



west virginia department of environmental protection

Office of Oil and Gas
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Charleston, WV 25304
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Jim Justice , Governor
Austin Caperton , Cabinet Secretary
www.dep.wv.gov

Thursday, March 23, 2017
WELL WORK PERMIT
Vertical / Plugging

ERP FEDERAL MINING COMPLEX, LLC (A)
1044 MIRACLE RUN ROAD

FAIRVIEW, WV 26570

Re: Permit approval for F2-590
47-061-01766-00-00

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: F2-590
Farm Name: JANET T. DUNN, NANCY TENNANT SNYDER, DIANE S. RUPP
U.S. WELL NUMBER: 47-061-01766-00-00
Vertical / Plugging
Date Issued: 3/23/2017

Promoting a healthy environment.

03/24/2017

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 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.

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil X / Gas / Liquid injection / Waste disposal /
(If "Gas, Production or Underground storage) Deep / Shallow
- 5) Location: Elevation 1,278' Watershed Dunkard Creek
District Clay County Monongalia Quadrangle Blacksville
- 6) Well Operator ERP Federal Mining Complex, LLC 7) Designated Agent Matthew L. Bonnell
Address 1044 Miracle Run Road Address 1044 Miracle Run Rd.
Fairview, WV 26570 Fairview, WV 26570
- 8) Oil and Gas Inspector to be notified Name Gayne J. Knitowski
Address P.O. Box 108
Gormanian, WV 26720
- 9) Plugging Contractor Name Chisler Brothers
Address P.O. Box 101
Pentress, WV 26544

10) Work Order: Per our 101-C petition, the work order for the manner of plugging this well Petition is as follows: SEE ATTACHED

1. Install Sediment Control as Needed
2. Cut out well to a total depth, ~~if possible~~, or to a minimum of 200 feet below the Pittsburgh Coal Seam, WHICHEVER IS DEEPER. A CLASS A CEMENT PLUG MUST BE SET FROM TA TO A POINT 200' BELOW THE PITTSBURGH COAL seam.
3. Run well logs and directional surveys.
4. Collars of any old remaining casing will be ripped at the coal seam.
5. A plug made of expanding cement slurry shall be pumped from at least 200 feet below the base of the coal seam to 100 feet above the coal seam. The expanding cement shall be place in the well under a pressure of at least 200 psi.
6. After the expanding cement has hardened, it will be tagged, and the well bore will be filled with Class A cement with no more than 3% CaCl2 and no other additives, by tubing, to the surface.
7. A suitable monument installed on the surface with the necessary well identification plate attached. SEE ATTACHED 35 CSR + 5.5 B
8. Reclaim site as soon as possible.

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

Work order approved by inspector Gayne J. Knitowski Date 2/10/2017


WELL APPEARS ON WV GES
WEB-SITE AS MONONGALIA COUNTY WELL 71022

Received
Office of Oil & Gas
FEB 13 2017

should contain the name, address and telephone number of the person filing the comment, the well operator's name and well number, and the approximate location of the proposed well site including district and county as indicated in the permit application. Comments may be accompanied by other pertinent documents in support of the comment. Other than as prescribed in this rule, no particular form for the comment is prescribed.

5.5. Identification Markings.

5.5.a. Every well shall have attached or stamped, in a permanent manner, the API identification number which consists of the state (47), county (001 through 109), and permit number. Such number shall be no less than one-half (1/2) inch in height and detectable by any interested person approaching the well. Any additional information the well operator may desire to display may be incorporated in the permanent identification plat or stamp in such a manner that it will not confuse or distort the permanent API identification number.

 5.5.b. Except as provided below, upon the completion of the plugging and filling of any abandoned well, a permanent monument or marker consisting of a length of pipe (minimum diameter size six (6) inches) filled with concrete (or the equivalent thereof if approved by the Chief) shall be erected over the well; the marker shall extend no less than thirty (30) inches above the surface and not less than ten (10) feet below the surface and into the well, and shall be sealed with concrete for the purpose of making the marker permanent. The API well identification number which consists of the state (47), county (001 through 109), and permit number shall be attached or stamped in a permanent manner to said monument; and such numbering shall be no less than one half (1/2) inch in height and detectable by any interested person approaching the marker. The erection of the marker shall in no way interfere with the bleeder pipe from the well where such pipe is required, or the vent or other device installed pursuant to W. Va. Code § 22-6-24. Such manner shall be accurately described on Form WR-38, "Affidavit of Plugging and Filling Well" (see subsection 13.10 below) as to time and manner of plugging and filling the well, and shall be approved by the Chief as a satisfactory landmark that may be used as such in the location of adjacent wells. Two (2) permanent reference points with courses and distances from the abandoned well shall be designated and prescribed on the plat required by subdivision 5.2.d above in the form prescribed by section 9 below, accompanying Form WW-4, "Notice of Intention to Plug and Abandon a Well," if any change in the plat is necessary, accompanying Form IV-38, "Affidavit of Plugging and Filling Well" (see subsection 13.10 below).

