



west virginia department of environmental protection

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

Jim Justice , Governor  
Austin Caperton , Cabinet Secretary  
www.dep.wv.gov

Thursday, September 28, 2017  
WELL WORK PERMIT  
Vertical / Plugging

CONSOLIDATION COAL COMPANY  
1 BRIDGE STREET

MONONGAH, WV 265540000

Re: Permit approval for L.L. HOWARD 985  
47-051-00611-00-00

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: L.L. HOWARD 985  
Farm Name: HOWARD, HELEN M.  
U.S. WELL NUMBER: 47-051-00611-00-00  
Vertical / Plugging  
Date Issued: 9/28/2017

Promoting a healthy environment.

09/29/2017

## 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

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1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.
4. This well is under a consent order and must be plugged under the terms of that agreement.

5100611A

FORM WW-4(B)  
Rev. 2/01

1) Date: May 8, 20 17  
2.) Operator's Well No. M-1105  
3.) API Well No. 47 - 51 - 00611  
State County Permit

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

4.) WELL TYPE: Oil \_\_\_\_\_ Gas X Liquid injection \_\_\_\_\_ Waste disposal \_\_\_\_\_  
(IF "Gas", Production \_\_\_\_\_ Underground storage \_\_\_\_\_ Deep \_\_\_\_\_ Shallow X)

5.) LOCATION: Elevation: 1136.43' Watershed: Grave Creek  
District: Liberty County Marshall Quadrangle: Cameron, WV 7.5'

6.) WELL OPERATOR Consolidation Coal Co. 7.) DESIGNATED AGENT Ronnie Harsh  
Address 1 Bridge St. Address 1 Bridge St.  
Monongah, WV 26554 Monongah, WV 26554

8.) OIL & GAS INSPECTOR TO BE NOTIFIED 9.) PLUGGING CONTRACTOR  
Name James Nicholson Name \_\_\_\_\_  
Address PO BOX 44 Address \_\_\_\_\_  
Moundsville, WV 26041

10.) WORK ORDER: The work order for the manner of plugging this well is as follows.

SEE EXHIBIT NO. 1

*B*  
MSHA 101C

*OK Jan*

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

Work order approved by inspector \_\_\_\_\_ Date \_\_\_\_\_

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WV Dept. of Environmental Protection

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## EXHIBIT 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 the following method to plug all future wells.

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 abandoned well: clean out to first plug 200 feet below lowest minable coal seam.
- (c) Circulate through tubing or drill steel an expanding Class A 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 an expanding Class A cement plug from 100 feet above coal seam to surface.

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

- WELL HAS NOT BEEN PREVIOUSLY PLUGGED.
- WELL RECORDS DO NOT INDICATE CASING WAS CEMENTED OR PERFORATED.
- ORIGINAL TD  $\approx$  2760'.
- BLOW WELL DOWN & LOAD WITH GEL
- PULL OR CUT TUBING.
- WELL RECORDS DO NOT INDICATE 4 1/2" CASING IN WELL.
- PICTURES INDICATE 4 1/2" IN WELL.
- FREEPOINT, CUT & PULL OUT OF HOLE WITH 4 1/2".
- SET CLASS A CEMENT PLUG FROM 2700' TO 100 FEET ABOVE 4 1/2" CUT. (SEE NOTE \*)
- RECORDS INDICATE 1900' OF 7" FREEPOINT, CUT & PULL 7" OUT OF HOLE.
- ADD MORE CLASS A CEMENT FROM PREVIOUS CEMENT TOP TO 920'.
- RUN EXPANDING CEMENT FROM 920' TO SURFACE.

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NOTE  
★ IF 4 1/2" CASING CANNOT BE PULLED, THEN PERFORATE TO COVER ANNULUS FROM 2700' TO 1900'.

09/29/2017

5700611P

U. S. Department of Labor

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

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MAY 18 1989  
MICHAEL R. PEELISH



MAY 15 1989

101-C

In the matter of  
McElroy Coal Company  
McElroy Mine  
I.D. No. 46-01437

Petition for Modification

Docket No. M-88-199-C

PROPOSED DECISION AND ORDER

On October 17, 1988, a petition was filed seeking a modification of the application of 30 CFR 75.1700 to Petitioner's McElroy Mine, 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 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, McElroy Coal Company is granted a modification of the application of 30 CFR 75.1700 to its McElroy 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 McElroy Coal Company's Petition for Modification of the application of 30 CFR 75.1700 in the McElroy Mine is hereby:

GRANTED, conditioned upon compliance with all provisions of the Petitioner's alternative method and the following terms and conditions:

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I. 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

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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:

- (1) A cement plug shall be set in the wellbore by pumping an expanding cement slurry down the tubing to displace the gel and fill the borehole to the surface. (As an alternative, the cement slurry may be pumped down the tubing so that the borehole is filled with Portland cement or a Portland cement-fly ash mixture from a point approximately 100 feet above the top of the lowest mineable coalbed to the surface with an expanding cement plug extending from at least 200 feet below the lowest mineable coalbed to the bottom of the Portland cement.) There shall be at least 200 feet of expanding cement below the base of the lowest mineable coalbed.
- (2) A small quantity of steel turnings, or other small magnetic particles, shall be embedded in the top of the cement near the surface to serve as a permanent magnetic monument of the borehole.

(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 expand-

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ing 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) Plugged 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.

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Oil and Gas  
Protection

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- (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 cut 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.
- (l) When using continuous or conventional mining methods, the working place shall be free from accumulations of coal dust and coal spillages, and rock dust shall be placed on the roof, rib, and floor to within 20 feet of the face when mining through the well. On longwall sections, rock dusting shall be conducted and placed on the roof, rib, and floor up to both the headgate and tailgate gob.
- (m) When the wellbore is intersected, all equipment shall be deenergized and the place thoroughly examined and determined safe before mining is resumed. Any well casing shall be removed and no open flame shall be permitted in the area until

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 WV Dept. of Environmental Protection  
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adequate ventilation has been established around the wellbore.

