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**west virginia** department of environmental protection

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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

December 08, 2014

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-8702286, issued to CHESAPEAKE APPALACHIA, L.L.C., 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 penalties 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.

James Martin  
Chief

Operator's Well No: 1238  
Farm Name: TAYLOR, W. W.  
**API Well Number: 47-8702286**  
**Permit Type: Plugging**  
Date Issued: 12/08/2014

**Promoting a healthy environment.**

## PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

### CONDITIONS

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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.

8702286P

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

1) Date: 10/22/2014  
2) Operator's Well No. 801238 P&A  
3) API Well No. 47-087-02286

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

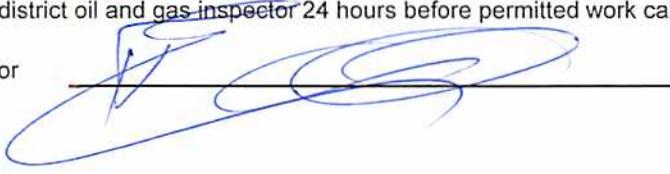
- 4) Well Type: Oil \_\_\_\_\_ Gas X Liquid injection \_\_\_\_\_ Waste disposal \_\_\_\_\_  
(Is Gas, Production X or Underground storage \_\_\_\_\_) Deep \_\_\_\_\_ Shallow X
- 5) Location: Elevation 989' Watershed Pigeon Run of Big Sandy Creek  
District Geary County Roane Quadrangle Newton, WV 7.5'
- 6) Well Operator Chesapeake Appalachia, L.L.C. 7) Designated Agent Jessica Greathouse  
Address P.O. Box 18496 Address P.O. Box 6070  
Oklahoma City, OK 73154-0496 Charleston, WV 25362
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Ed Gainer Name Chesapeake Appalachia, L.L.C.  
Address P.O. Box 821 Address P.O. Box 18496  
Spencer, WV 25276 Oklahoma City, OK 73154-0496

10) Work Order: The work order for the manner of plugging this well is as follows:

See Attached Sheet

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

Work Order approved by Inspector

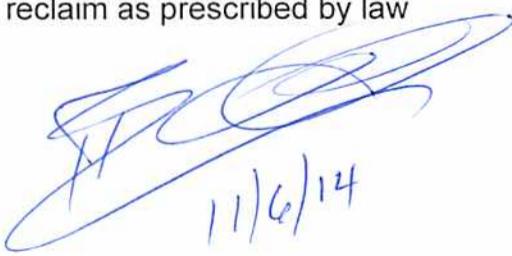


Date

11/6/14

801238 P&A PROCEDURE

- 1) Prepare road and location, MIRU service rig
- 2) Run in hole with tools to check T.D. at approximately 1825'
- 3) Attempt to pull 3 1/2" and packer
  - A) If successful:
    - a) Run W.S. to 1775', load hole with gel
    - b) Spot 100' cement plug 1775'-1675', pull W.S.
    - c) Proceed to step #4
  - B) If unsuccessful
    - a) Run W.S. to 1825', load hole with gel
    - b) Spot 100' cement plug 1825'-1725', pull W.S.
    - c) Cut 3 1/2" at free-point (approximately 1675') and pull
    - d) Proceed to step #4
- 4) Attempt to pull 6 5/8" casing
  - A) If successful:
    - a) Run W.S. to 1675', load hole with gel
    - b) Spot 100' cement plug 1675'-1575' 1500 (oil @ 1520)
    - c) Proceed to step #5
  - B) If unsuccessful:
    - a) Run W.S. to 1675', load hole with gel
    - b) Spot 100' cement plug 1675'-1575' 1500'
    - c) Cut 6 5/8" at free-point (approximately 1125') and pull
    - d) Proceed to step #5
- 5) Pull or run W.S. to 1125', load hole with gel
- 6) Spot 100' cement plug 1125'-1025', pull W.S. to 800'
- 7) Spot 100' cement plug 800'-700', pull W.S. to 525'
- 8) Spot 100' cement plug 525'-425' 350', pull W.S. to 350' 125' COVER 8 1/4" CASING BOTTOM AND COAL.
- 9) ~~Spot 100' cement plug 350'-250', pull W.S. to 125'~~ → W/M
- 10) Spot 125' cement plug 125' – surface
- 11) Pull W.S. and top off with cement
- 12) Erect monument and reclaim as prescribed by law

  
11/6/14

UNITED FUEL GAS COMPANY  
INCORPORATED

47-087-02286 P  
Well 801238 PVA

Serial Well No. 1238 Lease No. 11908 Map Square 84-71

RECORD OF WELL No. 1238 on the

Naylor Farm of 100 Acres  
in Geary District  
Moore County  
Clendenin Field, State of W. Va.

