

#### west virginia department of environmental protection

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

Austin Caperton , Cabinet Secretary www.dep.wv.gov

Friday, March 02, 2018 WELL WORK PERMIT Vertical / Plugging

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

GAHANNA, OH 432306510

Re:

Permit approval for WB-7 47-109-01037-00-00

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

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

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

James A. Martin

Chief

Operator's Well Number: WB-7

Farm Name: POCAHONTAS LAND CORP.

U.S. WELL NUMBER: 47-109-01037-00-00

Vertical / Plugging

Date Issued: 3/2/2018

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**

- 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 twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.

WW-4B Rev. 2/01

1) Date Februar	y 8th ,	20 18
2) Operator's	1	-
Well No. W	3 #07	
3) API Well N	0 - 47-109	- 01037

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

0111011	02	FILID		

APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON
4) Well Type: Oil/ Gas XX / Liquid	i injection / Waste disposal /
	derground storage) Deep/ ShallowXX
5) Location: Elevation 1281'	Watershed Indian Creek
District Center	County Wyoming Quadrangle Pineville 7.5
K Potroloum Inc	
6) Well Operator K. Petroleum, Inc.  Address 81 Mill St. Suite 205	7) Designated Agent Jam Khorammi
Gahanna, OH 43230	Address 81 Mill St. Suite 205
Garianna, Ori 43230	Gahanna, OH 43230
8) Oil and Gas Inspector to be notified	0) 23
Name Brian Ferguson	9) Plugging Contractor
Address 708 Manor Drive	Name Patchwork Oil & Gas, LLC
Beckley WV 25801	Address PO Box 168
2001109 111 20001	Davisville, WV 26142
Work Order follows  SEE ATTACHED MSHA IDIC	EXEMPTION FOR MINE-THROUGH.
	RECEIVED Office of Oil and Gas FEB 2 0 2018  WV Department of Environmental Protection
Notification must be given to the district oil work can commence.	and gas inspector 24 hours before permitted
Work order approved by inspector Brack	FROUSON Date 2/14/2018

#### **WB #07** Plugging work order 47-109-01037

- 1. Prepare plugging permit application
- Certify to surface owner and coal owner
- 3. Certify or email to designated state inspector for signature
- 4. Once all signatures are obtained, copy for our records and certify or email to Charleston for approval.
- 5. Receive plugging permit good for 2 years.
- 6. Notify the designated state inspector 24 hours prior to commencing operations.
- 7. Take equipment to location and begin prepping for plug.
- 8. Rig up.
- 9. Verify total depth of 1308'
- 10. Attempt to clean out well bore to original depth, if needed.
- 11. Run E-log to determine the location of the lowest mineable coal bed.
- 12. Run tubing to TD at 1308'. Set first plug with 14 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 1308' to 1145'. This will cover the bottom plug, pay, and elevation.
- 13. If the well bore still produces gas, a mechanical bridge plug shall be placed in RECEIVED Gas the well bore in a competent stratum at least 200' below the lowest mineable Office of Oil and 2018 W Department of Environmental Protection seam of coal but above the uppermost hydrocarbon producing zone.
- 14. Begin looking for free point
- 15. Run 6% Bentonite gel from 1145' to 750'.
- 16. Based on cement fill up on records the 4 ½ free point should be around 500'.

FEB 20 2018

- 17. Circulate gel. Cut and remove a section of 4 ½ by milling out a segment from the depth of 523' to 503' to produce a 20' casing free zone from 5' below the P3 seam to 10' above. This will facilitate active mining of the P3 at the depth of 518'.

  \*\*\*If production string of casing is cemented through the POCA 3 coal seam and unable to remove, then the production string may be section milled and the protection string perforated with approximately 8 shots per foot in a 10' area.

  18. Perforate 4 ½ at 10' intervals beginning at depth of 683' through depth of 533'.
- 19. Find free point then sever at approximately 500'.
- 20. Run tubing to 750', circulate gel, then run 51 sacks of expandable cement slurry down the tubing to displace the gel and fill well bore from depth of 750'-372'.
- 21. Run 6% Bentonite gel from 372' to 100'.
- 22. Run 50 sacks of Class A cement with no more than 3% CaCl2 and no other additives from 100' to surface.
- 23. Set 6 x 12.5 steel pipe with concrete with ½ API identification.
- 24. Rig down and move out.
- 25. Reclaim location
- 26. Prepare WR-34 & WR-38 for permit release.