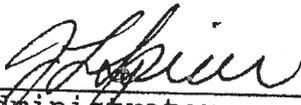
- (n) After a well has been intersected and the working place determined safe, mining shall continue in by the well a sufficient distance to permit adequate ventilation around the area of the wellbore.
- (o) No person shall be permitted in the area of the mining through operation except those actually engaged in the operation, company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.
- (p) The mining through operation shall be under the direct supervision of a certified 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.

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WV Dept. of Environmental Protection  
09/29/2017

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.

  
 \_\_\_\_\_  
 Administrator  
 for Coal Mine Safety and Health

Certificate of Service

I hereby certify that a copy of this proposed decision was served personally or mailed, postage prepaid, this 15<sup>th</sup> day of May, 1989, to:

Michael R. Peelish, Esq.  
 Consolidation Coal Company  
 1800 Washington Road  
 Pittsburgh, Pennsylvania 15241

Michael H. Holland, 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.  
 Washington, DC 20005

  
 \_\_\_\_\_  
 MARY ANN GRIFFIN  
 Mine Safety Clerk

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MAY 03 83  
Permitting  
Office of Oil & Gas

WR-35

Date April 20, 1993  
Operator's  
Well No. L-985  
Farm L.L. Howard  
API No. 47 - 051 - 00611

State of West Virginia  
DEPARTMENT OF ENERGY  
Oil and Gas Division

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas X / Liquid Injection \_\_\_ / Waste Disposal \_\_\_  
(If "Gas," Production X / Underground Storage X / Deep \_\_\_ / Shallow \_\_\_ /)  
LOCATION: Elevation: 1205 Watershed Laurel Run  
District: Liberty County Marshall Quadrangle Cameron SE

17173

COMPANY Columbia Gas Transmission Corp.  
ADDRESS P. O. Box 1273, Charleston, WV 25325  
DESIGNATED AGENT R.C. Weidner  
ADDRESS SAME  
SURFACE OWNER Helen M. Howard et al.  
ADDRESS 508 Chestnut Lane, Jeannette, PA 15644  
MINERAL RIGHTS OWNER SAME  
ADDRESS \_\_\_\_\_  
OIL AND GAS INSPECTOR FOR THIS WORK  
111 Blockshere Dr.  
R. Mick ADDRESS Mannington, WV 26582  
PERMIT ISSUED ASSIGNED 1978  
DRILLING COMMENCED Unknown  
DRILLING COMPLETED 1-30-1896  
IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON \_\_\_\_\_

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	1045		
9 5/8			
8 5/8	1420		
7		1900	
5 1/2			
4 1/2			
3			
2			
Liners used			

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GEOLOGICAL TARGET FORMATION Gordon Stray Depth 2755 feet  
Depth of completed well 2755 feet Rotary \_\_\_ / Cable Tools X  
Water strata depth: Fresh \_\_\_ feet; Salt 1680 feet  
Coal seam depths: 720 Is coal being mined in the area? No

OPEN FLOW DATA  
Producing formation Gordon Stray Pay zone depth 2755 feet  
Gas: Initial open flow 1320 Mcf/d Oil: Initial open flow \_\_\_ Bbl/d  
Final open flow \_\_\_ Mcf/d Final open flow \_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_ hours  
Static rock pressure NA psig (surface measurement) after \_\_\_ hours shut in  
(If applicable due to multiple completion--)  
Second producing formation \_\_\_ Pay zone depth \_\_\_ feet  
Gas: Initial open flow \_\_\_ Mcf/d Oil: Initial open flow \_\_\_ Bbl/d  
Final open flow \_\_\_ Mcf/d Oil: Final open flow \_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_ hours  
Static rock pressure \_\_\_ psig (surface measurement) after \_\_\_ hours shut in

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

The well record doesn't indicate any perforations or stimulating ever occurring.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Pittsburgh Coal			720		
Dunkard Sand			1260		
Lime			1355		
Salt Sand			1680		
Big Lime			1900		
Big Injun			2025	2140	
Slate			2490		
Red Rock			2665		
50' Sand			2705	2720	
Gordon Stray			2755		

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 Environmental Protection  
 MAY 05 93  
 Permitting  
 Office of Oil & Gas

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 MAY 3 2017

Office of Oil and Gas  
 WV Division of Environmental Protection

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation  
 Well Operator

By: Robert C. Weidner

Date: 04/29/93

Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



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WV Dept. of Environmental Protection

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IR-26  
OBVERSE

INSPECTOR'S PERMIT SUMMARY FORM

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OFFICE OF OIL AND GAS

OCT 28 1997

WELL TYPE GAS  
ELEVATION: 1,137.00  
DISTRICT: LIBERTY  
QUADRANGLE: CAMERON  
COUNTY: MARSHALL

API# 47- 51-00611 T  
OPERATOR: COLUMBIA GAS TRANSMISSION CORP  
TELEPHONE: (304)357-2459  
FARM: COURTRIGHT, NANCY SUE  
WELL NO.: L.L. HOWARD 985

WV Division of  
Environmental Protection

SURFACE OWNER Courtright  
TARGET FORMATION Cardox Str  
DATE PERMIT ISSUED: 09/01/93

COMMENTS (Y/N) ✓ TELEPHONE  
DATE APPLICATION RECEIVED 04/30/93

DATE LOCATION STARTED \_\_\_\_\_ NOTIFIED ✓ DRILLING COMMENCED 1896

WATER DEPTHS \_\_\_\_\_, \_\_\_\_\_, 1680 S., \_\_\_\_\_, \_\_\_\_\_  
COAL DEPTHS 720, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