5.6. Parties Responsible. All contractors and drillers, including all service companies carrying on business or doing work in oil and gas fields in West Virginia, as well as lease holders and operators generally, shall take notice of and are hereby directed to observe and apply the provisions of W. Va. Code § 22-6 and this rule; and all contractors, drillers, service companies and operators shall be held responsible for violations thereof.

5.7. Evidence of Performance.

5.7.a. After the completion of the work authorized to be done by any permit required by W. Va. Code § 22-6-6, the permittee shall comply with filing requirements of W. Va. Code § 22-6-22 and section 12 of this rule.

5.7.b. In addition to the requirements of subdivision 5.7.a, following completion of plugging a well, the permittee shall also comply with the affidavit requirements of W. Va. Code § 22-6-23 and subsection 13.10 below.

165/1052

U.S. Department of Labor

Office of Administrative Law Judges
William S. Moorhead Federal Office Building
1000 Liberty Avenue, Suite 1800
Pittsburgh, PA 15222



(412) 644-5754
(412) 644-5005 (FAX)

Issue Date: 08 April 2009

CASE NO.: 2007-MSA-4

In the Matter of:

MSHA 101 C EXEMPTION

EASTERN ASSOCIATED COAL
LLC, FEDERAL NO. 2 MINE
Petitioner

v.

MINE SAFETY & HEALTH
ADMINISTRATION
Party In Interest

DECISION AND ORDER APPROVING SETTLEMENT
and
ORDER OF DISMISSAL

This proceeding arises under Section 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. §§ 951-961, and its implementing regulations, 30 C.F.R. Part 44. On April 18, 2006, Eastern Associated Coal (Petitioner) petitioned the Mine Safety and Health Administration (MSHA) for modification of the application of 30 C.F.R. § 75.1700 to Petitioner's Federal No. 2 Mine located in Fairview, Monongalia County, West Virginia. On June 6, 2007, MSHA issued a Proposed Amended Decision and Order granting the Petition for Modification of 30 C.F.R. § 75.1700. Thereafter, Petitioner filed a Request for a Hearing, indicating that it was challenging the Proposed Amended Decision and Order because it was at variance with Petitioner's proposal. Petitioner's hearing request was received in the Office of Administrative Law Judges (OALJ) on July 17, 2007. On April 6, 2009, the parties jointly submitted a signed Consent Order for approval pursuant to 30 C.F.R. § 44.27.

The parties have agreed that:

1. The Consent Order shall have the same effect as if made after a full hearing.
2. The record on which this Order is based consists of the petition, the agreement, and all other pertinent information as set forth in Section 44.27(b)(2).
3. In accordance with 30 C.F.R. § 44.27(b)(3), Petitioner agrees to waive any further procedural steps before the Administrative Law Judge and Assistant Secretary.

4. In accordance with 30 C.F.R. § 44.27(b)(4), Petitioner agrees to waive any right to challenge or contest the validity of the Consent Findings and Consent Order made in accordance with the Consent Agreement.

5. The terms and conditions of the Consent Order do not result in a diminution of safety.

ORDER

I have carefully examined the Consent Order between the parties. Following that review, I have concluded that the Consent Order is consistent with the requirements of 30 C.F.R. § 44.27, and, therefore, the Consent Order is **ACCEPTED**. The petition of Eastern Associated Coal in this matter is, therefore, **DISMISSED**. This Order constitutes the final agency action in this matter.


DANIEL L. LELAND
Administrative Law Judge


SERVICE SHEET

Case Name: MSHA_v_EASTERN_ASSOCIATED_C_

Case Number: 2007MSA00004

Document Title: **DECISION AND ORDER APPROVING SETTLEMENT AND ORDER OF DISMISSAL**

I hereby certify that a copy of the above-referenced document was sent to the following this 8th day of April, 2009:



KAREN M. JOYCE
LEGAL TECHNICIAN

Counsel for Trial Litigation
Div. of Mine Safety and Health
U. S. Department of Labor
1100 Wilson Blvd, 22nd Floor East
Arlington, VA 22209-2247
{Hard Copy - Regular Mail}