Rig Commenced 19  
Rig Completed 19  
Drilling Commenced November 11, 1928  
Drilling Completed Jan. 5, 1928  
Drilling to cost per foot  
Contractor is: U.F.G. Co. Drlg. Dept.  
Address:

Drillers' Names J. A. Hickman,  
L. W. McQuain

CASING AND TUBING

Size	Used in Drilling	Left in Well
16		
13		
10		
8 1/4	455' 8"	376' 2"
6 7/8	1645' 8"	1645' 8"
5 3/16		
4 7/8		
4		
3	1869' 3"	1869'
2		

TEST ~~RESULTS~~ SHOT

..... of Water in ..... inch  
10ths  
... 4 ... of Merc. in ..... 5 ... inch  
10ths  
Volume... 789, 480 ..... Cu. ft.

TEST AFTER SHOT

..... of Water in ..... inch  
10ths  
..... of Merc. in ..... inch  
10ths  
Volume..... Cu. ft.

Rock pressure.....

Date Shot.....

Size of Torpedo.....

Oil Flowed..... bbls. 1st 24 hrs.

Oil Pumped..... bbls. 1st 24 hrs.

SHUT IN

Date..... Jan. 12, 1928  
..... 3 inch Tubing or Casing Well abandoned and  
Size of Packer 3 R. 5-3/16 Plugged..... 19.....  
Kind of Packer Spang Anchor set 145' 10" from bottom  
1st Perf. Set... 22' from bottom  
2nd Perf. Set... 51' from.....

DRILLERS RECORD.

Formation	Top	Bottom	Thickness	Remarks
Conductor		13		Slate 1750 1780--50
Soil	0	12	12	Squaw 1780 1807--27
Sand	12	40	28	Total Depth 1850
Slate	40	85	45	
Lime	85	100	15	
Sand	100	155	55	Oil at 1820
Slate	155	190	35	Oil and Gas at 1880
Sand	190	235	45	Gas at 1698
Slate	235	270	35	Gas 1727 to 1729
Sand	270	300	30	Gas 1745 to 1747
Coal	300	305	5	Gas 1802 to 1807
Slate	305	335	30	
Sand	335	400	65	Reduced Hole at 1695
Slate	400	460	60	
Sand	460	500	40	
Slate	500	570	70	
Lime	570	605	35	
Sand	605	700	95	
Slate	700	730	30	
Sand	730	755	25	
Lime	755	785	30	
Slate	785	800	15	
Sand	800	845	45	
Slate	845	870	25	
Sand	870	920	50	
Slate	920	960	40	
Sand	960	975	15	
Slate	975	1000	25	
Sand	1000	1055	55	
Slate	1055	1085	30	
Lime	1085	1090	5	
Sand	1090	1105	15	
Slate	1105	1120	15	
salt sand	1120	1430	310	
Slate	1430	1495	65	
Maxon Sand	1495	1540	45	
Slate	1540	1548	8	
Little Lime	1548	1615	67	
Pencil Cave	1615	1620	5	
Sil. Lime	1620	1712	92	
Sil. Injun	1712	1750	38	

WW4-A  
Revised  
2/01

1) Date: 10/22/2014  
2) Operator's Well No. 801238 P&A  
3) API Well No. 47-087-02286

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT  
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 Mary Ellen McCarty  
Address C/O Charles McCarty Trustee  
P.O. Box 129  
Spencer, WV 25276

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

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

6) Inspector Ed Gainer  
Address P.O. Box 821  
Spencer, WV 25276

Telephone 304-389-7582

5) Coal Operator  
(a) Name None  
Address \_\_\_\_\_

Coal Owner(s) with Declaration  
(b) Name Mary Ellen McCarty  
Address C/O Charles McCarty Trustee  
P.O. Box 129  
Spencer, WV 25276

