Notify the designated State inspector 24 hours prior to commencing operations.
7. Move rig and equipment to location.
8. Verify total depth of 2326'.  
*check Rock Pressure*
9. Attempt to clean out well bore, as necessary.
10. Run E-log to determine the location of the lowest mineable coal bed.
11. Run tubing to the bottom of the 4 1/2, set first plug with Class A cement with no more than 3% CaCl<sub>2</sub> and no other additives from TD up to 50' above the top hole of the 2<sup>nd</sup> set of perforations. (Covering 2115' to 2246' 1st stage perforation & 1898' to 2066' 2<sup>nd</sup> stage perforation)  
*Plug from TA ≈ 2280' TO 1848'.*
12. Pull tubing back, wait 8 hours.  
*Don't get cemented w hole*
13. Run in and tag plug, add additional cement if needed.
14. Run 6% Bentonite gel
15. Run tubing from 50' below the bottom of the 3<sup>rd</sup> stage perforation to 50' above the top perforation. (Covering 1403' to 1462' 3<sup>rd</sup> Stage perforations)  
*Plug from 1572' TO 1353'*
16. Pull tubing back, wait 8 hours.
17. Run in and tag plug, add cement if needed.
18. Begin looking for free point.

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*[Signature]*

19. If the well bore still produces gas, a mechanical bridge plug shall be placed in the well bore in a competent stratum at least 200' below the lowest mineable seam of coal but above the uppermost hydrocarbon producing zone.
20. If the free point shows the 4 ½" casing cemented thru the POCA 3 coal seam, then go in and mill the 4 ½" and perforate the 7" steel casing from approximately 5' below the bottom of the POCA 3 coal seam to 10' above the top of the POCA 3 coal seam. Perforate with 8 shots per foot in this area. FREE POINT ≈ BOTTOM OF 7".
21. If the free point shows the 4 ½ isn't cemented thru the POCA 3 coal seam, then pull the 4 ½ casing from below the POCA 3 coal seam to the surface.
22. Circulate gel. Section mill 7" for a 20' casing free zone from 5' below the POCA 3 coal seam to 10' above based on a bond log that locates the area of the POCA 3 coal seam to facilitate an appropriate active mining of the POCA 3 coal seam. (Approximately 723' to 703")
23. Perforate 4 ½ and/or 7" at 10 intervals approximately 878' to 733'.
24. Run tubing back in and circulate gel, run expandable cement slurry down tubing to displace gel from 50' below perforation interval to 50' above top of perforation interval.
25. Pull tubing back, wait 8 hours.
26. Run in and tag plug, add cement if needed.
27. Set 3' high x 7" casing with concrete; add API for identification.
28. RDMO
29. Reclaim location
30. Prepare WR-34 & WR-35 for permit release.



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47-109-01458P

U. S. Department of Labor

Mine Safety and Health Administration  
4015 Wilson Boulevard  
Arlington, Virginia 22203-1984



MSHA 101C

April 08, 1994

MEMORANDUM FOR MICHAEL J. LAWLESS

FROM: ALLYN DAVIS  
Chief, Division of Safety

SUBJECT: Finalized Cases, Petitions for Modification

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APR 15 1994  
DISTRICT 4

The cases listed below have become final pursuant to 30 CFR 44.13. More than 30 days have elapsed since the issuance of the proposed decisions and orders or the proposed orders of dismissal. No requests for hearing or appeals that would prohibit implementation of the modification have been received. Cases shown with an asterisk, however, have been partially appealed pursuant to 30 CFR 44.14(c); the proposed decisions and orders may be implemented for these cases during the appeal of one or more terms and conditions.

<u>Docket No.</u>	<u>Mine ID</u>	<u>Date Final</u>	<u>Decision</u>
M-93-051-C	4601816	04/02/94	Granted

Gary No. 50 mine  
U.S. Steel Mining Company, Inc.  
ID 46-01816  
Section 75.1700

CC: D. S. Mandeville  
C. E. Thomas  
T. E. Gunter  
Ventilation Files

MSHA  
MOUNT HOPE, W. VA.  
MAR - 7 1994  
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DISTRICT 4

MAR 3 1994

In the matter of  
U.S. Steel Mining  
Company, Inc.  
Gary No. 50 Mine  
I.D. No. 46-01816

Petition for Modification

Docket No. M-93-51-C

PROPOSED DECISION AND ORDER

On March 26, 1993, a petition was filed seeking a modification of the application of 30 CFR 75.1700 to Petitioner's Gary No. 50 Mine, located in Wyoming County, West Virginia. The Petitioner alleges that the alternative method outlined in the petition will at all times guarantee no less than the same measure of protection afforded by the standard.