CASING

RAN 1045 FEET OF 10 " PIPE ON \_\_\_\_\_ WITH \_\_\_\_\_ FILL UP  
RAN 1420 FEET OF 8 5/8 " PIPE ON \_\_\_\_\_ WITH \_\_\_\_\_ FILL UP  
RAN 1900 FEET OF 6 5/8 " PIPE ON \_\_\_\_\_ WITH \_\_\_\_\_ FILL UP  
RAN \_\_\_\_\_ FEET OF \_\_\_\_\_ " PIPE ON \_\_\_\_\_ WITH \_\_\_\_\_ FILL UP  
RAN \_\_\_\_\_ FEET OF \_\_\_\_\_ " PIPE ON \_\_\_\_\_ WITH \_\_\_\_\_ FILL UP

PITS

PIT DISCHARGE DATE \_\_\_\_\_ TYPE \_\_\_\_\_  
FIELD ANALYSIS pH See Fe DMR mg/l Cl \_\_\_\_\_ mg/l  
D.O. \_\_\_\_\_ mg/l TOC \_\_\_\_\_ mg/l

WELL RECORD RECEIVED \_\_\_\_\_ pH OF PRE-SEEDING SOIL \_\_\_\_\_  
DMR RECEIVED \_\_\_\_\_ ACRES DISTURBED \_\_\_\_\_  
DATE RELEASED 7/23/97 TONS OF LIME APP. \_\_\_\_\_  
TONS OF 10-20-20 APP. \_\_\_\_\_  
BALES OF MULCH APP. \_\_\_\_\_

[Signature]  
INSPECTOR'S SIGNATURE

-----RECORD ALL VISITS TO THIS WELL ON BACK-----

L.L. Howard NUMBER (985)

This well was shut out  
Jan. 1988 to 1992.

No Production 000.000

API number

47-051-00611

RECEIVED  
WV Division of  
Environmental Protection  
MAY 05 83  
Permitting  
Office of Oil & Gas

RECEIVED  
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Environmental Protection  
MAY 05 83  
Permitting  
Office of Oil & Gas

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MAY 07 2017  
Office of Oil and Gas  
Environmental Protection

MAY 07 1993

09/29/2017



Select County: (051) Marshall Select datatypes: (Check All)

Enter Permit #: 611

Get Data Reset

Location  
 Owner/Completion  
 Pay/Show/Water

Production  
 Stratigraphy  
 Logs

Plugging  
 Sample  
 Btm Hole Loc

- [Table Descriptions](#)
- [County Code Translations](#)
- [Form Submission Service](#)
- [Usage Notes](#)
- [Contact Information](#)
- [Disclaimer](#)
- [WVGES Main](#)
- [Privacy Policy](#)

WV Geological & Economic Survey

Well: County = 051 Permit = 611

Report Time: Thursday, May 04 2017 5:34:24 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LONG_DD	UTM_E	UTM_N
4705100611	Marshall	611	Liberty	Cameron	Cameron	39.819528	-80.552937	536261.3	4407868.6

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TROT_FM
4705100611	1/30/1896	J..	Completed	Helen M Howard et al	L-985	L-985	L L Howard	Helen M Howard et al		Columbia Gas Transmission Corp.		
4705100611	J..		Worked Over	Nancy Sue Courtwright	L-985			3002802	H Howard & B Charklock	Columbia Gas Transmission Corp.		

Completion Information:

API	CMP_DT	SPUD_DT	ELEV DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TYD	TMD	NEW_FTC	G_BEF	G_AFT	O_BEF	O_AFT
4705100611	1/30/1896	J..	1205	Ground Level	Kausoath	Gordon Stray	Gordon Stray	Miscellaneous Well	Miscellaneous Well	Storage	unknown	Nat/Open H	2755		2755	1320	0	0
4705100611	J..		1137	Ground Level						Storage	unknown	unknown						

Pay/Show/Water Information:

API	CMP_DT	ACTIVITY	PRODUCT	SECTION	DEPTH_TOP	FM_TOP	DEPTH_BOT	FM_BOT	G_BEF	G_AFT	O_BEF	O_AFT	WATER_QNTY
4705100611	1/30/1896	Pay	Water	Salt Water	Vertical		1660						0
4705100611	1/30/1896	Pay	Gas	Gas	Vertical		2755	Gordon Stray	0	0			0

Production Gas Information: (Volumes in Mcf)

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4705100611	Columbia Gas Transmission Corp.	1989	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1989	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1990	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1991	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1992	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Cameron Gas Company	1994	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Cameron Gas Company	1995	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Coleman, C. R.	1996	5,708	0	128	614	566	541	681	618	598	601	548	504	333
4705100611	Mountaineer Gas Services, Inc.	1997	385	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	1998	6,961	218	674	537	306	571	728	725	659	749	652	631	613
4705100611	Mountaineer Gas Services, Inc.	1999	7,239	590	690	633	855	851	740	758	720	768	553	14	661
4705100611	Mountaineer Gas Services, Inc.	2000	8,963	657	637	679	657	593	668	649	581	627	270	421	524
4705100611	Mountaineer Gas Services, Inc.	2001	5,564	563	493	512	505	575	626	536	270	225	412	458	509
4705100611	Mountaineer Gas Services, Inc.	2002	4,336	553	495	512	472	509	553	576	536	130	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2003	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2004	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, LLC	2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, LLC	2010	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Leatherwood, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0

Production Oil Information: (Volumes in Bbl) \*\* some operators may have reported NGL under Oil

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_OIL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4705100611	Columbia Gas Transmission Corp.	1988	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1989	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1990	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1991	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Columbia Gas Transmission Corp.	1992	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Cameron Gas Company	1994	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Cameron Gas Company	1995	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Coleman, C. R.	1996	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	1997	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	1998	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	1999	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2000	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2001	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2002	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2003	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, Inc.	2004	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, LLC	2009	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Mountaineer Gas Services, LLC	2010	0	0	0	0	0	0	0	0	0	0	0	0	0
4705100611	Leatherwood, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0