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

Coal Lessee with Declaration  
(c) Name None  
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 the 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 the 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: Chesapeake Appalachia, L.L.C.  
By: [Signature]  
Its: Manager - Operations, Appalachia South  
Address: P.O. Box 18496  
Oklahoma City, OK 73154-0496  
Telephone: 405-935-4073

Subscribed and sworn before me this 22nd day of October the year of 2014  
Phyllis A. Copley Notary Public  
My Commission Expires September 16, 2018  
Form WW-9

RECEIVED  
Office of Oil and Gas

OCT 24 2014

WV Department of  
Environmental Protection

47-087-02286 8702286P

CK 5202857  
10000

7012 3460 0000 4499 3460

**U.S. Postal Service™**  
**CERTIFIED MAIL™ RECEIPT**  
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SPENCER WV 25276

**OFFICIAL USE**

Postage	\$ 11.40	0522
Certified Fee	13.30	01
Return Receipt Fee (Endorsement Required)	12.70	Postmark Here
Restricted Delivery Fee (Endorsement Required)	10.00	
<b>Total Postage &amp; Fees</b>	<b>\$ 47.40</b>	10/23/2014 801238 P/A

Sent To *Mary Ellen McCarty*  
 Street, Apt. No.; *c/o Charles McCarty Trustee*  
 or PO Box No. *PO. Box 129*  
 City, State, ZIP+4 *Spencer, WV 25276*

PS Form 3800, August 2006 See Reverse for Instructions

RECEIVED  
Office of Oil and Gas  
OCT 24 2014  
WV Department of  
Environmental Protection

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 Chesapeake Appalachia, L.L.C. OP Code 494477557  
Watershed Pigeon Run of Big Sandy Creek Quadrangle Clio, WV 7.5'  
Elevation 989' County Roane District Geary

Description of anticipated Pit Waste: Plugging Returns/Cement

Will a synthetic liner be used in the pit? Yes

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
- Swabbing
- Plugging
- Other (Explain \_\_\_\_\_ )

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 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 *David Gocke*

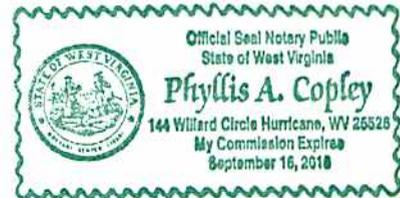
Company Official (Typed Name) David Gocke

Company Official Title Manager - Operations, Appalachia South

Subscribed and sworn before me this 2nd day of October, 2014.

*Phyllis A. Copley* Notary Public.

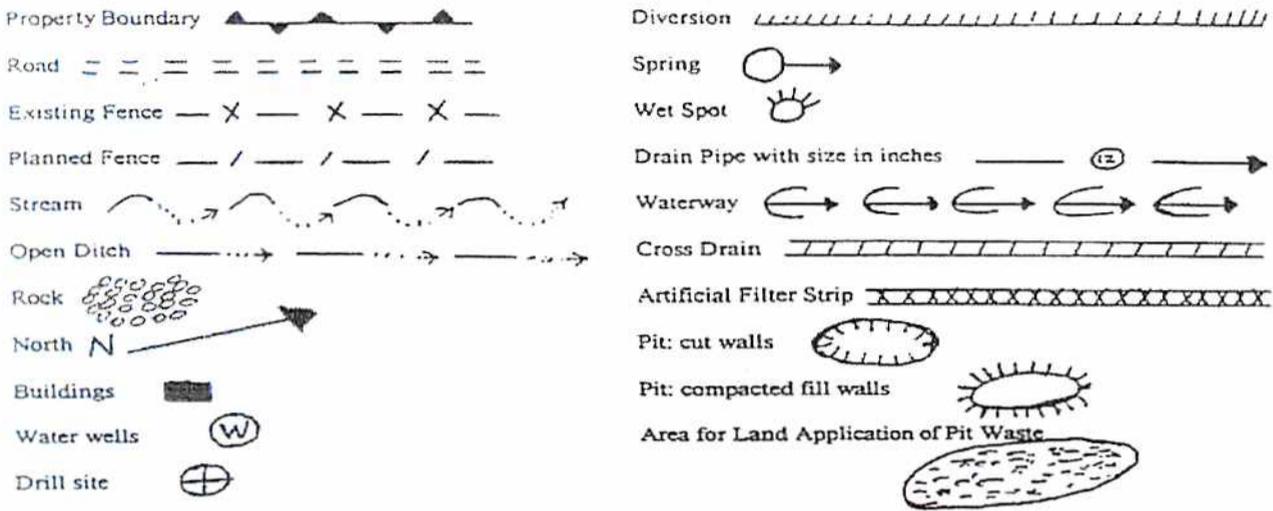
My Commission Expires September 16, 2018



