

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

Wednesday, August 21, 2019
WELL WORK PLUGGING PERMIT
Vertical Plugging

PANTHER CREEK MINING, LLC 3228 SUMMIT SQUARE PLACE SUITE 180 LEXINGTON, KY 40509

Re: Permit approval for 35 47-005-00069-00-00

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: 35

Farm Name: LAFOLLETTE, R. & P.

U.S. WELL NUMBER: 47-005-00069-00-00

Vertical Plugging
Date Issued: 8/21/2019

I

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.
- In the event of an accident or explosion causing loss of life or serious personal injury in or about
 the well or while working on the well, the well operator or its contractor shall give notice, stating
 the particulars of the accident or explosion, to the oil and gas inspector and the Chief within
 twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.

WW-4B Rev. 2/01 1) Date Nov. 12, 2018 2) Operator's Well No. 35 3) API Well No. 47-005-00069

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

CHH 9400

APPLICATION FOR A PERMIT TO PLUG	AND	ABANDON
----------------------------------	-----	---------

4) Well Type: Oil X / Gas / Liquid injection / (If "Gas, Production or Underground storage	Waste disposal// Shallow
5) Location: Elevation 1,491.7' Watershed: Jo District Sherman County Boone Quadrangle	
6) Well Operator Panther Creek Mining, LLC 7) Designated 2 Address 3228 Summit Square Place, Suite 180 Address Lexington, KY 40509	
8) Oil and Gas Inspector to be notified 9) Plugging Contractor Name Jeff Smith Name CJ's Address 5369 Big Tyler Road Address Cross Lanes, WV 25313	
10) Work Order: The work order for the manner of plugging this See attached plugging prognosis & MSHA 101C Exemption Total remaining 6 5/8" casing - 295 ft. (from 2225' depth Total remaining 8 1/4" casing - 63 ft. (from 1871'depth to	to 2520' depth)
Notification must be given to the district oil and gas permitted work can commence.	inspector 24 ACCENCED before Office of Oil and Gas
	DEC 11 2018
Work order approved by inspector	Date WV Department of Environmental Protection

PLUGGING PROGNOSIS

Well #35 API# 47-005-00069 Sherman District, Boone County

Current Status

Elevation: 1,491.70'

Total Depth: 3,229 (Per Well Drilling Record)

Active: No Plugged: Yes

Lowest mineable coal seam between 938' – 941' Highest mineable coal seam between 25' - 28'

Mineable coal seam are ≥ 20 inches or currently being mined

Procedure for Plugging

- 1) Notify state inspector, Jeff Smith, @ 681-313-6743, before starting.
- 2) Cleanout hole to at least 200 ft. below the lowest mineable seam of coal. Clean out to 1,141 ft.
- 3) Perforate casing (if Applicable) to 101C standards from 200 ft. below to 100 ft. above the Eagle Coal seam
- 4) Set a 1,141 ft. expanding cement plug from 1,141 ft. to 0 ft.
- 5) Cement will be set to the surface.
- 6) Depending on site conditions, plugging procedures may be modified after approval of the inspector.
- 7) All changes to the plugging procedures will be noted in the plugging affidavit.
- 8) Erect permanent monument with API number.
- 9) Reclaim the site and access road.

MUST CLEAN OUT TO 200' BELOW.

LOWEST MINABLE COAL SEAM WHICH Office of Oil and Gas

15 AWY SEAM GREATER THAN 20" THICK, DEC 11 2018

WV Department of Environmental Protection

You w

FEDERAL MINE SAFETY AND HEALTH ADMINISTRATION 1100 Wilson Boulevard, Room 2352 Arlington, VA 22209-3939

IN THE MATTER OF SPEED MINING
LLC, AMERICAN EAGLE MINE

Petitioner

Petitioner

PETITION FOR MODIFICATION

MSHA Docket No. M-2013-050-C

MSHA IDIC EXEMPTION

CONSENT ORDER

Pursuant to 30 C.F.R. § 44.27, Panther Creek Mining LLC ("Panther Creek"), by its undersigned counsel, and the Solicitor for the Administrator of Coal Mine Safety, Mine Safety and Health Administration, hereby agree to a Consent Order resolving the above-referenced matter.

 Pursuant to 30 U.S.C. § 101(c) and 30 C.F.R. Part 44, Panther Creek sought modification of 30 C.F.R. § 75.1700, which provides as follows:

Each operator of a coal mine shall take reasonable measures to locate oil and gas wells penetrating coal beds or any underground areas of a coal mine. When located, such operator shall establish and maintain barriers around such oil and gas wells in accordance with State laws and regulations, except that such barriers shall not be less than 300 feet in diameter, unless the Secretary or his authorized representative permits a lesser barrier consistent with the applicable State laws and regulations where such lesser barrier will be adequate to protect against hazards from such wells to the miners in such mine, or unless the Secretary or his authorized representative requires a greater barrier where the depth of the mine, other geologic conditions, or other factors warrant such a greater barrier.

2) In its Petition for Modification, Panther Creek alleged that, pursuant to 30 C.F.R. § 44.4(a)(1), its proposed method was an alternative method of achieving the result of the

¹ The American Eagle Mine at issue in this matter is no longer operated by Speed Mining LLC. Instead, it is now operated by Panther Creek Mining LLC. Accordingly, the petitioner herein shall be referred to as Panther Creek Mining LLC.

- standard which would at all times guarantee no less than the same measure of protection afforded by the standard.
- 3) MSHA personnel conducted an investigation of the petition and filed a report of their findings and recommendations with the Administrator of Coal Mine Safety and Health.
- 4) On July 31, 2015, MSHA issued a Proposed Decision and Order granting the Petition for Modification.
- Panther Creek disagreed with a number of conditions of the Petition for Modification and requested a hearing before a Department of Labor Administrative Law Judge pursuant to 30 C.F.R. § 44.14. The parties have entered into settlement discussions and negotiated this Consent Agreement. In accordance with 30 C.F.R. § 44.27(b), this Consent Agreement contains Consent Findings and a Consent Order disposing of the entire proceeding.

Consent Findings

- 6) In accordance with 30 C.F.R. § 44.27(b)(1), both MSHA and Panther Creek agree that the following Consent Order shall have the same effect as if made after a full hearing.
- 7) In accordance with 30 C.F.R. § 44.27(b)(2), both MSHA and Panther Creek agree that the record on which the following Consent Order is based consists of the petition and agreement and all other pertinent information as set forth in Section 44.27(b)(2).
- 8) In accordance with 30 C.F.R. § 44.27(b)(3), both MSHA and Panther Creek agree to waive any further procedural steps before the Administrative Law Judge and Assistant Secretary.
- 9) In accordance with 30 C.F.R. § 44.27(b)(4), both MSHA and Panther Creek agree to waive any right to challenge or contest the validity of the Consent Findings and Consent Order made in accordance with this Consent Agreement.
- 10) Both MSHA and Panther Creek agree that the terms and conditions of the following Consent Order will at all times guarantee no less than the same measure of protection afforded by the existing standard under the conditions present at this particular mine.

Consent Order

Under the authority delegated by the Secretary of Labor to the Administrator for Coal mine Safety and Health and under § 811(c) and 30 C.F.R. Part 44, modification of the application of 30 C.F.R. § 75.1700 at the American Eagle Mine is hereby GRANTED as set forth below.

1. <u>DISTRICT MANAGER APPROVAL REQUIRED</u>

- a. A safety barrier of 300 feet in diameter (150 feet between any mined area and a well) shall be maintained around all oil and gas wells (defined herein to include all active, inactive, abandoned, shut-in, previously plugged wells, water injection wells, and carbon dioxide sequestration wells) until approval to proceed with mining has been obtained from the district manager. Wells that were drilled into potential oil or gas producing formations that did not produce commercial quantities of either gas or oil (exploratory wells, wildcat wells or dry holes) are classified as oil or gas wells by MSHA.
- b. Prior to mining within the safety barrier around any well that the mine plans to intersect, the mine operator shall provide to the district manager a sworn affidavit or declaration executed by a company official stating that all mandatory procedures for cleaning out, preparing, and plugging each gas or oil well have been completed as described by the terms and conditions of this order. The affidavit or declaration must be accompanied by all logs described in subparagraphs 2(a)(2) and 2(a)(3) below and any other records described in those subparagraphs which the district manager may request. The district manager will review the affidavit or declaration, the logs and any other records that have been requested, and may inspect the well itself, and will then determine if the operator has complied with the procedures for cleaning out, preparing and plugging each well as described by the terms and conditions of this Order.

If the district manager determines that the procedures have been complied with, he will provide his approval, and the mine operator may then mine within the safety barrier of the well, subject to the terms of this Order.