MSHA personnel conducted an investigation of the petition and filed a report of their findings and recommendations with the Administrator for Coal Mine Safety and Health. After a careful review of the entire record, including the petition and MSHA's investigative report and recommendation, a Proposed Decision and Order was issued on October 14, 1993. On November 3, 1993, the Petitioner filed a request for a hearing objecting to certain terms and conditions set forth in Item II. (a) and (b) of the Proposed Decision and Order.

Following a request from the Administrator, the petition was remanded to Coal Mine Safety and Health for reconsideration on December 21, 1993. After further evaluation of the entire record, including the petition, the Mine Safety and Health Administrations's investigative report and recommendations, and comments from the Petitioner, this new Proposed Decision and Order is issued which supersedes the Proposed Decision and Order issued on October 14, 1993.

Finding of Fact and Conclusion of Law

The alternative method proposed by the Petitioner will at all times guarantee no less than the same measure of protection afforded the miners under 30 CFR 75.1700.

On the basis of the petition and the findings of MSHA's investigation, U.S. Steel Mining Company, Inc., is granted a modification of the application of 30 CFR 75.1700 to its Gary No. 50 Mine.

CC: D. S. Mandeville  
C. E. Thomas  
T. E. Gunter  
Ventilation Files

*File  
JAB  
3/8/94*

ORDER

Wherefore, pursuant to the authority delegated by the Secretary of Labor to the Administrator for Coal Mine Safety and Health, and pursuant to Section 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C., sec. 811(c), it is ordered that U.S. Steel Mining Company, Inc.'s Petition for Modification of the application of 30 CFR 75.1700 in the Gary No. 50 Mine is hereby:

GRANTED, conditioned upon compliance with the following terms and conditions:

- I. The wellbore shall be plugged using the following technique and procedures:
  - (a) Cleaning out and preparing oil and gas wells. Prior to plugging an oil or gas well, the following procedure shall be followed:
    - (1) A diligent effort shall be made to clean the borehole to the original total depth. If this depth cannot be reached, the borehole shall be cleaned out to a depth which would permit the placement of at least 200 feet of expanding cement below the base of the lowest mineable coalbed.
    - (2) When cleaning the borehole, a diligent effort shall be made to remove all the casing in the borehole. If it is not possible to remove all casing, the casing which remains shall be perforated, or ripped, at intervals spaced close enough to permit expanding cement slurry to infiltrate the annulus between the casing and the borehole wall for a distance of at least 200 feet below the base of the lowest mineable coalbed.
    - (3) If the cleaned-out borehole produces gas, a mechanical bridge plug shall be placed in the borehole in a competent stratum at least 200 feet below the base of the lowest mineable coalbed, but above the top of the uppermost hydrocarbon-producing stratum. If it is not possible to set a mechanical bridge plug, a substantial brush plug may be used in place of the mechanical bridge plug.
    - (4) A suite of logs shall be made consisting of a caliper survey directional deviation survey,



and log(s) suitable for determining the top and bottom of the lowest mineable coalbed and potential hydrocarbon-producing strata and the location for the bridge plug.

- (5) If the uppermost hydrocarbon-producing stratum is within 200 feet of the base of the lowest mineable coalbed, properly placed mechanical bridge plugs or a suitable brush plug described in subparagraph (a)(3) shall be used to isolate the hydrocarbon-producing stratum from the expanding cement plug. Nevertheless, a minimum of 200 feet of expanding cement shall be placed below the lowest mineable coalbed.
  - (6) The wellbore shall be completely filled and circulated with a gel that inhibits any flow of gas, supports the walls of the borehole, and densifies the expanding cement. This gel shall be pumped through open-end tubing run to a point approximately 20 feet above the bottom of the cleaned out area of the borehole or bridge plug.
- (b) Plugging oil and gas wells to the surface. The following procedures shall be utilized when plugging oil and gas wells to the surface:
- (1) A cement plug shall be set in the wellbore by pumping an expanding cement slurry down the tubing to displace the gel and fill the borehole to the surface. (As an alternative, the cement slurry may be pumped down the tubing so that the borehole is filled with Portland cement or a Portland cement-fly ash mixture from a point approximately 100 feet above the top of the lowest mineable coalbed to the surface with an expanding cement plug extending from at least 200 feet below the lowest mineable coalbed to the bottom of the Portland cement.) There shall be at least 200 feet of expanding cement below the base of the lowest mineable coalbed.
  - (2) A small quantity of steel turnings, or other small magnetic particles, shall be embedded in the top of the cement near the surface to serve as a permanent magnetic monument of the borehole, if a steel surface casing is not present.