Office of Oil and Gas

FEB 20 2018

FEB Protection

Environmental Protection

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U.S. Department of Labor

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



#### MSHA 101 C EXEMPTION

April 08, 1994

APR 1 5 1994

MEMORANDUM FOR MICHAEL J. LAWLESS

ABULLYED DISTRICT &

FROM:

ALLYN DAVIS

Chief, Division of Safety

SUBJECT:

Finalized Cases, Petitions for Modification

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.

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

Gacy 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

MISHA MOUNT HOPE, W. VA.

MAR - 7 1994

MAR 3 1994

RECEIVED DISTRICT 4

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

#### 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) <u>Cleaning out and preparing oil and gas wells</u>. 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:
  - A cement plug shall be set in the wellbore by (1)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 There shall be at least 200 feet of cement.) 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.
- (1) 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 inby 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 decipsion was served personally or mailed, postage prepaid, this 3 md day of Ward, 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

Mine Safety Clerk

cc: Mr. Stephen Weber

bcc: Lar Phillips

D. White

L. Smith

E. Fitch

P. Silvey

Case File

MCS:MAGriffin:mag: 02/15/94

18/09010378



State of Mest Augmin Well No. W1-87 Department of Mines Oil und Gas Bhiston

Operator's API No. 47 - 109 - 1087

WELL OPERATOR'S REPORT OF

WELL TYPE: Oil \_\_/ Gas \_X/ Liquid Injection \_/ Waste Disposal \_/ (If "Gas," Production \_X/ Underground Storage \_/ Deep \_\_/ Shallow \_X/)

#### DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

LOCATION: Elevation: /Z8/ Watershed	INDIAN	CREEK		
District: CENTER County Wy	OMING	Quadrangle	PINEYIL	ue 7.5
COMPANY BOWIE INC				
ADDRESS 137 WALDING STREET CARREDURG WY	Casing	Used in	Left	Cement
DESIGNATED AGENT WILLIAM H. BOLLIE	Tubing	Drilling		Gu. ft.
ADDRESS 132 WALNELK STREET CLARKSBURG WW	Size		24 11022	001 221
SURFACE OWNER POCAMONIAS LAND CORPORATION	20-16	34	34	
ADORESS	Cond.	-	-	1170
MINERAL RIGHTS OWNER PROMOWING LAWS CONCERNS	13-10"	/35	/35	075
ADDRESS	9 5/8	1/77	477	are.
UIL AND GAS INSPECTOR FOR THIS WORK HRTHUR	8 5/8	422	422	CTS
ST. CLAR ADDRESS BRENTON WW	7	-		-
PERMIT ISSUED NOVEMBER 20 1987	5 1/2	-	-	
DRILLING COMMENCED DECEMBER 17 487	4 1/2	1308	1308	1705KS
DRILLING COMPLETED DECEMBER 23 1967		+		-
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR	2 Liners	-	-	
REMORKING. VERBAL PERMISSION OBTAINED ON	used		Ì	
GOLOGICAL TARGET FORMATION RAVENCUSE				
Depth of completed well 1461 feet	Rotary	_/ Cabl	e Tools_	
Water strata depth: Fresh 35,40,80 feet;	Salt_No	WE feet	:	
Coal sezm depths: 165-170	_ Is coal	being min	ed in the	e area? <u>No</u>
OPEN FLOW DATA				
Producing formation RAVENCLIFF	Pa	y zone dep	th 1168-	-1260 feet
Gas: Initial open flow SHOW Mof/d				
Final open flow 250 Mcf/d				
Time of open flow between ini				
Statuc rock pressure ZOO psig(surfa	ce measure	ment) afte	er 48 ho	urs shut in
(If applicable due to multiple completion				
Second producing formation	Pa	y zone dej	pth_	feet
Gas: Initial open flowMcf/d				
Final open flowMcf/d	Oil: Fi	nal open :	flow	Bbl/d
Time of open flow between ini				ours
Static rock pressurepsig(surface				
	. • •	(Cont.		
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RECEIVED Office of Oil and Gas

FEB 2 0 2018

WV Department of Environmental Protection

FORM IV-35 (REVERSE)