If well intersection is not planned, the mine operator may request a permit to reduce the 300 foot diameter of the safety barrier but to not intersect the well. The district manager may require documents and information that help quantify the accuracy of the location of the well in respect to the mine maps and mining projections. This information may include survey closure data, down-hole well deviation logs, historical well intersection location data and any additional data required by the district manager. If the district manager determines that the proposed barrier reduction is reasonable, he will provide his approval, and the mine operator may then mine within the safety barrier of the well.

c. The terms and conditions of this Order apply to all types of underground coal mining.

2. MANDATORY PROCEDURES FOR CLEANING OUT, PREPARING, PLUGGING, AND REPLUGGING OIL OR GAS WELLS

a. MANDATORY PROCEDURES FOR CLEANING OUT AND PREPARING VERTICAL OIL AND GAS WELLS PRIOR TO PLUGGING OR REPLUGGING

- (1) If the total depth of the well is less than 4,000 feet, the operator shall completely clean out the well from the surface to at least 200 feet below the base of the lowest mineable coal seam, unless the district manager requires cleaning to a greater depth based on his judgment as to what is required due to the geological strata, or due to the pressure within the well (the operator shall provide the district manager with all information it possesses concerning the geological nature of the strata and the pressure of the well). If the total depth of the well is 4,000 feet, or greater, the operator shall completely clean out the well from the surface to at least 400 feet below the base of the lowest mineable coal seam. The operator shall remove all material from the entire diameter of the well, wall to wall.
- The operator shall prepare down-hole logs for each well. They shall consist of a caliper survey and log(s) suitable for determining the top, bottom, and thickness of all coal seams and potential hydrocarbon producing strata and the location for a bridge plug. The district manager may approve the use of a down-hole camera survey in lieu of down-hole logs. In addition, a journal shall be maintained describing the depth of each material encountered, the nature of each material encountered; bit size and type used to drill each portion of the hole; length and type of each material used to plug the well; length of casing(s) removed, perforated or ripped or left in place, any sections where casing was cut or milled; and other pertinent information concerning cleaning and sealing the well. Coal seam depth will be based on an e-log survey completed at the time of the well plugging. This e-log information is used for determining the coal seam depth and the depths of the perforations or rips in the casing from the surface reference point. Invoices, work-orders, and other records relating to all work on the well shall be maintained as part of this journal and provided to MSHA upon request.
- (3) When cleaning out the well as provided for in subparagraph (a)(1), the operator shall make a diligent effort to remove all of the casing in the well. If it is not possible to remove all of the casing, the operator must take appropriate steps to ensure that the annulus between the casing and between the casings and the well walls are filled with expanding (minimum 0.5% expansion upon setting) cement and contain no voids. If the casing cannot be removed, it must be cut, milled, perforated or ripped at all mineable coal seam levels to facilitate the removal of any remaining casing in the coal seam by the mining equipment. Any casing which remains shall be perforated or ripped to permit the injection of cement into voids within and around the well. The operator shall ensure that work

performed prior to the date of this order to perforate or rip all casing remaining at mineable coal seam levels is consistent with either Appendix A or Appendix B (attached). All work performed after the date of this order to perforate or rip all casing remaining at mineable coal seam levels shall be consistent with Appendix A. Perforations or rips consistent with Appendix A or Appendix B, as applicable by the date of this order, are required at least every 50 feet from 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam up to 100 feet above the uppermost mineable coal seam.

If the operator, using a casing bond log, can demonstrate to the satisfaction of the district manager that all annuli in the well are already adequately sealed with cement, then the operator will not be required to perforate or rip the casing for that particular well. When multiple casing and tubing strings are present in the coal horizon(s), any casing which remains shall be ripped or perforated and filled with expanding cement as indicated above. An acceptable casing bond log for each casing and tubing string is needed if used in lieu of ripping or perforating multiple strings.

- (4) If the district manager concludes that the completely cleaned-out well is emitting excessive amounts of gas, the operator must place a mechanical bridge plug in the well. It must be placed in a competent stratum at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam, but above the top of the uppermost hydrocarbon-producing stratum, unless the district manager requires a greater distance based on his judgment that it is required due to the geological strata, or due to the pressure within the well (the operator shall provide the district manager with all information it possesses concerning the geological nature of the strata and the pressure of the well). If it is not possible to set a mechanical bridge plug, an appropriately sized packer may be used.
- (5) If the upper-most hydrocarbon-producing stratum is within 300 feet of the base of the lowest mineable coal seam, the operator shall properly place mechanical bridge plugs as described in subparagraph (a)(4) to isolate the hydrocarbon producing stratum from the expanding cement plug. Nevertheless, the operator shall place a minimum of 200 feet (400 feet if the total well depth is 4,000 feet or greater) of expanding cement below the lowest mineable coal seam, unless the district manager requires a greater distance based on his judgment that it is required due to the geological strata, or due to the pressure within the well.

b. MANDATORY PROCEDURES FOR PLUGGING OR REPLUGGING OIL OR GAS WELLS TO THE SURFACE

After completely cleaning out the well as specified in paragraph 2(a) above, the following procedures shall be used to plug or replug wells:

(1) The operator shall pump expanding cement slurry down the well to form a plug which runs from at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam (or lower if required by the district manager based on his judgment that a lower depth is required due to the geological strata, or due to the pressure within the well) to the surface. The expanding cement will be placed in the well under a pressure of at least 200 pounds per square inch.

Portland cement or a lightweight cement mixture may be used to fill the area from 100 feet above the top of the uppermost mineable coal seam (or higher if required by the district manager based on his judgment that a higher distance is required due to the geological strata, or due to the pressure within the well) to the surface.

(2) The operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger casing, set in cement, shall extend at least 36 inches above the ground level with the API well number engraved or welded on the casing. When the hole cannot be marked with a physical monument (i.e. prime farmland), high-resolution GPS coordinates (one-half meter resolution) are required.

c. <u>MANDATORY PROCEDURES FOR PLUGGING OR REPLUGGING OIL AND GAS WELLS FOR USE AS DEGASIFICATION WELLS</u>

After completely cleaning out the well as specified in paragraph 2(a) above, the following procedures shall be utilized when plugging or replugging wells that are to be used as degasification wells:

- (1) The operator shall set a cement plug in the well by pumping an expanding cement slurry down the tubing to provide at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) of expanding cement below the lowest mineable coal seam, unless the district manager requires a greater depth based on his judgment that a greater depth is required due to the geological strata, or due to the pressure within the well. The expanding cement will be placed in the well under a pressure of at least 200 pounds per square inch. The top of the expanding cement shall extend at least 50 feet above the top of the coal seam being mined, unless the district manager requires a greater distance based on his judgment that a greater distance is required due to the geological strata, or due to the pressure within the well.
- (2) The operator shall securely grout into the bedrock of the upper portion of the degasification well a suitable casing in order to protect it. The remainder of this well may be cased or uncased.

- (3) The operator shall fit the top of the degasification casing with a wellhead equipped as required by the district manager in the approved ventilation plan.
- (4) Such equipment may include check valves, shut-in valves, sampling ports, flame arrestor equipment, and security fencing.
- (5) Operation of the degasification well shall be addressed in the approved ventilation plan. This may include periodic tests of methane levels and limits on the minimum methane concentrations that may be extracted.
- (6) After the area of the coal mine that is degassed by a well is sealed or the coal mine is abandoned, the operator must plug all degas wells using the following procedures:
 - (i) The operator shall insert a tube to the bottom of the well or, if not possible, to within 100 feet above the coal seam being mined. Any blockage must be removed to ensure that the tube can be inserted to this depth.
 - (ii) The operator shall set a cement plug in the well by pumping Portland cement or a lightweight cement mixture down the tubing until the well is filled to the surface.
 - (iii) The operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger casing, set in cement, shall extend at least 36 inches above the ground level with the API well number engraved or welded on the casing.

d. MANDATORY ALTERNATIVE PROCEDURES FOR PREPARING AND PLUGGING OR REPLUGGING OIL OR GAS WELLS

The following provisions apply to all wells which the operator determines, and the MSHA district manager agrees, cannot be completely cleaned out due to damage to the well caused by subsidence, caving or other factors.

- (1) The operator shall drill a hole adjacent and parallel to the well, to a depth of at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the lowest mineable coal seam, unless the district manager requires a greater depth based on his judgment that a greater depth is required due to the geological strata, or due to the pressure within the well.
- (2) The operator shall use a geophysical sensing device to locate any casing which may remain in the well.