(c) Plugging oil and gas wells using the vent pipe method. The following procedures shall be utilized when using the vent pipe method for plugging oil and gas wells:

- (1) A 4 1/2-inch or larger vent pipe shall be run into the wellbore to a depth of 100 feet below the lowest mineable coalbed and swedged to a smaller diameter pipe, if desired, which will extend to a point approximately 20 feet above the bottom of the cleaned out area of the borehole or bridge plug.
- (2) A cement plug shall be set in the wellbore by pumping an expanding cement slurry, Portland cement, or a Portland cement-fly ash mixture down the tubing to displace the gel so that the borehole is filled with cement. The borehole and the vent pipe shall be filled with expanding cement for a minimum of 200 feet below the base of the lowest mineable coalbed. The top of the expanding cement shall extend upward to a point approximately 100 feet above the top of the lowest mineable coalbed.
- (3) All fluid shall be evacuated from the vent pipe to facilitate testing for gases. During the evacuation of fluid, the expanding cement shall not be disturbed.
- (4) The top of the vent pipe shall be protected to prevent liquids or solids from entering the wellbore, but permit ready access to the full internal diameter of the vent pipe when necessary.

(d) Plugging oil and gas wells for use as degasification boreholes. The following procedures shall be utilized when plugging oil and gas wells for subsequent use as degasification boreholes:

- (1) A cement plug shall be set in the wellbore by pumping an expanding cement slurry down the tubing to displace the gel and provide at least 200 feet of expanding cement below the lowest mineable coalbed. The top of the expanding cement shall extend upward to a point above the top of the coalbed being mined. This distance shall be based on the average height of the roof strata breakage for the mine.

- (2) To facilitate methane drainage, degasification casing of suitable diameter, slotted or perforated throughout its lower 150 to 200 feet, shall be set in the borehole to a point 10 to 30 feet above the top of the expanding cement.
- (3) The annulus between the degasification casing and the borehole wall shall be cemented from a point immediately above the slots or perforations to the surface.
- (4) The degasification casing shall be cleaned out for its total length.
- (5) The top of the degasification casing shall be fitted with a wellhead equipped as required by the District Manager. Such equipment may include check valves, shut-in valves, sampling ports, flame arrestor equipment, and security fencing.

II. The following procedures shall apply to mining through a plugged oil and gas well:

- (a) The operator shall notify the District Manager or designee prior to mining within 300 feet of the well.
- (b) A representative of the operator; a representative of the miners; and State Inspection Agency; or the MSHA District Manager or designee may request that a conference be conducted prior to mining through any plugged well to review, evaluate and accommodate any abnormal or unusual circumstance(s) related to the condition of the well or surrounding strata when such conditions are encountered. The party requesting the conference shall notify all other parties listed above within a reasonable time prior to the conference to provide adequate opportunity for participation.
- (c) Mining through a plugged well shall be done on a shift approved by the District Manager or designee. The District Manager or designee and the miners' representative shall be notified as to which shift mining will be done in close proximity to or through a plugged well.
- (d) The District Manager or designee, representatives of the miners, the miners on the section, and the appropriate State agency shall be notified by the

operator in sufficient time in order to provide an opportunity to have representatives present.