Administrator for Coal Mine Safety & Health
U. S. Department of Labor
1100 Wilson Blvd., Room 2424
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Keith E Bell, Esq.
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1100 Wilson Boulevard
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Three Gateway Center
Pittsburgh, PA 15222
{Hard Copy - Certified Mail}

U.S. Department of Labor

Office of the Solicitor
Division of Mine Safety & Health
1100 Wilson Boulevard
Arlington, Virginia 22209-2296



April 2, 2009

Honorable Daniel Leland
U.S. Department of Labor
Office of Administrative Law Judges
1000 Liberty Ave., Suite 1800
Pittsburgh, PA 15222

In re: Eastern Associated Coal LLC, Federal No. 2 Mine Petition for Modification
Docket No. M-2006-018-C (2007 MSA-4)

Dear Judge Leland:

Enclosed for your consideration and approval is the *Consent Order* proposed by the parties in the above-referenced case.

Sincerely,

A handwritten signature in cursive script that reads "Keith E. Bell".

Keith E. Bell
Sr. Trial Attorney

Enclosure

cc: R. Henry Moore, Esq.

4. On June 6, 2007, MSHA issued a Proposed Decision and Order granting the Petition for Modification of 30 C.F.R. § 75.1700 (d) filed by Eastern.

5. Eastern 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 agreement. In accordance with 30 C.F.R. § 44.27(b), this 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), both MSHA and Eastern 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), both MSHA and Eastern 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), Eastern agrees 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), Eastern agrees 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 Eastern 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

11. 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 Federal No. 2 Mine is hereby GRANTED under the following conditions:

12. Eastern's Federal No. 2 mine is located in Monongalia County in West Virginia. Eastern desires to plug abandoned oil and gas wells in order to mine through them or to reduce the size of the barrier around them.

13. Eastern sought modification of 30 C.F.R. § 75.1700, which reads 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.

14. Eastern's petition for modification is granted under the following conditions:

15. **DISTRICT MANAGER APPROVAL REQUIRED**

- 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, and previously plugged wells, and including water injection wells) until approval to proceed with mining has been obtained from the district manager.

Prior to mining within the safety barrier around any well, the mine operator shall provide to the district manager an declaration executed by a company official (including, but not limited to, environmental or engineering personnel) 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 declaration must be accompanied by all logs described in subparagraphs 15(b)(iv) below. The district manager will review the declaration and the logs and may inspect the well itself. If the district manager determines that the procedures in this Order with respect to cleaning out and plugging oil and gas wells 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. The techniques and procedures listed in

this Order are limited to oil and gas wells that have a maximum depth of 5,000 feet or less. If the operator encounters wells that have a maximum depth greater than 5000 feet, the District Manager may approve a lesser barrier than required by the standard, plugging procedures and mining though pursuant to a plan submitted by the operator that addresses the potential for higher pressures in a fashion consistent with the procedures approved herein.

MANADATORY PROCEDURES FOR CLEANING OUT AND PREPARING OIL AND GAS WELLS PRIOR TO PLUGGING OR REPLUGGING

- b. Cleaning out and preparing oil and gas wells. Prior to plugging an oil or gas well, the following procedure shall be followed:
- i. The operator shall clean out the well from the surface to at least 200 feet below the base of the lowest mineable coal seam. The operator shall remove material from the entire diameter of the well, wall to wall, to the extent feasible and practicable.
 - ii. When cleaning out the well as provided for in subparagraph 15(b)(i) , 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, then 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 or milled at all mineable coal seam levels. Any casing that remains shall be perforated or ripped. Perforations or rips are required at least every 50 feet from 200 feet 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 shall 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 that 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.

- iii. If a cleaned-out well emits 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 below the base of the lowest mineable coal seam, but above the top of the uppermost hydrocarbon-producing stratum. If it is not possible to set a mechanical bridge plug, an appropriately sized packer may be used.
- iv. 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 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.

- v. If the uppermost 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 15(b)(iii) to isolate the hydrocarbon-producing stratum from the expanding cement plug. Nevertheless, the operator shall place a minimum of 200 feet of expanding cement below the lowest mineable coal seam.

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

- c. Plugging oil and gas wells to the surface. After cleaning out the well as specified in paragraph 15(b)(i) and (ii) above, the following procedures shall be used to plug or replug gas or oil wells to the surface.
 - i. The operator shall pump expanding cement slurry down the well to form a plug which runs from at least 200 feet below the base of the lowest mineable coal seam to the surface. The expanding cement shall 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. A gel that supports the wall of the borehole and increases the density of the expanding cement may be used to provide the placement pressure.
 - ii. 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 4½-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 not be marked with a physical monument (i.e., prime farmland), high-resolution GPS coordinates (one-half meter resolution) are required.