Production NGL Information: (Volumes in Bbl) \*\* some operators may have reported NGL under Oil

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_NGL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4705100611	Leatherwood, Inc.	2013	0	0	0	0	0	0	0	0	0	0	0	0	0

Stratigraphy Information:

API	SUFFIX	FM	FM_QUALITY	DEPTH_TOP	DEPTH_QUALITY	THICKNESS	THICKNESS_QUALITY	ELEV DATUM
4705100611	Original Loc	Pittsburgh coal	Well Record	720	Reasonable	0	Reasonable	1205 Ground Level
4705100611	Original Loc	Mahoning Ss/Bg Dunk	Well Record	1260	Reasonable	0	Reasonable	1205 Ground Level
4705100611	Original Loc	Sst Sands (undiff)	Well Record	1660	Reasonable	0	Reasonable	1205 Ground Level
4705100611	Original Loc	Big Lime	Well Record	1900	Reasonable	0	Reasonable	1205 Ground Level
4705100611	Original Loc	Big Injun (undiff)	Well Record	2025	Reasonable	115	Reasonable	1205 Ground Level
4705100611	Original Loc	Fifty-foot	Well Record	2705	Reasonable	15	Reasonable	1205 Ground Level
4705100611	Original Loc	Gordon Stray	Well Record	2755	Reasonable	0	Reasonable	1205 Ground Level

There is no Wireline (E-Log) data for this well

There is no Plugging data for this well

There is no Sample data for this well

Received

MAY 18 2017

Office of Oil and Gas  
WV Dept. of Environmental Protection

09/29/2017

5100611P

FORM WW-4(A)  
Revised 6-07

1) Date: May 8, 2017  
2) Operator's Well No. M-1105  
3) API Well No. 47-51 00611  
State County Permit

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

4) SURFACE OWNER(S) TO BE SERVED

(a) Name Glen P. & Cathy Courtright  
Address 13 Willard Lane  
Cameron, WV 26033

(b) Name \_\_\_\_\_  
Address \_\_\_\_\_

(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

(6) INSPECTOR James Nicholson  
Address PO BOX 44  
Moundsville, WV 26041  
Telephone (304) 552-3874

5)a) COAL OPERATOR

Name CONSOLIDATION COAL CO.  
Address 1 Bridge Street  
Monongah, WV 26554

(b) COAL OWNER(S) WITH DECLARATION:

Name \_\_\_\_\_  
Address \_\_\_\_\_

(c) COAL LESSEE WITH DECLARATION:

Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) 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 and its location 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 REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-4(B) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice 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 delivery by hand to the person(s) named above (or by publication in 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

Subscribed and sworn before me this 15<sup>th</sup> day of May, 20 17

Joseph E. Williams Notary Public,  
Marshall County, State of West Virginia

My commission expires June 5<sup>th</sup>, 20 24

Oil and Gas Privacy Notice

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



Received

MAY 18 2017

Office of Oil and Gas  
WV Dept. of Environmental Protection

09/29/2017

5100611A

7010 3090 0002 4253 9771

U.S. Postal Service™  
**CERTIFIED MAIL™ RECEIPT**  
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at [www.usps.com](http://www.usps.com)®

CAMERON WV 26033

M-1105	Postage	\$1.25	0792
	Certified Fee	\$2.75	11
	Return Receipt Fee (Endorsement Required)	\$0.00	Postmark Here
	Restricted Delivery Fee (Endorsement Required)	\$0.00	
	Total Postage & Fees	\$2.03	05/15/2017
		\$9.13	

Sent To Glen Paul cath courtwright  
 Street, Apt. No., or PO Box No. 13 Willard lane  
 City, State, ZIP+4 Cameron, WV, 26033

PS Form 3800, August 2006 See Reverse for Instructions



RECEIVED  
 Office of Oil and Gas  
 MAY 18 2017  
 WV Department of  
 Environmental Protection  
 09/29/2017

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 OP Code \_\_\_\_\_  
Watershed Grave Creek Quadrangle Cameron, WV  
Elevation 1136.43' County Marshall District Liberty

Description of anticipated Pit Waste: N/A

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes \_\_\_\_\_ No X

Will a synthetic liner be used in the pit? N/A If so, what mil.? \_\_\_\_\_

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 Tanks, see attached letter)

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Freshwater

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. Reused or Disposed (see attached letter)

-If left in pit and plan to solidify what medium will be used? Cement, lime, sawdust \_\_\_\_\_

-Landfill or offsite name/permit number? \_\_\_\_\_

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

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

Company Official Signature [Signature]

