

#### west virginia department of environmental protection

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

Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

February 25, 2016

#### WELL WORK PLUGGING PERMIT

#### Plugging

This permit, API Well Number: 47-5100469, issued to CONSOLIDATION COAL COMPANY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions,

please free to contact me at (304) 926-0499 ext. 1654.

Operator's Well No: 4696

Farm Name: CROW, JOHN

API Well Number: 47-5100469

**Permit Type: Plugging** Date Issued: 02/25/2016

Promoting a healthy environment.

02/26/2016

## **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.

1.) Date: I	Pebruary	16, 2016		,
2.) Operator's W	ell No.	SGW-1	18	
3.) API Well No	. 47	- 51		00469.
	State	Com	ntv	Permi

# STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF OIL & GAS APPLICATION FOR A PERMIT TO PLUG & ABANDON

45 WELL TYPE	Oll / Con Y	Liquid injection / Weste disc	need.
4.) WELL TYPE:	(IF "Gas", Production	Liquid injection / Waste disp Underground storage X / E	Deep / Shallow X
5.) LOCATION:	Elevation: <u>1188.90</u>	Watershed: Dunkard Fork	
	District: Webster	County: Marshall Quadra	angle: Majorsville 7.5'
6.) WELL OPERA	ATOR Consolidation Coal Compan	y 7.) DESIG	NATED AGENT_Ronnie Harsh
Address	s 1 Bridge Street		Address <u>1 Bridge Street</u>
	Monongah, WV 26554		Monongah, WV 26554
8.) OIL & GAS IN	SPECTOR TO BE NOTIFIED	9.) PLUG	GGING CONTRACTOR
Name _	Eric Blend		Name
Address	s_PO BOX 2115		Address
	Wheeling, WV 26003		<del>,</del>
	ALA EXPLORED		
10.) WORK		anner of plugging this well is as follows:	1 51
	0-1029	5-91 REVISION # 27	COAL COMPANY WELL OPERATION # SGW-87
		, 101C	COAL COMPANY WELL OF HITTER ST.
		SEE EXHIBIT NO. 1	
OK &	W AV		
-			
Notification must b	e given to the district oil and gas in	spector 24 hours before permitted work can co	ommence.
			PECEIVED
Work order approve	ed by inspector	Date	Office of Oil and Gas FEB 1 8 2016
			Office of On a
			FEB 1 8 2016

WV Department of Environment 92/26/2016

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U. S. Department & Labor 1990

W. J. SCHELLER

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



OCT 17 1990.

In the matter of Consolidation Coal Company Shoemaker Mine I.D. No. 46-01436 Ireland Mine I.D. No. 46-01438 Petition for Modification

Docket No. M-90-066-C

#### PROPOSED DECISION AND ORDER

On April 24, 1990, a petition was filed seeking a modification of the application of 30 CFR 75.1700 to Petitioner's Shoemaker Mine and Ireland Mine, both located in Marshall County, West Virginia. The Petitioner alleges that the alternative method outlined in the petition will at all times guarantee no less than the same measure of protection afforded by the standard.

MSHA personnel conducted an investigation of the petition and filed a report of their findings and recommendations with the Administrator for Coal Mine Safety and Health. After a careful review of the entire record, including the petition, comments, and MSHA's investigative report and recommendation, this Proposed Decision and Order is issued.

#### Finding of Fact and Conclusion of Law

The alternative method proposed by the Petitioner (as amended by the recommendations of MSHA investigators) will at all times guarantee no less than the same measure of protection afforded the miners under 30 CFR 75.1700.

On the basis of the petition and the findings of MSHA's investigation, Consolidation Coal Company is granted a modification of the application of 30 CFR 75.1700 to its Shoemaker Mine and Ireland Mine.

#### ORDER

Wherefore, pursuant to the authority delegated by the Secretary of Labor to the Administrator for Coal Mine Safety and Health, and pursuant to Section 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C., sec. 811(c), it is ordered that Consolidation Coal Company's Petition for Modification of the application of 30 CFR 75.1700 in the Shoemaker Mine and Ireland Mine is hereby:

Office of Oil and Gas

FEB 1 7 2016 -

- GRANTED, conditioned upon compliance with all provisions of the Petitioner's alternative method and the following terms and conditions:
  - Procedures to be utilized when plugging gas or oil wells.
    - (a) Cleaning out and preparing oil and gas wells.

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

plug described in subparagraph (a) (3) shall be used to isolate the hydrocarbon producing stratum from the expanding cement plug. Nevertheless, a minimum of 200 feet of expanding cement shall be placed below the lowest mineable coalbed.

- (6) The wellbore shall be completely filled and circulated with a gel that inhibits any flow of gas, supports the walls of the borehole, and densifies the expanding cement. This gel shall be pumped through open-end tubing run to a point approximately 20 feet above the bottom of the cleaned out area of the borehole or bridge plug.
- (b) Plugging oil or gas wells to the surface. The following procedures shall be utilized when plugging gas or oil wells to the surface:
  - A cement plug shall be set in the wellbore by pumping an expanding cement slurry down the tubing to displace the gel and fill the borehole to the surface. (As an alternative, the cement slurry may be pumped down the tubing so that the borehole is filled with Portland cement or a Portland cement-fly ash mixture from a point approximately 100 feet above the top of the lowest mineable coalbed to the surface with an expanding cement plug extending from at least 200 feet below the lowest mineable coalbed to the bottom of the Portland cement.) There shall be at least 200 feet of expanding cement below the base of the lowest mineable coalbed.
  - (2) A small quantity of steel turnings, or other small magnetic particles, shall be embedded in the top of the cement near the surface to serve as a permanent magnetic monument of the borehole.
- (c) Plugging oil or gas wells using the vent pipe method. The following procedures shall be utilized when using the vent pipe method for plugging oil and gas wells:
  - (1) A 4 1/2-inch or larger vent pipe shall be run into the wellbore to a depth of 100 feet below the lowest mineable coalbed and swedged to a smaller diameter pipe, if desired, which will extend to a point approximately 20 feet

above the bottom of the cleaned out area of the borehole or bridge plug.