MANDATORY PROCEDURES FOR PLUGGING OR REPLUGGING OIL AND GAS WELLS FOR USE AS DEGASIFICATION BOREHOLES

- 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:
- i. The operator shall set a cement plug in the well by pumping an expanding cements slurry down the tubing to provide at least 200 feet of expanding cement below the lowest mineable coal seam. The expanding cement shall 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 30 feet above the top of the coal seam being mined.
 - ii. 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.
 - iii. The annulus between the degasification casing and the borehole wall shall be cemented from a point immediately above any slots or perforations in the pipe to the surface.

- iv. The degasification casing shall be cleaned out for its entire length.
- v. 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. Such equipment may include check valves, shut-in valves, sampling ports, flame arrestor equipment, and security fencing.
- vi. Operation of the degasification well shall be addressed in the approved ventilation plan.
- vii. After the area of the coal mine that is degassed by a well is sealed or the coal mine is abandoned, the operator must seal degas holes using the following procedures:
 - (i) The operator shall insert a tube to the bottom of the drill hole or, if not possible, to no greater than 100 feet above the Pittsburgh coal seam. 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 4½-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.

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

f. If wells cannot be completely cleaned out due to damage to the well caused by subsidence, caving, or other factors, as determined by the operator and agreed to by the District Manager, the following provisions shall apply unless alternative measures are agreed upon and based upon a plan submitted to the District Manager.

i. The operator shall drill a hole adjacent and parallel to the well to a depth of at least 200 feet below the lowest mineable coal seam.

ii. The operator shall use a geophysical sensing device to locate any casing that may remain in the well.

iii. If the well contains casing(s), the operator shall drill into the well from the parallel hole. From 10 feet below the coal seam to 10 feet above the coal seam, the operator shall perforate or rip all casings at intervals of at least 5 feet. Beyond this distance, the operator shall perforate or rip at least every 50 feet from at least 200 feet below the base of the lowest mineable coal seam up to 100 feet above the seam being mined. 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 shall not be required to perforate or rip the casing for that particular well or fill these areas with cement. When multiple casing and tubing strings are present

in the coal horizon(s), any casing that 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.

- iv. Where the operator determines and the district manager agrees that there is insufficient casing in the well to allow the method outlined in subparagraph 15(f)(iii) to be used, then the operator shall use a horizontal hydraulic fracturing technique to intercept the original well. From at least 200 feet 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 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 that fills all intercepted voids.
- v. 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 the logs from the adjacent hole rather than the well if the condition of the well makes it 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 length and type of each

material used to plug the well; length of casing(s) removed, perforated, ripped or left in place; and other pertinent information concerning sealing the well.

- vi. After the operator has plugged the well as described in subparagraphs 15(f)(iii) and/or (f)(iv), the operator shall plug the open portions of both holes 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 4½-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 (f)(iii) and (f)(iv) may have to be used in a single well, depending upon the conditions of the hole and the presence 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.

MANDATORY PROCEDURES AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT MANAGER TO MINE WITHIN THE SAFETY BARRIER, OR TO MINE THROUGH A PLUGGED OR REPLUGGED WELL

16. The following cut-through procedures will apply whenever Eastern reduces the safety barrier diameter to a distance less than the District Manager would approve pursuant to Section 75.1700 or proceeds with an intent to cut-through a plugged 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 mining through any plugged or replugged well. Upon receipt of any such request, the district manager will schedule such a conference. The operator 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 District Manager or designee, representative of the miners, and the appropriate State agency shall be notified by the operator in sufficient time prior to the mining through operation in order to have an opportunity to have representatives present.
 - c. When using continuous mining equipment, drivage spads shall be installed at the last open crosscut near the place to be mined to ensure intersection of the well. The drivage spads shall not be more than 50 feet from the well. When using longwall mining methods, drivage spads shall be installed on 5-foot centers for a distance of 20 feet in advance of the well bore on the headgate of the longwall.
 - 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 mine-through (when either the conventional or the continuous mining method is used) is available and operable during all well mine-throughs. 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. All fire hoses shall be connected and ready for use, but do not have to be charged with water, during the cut-through.
 - e. A supply of roof support and ventilation materials sufficient to ventilate and support around the well on cut-through shall be available at the last open crosscut. In addition, an

emergency plug and/or plugs shall be available in the immediate area of the cut through.