Company Official (Typed Name) Mason Smith

Company Official Title Project Engineer

Subscribed and sworn before me this 15<sup>th</sup> day of May, 2017

Joseph E. Williams Joseph C. Williams Notary Public

My commission expires June 5<sup>th</sup>, 2024

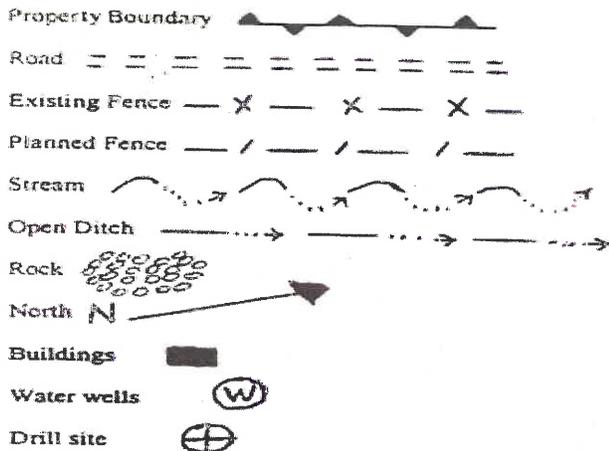


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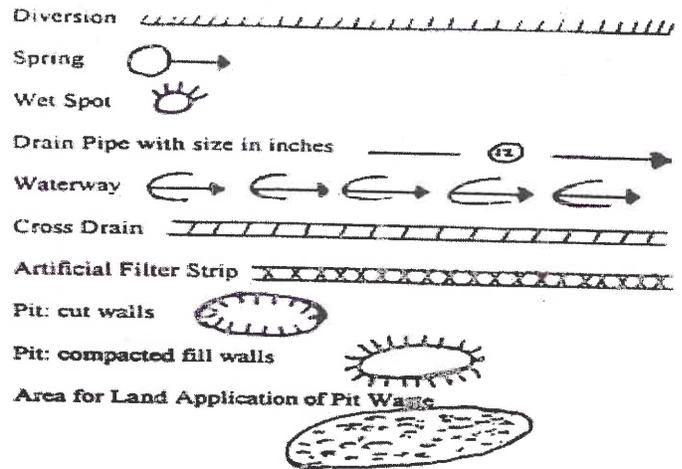
MAY 18 2017

Office of Oil and Gas  
WV Dept. of Environmental Protection

09/29/2017



LEGEND



Proposed Revegetation Treatment: Acres Disturbed <5 Prevegetation pH 6  
 Lime 2 Tons/acre or to correct to pH 6  
 Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)  
 Mulch 2 Tons/acre

Seed Mixtures

Seed Type	Area I		Area II	
	Seed Type	lbs/acre	Seed Type	lbs/acre
			Seed mix in accordance with WVDEP oil and gas Erosion and Sediment Control Field Manual	

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: \_\_\_\_\_

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

Received

OK p. 11/11

Title: \_\_\_\_\_ Date: MAY 18 2017

Field Reviewed? ( ) Yes ( ) No

**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](mailto:MasonSmith@coalsource.com)

**MASON SMITH**  
Project Engineer

May 16, 2017

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-78-83, U-140-83, or U-1011-93.