- (2) A cement plug shall be set in the wellbore by pumping an expanding cement slurry, Portland cement, or a Portland cement-fly ash mixture down the tubing to displace the gel so that the borehole is filled with cement. The borehole and the vent pipe shall be filled with expanding cement for a minimum of 200 feet below the base of the lowest mineable coalbed. The top of the expanding cement shall extend upward to a point approximately 100 feet above the top of the lowest mineable coalbed.
- (3) All fluid shall be evacuated from the vent pipe to facilitate testing for gases. During the evacuation of fluid, the expanding cement shall not be disturbed.
- (4) The top of the vent pipe shall be protected to prevent liquids or solids from entering the wellbore, but permit ready access to the full internal diameter of the vent pipe when necessary.
- (d) Plugging oil and gas wells for use as degasification boreholes. The following procedures shall be utilized when plugging oil or gas wells for subsequent use as degasification boreholes:
  - (1) A cement plug shall be set in the wellbore by pumping an expanding cement slurry down the tubing to displace the gel and provide at least 200 feet of expanding cement below the lowest mineable coalbed. The top of the expanding cement shall extend upward to a point above the top of the coalbed being mined. This distance shall be based on the average height of the roof strata breakage for the mine.
  - (2) To facilitate methane drainage, degasification casing of suitable diameter, slotted or perforated throughout its lower 150 to 200 feet, shall be set in the borehole to a point 10 to 30 feet above the top of the expanding cement.
  - (3) The annulus between the degasification casing and the borehole wall shall be cemented from

- a point immediately above the slots or perforations to the surface.
- (4) The degasification casing shall be cleaned out for its total length.
- (5) The top of the degasification casing shall be fitted with a wellhead equipped as required by the District Manager. Such equipment may include check valves, shutin valves, sampling ports, flame arrestor equipment, and security fencing.
- II. The following procedures shall apply to mining through a plugged oil or gas well:
  - (a) The operator shall notify the District Manager or designee:
    - (1) Prior to mining within 300 feet of the well; and
    - (2) When a specific plan is developed for mining through each well.
  - (b) The MSHA District Manager or designee shall conduct a conference prior to mining through any plugged well to review and approve the specific procedures for mining through the well. Representatives of the operator, the representative of the miners, and the appropriate State agency shall be informed, within a reasonable time prior to the conference, and be given an opportunity to attend and participate. This meeting may be called by the operator.
  - (c) Mining through a plugged well shall be done on a shift approved by the District Manager or designee.
  - (d) 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.
  - (e) When using continuous or conventional mining methods, drivage sights shall be installed at the last open crosscut near the place to be mined to ensure intersection of the well, and again if

necessary to ensure that the sight line is not more than 50 feet from the well.

- (f) Firefighting equipment, including fire extinguishers, rock dust, and sufficient fire hose to reach the working face area of the mining through shall be available when either the conventional or continuous mining method is used. The fire hose shall be located in the last open crosscut of the entry or room. When the longwall mining method is implemented, the fire hose shall be extended to the face area of the mine through. All fire hoses shall be ready for operation during the mining through.
- (g) Sufficient supplies of roof support and ventilation materials shall be available and located at the last open crosscut. In addition, an emergency plug and/or plugs, shall be available within the immediate area of the mine through.
- (h) The quantity of air required by the approved ventilation system and methane and dust control plan, but not less than 9,000 cubic feet of air per minute shall be used to ventilate the working face during the mining through operation. On longwall sections, a minimum of 20,000 cfm shall be used to ventilate the working face during the mining through operation.
- (i) Equipment shall be checked for permissibility and serviced on the shift prior to mining through the well.
- (j) The methane monitor on the longwall, continuous mining machine, or cutting machine and loading machine shall be calibrated on the shift prior to mining through the well.
- (k) When mining is in progress, tests for methane shall be made with a hand-held methane detector at least every 10 minutes from the time that mining with the continuous mining machine, cutting machine, or loading machine is within 30 feet of the well until the well is intersected and immediately prior to mining through. When mining with longwall mining equipment, the tests for methane shall be made at least every 10 minutes when the longwall face is within 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.

