



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

April 04, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3901858, 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: 9182
Farm Name: WARD, DAVID
API Well Number: 47-3901858
Permit Type: Plugging
Date Issued: 04/04/2016

Promoting a healthy environment.

04/08/2016

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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

CK# 6001587
100⁰⁰

3901858P

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

1) Date: 3/1/2016
2) Operator's Well No. 809182 P&A
3) API Well No. 47-039-01858

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 920' Watershed Bufflick Fork of Hughes Creek
District Cabin Creek County Kanawha Quadrangle Montgomery, WV 7.5' 481
- 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 Terry Urban Name Chesapeake Appalachia, L.L.C.
Address P.O. Box 1207 Address P.O. Box 18496
Clendenin, WV 25045 Oklahoma City, OK 73154-0496

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

See Attached Sheet

SEE Change to Prog.

Hughes Creek to Fork to Right

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

Work Order approved by Inspector Terry Urban Date 3-7-16

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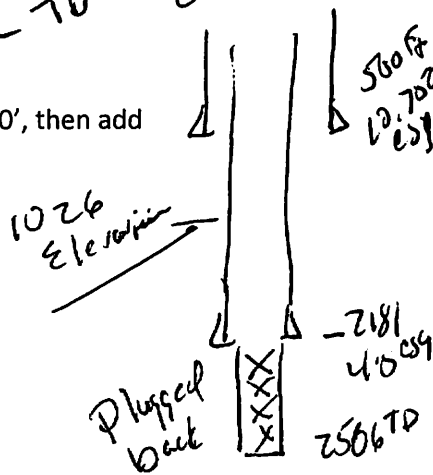
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WV Department of
Environmental Protection

PLUGGING PROCEDURE

- 1) Prepare road and location, MIRU Service Rig
- 2) RIH with tools to check end of tubing at 2084' and be sure end of tubing is not plugged
- 3) Attempt to pull 2 3/8" and packer
 - A) If successful:
 - a) Run W.S. to 2090', spot gel
 - b) Spot 190' cement plug 2090'-1900', pull W.S., WOC
 - c) Run in hole with tools to check TOC. If top of plug is below 1930', then add cement to top of plug
 - d) Proceed to step 4
 - B) If unsuccessful:
 - a) Pump enough water to be sure well will not circulate (If well pressures up, swab water off)
 - b) Pump 150' cement plug down tubing and displace to 1900'
 - c) Cut 2 3/8" at free-point (approximately 1830') and pull
 - d) Proceed to step 4
- 4) Rip or shoot holes in 4 1/2" at approximately 1820' and 1790'
- 5) Run W.S. to 1830', spot gel
- 6) Spot 130' cement plug 1830'-1700', pull W.S.
- 7) Cut 4 1/2" at free-point (approximately 1075') and pull
- 8) Run W.S. to 1075', spot gel
- 9) Spot 100' cement plug 1075'-975', pull W.S. to 850'
- 10) Spot 150' cement plug 850'-700', pull W.S.
- 11) Run tools in hole to check TOC. If top of plug is below 750', then add cement to top of plug
- 12) Attempt to pull 10 3/4" casing
 - A) If successful:
 - a) Run W.S. to 550', spot gel
 - b) Spot 100' cement plug 550'-450'
 - c) Proceed to step 13
 - B) If unsuccessful:
 - a) Run W.S. to 550', spot gel
 - b) Spot 100' cement plug 550'-450', pull W.S.
 - c) Cut 10 3/4" at free-point (approximately 150') and pull
 - d) Proceed to step 13
- 13) Pull or run W.S. to 150', spot 150' cement plug 150'-surface
- 14) Pull W.S. and top off with cement
- 15) Erect monument and reclaim as prescribed by law

10 TD will set plug from TD to first cut



— Elevation plug

3-7-16

04/08/2016

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STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 12

Well 809182
API - 47-039-01858P
Page 1 of 2

Quadrangle Montgomery

WELL RECORD

Permit No. KAN-1858

Oil or Gas Well Gas
(KIND)

Company United Fuel Gas Company
Address P. O. Box 1273; Charleston 25, W. Va.
Farm DAVID WARD Acres 8,000
Location (waters) Buffalo Fork
Well No. 9182 Elev. 1026.66'
District Cabin Creek County Kanawha
The surface of tract is owned in fee by _____
Address _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8		29'	
10 3/4		500	Size of
8 5/8	1326'	Pulled	
6 7/8	1852'	Pulled	Depth set
5 3/16			
4 1/2	Cemented	2181'	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Mineral rights are owned by David Struss Ward, et al
% Cottage Queen Garden Co. Address Queens Village, N.Y.