18 109010378

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

1234-1254

PERFORMER WITH 20 (-21) HOLES, FRAC WITH HO BOL TSO FUN, HOCOCOS ZO/HO SAND, SODYAL ISTO-HOL, ATP-ZADP ARE-ZOBPH; ESCY-HOLES

STHEE IT RAVENCURE 1195-1220

PARTOLITE WITH 25(-71) Was, FRAN WITH HO BEE 750 FORM, 40,000 = 71/10 Santa, 50030 15/2402, FTP- 2500#, ATR-328009,55P- 1650 #

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre and salt water, cosl, oil and q
SAND & FILL SAND & SAPLE SAND SHALE COAL (SOLD) SHALE SAND SAND SAND SAND SAND SAND SAND SAND	0 16 50 147 165 170 282 325 480 475	16 50 147 165 170 282 395 450 475	4" STREAM C. 160"  2"STREAM C. 160"  2"STREAM C. 160"
SAND & SMLE SAND LIME Rel Rock (SHME) SAND & SMACE	760 1167 1265 1300 1315	1167 1265 1300 1315 1401	GAS SHOW
DTD - 1401 LTD - 1401 GAMMARAY LOC- RAVENCLIFF SAND AVIS LIME	116B 1260	1760 1302	JAN 08 1988  DIMBION OF OUL GOES  DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including work, encountered in the drilling of a well."

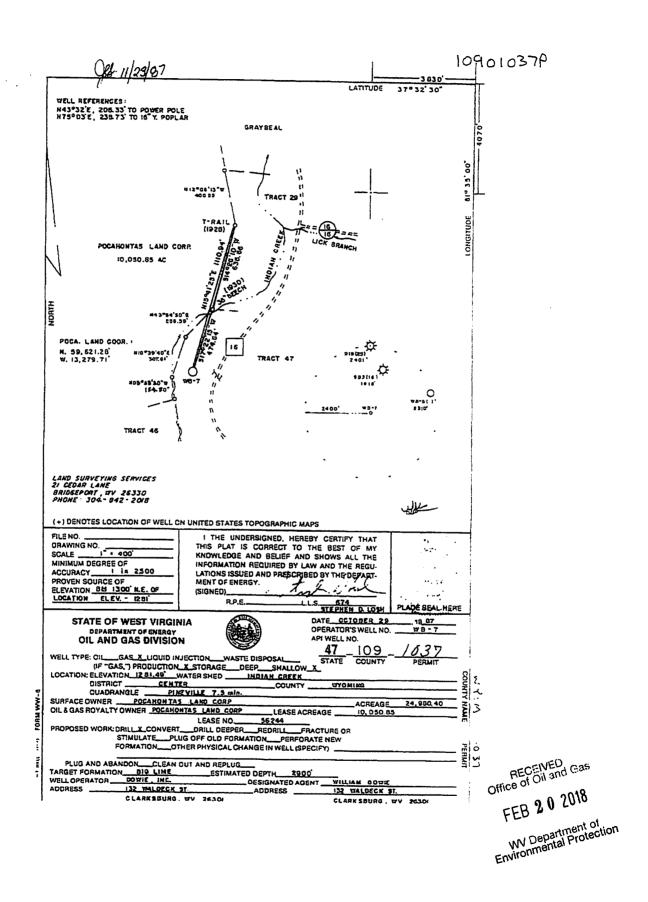
SHE

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WV Department of Environmental Protection

03/02/2018



WW-4A 1) Date: February 8th, 2018 2) Operator's Well Number Revised 6-07 WB #07 3) API Well No.: 47 -01037 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 Pinnacle Coal Company Name (a) Name Pinnacle Coal Company PO Box 338 PO Box 338 Address Address Pineville, WV 24874 Pineville, WV 24874 (b) Name (b) Coal Owner(s) with Declaration NRP, WPP, LLC Address Name Address 5260 IRWIN RD HUNTINGTON, WV 25705 (c) Name Name Address Address Brian Ferguson 6) Inspector (c) Coal Lessee with Declaration Address 708 Manor Drive Name Pinnacle Coal Company & Mechel Bluestone Beckley, WV 25801 Po Box 1085 Address Po Box 338 304-550-6265 Pineville, WV 24874 Beckley, WV 25802 Telephone 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 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 JONAS K. Petroleum, Inc. Well Operator NOTARY PUBLIC Jam Khorammi By: STATE OF OHIO President Its. Comm. Expires Address 81 Mill St. Suite 205 06-28-2021 Gahanna, OH 43230 RECEIVED Gas Telephone FEB 20 2018 Subscribed and sworn before me this Densey W Department of Environmental Protection My Commission Expires 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 depurivacyoffice wy.gov.