- (e) When using continuous or conventional mining methods, drivage sights shall be installed at the last open crosscut near the place to be mined to ensure intersection of the well. The drivage sights shall not be more than 50 feet from the well. When using longwall mining methods, drivage sights shall be installed on 10-foot centers for a distance of 50 feet in advance of the wellbore. The drivage sights shall be installed in the headgate and tailgate.
- (f) Firefighting equipment, including fire extinguishers, rock dust, and sufficient fire hose to reach the working face area of the mining through shall be available when either the conventional or continuous mining method is used. The fire hose shall be located in the last open crosscut of the entry or room. When the longwall mining method is implemented, the fire hose shall be extended to the face area of the mine through. All fire hoses shall be ready for operation during the mining through.
- (g) Sufficient supplies of roof support and ventilation materials shall be available and located at the last open crosscut. In addition, an emergency plug and/or plugs, shall be available within the immediate area of the mine through.
- (h) During the mine-through operation, the quantity of air required by the ventilation plan, but not less than 9,000 cubic feet per minute (cfm) of air, shall reach each working face where coal is being cut, mined, drilled for blasting, or loaded. The quantity of air required by the ventilation plan, but not less than 30,000 cfm, shall reach the working face of each longwall during the mine-through operation.
- (i) Equipment shall be checked for permissibility and serviced on the shift prior to mining through the well and the water line maintained up to the tail piece with a sufficient amount of fire hose to reach the farthest point of penetration on the section.
- (j) The methane monitor on the longwall, continuous mining machine, or cutting machine and loading

machine shall be calibrated on the shift prior to mining through the well.

- (k) When mining is in progress, tests for methane shall be made with a hand-held methane detector at least every 10 minutes from the time that mining with the continuous mining machine, cutting machine, or loading machine is within 30 feet of the well until the well is intersected and immediately prior to mining through. When mining with longwall mining equipment, the tests for methane shall be made at least every 10 minutes when the longwall face is within 30 feet of the well. During the actual cutting through process, no individual shall be allowed on the return side until mining through has been completed and the area has been examined and declared safe.
- (l) When using continuous or conventional mining methods, the working place shall be free from accumulations of coal dust and coal spillages, and rock dust shall be placed on the roof, rib, and floor to within 20 feet of the face when mining through the well. On longwall sections, rock dusting shall be conducted and placed on the roof, rib, and floor up to both the headgate and tailgate gob.
- (m) When the wellbore is intersected, all equipment shall be deenergized and the place thoroughly examined and determined safe before mining is resumed. Any well casing shall be removed and no open flame shall be permitted in the area until adequate ventilation has been established around the wellbore.
- (n) After a well has been intersected and the working place determined safe, mining shall continue in by the well a sufficient distance to permit adequate ventilation around the area of the wellbore.
- (o) No person shall be permitted in the area of the mining through operation except those actually engaged in the operation, company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.
- (p) The mining-through operation shall be under the direct supervision of a certified individual. Instructions concerning the mining-through operation shall be issued only by the certified individual in charge.

- (q) MSHA personnel may interrupt or halt the mining through operation when it is necessary for the safety of the miners.
- (r) A copy of the decision approving this petition shall be maintained at the office of Gary No. 50 Mine and be available to the Secretary's representatives, miners' representatives and miners.
- (s) The Petitioner shall file a plugging affidavit setting forth the persons who participated in the work, a description of the plugging work, and a certification by the Petitioner that the well has been plugged as described.
- (t) Within 60 days after this Proposed Decision and Order becomes final, the Petitioner shall submit proposed revisions for their approved 30 CFR Part 48 training plan to the Coal Mine Safety and Health District Manager. These proposed revisions shall include initial and refresher training regarding compliance with the terms and conditions stated in the Proposed Decision and Order.

III. This petition for modification applies to all types of mining such as continuous miner sections, continuous mining utilizing mobile bridge, and longwall.

Any party to this action desiring a hearing on this matter must file in accordance with 30 CFR 44.14, within 30 days. The request for hearing must be filed with the Administrator for Coal Mine Safety and Health, 4015 Wilson Boulevard, Arlington, Virginia 22203.

If a hearing is requested, the request shall contain a concise summary of position on the issues of fact or law desired to be raised by the party requesting the hearing, including specific objections to the proposed decision. A party other than Petitioner who has requested a hearing shall also comment upon all issues of fact or law presented in the petition, and any party to this action requesting a hearing may indicate a desired hearing site. If no request for a hearing is filed within 30 days after

service thereof, the Decision and Order will become final and must be posted by the operator on the mine bulletin board at the mine.