Sincerely,

Mason Smith  
Project Engineer

**Received**

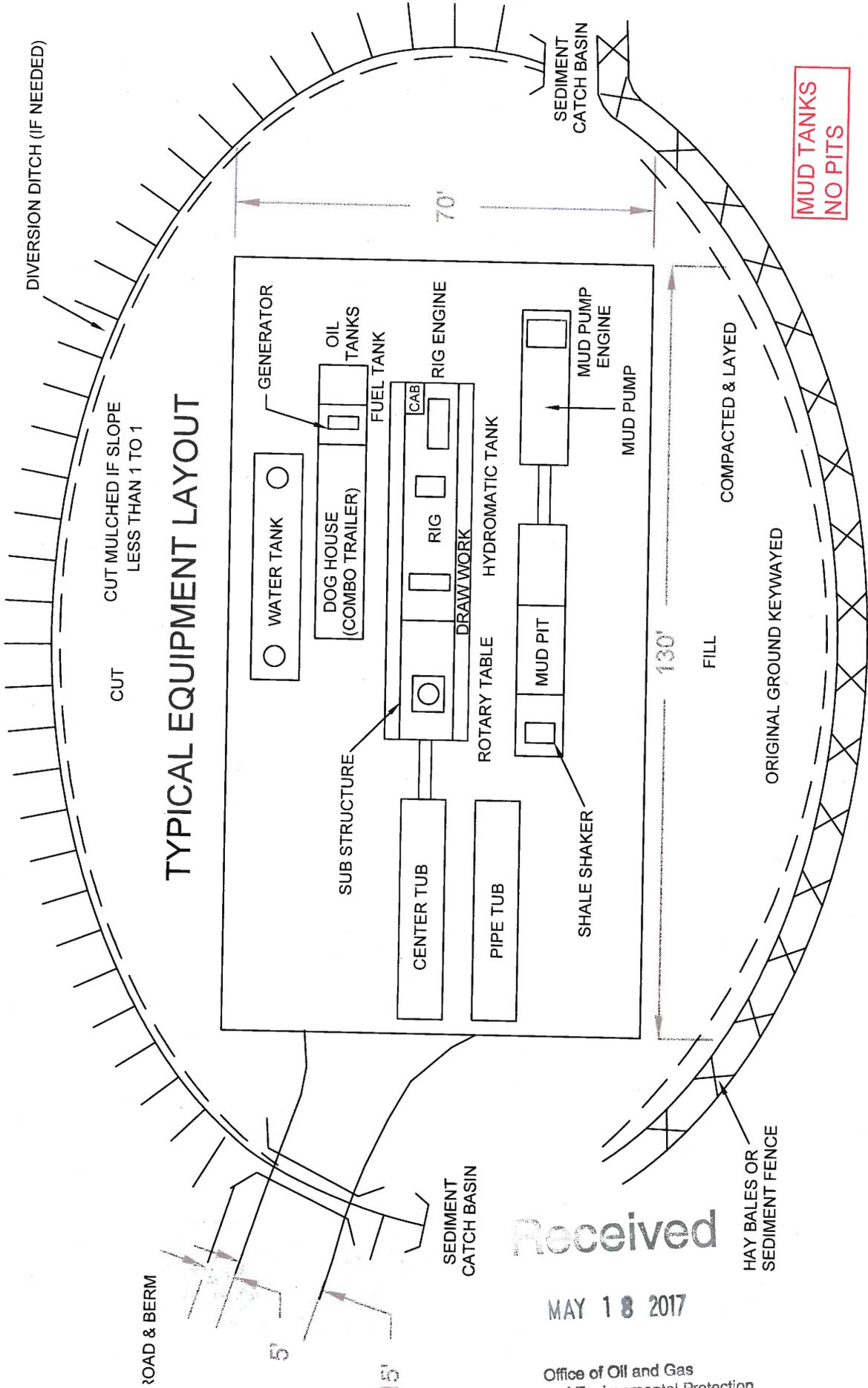
**MAY 18 2017**

Office of Oil and Gas  
WV Dept. of Environmental Protection

09/29/2017

# TYPICAL DRAWING OF WELL PLUGGING SITE PLAN

CONSOLIDATION COAL COMPANY  
NORTHERN WEST VIRGINIA  
OPERATIONS



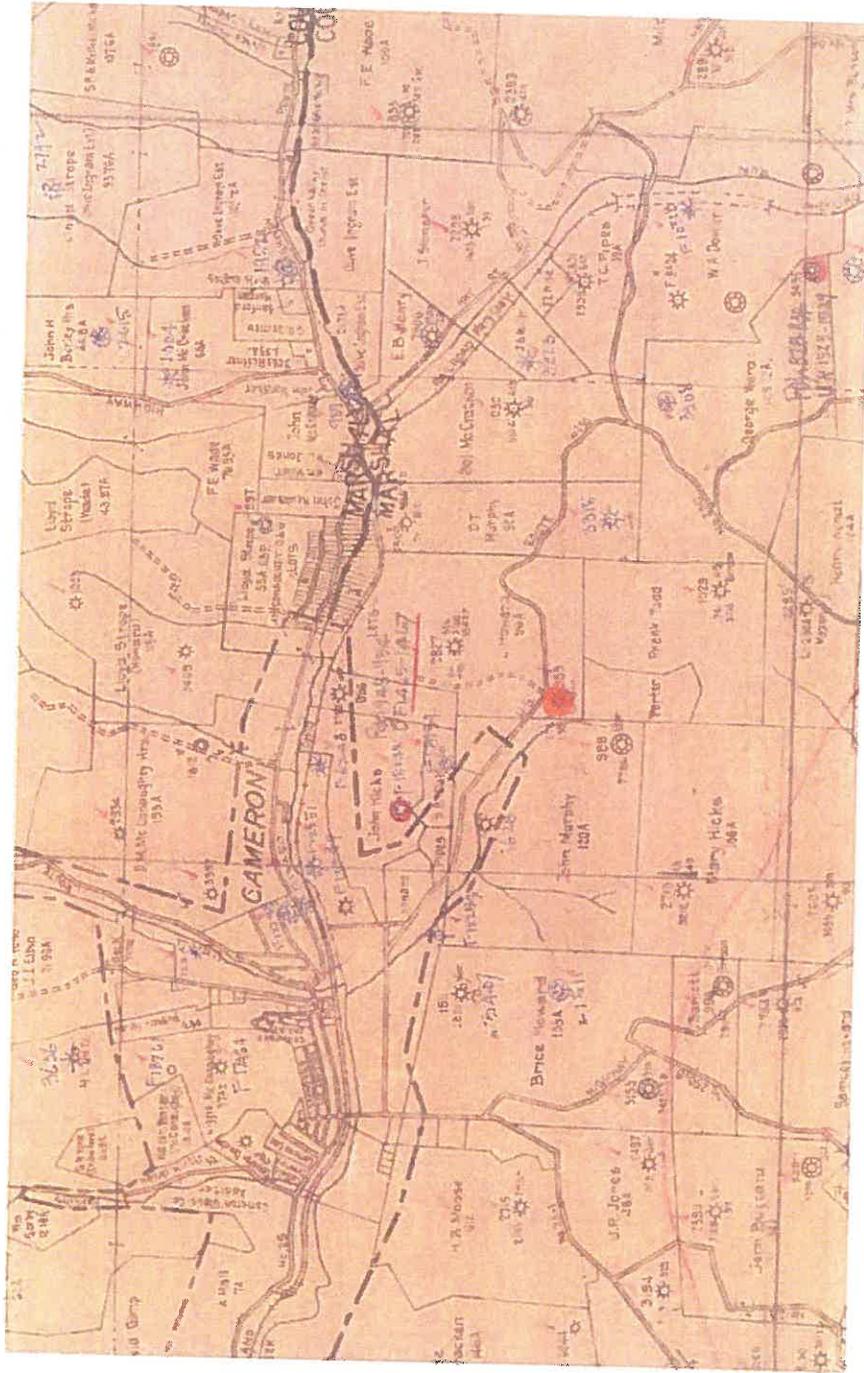
MUD TANKS  