- (3) If the well contains casing(s), the operator shall drill into the well from the parallel hole. All casings shall be perforated or ripped to permit the injection of cement into voids within and around the well. The operator shall ensure that work performed prior to the date of this order to perforate or rip all casing remaining at mineable coal seam levels is consistent with either Appendix A or Appendix B (attached). All work performed after the date of this order to perforate or rip all casing remaining at mineable coal seam levels shall be consistent with Appendix A. Perforations or rips consistent with Appendix A or Appendix B, as applicable by the date of this order, are required at least every 50 feet from at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam up to 100 feet above the seam being mined, unless the district manager requires a greater distance based on his judgment that a greater distance is required due to the geological strata, or due to the pressure within the well. The operator shall fill the annulus between the casings and between the casings and the well wall with expanding (minimum 0.5% expansion upon setting) cement, and shall ensure that these areas contain no voids. If the operator, using a casing bond log, can demonstrate to the satisfaction of the district manager that the annulus of the well is adequately sealed with cement, then the operator will not be required to perforate or rip the casing for that particular well, or fill these areas with When multiple casing and tubing strings are present in the coal horizon(s), any casing which remains shall be ripped or perforated and filled with expanding cement as indicated above. An acceptable casing bond log for each casing and tubing string is needed if used in lieu of ripping or perforating multiple strings.
- (4) Where the operator determines, and the district manager agrees, that there is insufficient casing in the well to allow the method outlined in subparagraph (d)(3) to be used, then the operator shall use a horizontal hydraulic fracturing technique to intercept the original well. From at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam to a point at least 50 feet above the seam being mined, the operator shall fracture in at least six places at intervals to be agreed upon by the operator and the district manager after considering the geological strata and the pressure within the well. The operator shall then pump expanding cement into the fractured well in sufficient quantities and in a manner which fills all intercepted voids.
- (5) The operator shall prepare down-hole logs for each well. They shall consist of a caliper survey and log(s) suitable for determining the top, bottom, and thickness of all coal seams and potential hydrocarbon producing strata and the location for the bridge plug. The operator may obtain logs from the adjacent hole rather than the well if the condition of the well makes its impractical to insert the equipment necessary to obtain the log. The district manager may approve the use of a down-hole camera survey in lieu of down-hole logs if in his judgment such logs would not be suitable for obtaining the above-listed data or are

impractical to obtain due to the condition of the drill hole. A journal shall be maintained describing the depth of each material encountered, the nature of each material encountered; bit size and type used to drill each portion of the hole; length and type of each material used to plug the well; length of casing(s) removed, perforated or ripped or left in place; and other pertinent information concerning sealing the well. Invoices, work-orders, and other records relating to all work on the well shall be maintained as part of this journal and provided to MSHA upon request.

(6) After the operator has plugged the well as described in subparagraphs (d)(3) and/or (d)(4), the operator shall plug the adjacent hole, from the bottom to the surface, with Portland cement or a lightweight cement mixture. The operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger casing, set in cement, shall extend at least 36 inches above the ground level.

A combination of the methods outlined in subparagraphs (d)(3) and (d)(4) may have to be used in a single well, depending upon the conditions of the hole and the presences of casings. The operator and the district manager should discuss the nature of each hole. The district manager may require that more than one method be utilized. The mine operator may submit an alternative plan to the district manager for approval to use different methods to address wells that cannot be completely cleaned out.

The district manager may require additional documentation and certification by a registered petroleum engineer to support the proposed alternative methods.

3. MANDATORY PROCEDURES WHEN MINING WITHIN 100-FOOT DIAMETER BARRIER AROUND WELL

- a. A representative of the operator, a representative of the miners, the appropriate State agency, or the MSHA district manager may request that a conference be conducted prior to intersecting any plugged or replugged well. Upon receipt of any such request, the district manager shall schedule such a conference. The party requesting the conference shall notify all other parties listed above within a reasonable time prior to the conference to provide opportunity for participation. The purpose of the conference shall be 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.
- b. The operator shall intersect a well on a shift approved by the district manager. The operator shall notify the district manager and the miners' representative in sufficient time prior to intersecting a well in order to provide an opportunity to have the representatives present.

- c. When using continuous mining methods, the operator shall install drivage sights at the last open crosscut near the place to be mined to ensure intersection of the well. The drivage sites shall not be more than 50 feet from the well. When using the longwall-mining methods, distance markers shall be installed on 5-foot centers for a distance of 50 feet in advance of the well in the headgate entry and in the tailgate entry.
- d. The operator shall ensure that fire-fighting equipment including fire extinguishers, rock dust, and sufficient fire hose to reach the working face area of the well intersection (when either the conventional or continuous mining method is used) is available and operable during all well intersections. The fire hose shall be located in the last open crosscut of the entry or room. The operator shall maintain the water line to the belt conveyor tailpiece along with a sufficient amount of fire hose to reach the farthest point of penetration on the section. When the longwall mining method is used, a hose to the longwall water supply is sufficient.
- e. The operator shall ensure that sufficient supplies of roof support and ventilation materials shall be available and located at the last open crosscut. In addition, emergency plugs and suitable sealing materials shall be available in the immediate area of the well intersection.
- f. On the shift prior to intersecting the well, the operator shall service all equipment and check it for permissibility. Water sprays, water pressures and water flow rates used for dust and spark suppression shall be examined and any deficiencies corrected.
- g. The operator shall calibrate the methane monitor(s) on the longwall, continuous mining machine, or cutting machine and loading machine on the shift prior to intersecting the well.
- h. When mining is in progress, the operator shall perform tests for methane with a handheld methane detector at least every 10 minutes from the time that mining with the continuous mining machine or longwall face is within 30 feet of the well until the well is intersected. During the actual cutting process, no individual shall be allowed on the return side until the well intersection has been completed, and the area has been examined and declared safe. All workplace examinations on the return side of the shearer will be conducted while the shearer is idle.
- i. 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 intersecting 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.
- j. When the well is intersected, the operator shall de-energize all equipment, and thoroughly examine and determine the area is safe before mining is resumed.

- k. After a well has been intersected and the working place determined to be safe, mining shall continue inby the well a sufficient distance to permit adequate ventilation around the area of the well.
- 1. If the casing is cut or milled at the coal seam level, the use of torches should not be necessary. However, in rare instances, torches may be used for inadequately or inaccurately cut or milled casings.

No open flame shall be permitted in the area until adequate ventilation has been established around the well bore and methane levels of less than 1.0% are present in all areas that will be exposed to flames and sparks from the torch. The operator shall apply a thick layer of rock dust to the roof, face, floor, ribs and any exposed coal within 20 feet of the casing prior to the use of torches.

- m. Non-sparking (brass) tools will be located on the working section and will be used to expose and examine cased wells.
- n. No person shall be permitted in the area of the well intersection except those actually engaged in the operation, including company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.
- o. The operator shall alert all personnel in the mine to the planned intersection of the well prior to their going underground if the planned intersection is to occur during their shift. This warning shall be repeated for all shifts until the well has been mined through.
- p. The well intersection shall be under the direct supervision of a certified individual. Instructions concerning the well intersection shall be issued only by the certified individual in charge.
- q. The provisions of this Order do not impair the authority of representatives of MSHA to interrupt or halt the well intersection, and to issue a withdrawal order, when they deem it necessary for the safety of the miners. MSHA may order an interruption or cessation of the well intersection and/or a withdrawal of personnel by issuing either a verbal or a written order to that effect to a representative of the operator, which order shall include the basis for the order. Operations in the affected area of the mine may not resume until a representative of MSHA permits resumption. The mine operator and miners shall comply with verbal or written MSHA orders immediately. All verbal orders shall be committed to writing within a reasonable time as conditions permit.
- r. A copy of this Order shall be maintained at the mine and be available to the miners.
- s. Within 30 days after this Order becomes final, the operator shall submit proposed revisions for its approved 30 CFR Part 48 training plan to the district manager. These proposed revisions shall include initial and refresher training regarding compliance with the terms and conditions stated in the Order. The operator shall provide all

miners involved in the well intersection with training regarding the requirements of this Order prior to mining within 150 feet of the next well intended to be mined through.

- t. The responsible person required under 30 CF.R. § 75.1501 is responsible for well intersection emergencies. The well intersection procedures should be reviewed by the responsible person prior to any planned intersection.
- u. Within 30 days after this Order becomes final, the operator shall submit proposed revisions for its approved mine emergency evacuation and firefighting program of instruction required under 30 C.F.R. § 75.1502. The operator will revise the program of instruction to include the hazards and evacuation procedures to be used for well intersections. All underground miners will be trained in this revised plan within 30 days of submittal.