- (1) When using continuous or conventional mining methods, the working place shall be free from accumulations of coal dust and coal spillages, and rock dust shall be placed on the roof, rib, and floor to within 20 feet of the face when mining through the well. On longwall sections, rock dusting shall be conducted and placed on the roof, rib, and floor up to both the headgate and tail-gate gob.
- (m) When the wellbore is intersected, all equipment shall be deenergized and the place thoroughly examined and determined safe before mining is resumed. Any well casing shall be removed and no open flame shall be permitted in the area until adequate ventilation has been established around the wellbore.
- (n) After a well has been intersected and the working place determined safe, mining shall continue inby the well a sufficient distance to permit adequate ventilation around the area of the wellbore.
- (o) No person shall be permitted in the area of the mining through operation except those actually engaged in the operation, company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.
- (p) The mining through operation shall be under the direct supervision of a certified official. Instructions concerning the mining through operation shall be issued only by the certified official in charge.
- (q) MSHA personnel may interrupt or halt the mining through operation when it is necessary for the safety of the miners.
- (r) A copy of the petition shall be maintained at the mine and be available to the miners.
- (s) The Petitioner shall file a plugging affidavit setting forth the persons who participated in the work, a description of the plugging work, and a certification by the Petitioner that the well has been plugged as described.

(t) Within 60 days after this Proposed Decision and Order becomes final, the Petitioner shall submit proposed revisions for their approved 30 CFR Part 48 training plan to the Coal Mine Safety and Health District Manager. These proposed revisions shall include initial and refresher training regarding compliance with the alternative method stated in the petition and the special terms and conditions stated in the Proposed Decision and Order.

The terms and conditions of this Proposed Decision and Order shall supersede conflicting provisions in the Petitioner's proposed alternative method.

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

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

Edward C. Hugler

Deputy Administrator / or Coal Mine Safety and Health

#### Certificate of Service

Walter J. Scheller III, Esq. Consolidation Coal Company Consol Plaza Pittsburgh, Pennsylvania 15241

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

Mr. David Shreve
International Safety
Representative
District 6
United Mine Workers of America
56000 Dilles Bottom
Shadyside, Ohio 43947

MARY ANN GRIFFIN Mine Safety Clerk

#### EXEUBIT NO. 1

From the experience and technology developed since 1970 in plugging oil and gas wells for mining through, Consolidation Coal's Northern West Virginia Operations will utilize one of the following two methods to plug all future wells.

#### 45 VENT PIPE METHOD

- (a) If active well: clean out to total depth and plug back according to state regulations to a minimum of 200 feet below lowest minable coal seam.
- (b) If abandoned well: clean out to first plug 200 feet below lowest minable seam.
- (c) Run 4½ casing from surface to minimum 200 feet below lowest minable seam and circulate 50/50 poz mix cement followed by expanding cement to surface. The expanding cement shall extend from minimum 200 feet below minable coal seam to a point 100 feet above.

The 44 will remain open from surface to a minimum of 80 feet below that minable coal seam.

#### SOLID PLUG METHOD

- (a) If active well: clean out to total depth and plug back according to state regulations to a minimum of 200 feet below lowest minable coal seam.
- (b) If an abandoned well: clean out to first plug 200 feet below lowest minable coal seam.
- (c) Circulate through tubing or drill steel an expanding cement plug from a minimum of 200 feet below minable coal seam to a point 100 feet above minable coal.

Circulate through tubing or drill steel 50/50 poz mix from 100 feet above coal seam to surface.

A monument will be installed with API No. and stating "solid plug".