- f. The quantity of air required by the approved mine ventilation plan, but not less than 7,000 cubic feet of air per minute for scrubber equipped continuous miners or not less than 9,000 cubic feet per minute for continuous miner sections using auxiliary fans or line brattice only, shall be used to ventilate the working face during the cut through operations. The quantity of air required by the ventilation plan, but not less than 42,500 cfm, shall reach the working face of each longwall during the cut-through operation.
- g. Equipment that will be in by the last open crosscut during mine through shall be checked for permissibility and serviced on the shift prior to mining through the well.
- h. 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 mining through the well.
- i. 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 is within 20 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 10 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.
- j. 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.

- k. 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. No open flame shall be permitted in the area until adequate ventilation has been established around the wellbore.
- l. 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 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 any use of torches.
- m. 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.
- n. No person shall be permitted in the area of the cut through operation except those actually engaged in the mining operation, mine management, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.
- o. The cut through operation shall be under the direct supervision of a certified official. Instructions concerning

the cut through operation shall be issued only by the certified official in charge.

- p. Non-sparking (brass) tools shall be located on the working section in the event they are needed to expose and examine cased wells.
- q. 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 mine through. Mining may be conducted in other working sections during the intersection of the well.
- r. MSHA personnel may interrupt or halt the mining through operation when it is necessary for the safety of the miners.
- s. A copy of the petition shall be maintained at the mine and be available to the miners.
- t. Within 60 days after this petition becomes final, Eastern shall submit proposed revisions for its 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 petition.
- u. The responsible person required under 30 C.F.R. 75.1501 shall be responsible for well intersection emergencies. The well intersection procedures must be reviewed by the responsible person prior to any planned intersection.
- v. Within 30 days after this Order becomes final, the operator shall submit proposed revisions for its approved mine emergency evacuation and fire-fighting plan required by 30 C.F.R. 75.1501. The operator shall revise the plans to include the hazards and evacuation procedures to be used

for well intersections. All underground miners shall be trained in this revised plan within 30 days of the submittal of the revised evacuation plan. Such training may be done in a weekly safety meeting or other type of appropriate setting.

17. The alternative method proposed by the Eastern will at all times guarantee no less than the same measure of protection afforded the miners under 30 C.F.R. §75.1700.

Dated: 3/27/09

By: R. H. Moore J.

R. Henry Moore
Jackson Kelly PLLC
Three Gateway Center, Suite 1340
401 Liberty Ave.
Pittsburgh, PA. 15222
412-434-8055
412-434-8065 fax

Dated: 4/2/09

By: Keith E. Bell J.

Keith E. Bell, Esq.
U.S. Department of Labor
Office of the Regional Solicitor
1100 Wilson Boulevard, 22nd Floor
Arlington, VA 22209-2296
202-693-9333
202-693-9361 fax

Approval:

By: _____ J.

Dated: _____

Administrative Law Judge

WW4-A
Revised
2/01

1) Date: January 25, 2017
2) Operator's Well Number ?
(current-Tennant Heirs), ERP F2-590
3) API Well No.: - 47 - 061 - _____

**STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL**

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Linda K. Tennant</u>	Name <u>ERP Federal Mining Complex, LLC</u>
Address <u>7 Hampton Xing</u>	Address <u>1044 Miracle Run Road</u>
<u>Hurrican WV 25526</u>	<u>Fairview, WV 26570</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>ERP Federal Mining Complex, LLC</u>
(c) Name _____	Address <u>1044 Miracle Run Road</u>
Address _____	<u>Fairview, WV 26570</u>
6) Inspector	(c) Coal Lessee with Declaration
Address _____	Name _____
Telephone _____	Address _____

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 Division 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 ERP Federal Mining Complex, LLC
 By: Matthew L. Bonnell
 Its: Designated Agent
 Address 1044 Miracle Run Road
Fairview, WV 26570
 Telephone (304) 368-9952

Subscribed and sworn before me this 25th day of January, 2017.
Jo Ann Moore Notary Public
 My Commission Expires April 29, 2019



Received
Office of Oil & Gas
FEB 13 2017

03/24/2017

API No. 47 - 061 - 01766P

Farm Name Tennant Heirs

Well No. ERP Fed. Mining Complex F2-590

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

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

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

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

WAIVER

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

Date: January 25, 2017

ERP Federal Mining Complex, LLC
By: Matthew J. Bonnell
Its Designated Agent

Received
Office of Oil & Gas
FEB 18 2017

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name ERP Federal Mining Complex, LLC OP Code _____

Watershed Dunkard Creek Quadrangle Blacksville

Elevation 1,278' County Monongalia District Clay

Description of anticipated Pit Waste: Plugging

Will a synthetic liner be used in the pit? No

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging (no pit, steel tank used)