Attachment #1

API #: 47-087-02286  
 Operator's Well No. 801238 P&A

LEGEND



Proposed Revegetation Treatment: Acres Disturbed 1.0 Prevegetation pH 6.1

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 TON lbs/acre (500 lbs minimum)

Mulch Hay 2 Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	ORCHARD GRASS	15
ALSIKE CLOVER	5	ALSIKE CLOVER	5
ANNUAL RYE	15		

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Title: Inspector

Date: 11/6/14

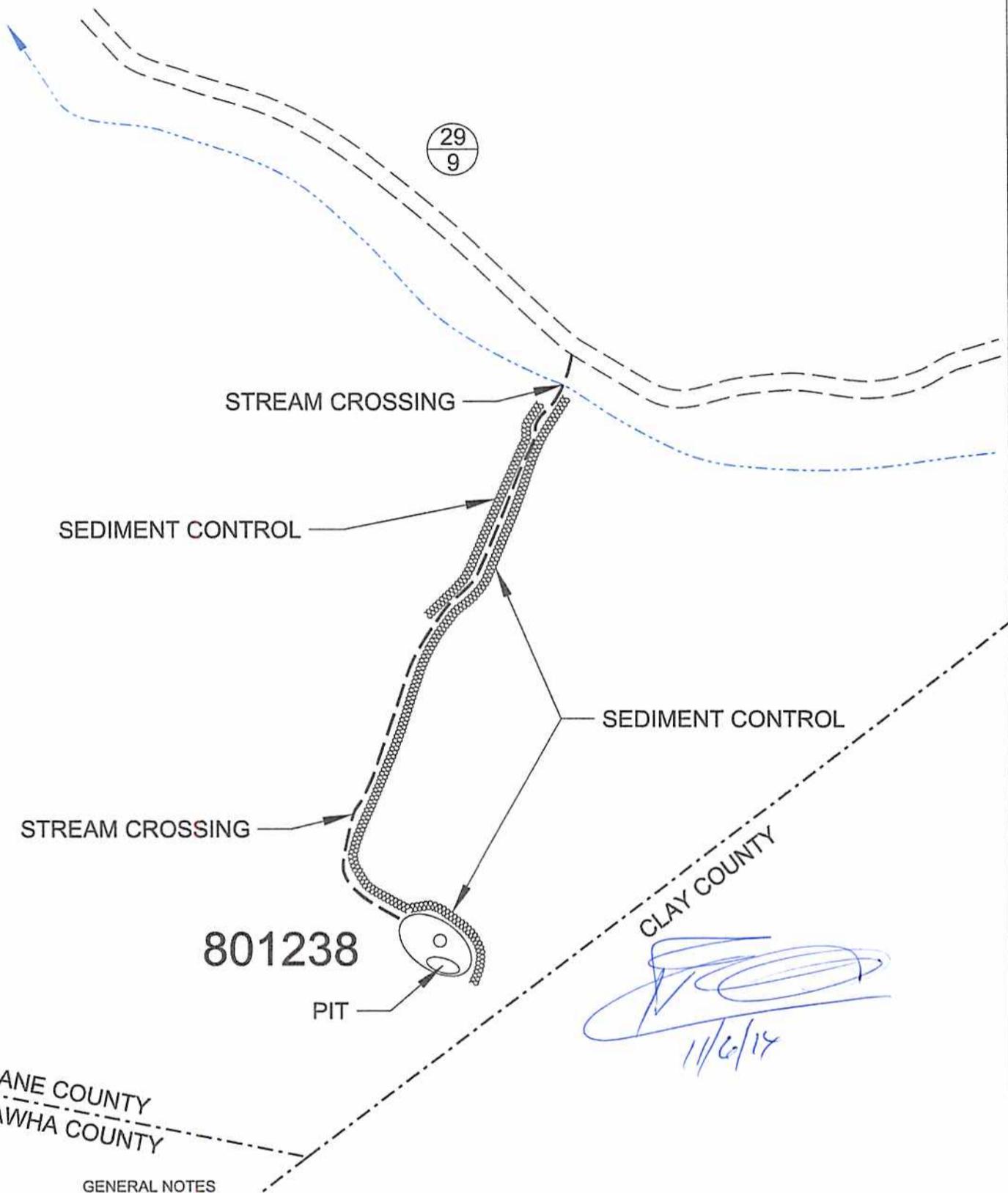
Field Reviewed? ( ) Yes (X) No

8702286P

# CHESAPEAKE APPALACHIA, L.L.C.

## RECLAMATION DIAGRAM WELL LOCATION 801238

API 47-087-02286



### GENERAL NOTES

This drawing is a schematic representation of the well site and access road. Proposed structures such as well site, drilling pit, roadways, culverts, sediment barriers, etc. are shown in approximate pre-planning configurations.

All culvert pipes will be a minimum of 15 inches in diameter. All culvert pipes installed will be accompanied by an entrance sump with dimensions no less than 3 feet (width) x 3 feet (length) x 4 feet (deep). Culverts will be installed at an angle to ensure proper flow. The outfall of culverts will be protected from erosion and sedimentation using large rocks or other sediment controls deemed necessary in the prevention of erosion and sedimentation. Storm water from the ditches to the culverts will be directed to stable natural vegetative areas. Where culverts are not practical, operator will have other sediment control in place to minimize erosion sedimentation.

Cross drains, broad based dips, water bars, and diversion ditches, will be employed during the construction phase. These erosion and sediment control structures will be used to control erosion and sedimentation during the construction phase, where applicable, and in areas that will allow. These structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1.