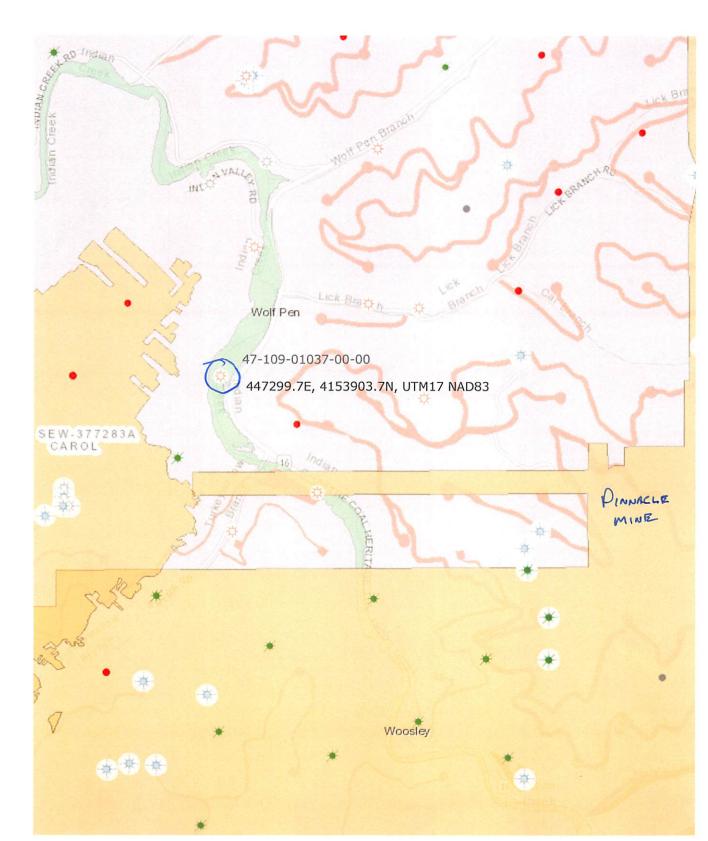
WW-9 (5/16)

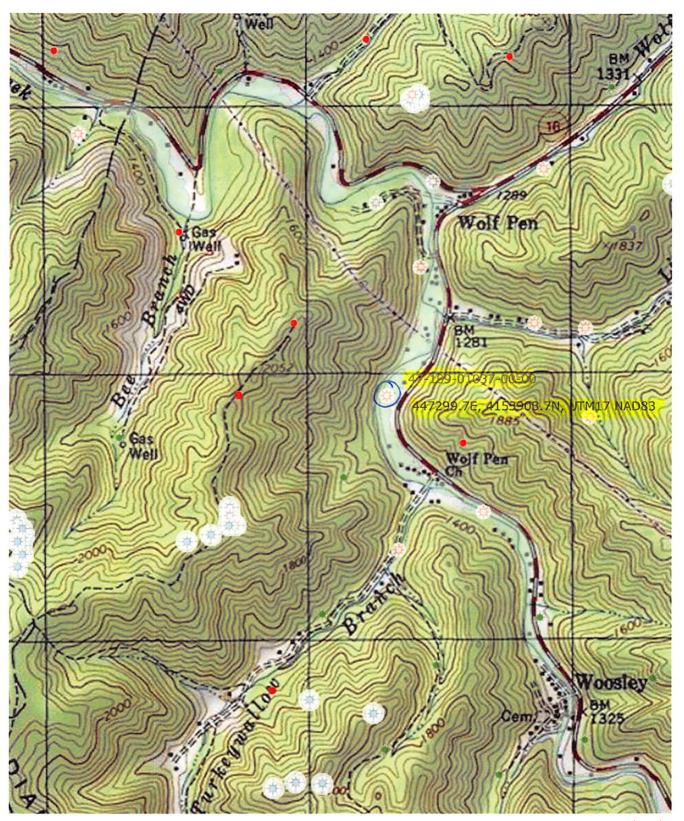
API Number	47 -	109	_ 01037	
Operator's W	ell No	. 1	2 = 07	