Signed: Robert A. Elam

Robert A. Elam  
Deputy Administrator  
for Coal Mine Safety and Health

Certificate of Service

I hereby certify that a copy of this proposed decision was served personally or mailed, postage prepaid, this 3<sup>rd</sup> day of March, 1994, to:

Billy M. Tennant, Esq.  
U.S. Steel Mining Company, Inc.  
600 Grant Street, Room 1580  
Pittsburgh, Pennsylvania 15219

Ms. Linda Raisovich-Parsons  
Special Assistant  
United Mine Workers of America  
900 Fifteenth Street, NW.  
Washington, DC 20005

*Mary Ann Griffin*  
MARY ANN GRIFFIN  
Mine Safety Clerk

cc: Mr. Stephen Weber  
bcc: ~~L.~~ Phillips      D. White  
         L. Smith              E. Fitch  
         P. Silvey  
         Case File

MCS:MAGriffin:mag: 02/15/94

WR-35

16-Aug-94

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WV Division of  
Environmental Protection

API # 47-109-01458

NOV 23 1994

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Permitting  
Office of Oil & Gas  
Farmer: CAHONTAS LAND CORP. Operator Well No.: PLC #25

LOCATION: Elevation: 1,510.00 Quadrangle: PINEVILLE

District: CENTER County: WYOMING  
Latitude: 1075 Feet South of 37 Deg. 32Min. 30 Sec.  
Longitude: 10740 Feet West of 81 Deg. 32 Min. 30 Sec.

Company: BOWIE, INC.  
P.O. BOX 1430  
CLARKSBURG, WV 26301-1430

Agent: GROVER BOWIE

Inspector: OFIE HELMICK  
Permit Issued: 08/10/94  
Well work Commenced: 9-29-94  
Well work Completed: 10-5-94  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 2396 DTD  
Fresh water depths (ft) \_\_\_\_\_  
150  
Salt water depths (ft) \_\_\_\_\_  
N/A

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 250-57,290-93,310-14,  
344-47,628-32,732-36

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9 5/8"	31'	-	-
7"	884'	884'	150 sks
4 1/2"	2326'	2326'	130 sks

CTS  
TO BOTTOM OF 7" CASING.

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OPEN FLOW DATA

1st  
Producing formation L. Maxton, Maxton Pay zone depth (ft) 2029-2144  
Gas: Initial open flow show MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow 712 MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests 12 Hours  
Static rock Pressure 270 psig (surface pressure) after 24 Hours

2nd  
Second producing formation U. Maxton, Ravencliff Pay zone depth (ft) 1403-1954  
Gas: Initial open flow show MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow comingled MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests 12 Hours  
Static rock Pressure comingled psig (surface pressure) after 24 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 A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: BOWIE, INC.  
By: W. C. Bowrie  
Date: 11/2/94

2571 JKM



- I (2115-2246) 20 holes, 500gal 15%HCL, 450sks sand, 520bbl 75Q foam  
 II (1898-2066) 25 holes, 500gal 15%HCL, 300sks sand, 400bbl 75Q foam  
 III (1403-1462) 30 holes, 500gal 15%HCL, 500sks sand, 560bbl 75Q foam

SAND	0-34	
SAND & SHALE	34-250	1/4" H2O 150'
COAL	250-257	
SAND	257-290	
COAL	290-293	
SAND	293-310	
COAL	310-314	
SAND	314-344	
COAL	344-347	
SAND	347-628	
COAL	628-632	
SAND	632-732	
COAL	732-736	
SAND & SHALE	736-1050	
RAVENCLIFF	1384-1456	GAS SHOW
AVIS	1456-1505	
SAND & SHALE	1505-1865	
MAXTON	1865-2140	GAS SHOW
SHALE	2140-2228	
L. MAXTON	2228-2275	GAS SHOW
SHALE	2275-2356	
L. LIME	2356-2396	DTD