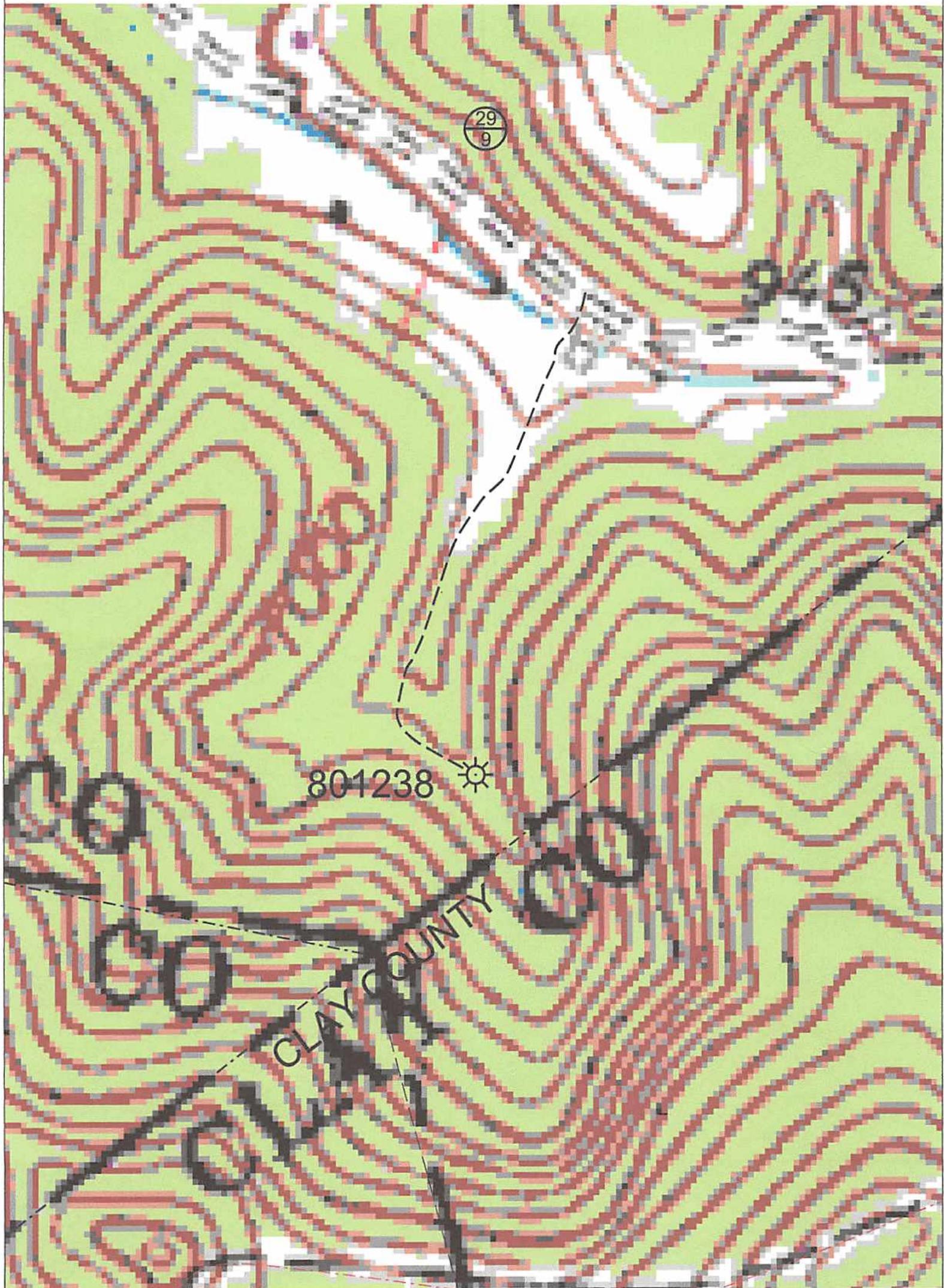


CHESAPEAKE APPALACHIA, L.L.C.