NO PITS

Received

MAY 18 2017

Office of Oil and Gas  
Dept. of Environmental Protection

09/29/2017

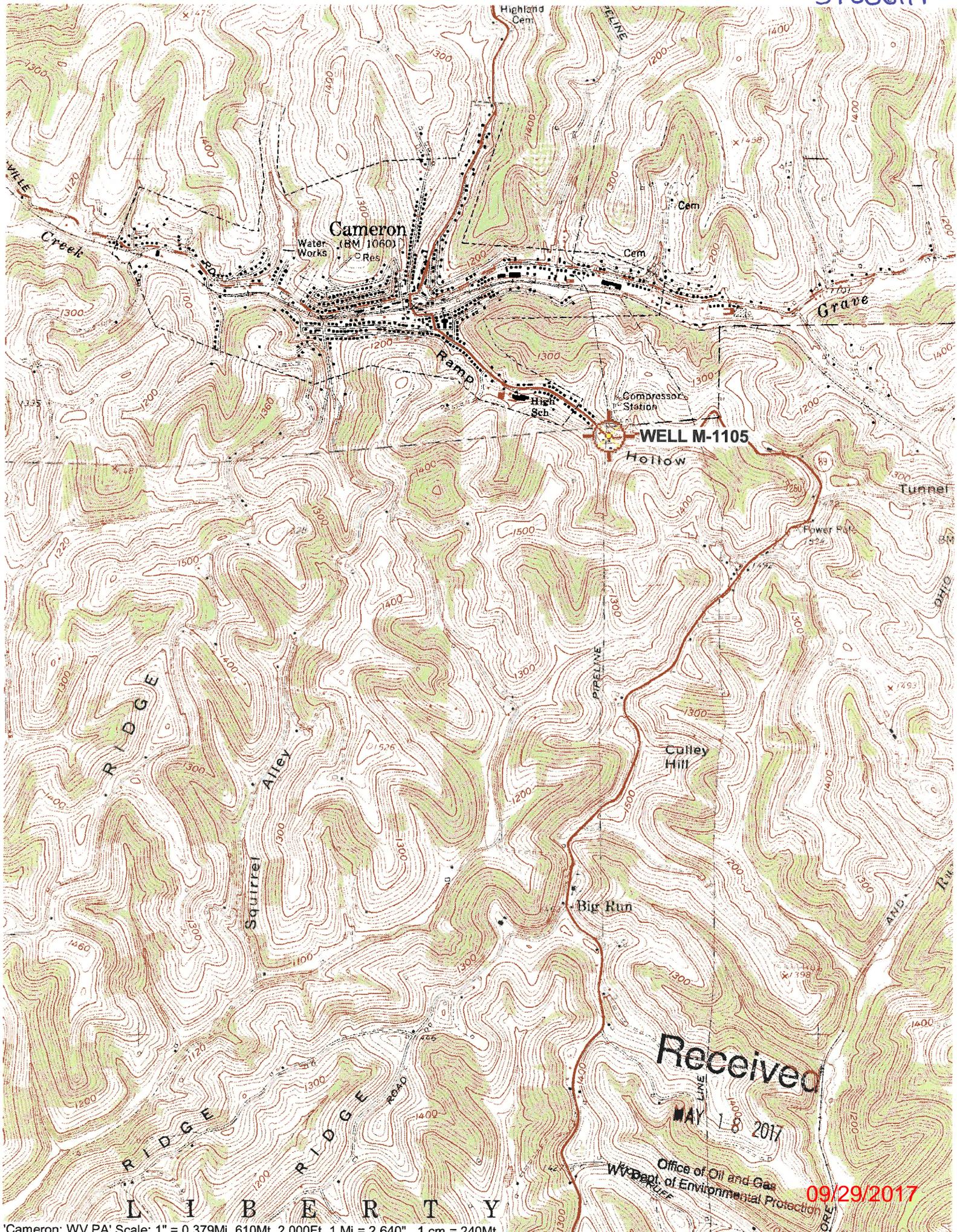


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WV Dept. of Environmental Protection

09/29/2017



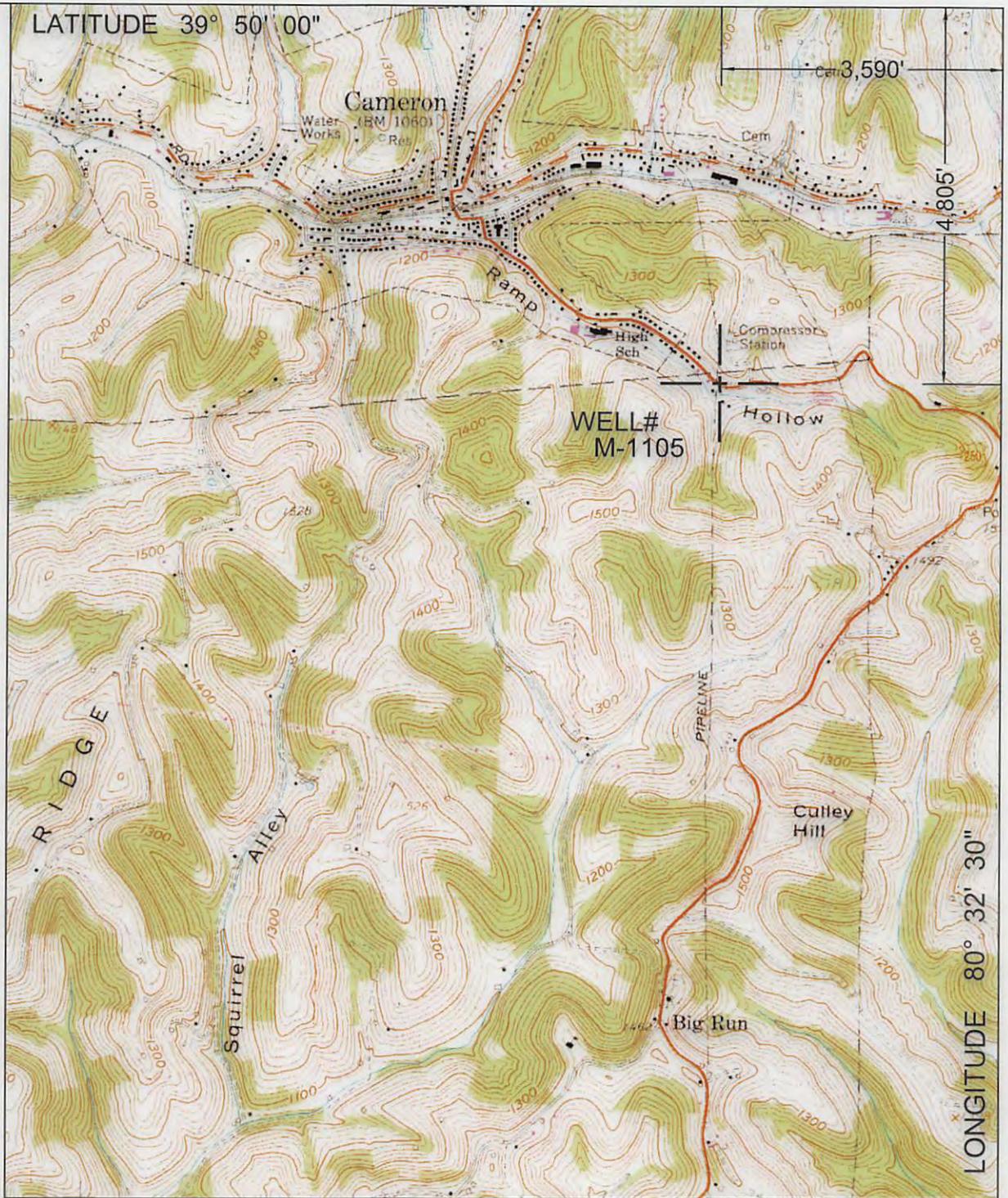
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MAY 18 2017