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*JK*

47-109-01458 P

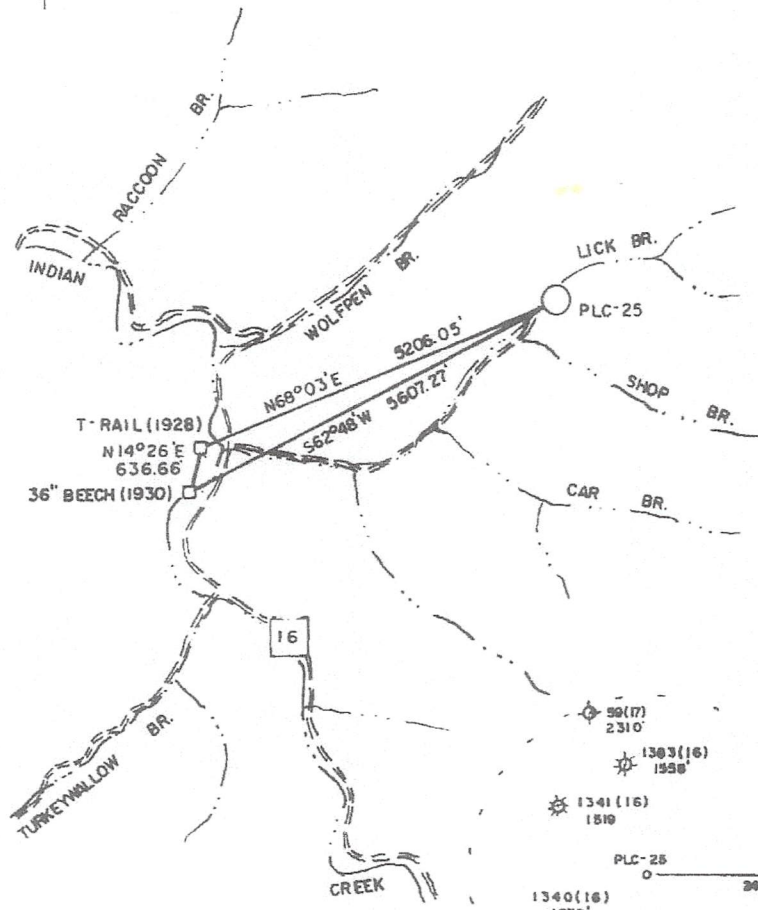
10,740'

LATITUDE 37°32'30"

LONGITUDE 81°32'30"

POCA. LAND COOR.:  
NO. 25 - N. 62,638.03'  
W. 8,150.30'

NORTH



WELL REFERENCES:  
S35°W, 110' TO 3" BEECH  
N72°E, 106' TO 8" W.OAK

LAND SURVEYING SERVICES  
21 CEDAR LANE  
BRIDGEPORT, WV 26330  
PHONE: 304-842-2018

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 in 2500  
 PROVEN SOURCE OF ELEVATION BM 4800' S. OF LOCATION ELEV. - 1281'

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 ENERGY.  
 (SIGNED) *[Signature]*  
 R.P.E. \_\_\_\_\_ I.L.S. 674  
 STEPHEN D. LOSH

PLACE SEAL HERE

**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE APRIL 25 1994  
 OPERATOR'S WELL NO. PLC NO. 25  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 1510' WATER SHED LICK BRANCH  
 DISTRICT CENTER COUNTY WYOMING  
 QUADRANGLE PINEVILLE 7.5 min.  
 SURFACE OWNER POCAHONTAS LAND CORP. ACREAGE 24980.40  
 OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORP. LEASE ACREAGE 10050.85  
 LEASE NO. 56244

PROPOSED WORK: DRILL  CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION MAX TON ESTIMATED DEPTH 2600'  
 WELL OPERATOR BOWIE, INC. DESIGNATED AGENT WILLIAM BOWIE  
 ADDRESS P.O. BOX 1430 ADDRESS P.O. BOX 1430  
 CLARKSBURG, WV 26302-1430 CLARKSBURG, WV 26302-1430

RECEIVED  
 Office of Oil and Gas  
 AUG 4 2018  
 WV Department of Environmental Protection

WYO  
 COUNTY NAME  
 PERMIT 1458

*[Handwritten signature]*

WW-4A  
Revised 6-07

1) Date: July 19th, 2018  
2) Operator's Well Number  
P.L.C. #25

3) API Well No.: 47 - 109 - 01458

**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>PINNACLE COAL COMPANY</u>	Name <u>PINNACLE COAL COMPANY</u>
Address <u>PO BOX 338</u>	Address <u>PO BOX 338</u>
<u>PINEVILLE, WV 24874</u>	<u>PINEVILLE WV 24874</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>NRP WPP, LLC</u>
	Address <u>5260 IRWIN RD</u>
	<u>HUNTINGTON, WV 25705</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>GARY KENNEDY</u>	(c) Coal Lessee with Declaration
Address <u>66 OLD CHURCH LANE</u>	Name <u>PINNACLE COAL COMPANY &amp; MECHEL BLUESTONE</u>
<u>PIPESTEM, WV 25979</u>	Address <u>PO BOX 338</u> <u>PO BOX 1085</u>
Telephone <u>304-382-8402</u>	<u>PINEVILLE, WV 24874</u> <u>BECKELY, WV 25082</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.