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on December 31, 1999, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

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

Company Official Signature Matthew L. Bonnell

Company Official (Typed Name) Matthew L. Bonnell

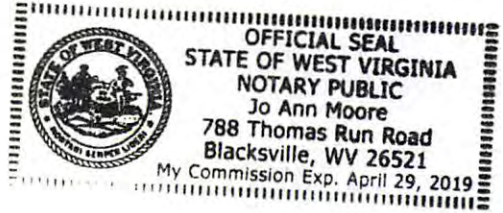
Company Official Title Designated Agent

Received
Office of Oil & Gas
FEB 13 2017

Subscribed and sworn before me this 25th day of January, 2017


Jo Ann Moore Notary Public

My commission expires April 29, 2019

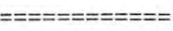


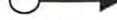
LEGEND

6101766A


Property Boundary 

Diversion 

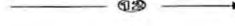
Road 

Spring 

Existing Fence 

WetSpot 

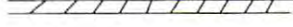
Planned Fence 

Drain Pipe with size in inches 


Stream 


Water Way 


Open Ditch 

Cross Drain 


Rock 


Artificial Filter Strip 

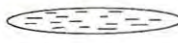
North N 


Pit with Cut Walls 

Buildings 

Pit with Compacted Walls 

Water Wells 

Area of Land Application of Pit Waste 

Drill Site 

Proposed Revegetation Treatment: Acres Disturbed 2 Prevegetation pH _____

Lime 4 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1,000 lbs/acre (500 lbs minimum)

Mulch Hay 150 Bales or 3 Tons/acre

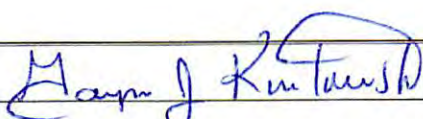
Seed Mixtures

Seed Type	Area I	lbs/acre	Seed Type	Area II	lbs/acre
Annual Rye Grass		40 pounds	Tall Fescue		30 pounds
			Orchard Grass		15 pounds
			Ladine Clover		10 pounds

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

Photocopied section of involved 7.5' topographic sheet.

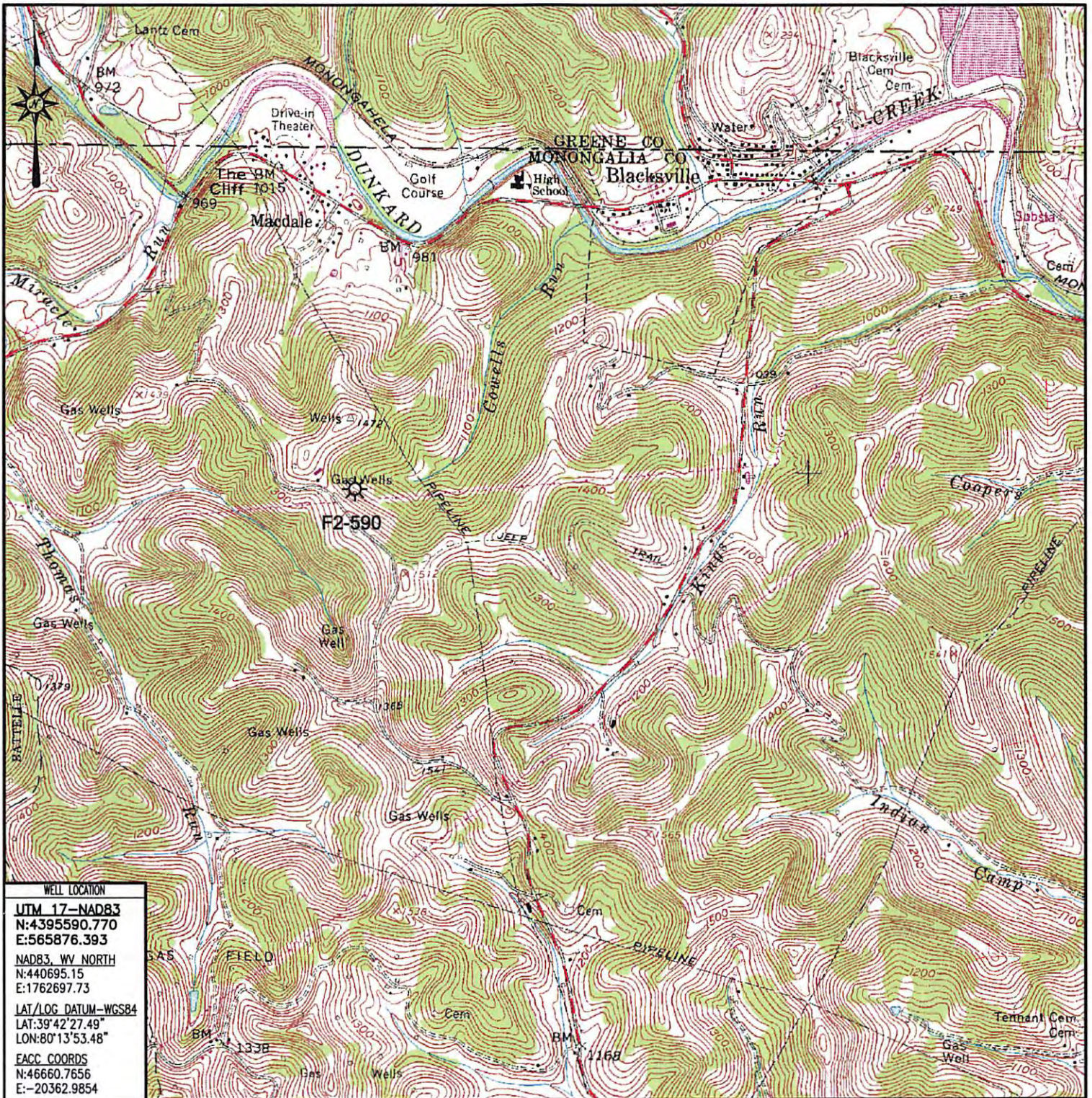
Received
Office of Oil & Gas
FEB 13 2017