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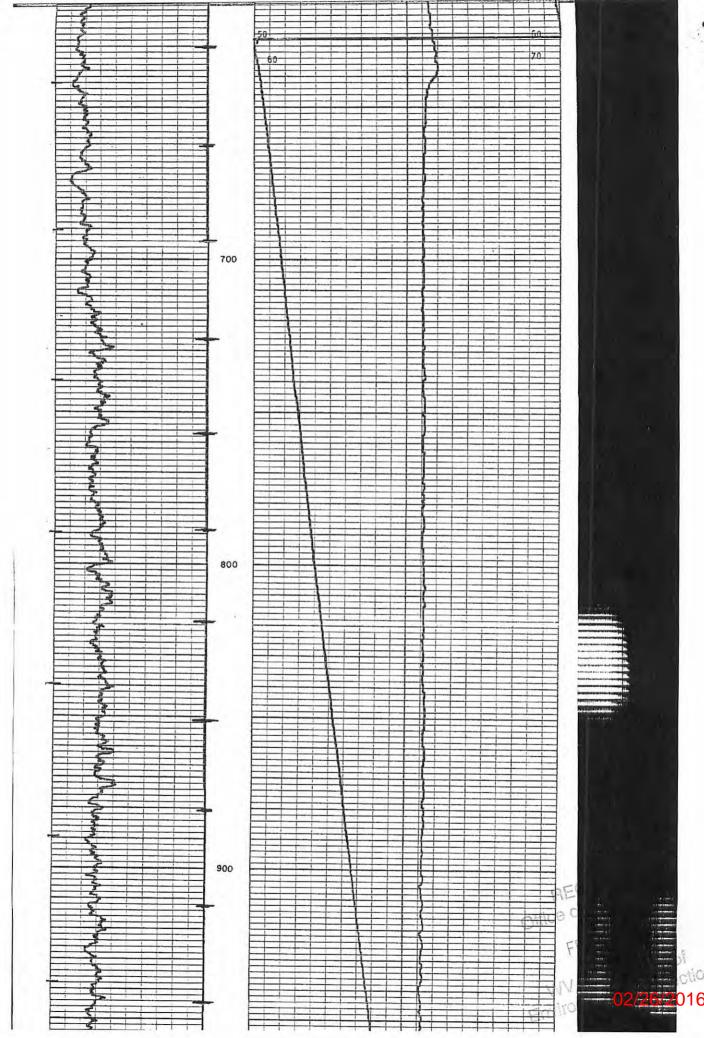
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LAST ACTIVE WELL	L ON FARM	THIS BLOCK FOR GENERAL	OFFICE US	E ONLY)	· · · · · · · · · · · · · · · · · · ·			
YES	₹NO	SURRENDER LEASE	<u> </u>	RENEW LEASE	OTHER			
STATUS PRIOR TO THIS	DRILLING WEI	El Storage	1	Remarks <b>Deilli</b> W <b>ell Compl</b>	<b>*</b> -			
REPORT	ABANDONED			_ <u> </u>	25 oct - 451 41	. 22		
	COMPLETED REDRILLED F	Gas Dry Retain	ľ					
WELL	RECONDITION	Retained	oned					
STATUS CHANGE		ED & TRANSF. TO STOR						
OR Work	TRANSFERRE  PURCHASED F	☐ Storage	n					
PERFORMED	DRILLED DEE	PER						
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	PLUGGED ANI	D ABANDONED					. <b></b>	
	SOLD	D ABANDONED						
	SOLD BRILLED TO			LUGGED BACK		YES		
	SOLD DRILLED TO	to Big Injun		LUGGED BACK		_		sgne
· · · · · · · · · · · · · · · · · · ·	SOLD  BRILLED TO  1818 foot 111  WELL TREATMENT	to Big Injun	sand			_		sanc
·	SOLD  DRILLED TO  1818 foot 111  WELL TREATMENT  No Yes	If Yes, Type of Treatmen	sand	f Yes, to depth of	feet feet			sgn(
COMPLETION	SOLD  BRILLED TO  1818 foot 111  WELL TREATMENT	If Yes, Type of Treatmen  TYPE OF GAUGE  Orifice Well Tester	sand					
COMPLETION DATA	SOLD  BRILLED TO  SOLD  Foot IN  WELL TREATMENT  No Yos  BEFORE TREAT- MENT  OPEN (IF	If Yes, Type of Treatmen TYPE OF GAUGE Orifice Well Tester GAUGE READING inches	sand I	f Yes, to depth of .  itot Tube  psig thi	feet feet	)	blowing	
	SOLD  DRILLED TO  1888 foot 188  WELL TREATMENT  No Yos  BEFORE  TREAT- MENT  (If  applicable	If Yes, Type of Treatmen TYPE OF GAUGE Orifice Well Tester GAUGE READING Inches	sand	f Yes, to depth of .  itot Tube  psig thi	Other (Specify	)		
DATA	SOLD  DRILLED TO  1818 foot 122  WELL TREATMENT  No Yes  BEFORE  TREAT- MENT  (If applicable)	If Yes, Type of Treatmen  If Yes, Type of Treatmen  TYPE OF GAUGE  GAUGE READING  Inches  TYPE OF GAUGE  Orifice Well Tester	sand	f Yes, to depth of  itot Tube  psig the	Other (Specify	ch opening after		
DATA	SOLD  DRILLED TO  1888 foot 188  WELL TREATMENT  No Yos  BEFORE  TREAT- MENT  (If  applicable	If Yes, Type of Treatmen TYPE OF GAUGE Orifice Well Tester GAUGE READING Inches TYPE OF GAUGE Orifice Well Tester GAUGE READING TYPE OF GAUGE GAUGE READING FLOW TYPE OF GAUGE FLOW FLOW FLOW FLOW FLOW FLOW FLOW FLOW	Mercury Water  Cub	itot Tubo  itot Tubo  psig the Ric feet per day  itot Tubo	Other (Specify  rough incock pressure  psig in  Other (Specify  rough incock pressure	ch opening after hour  ch opening after	s	hours
DATA	SOLD  DRILLED TO  1818 foot 111  WELL TREATMENT  WELL TREATMENT  Yes  BEFORE TREAT- MENT (If applicable)  FLOW  TEST FINAL	If Yes, Type of Treatmen  If Yes, Type of Treatmen  TYPE OF GAUGE  GAUGE READING  Inches  TYPE OF GAUGE  Orifice Well Tester  GAUGE READING  TYPE OF GAUGE  Orifice Well Tester  GAUGE READING	Mercury Water  Cubi	itot Tubo  itot Tubo  psig the Ric feet per day  itot Tubo	Other (Specify roughin OCK PRESSUREpsig in Other (Specify roughin OCK PRESSURE	ch opening after	s blowing	hours