TERESA M. JONES, Well Operator K. PETROLEUM, INC.  
 NOTARY PUBLIC, By: JAM KHORAMMI  
 STATE OF OHIO, As: \_\_\_\_\_  
 Comm. Expires Address \_\_\_\_\_  
06-28-2021 Telephone \_\_\_\_\_  
81 MILL ST. SUITE 205  
GAHANNA, OH 43230  
1-614-208-6009

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Office of Oil and Gas  
AUG 24 2018  
WV Department of Environmental Protection

Subscribed and sworn before me this 20th day of July, 2018  
Teresa M. Jones Notary Public  
My Commission Expires 6/28/21

**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).

API No. 47-109-01458  
Farm Name PLC  
Well No. 25

**INSTRUCTIONS TO COAL OPERATORS  
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

**WAIVER**

The undersigned coal operator  / owner \_\_\_ / lessee \_\_\_ / of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 8/10/2018

David G. Trader  
By: DAVID G. TRADER  
Its MINE ENGINEER  
PINNACLE COAL COMPANY

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Office of Oil and Gas  
AUG 24 2018  
WV Department of  
Environmental Protection

WW-4B

API No. 47-109-01458  
Farm Name PLC  
Well No. 25

**INSTRUCTIONS TO COAL OPERATORS  
OWNERS AND LESSEE**

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Office of Oil and Gas  
AUG 24 2018  
WV Department of  
Environmental Protection

**WAIVER**

The undersigned coal operator \_\_\_\_ / owner  / lessee \_\_\_\_ / of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 8-9-18

By:   
(Greg Wooden)  
Its Vice President + Chief Engineer

NRP WPP, LLC

WW-9  
(5/16)

API Number 47 - 109 - 01458  
Operator's Well No. \_\_\_\_\_

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name K. PETROLEUM, INC OP Code 306574

Watershed (HUC 10) LICK BRANCH Quadrangle PINEVILLE 7.5

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 (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_ )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Vac. Trk/portable pit is properly used to contain fluids; fluids disp. of off loc.)

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. n/a

-If oil based, what type? Synthetic, petroleum, etc. n/a

Additives to be used in drilling medium? n/a

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. n/a

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

-Landfill or offsite name/permit number? n/a

n/a

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.

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Office of Oil and Gas  
AUG 24 2018  
Department of Environmental Protection

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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 \_\_\_\_\_

Company Official (Typed Name) JAM KHORAMMI

Company Official Title PRESIDENT

Subscribed and sworn before me this 20th day of July, 2018

Teresa M. Jonas

My commission expires 6/28/21



Notary Public  
TERESA M. JONAS  
NOTARY PUBLIC  
STATE OF OHIO  
Comm. Expires  
06-28-2021

Proposed Revegetation Treatment: Acres Disturbed 3.2 Prevegetation pH 6.67

Lime 2 Tons/acre or to correct to pH 6.5

Fertilizer type 10-10-20 EQUIVALENT

Fertilizer amount 500 lbs/acre

Mulch STRAW Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
		TALL FESCUE	40
		LADINO CLOVER	5