Drilling commenced 7-17-62
Drilling completed 8-31-62
Date Shot _____ From _____ To _____

Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch

Volume 1,391 M - Injun 300 M; Weir 1,091 M Cu. Ft.
Rock Pressure 428 lbs. 48 hrs.

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT 50 FEET 48 INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

Oil _____ bbls., 1st 24 hrs.

WELL ACIDIZED _____

WELL FRACTURED _____

RESULT AFTER TREATMENT _____

ROCK PRESSURE AFTER TREATMENT _____

Fresh Water 45 Feet Salt Water 950 Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Clay			0	40			
Sand			40	50	Gas show EX 2010'		
Coal			50	54			
Slate			54	90	Gas 2100' 6/10 W 1" 26 M		
Sand			90	100			
Slate			100	115	Gas 2472' 13/10 W 1" 38 M blew down to		
Lime			115	162	2/10 W 1" 15 M		
Sand			162	226			
Slate			226	242	Plugged back to 2181'		
Lime			242	255			
Slate			255	455	Perforated Weir at 2111' and 2117'		
Lime			455	480			
Sand			480	530	Fractured Weir 9-7-62 with 700 bbls.		
Slate			530	540	water, 34,000# 20-40 sand, 200# J-84,		
Lime			540	655	100# J-100 and 10 gallons detergent.		
Slate			655	665			
Lime			665	850	Perforated Injun at 2013 2032'		
Salt Sand			850	986			
Slate			986	1012	Fractured Injun 9-7-62 with 350 bbls.		
Salt Sand			1012	1150	fluid, 12,000# 20-40 sand, 100# J-84		
Slate			1150	1155	50# J-100 and 5 gallons detergent.		
Sand			1155	1170	Final open flow after fracture 1,391 M		
Slate			1170	1246	Injun and Weir.		
Sand			1246	1396			
Slate			1396	1410			
Sand			1410	1450			
Slate			1450	1455	Shut in 9-11-62 in 4 1/2" casing		
Lime			1455	1465			
Slate & Shells			1465	1480			
Red Rock			1480	1503			



Plugged Back

(over)

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WV Department of Environmental Protection

Well 809182
 APF 47-039-01858P

Page 2 of 2

Formation	Color	Hard or Soft	Top <i>12</i>	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1503	1525	LOGS RUN:		
Slate			1525	1535	Gamma Ray		
Lime			1535	1577	Density		
Red Rock			1577	1610	Induction		
Slate			1610	1615	Temperature		
Red Rock			1615	1680			
Slate & Shells			1680	1750			
Lime			1750	1815			
Big Lime			1815	2023			
Injun			2023	2042			
Slate & Shells			2042	2100			
Weir			2100	2135			
Slate			2135	2457			
Brown Shale			2457	2470			
Berea			2470	2472			
Slate & Shells			2472	2506			
Total Depth			2506'				

Date January 17, 19 63

APPROVED UNITED FUEL GAS COMPANY, Owner

By *S. R. Tennell*
 (Title)
 Supt., Civil Engineering Dept.

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 WV Department of
 Environmental Protection

WW4-A
Revised
2/01

1) Date: 3/1/2016
2) Operator's Well No. 809182 P&A
3) API Well No. 47-039-01858

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 David Ward Heirs ✓
Address C/O James F. Brown, IV
Attorney-in-Fact D. Ward Heirs
P.O. Box 88
Charleston, WV 25321
(b) Name Boone East Development Comp ✓
Address P.O. Box 16429
Bristol, VA 24209
(c) Name _____
Address _____
6) Inspector Terry Urban
Address P.O. Box 1207
Clendenin, WV 25045
Telephone 304-549-5915

5) Coal Operator
(a) Name None
Address _____
Coal Owner(s) with Declaration
(b) Name David Ward Heirs ✓
Address C/O James F. Brown, IV
Attorney-in-Fact D. Ward Heirs
P.O. Box 88
Charleston, WV 25321
Name Boone East Development Company ✓
Address P.O. Box 16429
Bristol, VA 24209
Coal Lessee with Declaration
(c) Name Boone East Development Company ✓
Address Subsidiary of Alpha Natural Resources
One Alpha Place, P.O. Box 16429
Bristol, VA 24209

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.