PORM OG-A

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

47-005-0008	9
47-005-00069	
47-003	
Well No. 35	
BE RETAINED BY THE AL	>

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THING COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE

L.M. LaFollette, Jr. - Box 2068-Charleston 27, W. Va. The Pure Oil Company Robert Larollette - Box hill Charleston 27,W.Va-NAME OF WELD OPERATOR Box 551 - Newark, Ohio James LaFollette - Box high -Charleston 27, W. Va. 1958 JUL 9 H. A. Robson Estate - % Taylor Vinson, WELL AND LOCATION P. O. Box 53 - Huntington, W. Va. Boone 917 Ridgeway Road County Fred W. Prichard, Well. No. Charleston 4, W. Va LaFollette, Robson & Prichard Tract "B"

STATE INSPECTOR SUPERVISING PLUGGING.

AFFIDAVIT

STATE OF WEST VIRGINIA.

County of Kanawha

Homer Groves

and

Stanley Ribin

being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

was commenced on the 26th day of May

not be seen and say that they are experienced in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

not be seen and Stanley Ribin

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

not be seen and Stanley Ribin

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

not be seen and Stanley Ribin

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

not be seen and Stanley Ribin

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

not be seen and Stanley Ribin

Not be seen and Stanley Ribin

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 26th day of May

Not be seen and Stanley Ribin

Not be seen and Stanley Ribin

The Pure Oil Company

well operator, and participated in the work of plugging and filling the above well was plugged and tilled in the following manner:

EAND OR TONE RECORD	FILLING	MATERIAL	1	PLUGS USED	CARING
FORMATION	CONTENT	PROS	⁰ 70	EIZE & KING	310111 and
Started and pulled	p_3/80 the from	hole.	200	49	20 3 × 3 25
Set bridge	almin to the said	3166	3156	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	5 9 7 0
Lipe	Cement	3156	3136	20! cement	S 4 2 5 00
Weir Sand	Clay	3136	2875	* 4	6
Slate & Shells	Cement	2875	2865	10" cement	S. W. S. W. S.
Set bridge	Services Property of	2800	2790	5 M - " - " 5 9	500
Big Lime & Injun	Clay U	2790	2530	The supplier of the supplier o	·or (191 d/1)
		2530	. 2510	201 cement	777
Ripped 7" csg. appr	oximately 22251	and pull	ed from	hole.	22251 2951
Set bridge	11 11 11 11	2225	2215	Line to the work	
Maxon Sand	Cement	2215 -	. 2205	10' cement	2. 10. 12.
Maxon Sand, slate	Clay	2205	-2120	A	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
Lime, slate	Cement	2120	2110	10 tement	g to
Set bridge	records . Deli	1974	1964	\$	So #2 10° 1, 10°
Ripped 8-5/84 csg.	approximately 1	871' and	bulled :	from hole.	1871 1 631
COAL BEAMS	The state of the s	4(/1/	4 - 4		ON OF MONUMENT
Ed a right man the age	Property Vel	100	1001	7" csg. imbedd	ed below surface and
(HAME)	side a col	1. 1.54	74,	protruding abo	ve surface 36" high
(HAME) See Rises	016	The state of			nt w/ metal plate on
(MAME)	- cent > 571	· init	Ber		POCO LEPB 35.

(MAME)	- 0								_
and th	of the two	k of plugging	and filli	ie said w	ell was	completed (on the	8th day	of
				deres in			75 JAN 57 13		
E PATCHO	Ju	ne 1	o 58'	1000	1	7.0	The same of the same of		
A - 12 - 131 A	1 of	- 1- m- Dr. D	O principal	TENU	うん	mev_	George	L: 1	7
Ar Ar	id further o	leponents sait	n not	Test	70	Λ Θ	1000	and the state of the	
			- production	Fact Briefly	7	0	July VA	tion - virial -	p.
" es 2 (es fo	7	COCAGE	一世の世	3.47		- min			_
and in rest to				31	d day	- X	July	1958	
Sv	vorn to and	subscribed b	eiore me i	nis	aay	OI U		manufacture of the last of the	-
	* 1 5	10 to 10 to	70			· A	no 7. 8	rell .	1
	7		1015 1 15		-	1	1	-1 D-11-	
Miss on	mmission e	mireg.	- H -		2.	/	to 1 200 P	lotary Public.	

My Commission Expires July 26, 1961

Notary Public. RECEIVED Permit No. BOO-690 fice of Oil and Gas

WV Department of Environmental Protection

DEC 1 1 2018

Office of Oil and Gas

VERIEN PALL OF PRINCENS AND EALTHO WE

E OVAL SEGRED DE HYDR IN ABILITAVA

STATUTURE TREETED SUPPRESTATING PLUCOING Robein & Priaderra Trach "Be Charleston b, W. Wa. Fied W, Prichard, Agent - 927 Bidgetony Road 1.0000 F, C, Prox 53 - Marchington li. A. Rollegu Betste - P Terlor Virteen, - Bunati atting to part the manual SEC 3020 CIT CO DETA -Ech 2000

bring histodily amora according to low deport and say that they are expense. ficher graves Stankey Rubin

-2 - 11 Man, and that the water of the The first soul tillury out and such redly and were oraplayed by ... The Free Dill Co. 1 or 7. well aperator, and parametered in the reals of purefull and filling the above well. The

end I'm in the following manner: was and manyed on the .. Rounday of Now.

FORMATION

Slate & Shells Set bridge

Salt Sand, slate Clay

Started and pulled 10-3/4" csg. from hole.	1 Was commission 6001.
Lime Clay 1000 971	
Coal, lime, slate Cement 971 878	931 cement . 0307369 30 1732 31.
Time sand, slate Clay 878 647	TO A TOTAL A SECRETARY OF THE
	54' cement a soute and co 30's Re-
Lime, sand, slate Clay 593 474	The state of the s
Coal, sand, slate Cement 474 422	521 cement
100 100	to the second se
Coal, sand, slate Cement 1 102 341 350	5211 cement 16.
Sand : Clay 350 1:250	(10)
	535 cement court
17: 205 58	550 10 1
Coal, lime, slate Cement 58 5510	585 cement color
5552	5574 77
. 'S' is and employ the trademille	the state of the s
COAL SEAMS TO CONTENT OF GROM TO 30	2510. [201 eseeuth
lst Cement I 0 58 00	\$230:
2nd Cement 205 258 300	2000
3rd Cement CCEC: 350 402 232	2265 10' remark . * - 2" 90
Lith Cement 122 474730	5842
	2020 SOI COLLEGE 30 15
6th, 7th Cement 678 971	378
1, 17.1.0	
+ 55 : 1866 - 16 70 TO CA 12-3/30 Str. 2. 2700 100) 64	The state of the s
The state of a contract of the	A STATE OF THE STA
and the second s	The state of the s
water the name agents to the Little of the little	Fund 1 7 15
weeks the true of extrange to the true to the property of the	Fairs that the state of the party and the pa