Plan Approved by: 

Title: Inspector Date: 2/10/2017

Field Reviewed? Yes No

03/24/2017



WELL LOCATION
 UTM 17-NAD83
 N:4395590.770
 E:565876.393
 NAD83, WV NORTH
 N:440695.15
 E:1762697.73
 LAT/LOG DATUM-WGS84
 LAT:39°42'27.49"
 LON:80°13'53.48"
 EACC COORDS
 N:46660.7656
 E:-20362.9854

PREPARED FOR:
 ERP FEDERAL MINING COMPLEX LLC
 1044 MIRACLE RUN ROAD
 FAIRVIEW, WV 26570

**F2-590 WELL
 WELL LOCATION MAP
 MONONGALIA COUNTY
 CLAY DISTRICT
 WEST VIRGINIA**

Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486

Received
 Office of Oil & Gas

LEGEND
 WELL LOCATION

TOPO QUAD: BLACKSVILLE, WV
 SCALE: 1" = 2000'
 DATE: JANUARY 18, 2017

FEB 13 2017

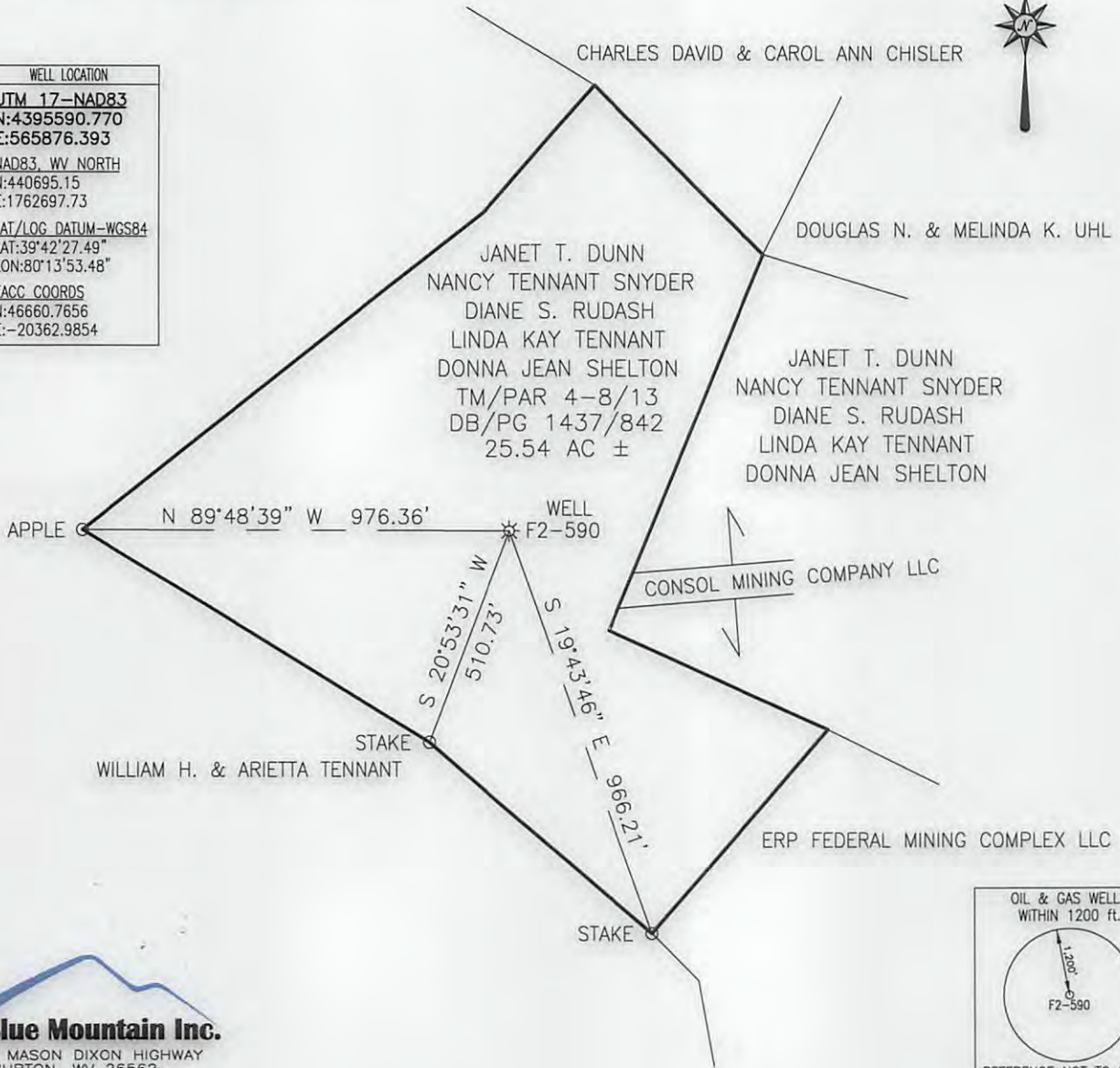
NOTE:

It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

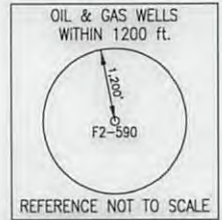
Well is located on topo map 254 feet south of Latitude: 39° 42' 30"

Well is located on topo map 6,524 feet west of Longitude: 80° 12' 30"

WELL LOCATION	
UTM 17-NAD83	
N:4395590.770	
E:565876.393	
NAD83_WV NORTH	
N:440695.15	
E:1762697.73	
LAT/LOG DATUM-WGS84	
LAT:39°42'27.49"	
LOG:80°13'53.48"	
EACC COORDS	
N:46660.7656	