DATA	SOLD  DRILLED TO  1818 foot 111  WELL TREATMENT  WELL TREATMENT  Yes  BEFORE TREAT- MENT (If applicable)  FLOW  TEST FINAL	If Yes, Type of Treatmen  TYPE OF GAUGE  Orifice Well Tester  GAUGE READING  Inches  TYPE OF GAUGE  Orifice Well Tester  GAUGE READING  TYPE OF GAUGE  FLOW  TYPE OF GAUGE  TYPE OF GAUGE  FLOW  TYPE OF GAUGE  TYPE OF GAUGE  TYPE OF GAUGE	Mercury Water  Cubi	itot Tubo	Other (Specify  roughin-  OCK PRESSURE psig in  Other (Specify  roughin-  OCK PRESSURE psig in  For Gene	ch opening after hour ch opening after hour	s blowing	hours
DATA (If applicable)	SOLD  BRILLED TO  1818 foot 182  WELL TREATMENT  No Yos  BEFORE TREAT- MENT (If applicable FLOW  TEST FINAL READING	If Yes, Type of Treatmen TYPE OF GAUGE Orifice Well Tester GAUGE READING Inches TYPE OF GAUGE Orifice Well Tester GAUGE READING TYPE OF GAUGE FLOW BUGGET No.	Mercury Water  Water  Water  Cub	itot Tube  itot Tube  psig the itot Tube  itot Tube	Other (Specify roughin OCK PRESSUREpsig in Other (Specify roughin OCK PRESSUREpsig in OCK PRESSUREpsig in For Gene SECTION	ch opening after	s blowing	hours
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DATA  (If applicable)  AUTHORI- ZATION FOR WORK	SOLD  DRILLED TO  1882 foot 188  WELL TREATMENT  No Yes  BEFORE  TREAT- MENT  (If applicable  FLOW  TEST FINAL  READING  Work Order Numb  Abandonment Order	If Yes, Type of Treatmen TYPE OF GAUGE Orifice Well Tester GAUGE READING Inches FLOW TYPE OF GAUGE Orifice Well Tester GAUGE READING FLOW BUGGET BUGGT BUGGET BUGGT BUGGET BUGGT BUGGET BUGGET BUGGT BUGG	Mercury Water  Water  Water  Cub	itot Tubo	Other (Specify roughin OCK PRESSUREpsig in Other (Specify roughin OCK PRESSUREpsig in For Gene SECTION Geology Storage	ch opening after hour ch opening after hour	s blowing	hours
DATA  (If applicable)  AUTHORI- ZATION FOR WORK PERFORMED	SOLD  BRILLED TO  1818 feet 182  WELL TREATMENT  WELL TREATMENT  REAT- MENT  (If applicable  FLOW  TEST FINAL  READING  Work Order Numb  Abandonment Ord  MACHINE NUMBER OR 6	If Yes, Type of Treatment Type of Gauge Orifice Well Tester Gauge Reading Inches FLOW Type of Gauge Orifice Well Tester Gauge Reading FLOW Type of Gauge FLOW Budget No.	Mercury Water  Water  Water  Cub	itot Tubo  DEPARTMENT	Other (Specify roughincock pressure psig in Other (Specify roughincock pressure psig in For Gene SECTION Geology Storage Clerical	ch opening after hour ch opening after hour	s blowing	hours
DATA  (If applicable)  AUTHORI- ZATION FOR WORK PERFORMED	SOLD  BRILLED TO  1818 feet 182  WELL TREATMENT  WELL TREATMENT  REAT- MENT  (If applicable  FLOW  TEST FINAL  READING  Work Order Numb  Abandonment Ord  MACHINE NUMBER OR 6	If Yes, Type of Treatmen TYPE OF GAUGE Orifice Well Tester GAUGE READING Inches FLOW TYPE OF GAUGE Orifice Well Tester GAUGE READING FLOW BUGGET BUGGT BUGGET BUGGT BUGGET BUGGT BUGGET BUGGET BUGGT BUGG	Mercury Water  Water  Water  Cub	itot Tube  or psig the lic feet per day itot Tube  or psig the lic feet per day    DEPARTMENT PRODUCTION	Other (Specify roughin- OCK PRESSUREpsig in Other (Specify roughin- OCK PRESSUREpsig in For Gene SECTION Geology Storage Clerical Map	ch opening after hour ch opening after hour	s blowing	hours
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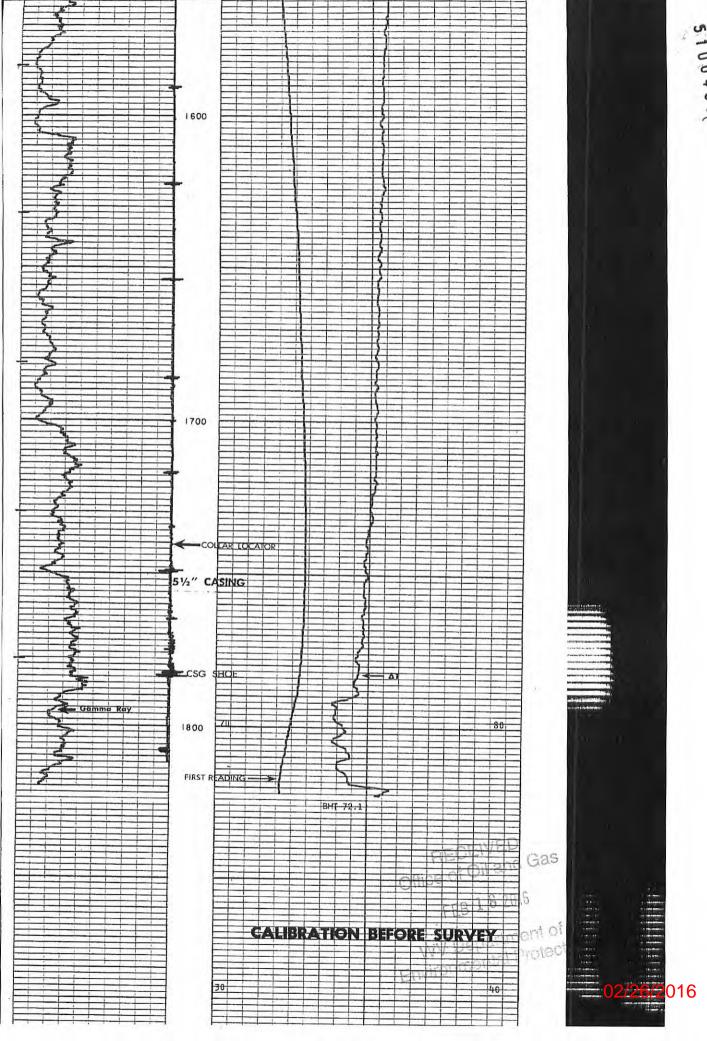
Well	is located on topo map _	10,340 feet south of Lat	itude: <u>39 57 30 "</u>	1.0