701 cement

LATE OF THE



- 12	x 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				25 V, Spiers	(Tale)	garte Myagoni is	10
7			,/		A. A. A.	/ພາສະພາກ ⁻	the second secon	
	85	1	STATE OF	F WEST VIRGINIA		torfa)	gra – interpretation (78.00 B
		. 1 8	DEPARTM	ENT OF MIN	ES	artitra mila	a constant	
Quadrangle P	eytona .	π	OIL AND	GAS DIVISION		200 200		-r.y
	00-69	1. 7	WELL	RECORD		Oil or G	as Well 017	
Company	The Pur	oil Company	ri -	Samuel	T		(KIND)	
Address	P. O. Box	& 551, Newark	c. Ohio	Casing and Tubing	Used in Drilling	Left in Well	Packers	
Location (waters			Acres 5,000	1/		1 7 1		
Well No 3			Elev. 11:91.7	Size				
		County E		16	6 0 5	1	Kind of Packer	
1 4.02	0.10	the second secon	llette Robson		990	1 990		- 5
		Address	A 1985	814	1934	1934	Size of	
Mineral rights A	re owned by		1	v 856	2520	2520	Depth set	
the state of the s	20 (SXI) /2 (Address	7	59/16	= 3(x 1) 1 = -0 (x v)	125	Depth sec	(A)
Drilling commend			Tarana and	3.	1 n n n n n n	1.01 - 1	Perf. top	- F
Drilling complete				2 #		32131	Perf. bottom	
Date Sunt 3/20	/30 Fro	m 3200 T	a_3218	Liners Used			Perf, top	
and the second second	80 qts	· 16.3		A 100	J. 1. 1. 1.	4	Perf. bottoW	
Open Flow			Inch	1			Fort. posterni	
4 6	/10ths Merc.	in	Inch	TARING CEM	ENTED	grap	To water the state of	- V
Volume	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n a Gran	Cu. Ft.	CABING CEM	ENIED_	SIZE	No. Ft	Date
Rock Pressure	er.	1) Alsa paul	hrs		and the	+05	26	
011 1001 13	uld in no.	Le ·	bbls., 1st 24 hrs.		NCOUNTEREL		FEET 36 IN	
Manager of the same of	D.		1 1 1	200		770		Contraction Contraction Contraction
WELL ACIDIZE		+ (1146	T. 36 INC	698	FEET24INC	CHES
3.786, 1					20	698	FEET 36 INC	400
WELL PRACTU RESULT AFTER	REDREDREATMEN	REATMENT		1146	T A INC	ones 938	410	400
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2	RED R TREATMEN RE AFTER TI 25 1/20	Feet 6	613	Salt Water	T H INC	HES 938	FEET 36 INC	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation	RED R TREATMEN RE AFTER TO 25 1/20 Color	REATMENTFeet6	613 Top	Salt Water	T A INC	ones 938	FEET 36 INC	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface	RED R TREATMEN RE AFTER TO 25 120 Color black	Feet 6		Salt Water Bottom	T 48 INC	HES 938	FEET 36 INC	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand	RED R TREATMEN RE AFTER TO 25 1/20 Color	Feet 6	Top 0 2	Salt Water Bottom 2 25	T 48 INC	HES 938	FEET 36 INC	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coel	RED R TREATMEN RE AFTER TO 25 1/20 Color black brown	Feet 6	Top 0 2 25	Salt Water Bottom 2 25 28	T 48 INC	UO Fret	FEET 36 INC	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand	RED R TREATMEN RE AFTER TO 25 120 Color black	Feet 6	Top 0 2 25 28	Salt Water Bottom 2 25 28 45	1675 211 Oll, Gas or Water	LO Frei	Remarks	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime C Sand	RED REATMENTE AFTER TO 25 1/20 Color black brown black white white	Feet 6	Top 0 2 25	Salt Water Bottom 2 25 28 45 80	T 48 INC	UO Fret	FEET 36 INC	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime c Sand Coal	RED R TREATMEN RE AFTER TO 25 120 Color black brown black white	Feet 6	Top 0 2 25 28 15 80 225	Salt Water	T HO INC	LO Frei	Remarks	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime CSand Ccal Slate	RED REATMENTE AFTER TO 25 1/20 Color black brown black white white black	Feet 6	Top 0 2 25 28 15 80 225 228		T INC	Depth	Remarks	CHES
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime Coal Slate	RED R TREATMEN RE AFTER TO 25 1/20 Color black brown black white white black white	Feet 6	Top 0 2 25 28 15 80 225 228 230	Salt Water Bottom 2 25 28 45 80 225 228 230 370	T INC	Depth	Remarks	ount
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coel Slate Lime c Sand Coal Slate	RED REATMENTE AFTER TO 25 1/20 Color black brown black white white black	Feet 6	Top 0 2 25 28 45 80 225 228 230 370	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372	T 48 INC	Depth	Remarks	CHES
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coel Slate Slate Coel Slate Sl	RED R TREATMEN RE AFTER TO 25 1/20 Color black brown black white black white black white	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392	Salt Water Bottom 2 25 28 45 45 225 228 230 370 372 392 442	T INC	Depth	Remarks Remarks Small amo	ents
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coel Slate S	RED R TREATMEN RE AFTER TO 25 1/20 Color black brown black white black white black white	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 370 372 392 hh2	Salt Water Bottom 2 25 28 45 45 20 225 228 230 370 372 392 442	T INC 1675 211 Oll. Gas or Water Water	Depth 225	Remarks Small amo	ents
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coel Slate S	RED R TREATMENT RE AFTER TO 25 1/20 Color black brown black white black white black white black white	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 444	Salt Water Bottom 2 25 28 45 45 225 228 230 370 372 392 442 444 510	T INC 1675 211 Oll. Gas or Water Water	HO Fret Depth	Remarks Remarks Small amo	ents
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate S	RED R TREATMENT RE AFTER TO 25 420 Color black brown black white black white black white black black black black black black black	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 414 414 510	Salt Water Bottom 2 25 28 45 45 225 228 230 370 372 392 442 444 510 542	T INC 1675 211 Oll. Gas or Water Water	Depth 225	Remarks Small amo	ents
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coel Slate S	RED R TREATMENT RE AFTER TO 25 1/20 Color black brown black white black white black white black white	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 370 372 392 444 510 542	Salt Water Bottom 2 25 28 45 45 225 228 230 370 372 392 442 444 510 542 547	T INC 1675 211 Oll. Gas or Water Water	Depth 225	Remarks Small amo	ents
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water_2 Formation Surface Sand Coal Slate Slate Sand Coal Coal Slate Sand Coal Coal Coal Coal	RED R TREATMENT RE AFTER TO 25 1/20 Color black brown black white black white black white black white black white	Feet 6	Top O 2 25 28 45 80 225 228 230 370 372 392 444 510 542 5517 613	Salt Wuter Bottom 2 25 28 45 80 225 228 230 370 372 392 442 4442 4444 510 542 517 613	T INC 1675 211 Oll. Gas or Water Water	140 Fret Depth 225	Remarks Small amo	ent hr.
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water_2 Formation Surface Sand Coal Slate Slate Sand Coal Slate Sand Coal Slate Sand Coal Slate	RED R TREATMENTE AFTER TO 25 1/20 Color black black white black white black white black white black white black	Feet 6	Top O 2 25 28 45 80 225 228 230 370 370 372 392 414 510 5142 5147 613 617	Salt Wuter Bottom 2 25 28 45 80 225 228 230 370 372 392 442 4442 4444 510 542 517 613	T INC 1675 211 Oil, Gas or Water Water	Depth 225	Remarks Small amo	ount hr.
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water_2 Formation Surface Sand Coal Slate Slate Sand Coal Slate Slate Slate Sinte Sand Coal Slate	RED R TREATMENT RE AFTER TO 25 1/20 Color black brown black white	Feet 6	Top O 2 25 28 45 80 225 228 230 370 370 372 392 414 510 512 517 613 617 676	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372 392 442 4444 510 542 547 613 617 676 7700	T INC 1675 211 Oil, Gam or Water Water	110 Fret Depth 225 420	Remarks Small amo	ent hr.
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime Coal Slate Lime Slate Lime Slate Lime Slate Lime Sand	RED R TREATMENT TO THE AFTER T	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 370 372 392 414 510 542 547 613 617 6617	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372 392 444 510 512 542 547 613 617 676 7700 725	T INC 1675 211 Oil, Gas or Water Water	140 Fret Depth 225	Remarks Small amo	ount Office of Oil ar
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime Coal Slate Sand Coal Slate Lime Sand Coal Slate Lime Slate L	RED R TREATMENT TO THE AFTER T	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 414 514 514 514 5147 613 617 1676 1700 1725	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372 392 444 510 542 542 547 613 617 676 7700 725 765	T INC 1675 211 Oil, Gam or Water Water Water	10 Fret Depth 225	Remarks Small amo	ount Office of Oil a
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime Coal Slate Lime Slate Lime Slate Lime Slate Lime Sand	RED R TREATMENT TO THE AFTER T	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 414 5140 5142 5147 1613 1676 1700 1725 1765	Salt Water Bottom 2 25 28 45 28 45 225 228 230 370 372 392 444 510 542 547 613 617 676 1700 725 765 800	T INC 1675 211 Oil, Gam or Water Water	10 Fret Depth 225	Remarks Small amo	ount Office of Oil at
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime Coal Slate Slate Lime Slate Lime Slate Lime Slate Lime Slate Lime Sand Coal Slate Slate Lime Slate Lime Sand Coal	RED R TREATMENT RE AFTER TO 25 120 Color black black white black white black white black white black white black white black white white black white	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 444 514 514 514 5147 613 617 1676 1700 1765 1800 1898	Bottom 2 25 28 45 80 225 228 230 370 372 392 442 444 510 542 547 613 617 676 1700 7725 765 800 898 1902	T INC 1675 211 Oil, Gam or Water Water Water	Depth 225	Remarks Small amo	ount Office of Oil at
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate	RED R TREATMENT RE AFTER TO 25 120 Color black brown black white black white black black black white black	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 444 510 542 517 613 7617 7613 7617 765 700 7725 7800 898 8902	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372 392 444 510 542 517 613 617 676 1700 1725 1765 800 898 1902 1925	T INC 1675 211 Oil, Gam or Water Water Water	Depth 225	Remarks Small amo	ount Office of Oil at
WELL FRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate Lime Sand Coal Slate Lime Slate Lime Slate Lime Sand Coal Slate Lime Slate Lime Sand Coal Slate Lime Lime Lime Lime Lime Lime Lime Lim	RED Color Color black brown black white black white black black white black black white black white black black white black white black white black white	Feet 6	Top O 2 25 28 45 80 225 228 230 370 372 392 444 510 542 517 613 7617 7613 7617 765 7800 7725 7850 7898 7902 7925	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372 392 444 510 542 517 613 617 676 1700 1725 1765 800 898 1902 1925	T INC 1675 211 Oil, Gam or Water Water Water	Depth 225	Remarks Small amo	ount hr. Office of Oil ar
WELL PRACTU RESULT AFTER ROCK PRESSUR Fresh Water 2 Formation Surface Sand Coal Slate	RED R TREATMENT RE AFTER TO 25 120 Color black brown black white black white black black black white black	Feet 6	Top 0 2 25 28 45 80 225 228 230 370 372 392 444 510 542 517 613 7617 7613 7617 765 700 7725 7800 898 8902	Salt Water Bottom 2 25 28 45 80 225 228 230 370 372 392 444 510 542 517 613 617 676 1700 1725 1765 800 898 1902 1925	T INC 1675 211 Oil, Gam or Water Water Water Water	Depth 225	Remarks Small amo	ount Office of Oil at

(over)

Entloys.