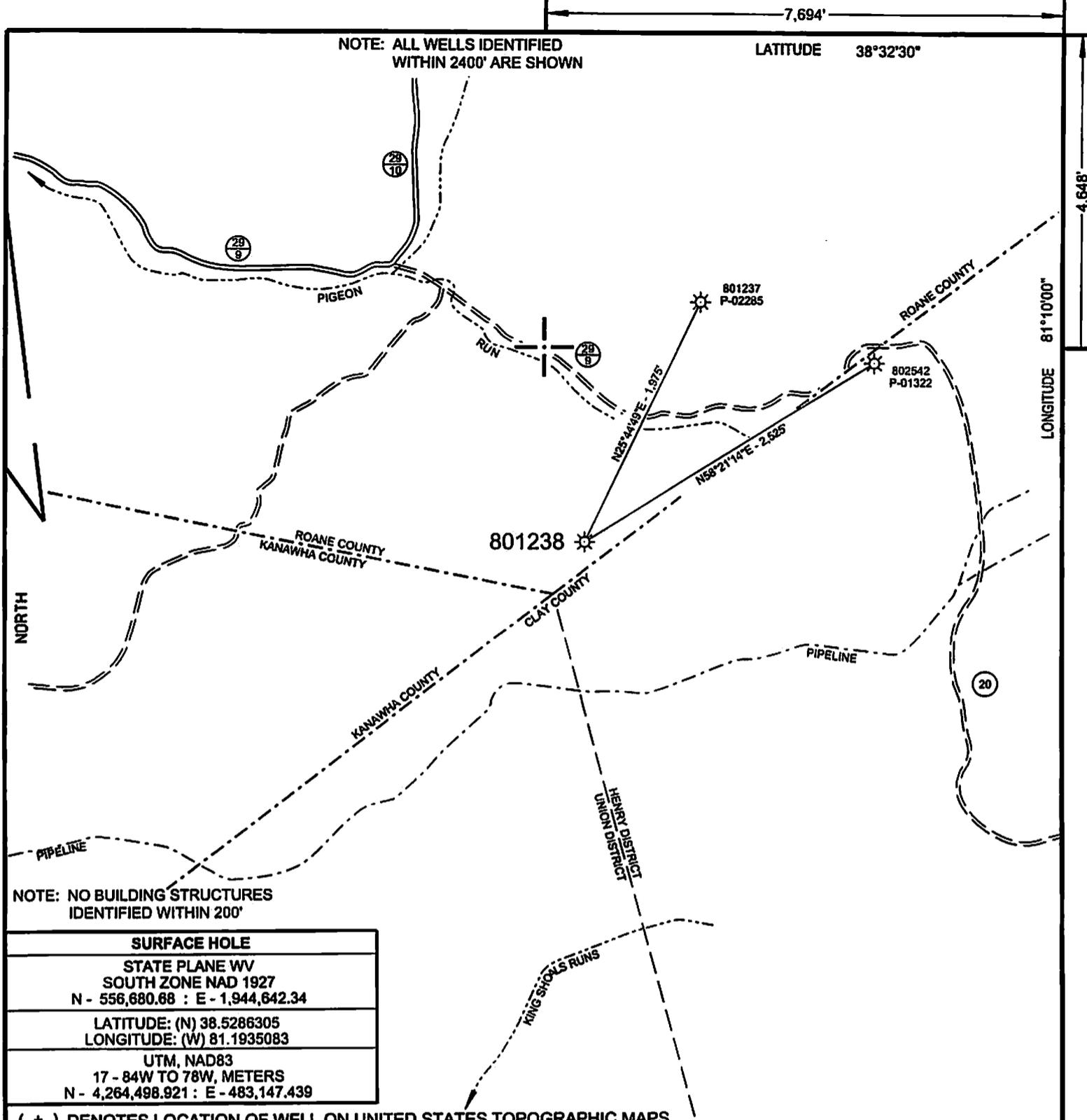
870 2286P

TOPOGRAPHICAL MAP OF ACCESS AND  
WELL LOCATION 801238

API 47-087-02286



CHESAPEAKE ENERGY CORPORATION - EASTERN DIVISION  
P.O. BOX 579 - 8165 COURT AVENUE - HAMLIN, WV 25523  
304 824-5141 - FAX 304 824-2247



<b>SURFACE HOLE</b>
STATE PLANE WV SOUTH ZONE NAD 1927 N - 556,680.68 : E - 1,944,642.34
LATITUDE: (N) 38.5286305 LONGITUDE: (W) 81.1935083
UTM, NAD83 17 - 84W TO 78W, METERS N - 4,264,498.921 : E - 483,147.439

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

FILE NO. 801238 P&A.DGN

DRAWING NO. 801238 P&A

SCALE 1" = 1000'

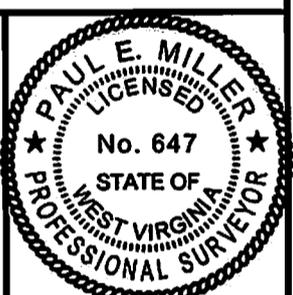
MINIMUM DEGREE OF ACCURACY 1 : 200

PROVEN SOURCE OF ELEVATION MAPPING GRADE GPS

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) Paul E. Miller

R.P.E. \_\_\_\_\_ L.L.S. 647



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

DATE OCTOBER 13, 20 14

OPERATOR'S WELL NO. 801238

API WELL NO. 47 087 02286 P

STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X

LOCATION: ELEVATION 989' WATER SHED PIGEON RUN OF BIG SANDY CREEK

DISTRICT GEARY COUNTY ROANE

QUADRANGLE NEWTON, WV 7.5'

SURFACE OWNER MARY ELLEN MCCARTY / UNIFIED CREDIT TRUST ACREAGE -

OIL & GAS ROYALTY OWNER \_\_\_\_\_ LEASE ACREAGE -

LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON X CLEAN OUT AND REPLUG \_\_\_

TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_

WELL OPERATOR CHESAPEAKE APPALACHIA LLC DESIGNATED AGENT JESSICA GREATHOUSE

ADDRESS PO BOX 18496 OKLAHOMA CITY, OK 73154-0496 ADDRESS PO BOX 6070 CHARLESTON, WV 25362

FORM WW-6

COUNTY NAME  
PERMIT