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STAKE O	TM/PAR 15-5/42 DB/PG 731/607	WAT	WHEELING CREEK SERSHED COMMISSION	ļ
	99.00 AC±	WELL SGW-118 \$ 21'05': 489.6	å. ŧ	
RANDALL B. SCHMIDT	STONE	STAVE 489.6		
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			OIL & GAS WELLS WITHIN 1200 ft.	
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		N:522480.824 E:1680606.844	5100151	
		LAT/LOG_CATUM-WGS84 LAT:39'55'47.816"	Stories	
	purpose or intention of this plat to represent surveyed		RENCE NOT TO SCALE	
	of the surface or mineral parcels depicted hereon. The I the boundary lines, as shown, are based on record dee	t .		
10125 MASON DIXON HIGHWAY BURTON, WV 26562 PHONE: (304) 662-6486 location of description	ns, field evidence found and/or lax map position, unless noted.		annummu.	i
		HEREBY CERTIFY THAT THIS	No. 2000	1
FILE #: SGW-118	PLAT IS CORRECT TO THE BES		IN CENSO !	
DRAWING #: SGW-118	BELIEF AND SHOWS ALL THE LAW AND THE REGULATIONS IS	SSUED AND PRESCRIPED BY	No. 2000	
SCALE:1" = 1000'	THE DEPARTMENT OF ENVIRO		STATE OF	·
MINIMUM DEGREE	a M.	O.I.	MAL SUMMING	
OF ACCURACY: 1/2500	Signed: Klorge	alxy	THE SONAL SURVINITION	
PROVEN SOURCE U.S.G.S. MONUMENT OF ELEVATION: THOMAS 1498 81'	R.P.E.:	L.L.S.: P.S. No. 2000	Mannanna Committee	
71101110 1730.01		1°.3. NU. 2000	PLACE SEAL HERE	
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	A PLEASE	DATE: FEBRUARY 1	1, 2016	
WVDEP	S. S. S. W.	OPERATOR'S WELL #:	SGW-118	l
OFFICE OF OIL & GAS	[7] [1]		304-110	
601 57TH STREET CHARLESTON, WV 25304		API WELL #: 47	51 00469	]
· ·		STATE CO	UNTY PERMIT	1
Well Type: Oil Waste Disposal	Production Deep			
X Gas Liquid Injection				
WATERSHED: DUNKARD FORK		ELEVATION:	1188.90'	
COUNTY/DISTRICT: MARSHALL/	WEBSTER OLIA			
SURFACE OWNER: GMO FORES		ACREAGE:		
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OIL & GAS ROYALTY OWNER:	NUMBER OF THE PARTY OF THE PART	ACREAGE:		VED
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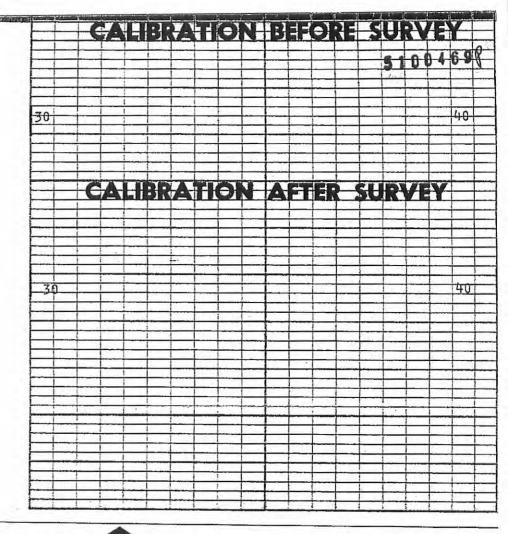
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	COMPANY		BIA GAS MISSION CO	RPORA	ПОИ	- 1
	WELL	JOHN	E EMMA CRO	W #L-	-4696	
1						
	FIELD	MAJOR	SVILLE			
	COUNTY	MARSH	ALL		STATE	PA
	LOCATION:		EBSTER RGE	. N.		N.A.
ERMANENT DATUM_		N.A.	Ft. Above	1186		EV. K.B. N.A. D.F. N.A.
ERMANENT DATUM OG MEASURED FROM PRILLING MEASURED	G.L. G.L. FROM G.L.	N.A.	, ELEV	1186		DE N.A.
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ERMANENT DATUM_ OG MEASURED FROM RILLING MEASURED  ATE UN NO. YPE LOG DEPTH — DRILLER DEPTH — LOGGER	G.L. G.L. FROM G.L. 6-18-80 ONE GR/TLD 1848' 1817'	N.A.	, ELEV	1186		DE N.A.
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TOOL MODEL NO. TOOL SERIAL NO. TOOL DIAMETER					ON MIN	IEM ERAIONE		
OL SERIAL NO.					TOOL MODEL NO.			
					TOOL DIAMETER			
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DETECT. LENGTH								
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SERVICE ORDER/INV.NO.	5222				TO CHECK FOR GAS LEAKS	GAS LEAKS		
		SGIN	LOGGING DATA			WELL	DATA	
V DEPTHS	SPEED	T.C.	T.C. SENS.	ZERO	API G.R. UNITS	TYPE WELL	GAS	
NO. FROM TO	FT./MIN.	SEC.	SETTINGS	DIV L. or R.	PER LOG DIV.	WELL HEAD PRESSURE	710#	
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## CALIBRATION DATA