Tartetten france

james of the same			a constant				1-005-00069 P
Formation	Color	Hard or Soft	Тор	Bottom	Oli, Gas or Water	Depth Found	Remarks
Sisterie	177 400		T317	7.7			
Sand "	white		1136	11.80		4	
Slate shells	black		1180	1220		9	
I.i.ma	white		1220	1,262	13.	4.4	
Sando	white		-1262	1380	- 0	-	F
Grampus	white		1380	1486		A CONTRACTOR	
Limo	black		11,86	1506	***************************************	5.7	
Slate shells	black	- "	1506	1561			
Lime	white		1561	-1570		2627	
Salt sand	white		1570	1910	Water	1675	
Slate	black .		1910	1920	A	- 4	
Limec	white		1920	1.974	1.	- 544	and the state of t
Sand.	white	3. 5	1974	2015	Hater	613	Serial and the serial s
Slate	black	20.5	2015	2070			
Lime	white		2070	2125	E		
Slate	white	11	2115	2140			
Red rock	H DISCOURT		21.25	2252	Water	2140	46 blrs per hr.
Maxon Sand	white			2280	177-2	2011	The second secon
Red rock	1777.00	100	2252		MZT+4	+ ;;s0	INT OUR HE
Lime	white.		2280		SACHER PART		
Sand	white	1 199	2295	2335			
Red rock	9.10	à :	2335	2348	** · ·	3	100
Slate shells		3 - 3 1	2348	2360	arries 1	4.3	et entro even alesse
Slate	black		2380	2390	Mater .	358	Stall Assumit
Little Lime	white	1 24 3	2390	2510	' Gas	2610	Smell of gas
BigcLime	white		2510	2709	Uas	2010	Direct of Bas
Big Injun	1.75		2709	2760			
Slate shells			2760	2895		2902-04	48 MCF
Weir Sand	white	Ĭ - '.	2895	3016	Gas	2902-04	
Slate shells			3016	3034		E . Little	in the same
Lime	white -	Soft.	3094	3170	64 (422)04	J 17:21,	
Shale	brown	Eard or	3170	3176	Diff. TEVE	3209	67 MCF
Berea Grit	white	*	3176	3218	∴ Gas	3196	Black Oil
	# T20	e de la	Tal v	A Salt Water	2017	3202-18	Green oil
11: -2/1	2 Martin as	RATHINTL		2007	011	3202-10	Orden Can
. Lime .	black E	in the second		3221 -	7 77 77 3	3	
TOTAL DEPTH				3221			学。
TD After C.O	1111	7.0		3229	4 +	·	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				10.	(3 735 11.	705
	N			118	131	di Città	
- Guadala		(4) (4)		235	The second secon	\$ 319 m	
	tid in hol	S., 3	April 151 25 124	COFF. LEYE	ACDCYLETTA	T. 25 FF	10 10 10
the state of the state of	nidet.	d and Abando	200 - 6-20-5	0 4			
Pina	Prugge	d and Abando	ned - 0-28				7-
	LIGHT MALE	ari	100	CARNETERN	D37.2.00E1	1812 60	7- 4-1
From Subse	MIT MARKO	V	1021				
	The same of the sa	4-,			4		a transfer to the second
11/11/	in acc.	F0		Princip (Sec.	V. C.		
A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	130	3720	579	, and the same		- L &	1
L 15(10) to ≥ (₹ 1 ± 0	Erch J	1, 1950	100	- 32		32131	200
- plant parts and redeta		65.7230	1 1	1 2			201
altina a	-	Eddress		5 8/10			W
jú og stpre =	and survey of	200		t * 122 E		2520	10 472 am' = - 1
	A CONTRACTOR OF THE PARTY OF TH	Midres		- 670	1537	1931	
PRO E 3				The second secon			J-9:
्रांसायुक्त भारत्य र		foa by Leffel	Moto, Borger	15 u	1 655.	820	10.22
The Market States	. เรม	County	XCCG "	10.000	4.	- 1	OF RECEIVED
Wou No	100	E	n . Mar. P.	16			4 of Parks Office of Oil and Gas
Ancation (water	- Toes	trad:		- 2010 -			
ulrstolat	AND PARTY OF THE	Pricess.	200,5,050	- Secretary			DEC 11 2018
	Control of the second	The second secon	and the same of th	1 hours	income.	n.cu	
Auditoria.	F. Of Em	551, Mentak	CUTO.	Legist out	1.20d In	Loft la	Environmental Protection
Company	aro Trac	DAL Defeated		4.5			
The same of the same of	And the second s		4			OH OF The	
- Persit Ma	3-69	1 = 7 · 5	MEFF	BECOUL	f	3	
115	11.00	Al	A	The same of the sa	A		

DESCRIPTION Date March 14: 19-5

APPROVED THE PURE OIL COMPANY Own



anazone

Guy J. Anderse

ersen -(Title) Superintendent NOTICE OF PROPOSED LOCATION OF OIL AND GAS WELL

(REQUIRED BY SECTION 2, CHAPTER SS. ACTS 1929)

WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS SECTION

. To THE DEPARTMENT OF MINES,

Charleston, W. Va.		
L. M. LaFollogto ot al		
Citizens Natifelal Bill Bldgo	The Pure Oil Company	6
Charleston, G. Va.	HAME OF WELL OPERATOR	17-1
ADDRESS	Daws, U. Vo.	
	COMPLETE ADDRESS	
COAL OPERATOR	November 18, 29	
	- PROPOSED LOCATION V	\$
ADDREAS	Sherman Di-	
v	Dustrict	· H
COAL OPERATOR	Boons County	
Total Control Control		
	Well No. 35	
ADDRESS	LaFollette, Robson & Prichard Tract Farm	
GENTLEMEN:		5000 Ass.
The undersigned well operator is entitled to d	rill upon the above named farm or tract of land for	
	A.	
on and was, having tee title thereto, (or as the case i	may be) under grant or lease dated Morember 20, 19	125
and December 29, 1914 med	e by LaFollette, Robson & Prichard et al to	
Holley & Stephenson and Columbus Produc	ing Company , and recorded on the 24th day	
of May, 1915	, in the office of the County Clerk for said County in	
Book		1-3-3
The enclosed plat was prepared by a competer	nt engineer and shows the proposed location of a well	
	operator on the farm and in the Magisterial District courses and distances from two permanent points, or	
and materials.		
	nd believes there are no coal operators operating beds said well is located, or within 500 feet of the bound-	v 1
aries of the same, who have mapped their workings a coal operators (if any) above named as addressees.	and filed their maps as required by law, excepting the	. 1
The above named coal operators (if any) are	notified that are about 1	
	as condition in or about their respective coal mines, Mines within ten days from the receipt of a copy of	4
forms for use in making such objections will be fur-	rished to them by the Department of AC	
should be moved to overcome same.	idicate the direction and distance the proposed location	
 (The next paragraph is to be completed only) 	in Department's copy.)	
Copies of this notice and the enclosed plat wer	re mailed by registered mail, or delivered to the above	1.40
named coal operators at their above shown respectiv	re address	
with the mailing or delivery of this copy to the Depa	re address on the same day or the name of Mines at Charleston, West Virginia.	
	truly yours, THE PURE OFL COMPANY	
	THE PORK OUT COMPANY	
DEP-RIMENT	WELL OPERATOR MEDIAGET	RECEN
OF MINIT		Office of Oil and G
- (NOV 19 1929) Address)	FTREET	Drive.
Well Operator		D自L 1 1 2018
WEST VIRGINIA	Darrage	WV Department of
	CITY ON TOWN	Environmental Protect
	- <u>Va Vsa</u>	21
"Section 3 If no such objections be filed, or be	found he at a	- (

Section 3 If no such objections be filed, or be found by the department of mines, within said period of the days from the receipt of said notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a drilling permit reciting the filing of such plat, that no objection have been made by the coal operators to the location, or found thereto by the department, and that the same in approved and the well operator authorized to proceed to drill at said location.