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WV Dept. of Environmental Protection

09/29/2017

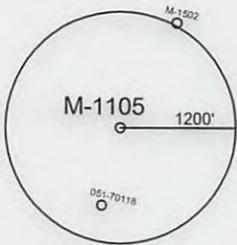


LATITUDE 39° 50' 00"



NORTH

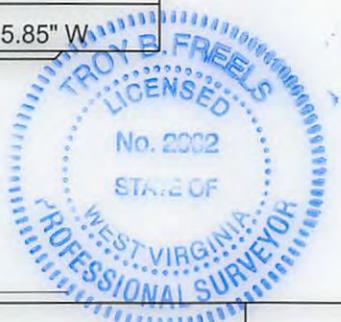
SURROUNDING WELLS WITHIN 1200' RADIUS



LONGITUDE 80° 32' 30"

UTM ZONE 17N NAD83 CONUS	LAT/LONG NAD27 CONUS
NORTHING 4,407,889 METERS	39° 49' 12.19" N
EASTING 538,153 METERS	80° 33' 15.85" W

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.  
P.S. 2002



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

DATE MAY 8, 20 17

OPERATORS WELL NO. M-1105

API WELL NO. 47 - 51 - 00611 P  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY: 1 / 2500 FILE NO.: CAMERON 1.DWG  
SCALE: 1"=2000'  
PROVEN SOURCE OF ELEVATION: GPS METADATA OR COMPANY NETWORK TIED INTO U.S.G.S.

WV DEP  
OFFICE OF OIL AND GAS  
601 57TH ST., CHARLESTON, WV 25304



WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: 1136.43' WATERSHED: GRAVE CREEK  
DISTRICT: LIBERTY COUNTY: MARSHALL QUADRANGLE: CAMERON, WV 7.5'

SURFACE OWNER: GLEN P. & CATHY COURTRIGHT ACREAGE: 1± ACRES  
ROYALTY OWNER: LEASE ACREAGE: LEASE NO.: 09/29/2017

DRILL: CONVERT: DRILL DEEPER: REDRILL: FRACTURE OR STIMULATE: PLUG OFF OLD:  
FORMATION: PERFORATE NEW FORMATION: PLUG AND ABANDON: X CLEAN OUT AND REPLUG: OTHER:  
PHYSICAL CHANGE IN WELL (SPECIFY): TARGET FORMATION: NONE ESTIMATED DEPTH:

WELL OPERATOR: CONSOLIDATION COAL COMPANY DESIGNATED AGENT: RONNIE HARSH  
ADDRESS: 6126 ENERGY DRIVE, MOUNDSVILLE WV 26041 ADDRESS: 6126 ENERGY DRIVE, MOUNDSVILLE WV 26041

51 00611P

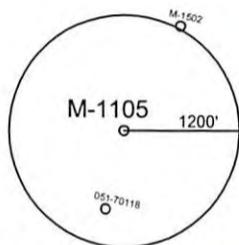
FORM WW 6

LATITUDE 39° 50' 00"



NORTH

SURROUNDING WELLS WITHIN 1200' RADIUS



LONGITUDE 80° 32' 30"

UTM ZONE 17N NAD83 CONUS	LAT/LONG NAD27 CONUS
NORTHING 4,407,889 METERS	39° 49' 12.19" N
EASTING 538,153 METERS	80° 33' 15.85" W

Office of Oil and Gas  
WV Dept. of Environmental Protection

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.

P.S.  
2002



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

DATE MAY 8, 20 17  
OPERATORS WELL NO. M-1105

API WELL NO. 47 - 51 - 00611P  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY: 1 / 2500 FILE NO.: CAMERON 1.DWG  
SCALE: 1"=2000'  
PROVEN SOURCE OF ELEVATION: GPS METADATA OR COMPANY NETWORK TIED INTO U.S.G.S.

WV DEP  
OFFICE OF OIL AND GAS  
601 57TH ST., CHARLESTON, WV 25304



WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: 1136.43' WATERSHED: GRAVE CREEK

DISTRICT: LIBERTY COUNTY: MARSHALL QUADRANGLE: CAMERON, WV 7.5'

SURFACE OWNER: GLEN P. & CATHY COURTRIGHT ACREAGE: 1± ACRES

ROYALTY OWNER: \_\_\_\_\_ LEASE ACREAGE: \_\_\_\_\_

PROPOSED WORK: \_\_\_\_\_ LEASE NO.: \_\_\_\_\_

DRILL: \_\_\_\_\_ CONVERT: \_\_\_\_\_ DRILL DEEPER: \_\_\_\_\_ REDRILL: \_\_\_\_\_ FRACTURE OR STIMULATE: \_\_\_\_\_ PLUG OFF OLD: \_\_\_\_\_

FORMATION: \_\_\_\_\_ PERFORATE NEW FORMATION: \_\_\_\_\_ PLUG AND ABANDON:  CLEAN OUT AND REPLUG: \_\_\_\_\_ OTHER: \_\_\_\_\_

PHYSICAL CHANGE IN WELL (SPECIFY): \_\_\_\_\_ TARGET FORMATION: NONE

ESTIMATED DEPTH: \_\_\_\_\_

WELL OPERATOR: CONSOLIDATION COAL COMPANY DESIGNATED AGENT: RONNIE HARSH

ADDRESS: 6126 ENERGY DRIVE, MOUNDSVILLE WV 26041 ADDRESS: 6126 ENERGY DRIVE, MOUNDSVILLE WV 26041

COUNTY NAME PERMIT

09/29/2017