COMPANY COLUMBIA GAS TRANSMISSION CORPORATION

WELL JOHN & EMMA CROW #L-4696

BIRDWELL T.D. 1817'

FIELD MAJORSVILLE

BIRDWELL F.R. 1817'

LOCATION WEBSTER TWP.

COUNTY MARSHALL

D.F. N.A.

STATE PA DATE 5-18-89

G.L. 1186. 50'

## BIRDWELL DIVISION



Seismograph Service Corporation

A SUBSIDIARY OF RAYTHEON COMPANY

SSC-1285

Office of Oil and Gas
FEB 1 8 2016
WV Department of

02/26/2016

FORM WW-4(A) Revised 6-07

1) Date: February 16, 2016. 2) Operator's Well No. SGW-118 3) API Well No. 47 – 51 – 00469 State County Permit

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

NOTICE OF ATTEMENTED	IN TO FEEG AND ADAINDON A WEEL
	COLUMN ORED L'EOR
4) SURFACE OWNER(S) TO BE SERVED (a) Name GMO Forestry	5)a) COAL OPERATOR Name CONSOLIDATION COAL CO
(a) Name GMO Forestry V Address PO BOX 25	Address 1 Bridge Street
Pittsfield, NH 03263	Monongah, WV 26554
(b) Name	(b) COAL OWNER(S) WITH DECLARATION:
Address	Name
	Address
(c) Name	
Address	(c) COAL LESSEE WITH DECLARATION:
(6) INSPECTOR Eric Blend	
Address PO BOX 2115	Name Address
Wheeling, WV 26003	
Telephone (304) 552-1179	
Annual VV Colored Colored	
TO THE PERSON(S) NAMED ABOVE	: You should have received this Form and the following documents:
(IX THE POST OF THE LAND	N. I. C. W. W. C.
	Well on form WW-4B, which sets out the es the well and its location and the plugging
work order; and	es the well and its location and the plugging
(2) The Plat (surveyor's map) showing the w	vell location on Form WW-6
(a)	
THE REASON YOU RECEIVED THESE DOCUMENT	IS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION
	NS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION
(FORM WW-4(B) DESIGNATED FOR YOU. HOWE	VER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.
Take notice under Chapter 22-6 of the West Virgin	ia Code, the undersigned well operator proposes to file or has filed this Notice
and Application and accompanying documents for a pern	nit to plug and abandon a well with the Chief of the Office of Oil and Gas. West
Virginia Department of Environmental Protection, with re	espect to the well at the location described on the attached Application and denicted
on the attached From WW-6. Copies of this Notice, the	Application, and the plat have been mailed by registered or certified mail or delivery by
nand to the person(s) named above (or by publication in c	certain circumstances) on or before the day of mailing or delivery by the Chief.
	WELL OPERATOR Consolidation Coal Company
	By Mason Smith .
	Its Project Engineer
	Address 6126 Energy Road
	Moundsville WV 26041
	Telephone (304) 843-3565
	Misophygung
	10 and Johns
bscribed and sworn before me this 16 day of Febru	120 16 Energy , 20 16
	OFFICIAL SEAL
Christian K. Warfield	Notary Public, STATE OF WEST VIRGINIA NOTARY PUBLIC
01 1 11	Christian K Warfield
Marshall County, State of West	Christian K Warfield Murray American Energy Inc 6126 Energy Road Moundsville WV 26041 My Commission Expires June 10, 202
commission expires June 10 2024	Moundsville WV 26041
commission expires	My Commission Expires June 10, 202
	Mulan & water of Oil and Gas
and Gas Privacy Notice	Office of On The

Oil

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

Environm snta 02/26/2016

WW-9 Rev. 5/08

	Page		of
API Number 47 -	051		00469
Operator's Well No	. SG	W-11	8

## STATE OF WEST VIRGINIA DEPARTMENT 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 Consolidation Coal Company	
Watershed Dunkard Fork	Quadrangle Majorsville, 7.5'
Elevation 1188.90' County Marshall	District Webster
Description of anticipated Pit Waste: N/A	
Do you anticipate using more than 5,000 bbls of water to complete the propos	ed well work? Yes NoX
Will a synthetic liner be used in the pit? If so, what	at mil.?
Proposed Disposal Method For Treated Pit Wastes: Land ApplicationUnderground Injection (UIC Permit Number	location)
Drilling medium anticipated for this well? Air, freshwater, oil based, etc If oil based, what type? Synthetic, petroleum, etc.? Additives to be used?Bentonite, Bicarbonate of Soda	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc.  -If left in pit and plan to solidify what medium will be used? Cemen -Landfill or offsite name/permit number?	t, lime, sawdust
I certify that I understand and agree to the terms and conditions of the on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department provisions of the permit are enforceable by law. Violations of any term or olaw or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined an application form and all attachments thereto and that, based on my inquivobtaining the information, I believe that the information is true, accurate, penalties for submitting false information, including the possibility of fine or in Company Official Signature  Company Official Title  Project Engineer	nent of Environmental Protection. I understand that the condition of the general permit and/or other applicable d am familiar with the information submitted on this iry of those individuals immediately responsible for and complete. I am aware that there are significant
Subscribed and sworn before me this 16 day of February  Christian K. Warkield Christian  My commission expires June 10, 2024	Notary Public CEIVED  A OFFICIAL SEAL STATE OF WEST VIRGINIA NOTARY PUBLIC Christian K Warfield Murray American Energy Inc 6126 Energy Road Moundsville WV 26041 My Compliance Carlot Ca