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

TEOIDS/ COTTINGS DIS	STOSAL & RECEAMATION FLAN	
Operator Name K. Petroleum, Inc.	OP Code 306574	
Watershed (HUC 10)_Indian Creek	Quadrangle Pineville 7.5	
Do you anticipate using more than 5,000 bbls of water to con	nplete 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 prov		
Underground Injection ( UIC Perr	mit Number	)
Reuse (at API Number Off Site Disposal (Supply form W	/W 0 for disposal location	)
Other (Explain Plugging contractor use	es a vac truck, any and all effluent will be contained in tanks and disposed off loc	cation. AROPERLY,
		3 mm
Will closed loop systembe used? If so, describe: n/a		
Drilling medium anticipated for this well (vertical and horizo	ntal)? 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, remove	ed offsite, etcn/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		
Permittee shall provide written notice to the Office of Oil and West Virginia solid waste facility. The notice shall be provide		
I certify that I understand and agree to the terms an on April 1, 2016, by the Office of Oil and Gas of the West \	d conditions of the GENERAL WATER POLLUTION PEI	RMIT issued stand that the
provisions of the permit are enforceable by law. Violations o		
or regulation can lead to enforcement action.	ally examined and am familiar with the information subm	nitted on this
application form and all attachments thereto and that, based of	on my inquiry of those individuals immediately responsible	for o btaining
the information, I believe that the information is true, accurate submitting false information, including the possibility of fine	rate, and complete. I am aware that there are significant	penalties for
stiomitting laise information, including the possionity of the		
Company Official Signature		TARY PUBLIC
Company Official (Typed Name) Jam Khorammi	= ;	ATE OF OHIO
Company Official Title President	€ Co	mm. Expires
		06-28-20-21 Gas
Subscribed and sworn before methis 9th day of	February , 20/18 million 0	on 2018
Senson tones		FEB 20 2018
1 - 51 - 1	Notary Public	WV Department of WV Department of Environmental Protect
My commission expires 6 28 2		Environmen

posed Revegetation Trea	atment: Acres Disturbe	d 3.2 Prevegeta	ation pH 6.67
Lime 2	Tons/acre or to c	correct to pH 6.5	
Fertilizer type 10-10	0-20 equivalent		
Fertilizer amount	500	lbs/acre	
Mulch_Straw		Tons/acre	
		Seed Mixtures	
Te	emporary	1	Permanent
Seed Type	lbs/acre	Seed Type	lbs/acre
		Tall Fescue	40
		Ladino Clover	5
ch: s(s) of road, location, pi ided). If water from the V), and area in acres, of ocopied section of invol	pit will be land applied, the land application are		including this info have been as (L, W, D) of the pit, and dimens
s(s) of road, location, pi ided). If water from the V), and area in acres, of occopied section of invol	pit will be land applied, the land application are	, provide water volume, include dimensionea.	ns (L, W, D) of the pit, and dimens
s(s) of road, location, prided). If water from the V), and area in acres, of occopied section of invol	pit will be land applied, the land application are lived 7.5' topographic sh	, provide water volume, include dimensionea.	ns (L, W, D) of the pit, and dimens
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WW-7 8-30-06



# West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

API: 47-109-01037	WELL NO	).: <u>#</u> 07			
FARM NAME: Pocahontas Land Company					
RESPONSIBLE PARTY NAME	K. Petroleum, Ind	j.			
	DISTRICT:				
QUADRANGLE: Pineville	7.5				
SURFACE OWNER: Pinnac					
ROYALTY OWNER: Pinna					
UTM GPS NORTHING: 4153					
UTM GPS EASTING: 44729		/ATION: 1281'			
The Responsible Party named above preparing a new well location plat above well. The Office of Oil and the following requirements:  1. Datum: NAD 1983, Zon height above mean sea  2. Accuracy to Datum – 3  3. Data Collection Method Survey grade GPS: Post I	for a plugging permit or assign Gas will not accept GPS coordinate Units ne: 17 North, Coordinate Units level (MSL) – meters. .05 meters d:	ned API number on the linates that do not meet			
Real-	Time Differential				
Mapping Grade GPS X : Po		_			
Real-Time Differential XX					
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	02/08/2018			
Signature	Title	Date			

RECEIVED Office of Oil and Gas

FEB 20 2018

WV Department of Environmental Protection