E:-20362.9854	

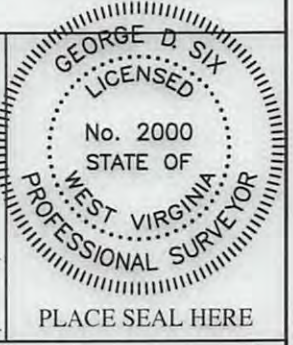


Blue Mountain Inc.
 11023 MASON DIXON HIGHWAY
 BURTON, WV 26562
 PHONE: (304) 662-6486



FILE #: F2-590
 DRAWING #: F2-590
 SCALE: 1" = 400'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 Signed: [Signature]
 R.P.E.: _____ L.L.S.: P.S. No. 2000



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



DATE: JANUARY 18, 2017
 OPERATOR'S WELL #: F2-590
 API WELL #: 47 061 01766P
 STATE COUNTY PERMIT

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

WATERSHED: DUNKARD CREEK ELEVATION: 1278.02'
 COUNTY/DISTRICT: MONONGALIA/CLAY QUADRANGLE: BLACKSVILLE, WV 7.5'

SURFACE OWNER: JANET T. DUNN, NANCY TENNANT SNYDER, DIANE S. RUDASH, LINDA KAY TENNANT, DONNA JEAN SHELTON ACREAGE: 25.54

OIL & GAS ROYALTY OWNER: UNKNOWN ACREAGE: 25.54

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

TARGET FORMATION: BAYARD SAND ESTIMATED DEPTH: 3,200'

WELL OPERATOR ERP FEDERAL MINING COMPLEX LLC DESIGNATED AGENT MATTHEW BONNELL
 Address 1044 MIRACLE RUN ROAD Address 1044 MIRACLE RUN ROAD
 City FAIRVIEW State WV Zip Code 26570 City FAIRVIEW State WV Zip Code 26570

03/24/2017