## MURRAY AMERICAN ENERGY, INC. & CONSOLIDATION COAL COMPANY

MURRAY AMERICAN ENERGY, INC. & CONSOLIDATION COAL COMPANY

46226 National Road St. Clairsville, OH 43950

phone: 304.843.3565 fax: 304.843.3546

e-mail: MasonSmith@coalsource.com

MASON SMITH Project Engineer

February 16, 2016

Department of Environmental Protection Office of Oil and Gas 601-57<sup>th</sup> Street Charleston, WV 25320

To Whom It May Concern,

As per the Division of Environmental Protection, Office of Oil and Gas request, Consolidation Coal Company submits the following procedures utilizing pit waste.

Upon submitting a well work application (without a general permit for Oil & Gas Pit Waste Discharge Application), Consolidation Coal Company will construct no pits, but instead will use mud tanks to contain all drilling muds.

Once the well is completed, that material (minus the cave material) will be trucked to the next well to be plugged or to DEP facilities number U-0033-83, O-1001-00, U-1035-91U-46-84, U-78-83, O-1044-9, or U-100-83.

Sincerely,

Mason Smith

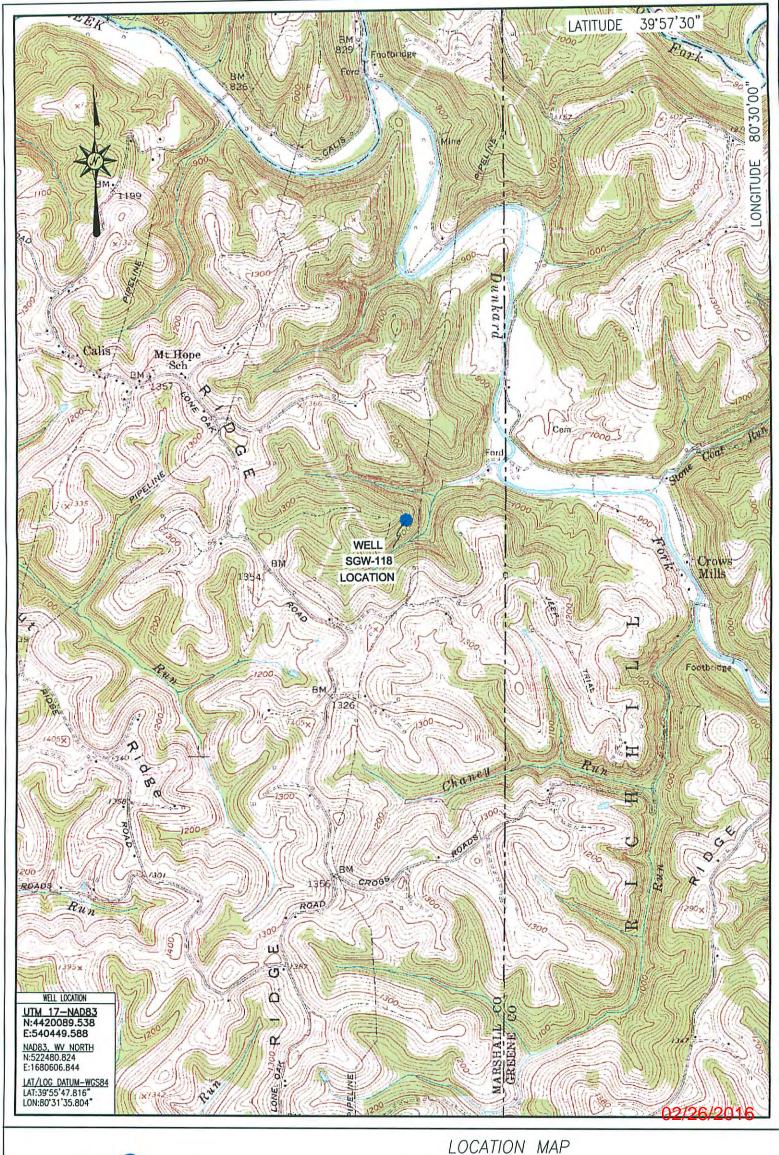
Project Engineer

Office of Oil and Gas

FEB 1 8 2016

W/V Department of
Environmental Protection

5100469P



Blue Mountain Inc.

10125 MASON DIXON HIGHWAY
BURTON, WY 26562
PHONE: (304) 662-6486

FEBRUARY 11, 2016

SGW-118 MAJORSVILLE QUADRANGLE WEST VIRGINIA

SCALE 1" = 2000' 0' 2000' 4000'

6000'

BLUE MOUNTAIN ENGINEERING