ness Multi-Latery Sound Merch Months South	CONTRACTOR OF THE PARTY OF THE	velojav 2002 - 10.0	A Company of the Comp	
The state of the s		612 - 170 25 5 C 24 2 70	NU. SURLAND	in the second se
New Antic North Line of Sec.		o Lee v. on O Rife		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Duch Smith C Webs		ors while order vers orsered on	i ukur	O' - 17 (NEO / LEE) o co, - 10 O' - 12 (NEO / LEE) o co, - 10 O' - 1
NOTE: Before make tracing from mine (when its measurement and also valls, diversible of the sub-ordered to Committee direct.	he voe toe in daar da	illy of this local	ion alm	enter de la como des laquat en la caracter de la como de la
355-19	1 50 5 5 - 1 8 - 1 5 - 1 8		10 miles	
		7. 2.1. 1	Holes,	2= 1,-0/= 1,71,571,5 00:1 <u>4</u>
The property of the property o		0.53 2		
Totalist the point of the second			704.37 6	<u>reserve</u>
TELL PICTURE PROPERTY.	PTTO DE Tribuire :			50% Og 50% (COPE)
10 gm vest in W. Evos agle in production of the street of	TRACTURE CONTRACTOR		gere, geogr openie są	Sec. 1914 Sec. 1915

MAI Department of Protection

WW-4A Revised 6-07

1.) Date: _	11/13/18
2.) Operat	or's Well Numbe
3.) API W 47-005-00	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

(a) Name	wner(s) to be served: LaFollette (Gaddy Engineering)	5) (a) Coal Operator Name Panther Creek Mining, LLC
Address	303 West Washington St. Charleston, WV 25302	Address 3228 Summit Square Place, Suite 180 Lexington, KY 40509
(b) Name		(b) Coal Owner(s) with Declaration
Address		Name LaFollette (Gaddy Engineering)
		Address 303 West Washington St.
		Charleston, WV 25302
(c) Name		Name
Address		Address
6) Inspector	Jeff Smith	(c) Coal Lessee with Declaration
Address	5369 Big Tyler Road	Name Panther Creek Mining, LLC
	Cross Lanes, WV 25313	Address 3228 Summit Square Place, Suite 180
Telephone	681-313-6743	Lexington, KY 40509

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

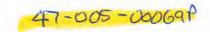
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

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	Panther Creek Mining, LLC	
By:	Gary Acord	
Its:	Agent	
$\operatorname{Address}$	P.O. Box 99	
	Dawes, WV. 25054	
Telephone	681-221-8100 ext. 8847	
Subscribed and sworn before me this _	3rd day of Docemy	ser
llepsa Midomeo	OFFICIAL SEAL	RECEIVED
My Commission Expires	NOTARY PUBLIC STATE OF WEST VIRGINIA	Office of Oil and G
Dil and Gas Privacy Notice	Alyssa N Romeo Kanawha Eagle Mining LLC PO Box 189	DEC 11 2018
The Office of Oil and Gas processes your personal in	Comfort, WV 25049 My Commission Expires Feb. 6, 2023	mberrollie fall Prote

The Office of Oil and Gas processes your personal information much as many address and information the protection of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.go



SURFACE OWNER WAIVER

Operator's Well Number

135		
. 7.7		
ω		

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT. WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57" St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have FIVE (5) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY	STATEMENT	OF NO	OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON CORPORATION.

Signature

Date ____ Name Bv

Its

FOR EXECUTION BY A

Office of Oil and Gas

DEC 11 2018

00.	5.5		- 0.0		
Farm	Name	LaF	ollet	te	
		11	7.11	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 then 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 plug proposed to be done at this location, provide	ging work or	der. Ti	he undersigned	has no objection to the work
of the West Virgin	nia Code and	the go	verning regula	ations.

Date: 12/5/2018

RECEIVED Office of Oil and Gas

DEC 11 2018

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 then 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

location has examined	coal operatorX/ owner _ I this proposed plugging work ord is location, provided, the well ope of the West Virginia Code and the	er. The undersigned harator has complied wi	as no objection to the work the all applicable requirements
Date: 11-19-18			Panther Creek Mining, LLC By: GARY E ACORD, Many El Its AGENT/ENGINEER Many Ellion D.

Office of Oil and Gas

DEC 11 2018

WW-9 (5/16)

API Number 47 - 005	_00069
Operator's Well No. 35	

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Postbox Cook Misira II C
Operator Name Panther Creek Mining, LLC OP Code
Watershed (HUC 10) Jakes Branch of Big Coal River Quadrangle Sylvester 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 No
If so, please describe anticipated pit waste: Cement and Cuttings
Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20
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_
Will closed loop systembe used? If so, describe: No
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Fresh Water
-If oil based, what type? Synthetic, petroleum, etc
Additives to be used in drilling medium? None
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave in pit
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Cement and Cuttings
-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 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 penaltics for submitting false information, including the possibility of fine or imprisonment. Company Official Signature Office of Oil and Gas Company Official (Typed Name) Gary E. Acord
Company Official Title Agent/Engineer W Department of
Environmental Protecti
Subscribed and sworn before me this day of December OFFICIAL SEAL MOTARY PUBLIC My commission expires 2 16 23 Nosar Adalic N
Comfort, WV 25049 My Commission Expires Feb. 6, 2023

		Operator's	Well No. 35
sed Revegetation Trea	atment: Acres Disturbed	Preveg etation	1pH
Lime 2	Tons/acre or to correc	t to pH 6.5	
Fertilizer type (10	0-20-20) or Equivalen	<u>t</u>	
Fertilizer amount	500	lbs/acre	
Mulch 2 tons or 10	000-1500 lbs hydroseed mulch	_Tons/acre	
		Seed Mixtures	
T	emporary	Per	manent
Seed Type	lbs/acre	Seed Type	lbs/acre
		Fescue	40
		Clover	5
		Ryegrass	5
led). If water from the	e pit will be land applied, pro	d application (unless engineered plans indevide water volume, include dimensions	cluding this info have been (L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of	oit and proposed area for land e pit will be land applied, pro f the land application area.	ovide water volume, include dimensions	cluding this info have been (L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, prof f the land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, prof f the land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime
(s) of road, location, p led). If water from the), and area in acres, of copied section of invo Approved by: ents:	e pit will be land applied, profithe land application area. olved 7.5' topographic sheet.	ovide water volume, include dimensions	(L, W, D) of the pit, and dime

5 4 4 **3**

WW-9- GPP Rev. 5/16

	Page	t	of 2	
API Number 47	_ 005	- (=	00069	
Operator's Well 1	No.35		1	

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

Quad: Sylvester
ist of all operations that could contaminate the
dards to mine through the well). Water ed pit. The pit is designed to hold lling water and cuttings) in the pit will be lab before the pit is reclaimed. The only ter is not expected to be encountered be used to mix the cement for
the list of potential contaminant sources above.
ischarged into a lined pit. The pit lling water. The pit contents and any remaining water will be ales, oil absorption pads, and silt or contaminations.
om closest Well Head Protection Area to the
ately 1200 ft. away from the well RECEIVED Office of Oil and
DEC 11 201
ater protection.
WV Department Environmental Prote
i i o o o

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

WW-9- GPP Rev. 5/16

Pag	e 2	of	2
API Number 47 -			
Operator's Well No. 35	5		

None for Jakes Branch watershed. Adjacent watersheds are sampled bimonthly for the mining operations. The results of the bimonthly samplings are submitted to the WV DEP.

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

No waste material will be used for deicing or fill material.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

Each employee and contractor involved in re-plugging the well will be trained on the proper environmental procedures of the job. The pit and area around the pit will be visually examined daily for leaks and tears. If a leak or tear is observed, discharge to the pit will cease until proper repairs can be made to the pit or liner. Drilling equipment will be inspected each day before work begins to ensure there are no fluid leaks. Straw bales, oil absorption pads, and silt fencing will be available on the mine property in case of spills. Any contaminated materials will be properly disposed of in specially marked containers. If there is any remaining water in the pit once plugging is complete, it will be analyzed by a lab before the pit is reclaimed.

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

The pit and area around the pit will be visually examined daily for leaks and tears. If a leak or tear is observed, discharge to the pit will cease until proper repairs can be made to the pit or liner. Drilling equipment will be inspected each day before work begins to ensure there are no fluid leaks. Straw bales, oil absorption pads, and silt fencing will be available on the mine property in case of spills. Any contaminated materials will be properly disposed of in specially marked containers. If there is any remaining water in the pit once plugging is complete, it will be analyzed by a lab before the pit is reclaimed.