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

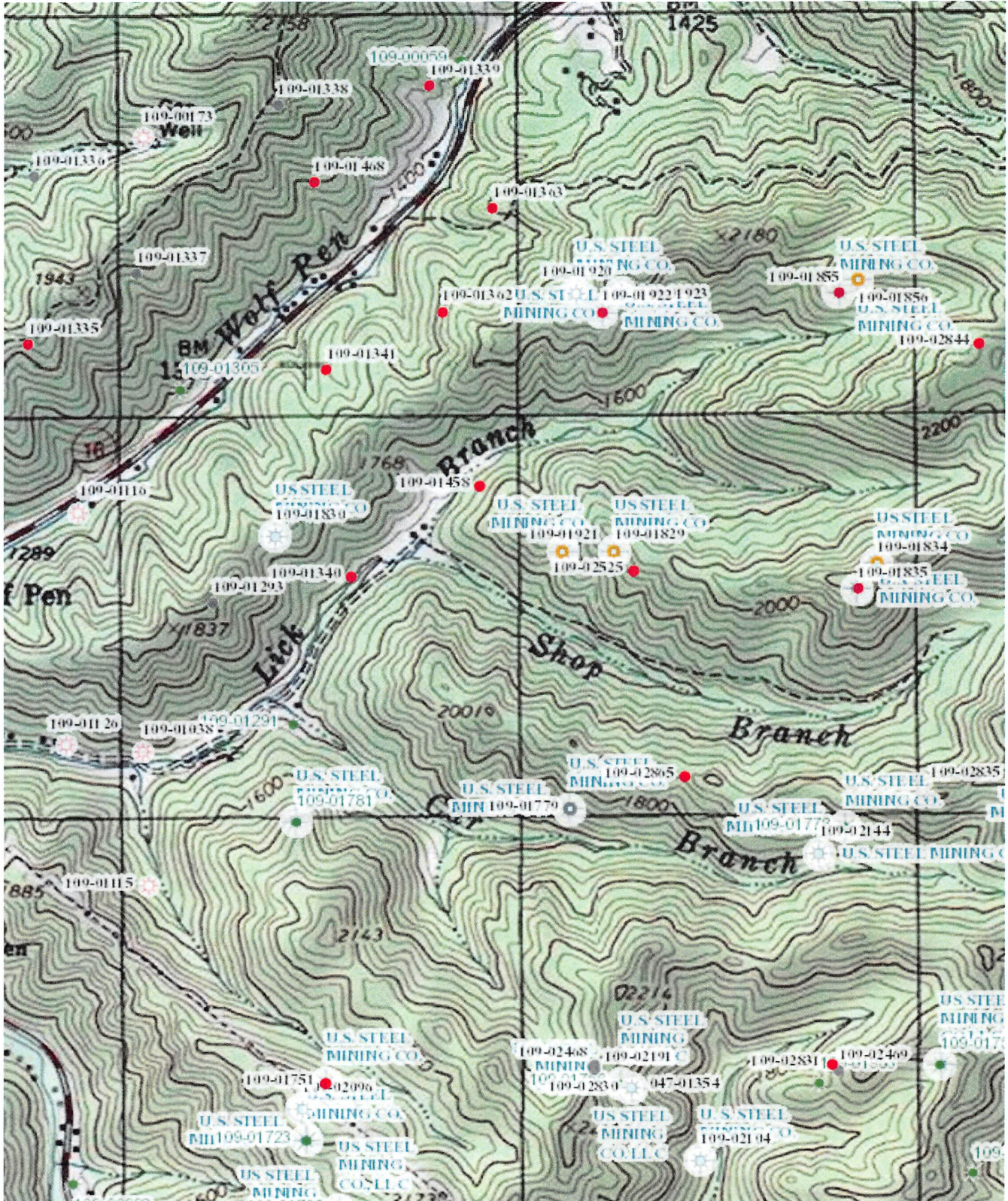
Plan Approved by: [Signature]

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

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Office of Oil and Gas  
AUG 24 2018  
WV Department of  
Environmental Protection

Title: Inspector Date: 8/13/18

Field Reviewed? ( ) Yes ( ) No





WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: <sup>109</sup> ~~47-107~~-01458 WELL NO.: #25

FARM NAME: POCAHONTAS LAND CORP.

RESPONSIBLE PARTY NAME: K. PETROLEUM, INC.

COUNTY: WYOMING DISTRICT: CENTER

QUADRANGLE: PINEVILLE 7.5

SURFACE OWNER: PINNACLE COAL COMPANY

ROYALTY OWNER: PINNACLE COAL COMPANY

UTM GPS NORTHING: 4154811.7

UTM GPS EASTING: 448911 GPS ELEVATION: 1510

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS \_\_\_\_\_: Post Processed Differential \_\_\_\_\_

Real-Time Differential \_\_\_\_\_ **XX**

Mapping Grade GPS \_\_\_\_\_: Post Processed Differential \_\_\_\_\_

Real-Time Differential \_\_\_\_\_

4. Letter size copy of the topography map showing the well location.

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

PRESIDENT

7/19/18

Signature

Title

Date

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Office of Oil and Gas  
AUG 4 2018  
WV Department of  
Environmental Protection