Office of Oil and Gas

Signature:

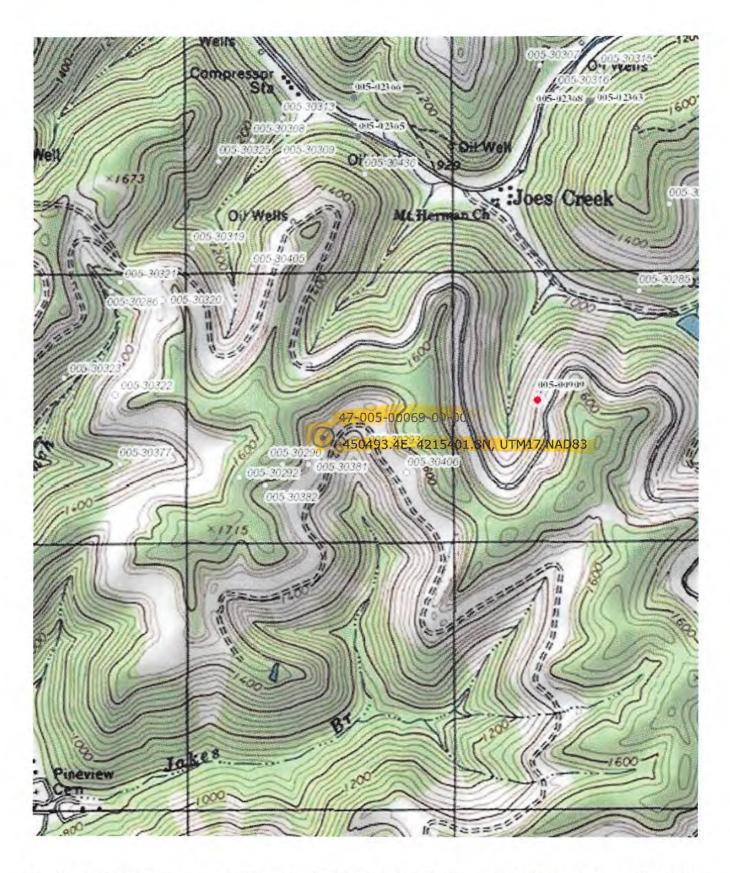
Bang Elcore AGEN

DEC 11 2018

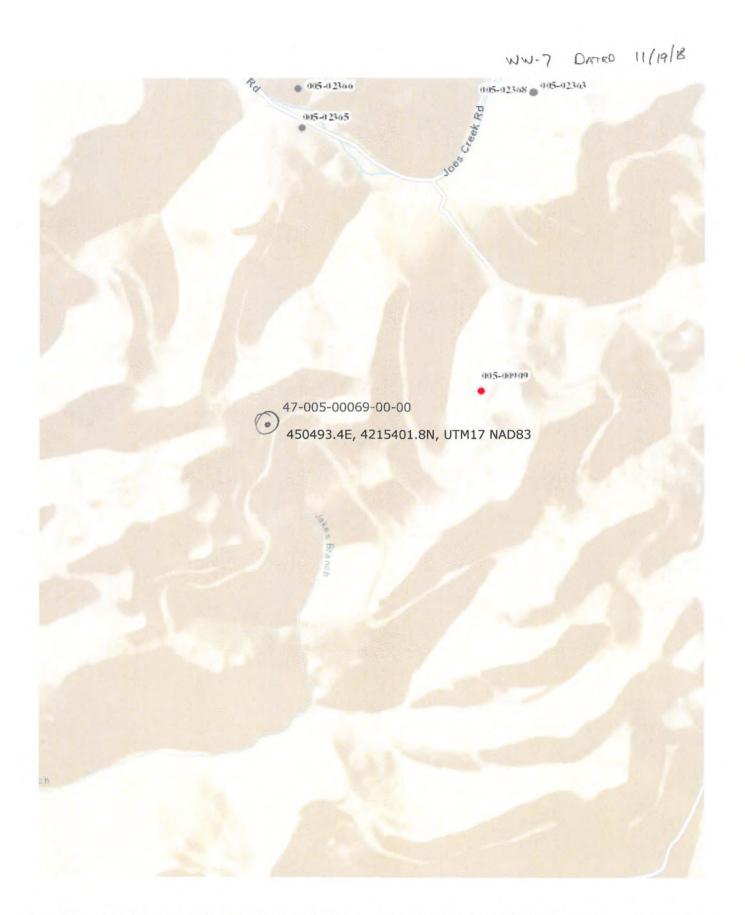
Date: 11-19-18



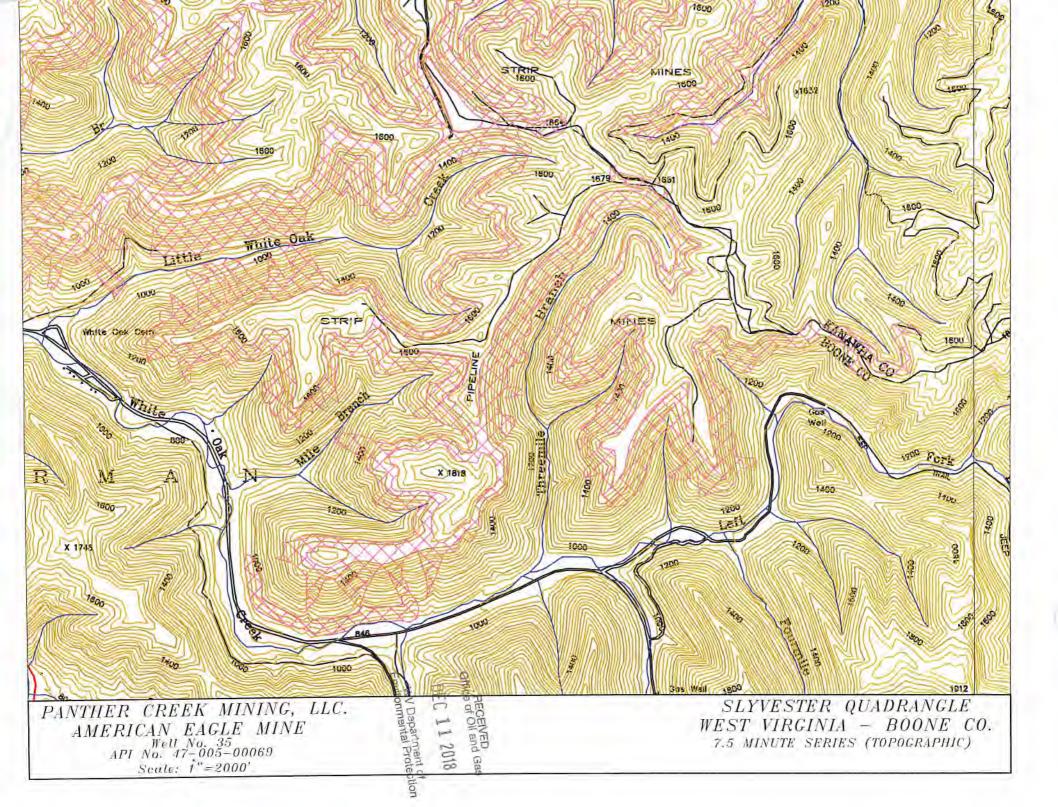
DEC 11 2018



 $http://deparcgis1/ooggis/index.html?x = 450493.4 \& y = 4215401.8 \& datum = NAD83 \& pntlabe... \\ 8/21/2019 = 12019 \& datum =$



 $http://deparcgis1/ooggis/index.html?x = 450493.4 \& y = 4215401.8 \& datum = NAD83 \& pntlabe... \\ 8/21/2019 = 8/21/2019 + 10/2$





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

ATT. 47-005-00007 WELL	11011 35		
FARM NAME: LaFo	llette		
RESPONSIBLE PARTY N.	AME: Gary E. Acord		
COUNTY: Boone	DISTRICT:	Sherman	
QUADRANGLE:	Sylvester		
SURFACE OWNER:	LaFollette		
	LaFollette		
UTM GPS NORTHING:	4215401.79 meters (NA)	0-83)	
**************************************	0493.39 meters (NAD-83		VATION: 454 7 m
The Responsible Party named above plat for a plugging permit or assigned coordinates that do not meet the following 1. Datum: NAD 1983, Zone: 17 meters. 2. Accuracy to Datum – 3.05 meters. 3. Data Collection Method:	ed API number on the above we lowing requirements: North, Coordinate Units: meter	ll. The Office of	
Survey grade GPS: Post Processed Differential Real-Time Differential			RECEIVED Office of Oil and Gas
Mapping Grade GPS X: Post Processed Differential			DEC 11 2018
4. Letter size copy of the topo I the undersigned, hereby certify information required by law and	this data is correct to the best	of my knowledge	
Signature Signature	0	NGINEER	11-19-18 Date