Received
Office of Oil & Gas
MAR 03 2016



Well Operator: Chesapeake Appalachia, L.L.C.
By: _____
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 2nd day of March the year of 2016
Phyllis A. Copley Notary Public

My Commission Expires September 16, 2018
Form WW-9

39 01858P

**LAW OFFICE OF
JAMES F. BROWN, IV**

300 Summers Street, Suite 900
Post Office Box 88

Charleston, WV 25321-0088

Tel. (304) 343-5501

Fax (304) 343-6695

March 4, 2016

Chesapeake Energy Corp.
P.O. Box 579
Hamlin, WV 25523

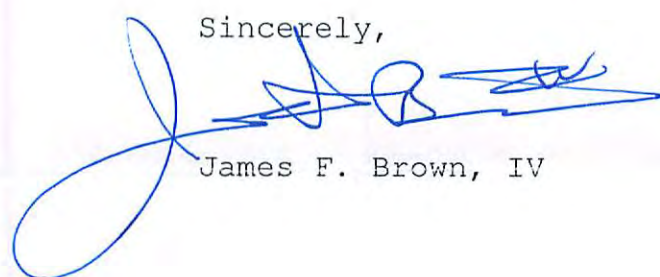
RE: Surface Owner Waiver/Voluntary Statement of No Objection
API Number: 47-039-01858
Gas Well Number: 809182

— Plugging

Dear Sirs:

Enclosed is my signed waiver as the surface owner for your request to plu and abandon the well captioned above, together with the voluntary statement of no objection by the David Ward Heirs as surface owners to the plugging and abandonment of the well.

Sincerely,



James F. Brown, IV

JFB, IV/jsm
Enclosures

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04/08/2016

SURFACE OWNER WAIVER

Operator's Well Number 809182 P&A

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

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

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th Street
Charleston, WV 25304
(304) 926-0499

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

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

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

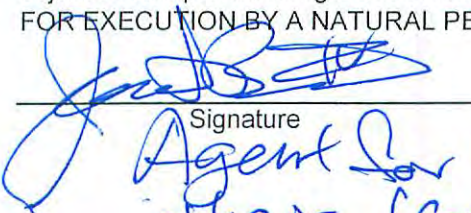
- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5)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

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

VOLUNTARY STATEMENT OF NO OBJECTION

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

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.
FOR EXECUTION BY A NATURAL PERSON ETC.


 Signature _____
 Date 3/4/16
 Agent for David Ward
 Heri (Coal Group)

Name: _____
 By: _____
 Its: _____
 Signature _____
 Date _____

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 Office of Oil and Gas
 FOR EXECUTION BY A CORPORATION,
 MAR 10 2016
 WV Department of Environmental Protection

3901858P

FORM WW-4 (B)
Reverse

Farm Name _____
API No. 47-039-01858
David Ward Heirs
Well No. 809182 P&A

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

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

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

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

WAIVER

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

Date: 3/4/2016

By: [Signature] Agent
Its: For David Ward Heirs (Coal Group)

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MAR 10 2016

WV Department of
Environmental Protection

04/08/2016

3901858P

ev. 02/01

API Number 47-039-01858
Operator's Well No. 809182 P&A

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 Bufflick Fork of Hughes Creek Quadrangle Montgomery, WV 7.5'
Elevation 920' County Kanawha District Cabin Creek

Description of anticipated Pit Waste: Plugging Returns/Cement
Will a synthetic liner be used in the pit? Yes 14 20 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 _____)

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 March, 2016.
Phyllis Copley Notary Public.
My Commission Expires September 16, 2018



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Office of Oil and Gas
MAR 07 2016
WV Department of
Environmental Protection

Attachment #1

API #: 47-039-01858
Operator's Well No. 809182 P&A

LEGEND

- Property Boundary
- Road
- Existing Fence
- Planned Fence
- Stream
- Open Ditch
- Rock
- North
- Buildings
- Water wells
- Drill site

- Diversion
- Spring
- Wet Spot
- Drain Pipe with size in inches
- Waterway
- Cross Drain
- Artificial Filter Strip
- Pit: cut walls
- Pit: compacted fill walls
- Area for Land Application of Pit Waste

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 Tons/acre (500 lbs minimum)
 Mulch Weed Free Straw 2 Tons/acre

Seed Mixtures

October 1st to April 30th		May 1st to September 30th	
Creeping Red Fescue	68.60%	Creeping Red Fescue	68.60%
Wheat	14.76%	Wheat	17.18%
Annual Ryegrass	9.80%	Annual Ryegrass	9.80%
Ladino Clover	3.21%	Ladino Clover	4.97%

Total seeding will be 50 lbs/acre

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Amy W. Miller*

Title: *Field Drop Well (P&A)*

Date: *3-7-16*

Field Reviewed? Yes No

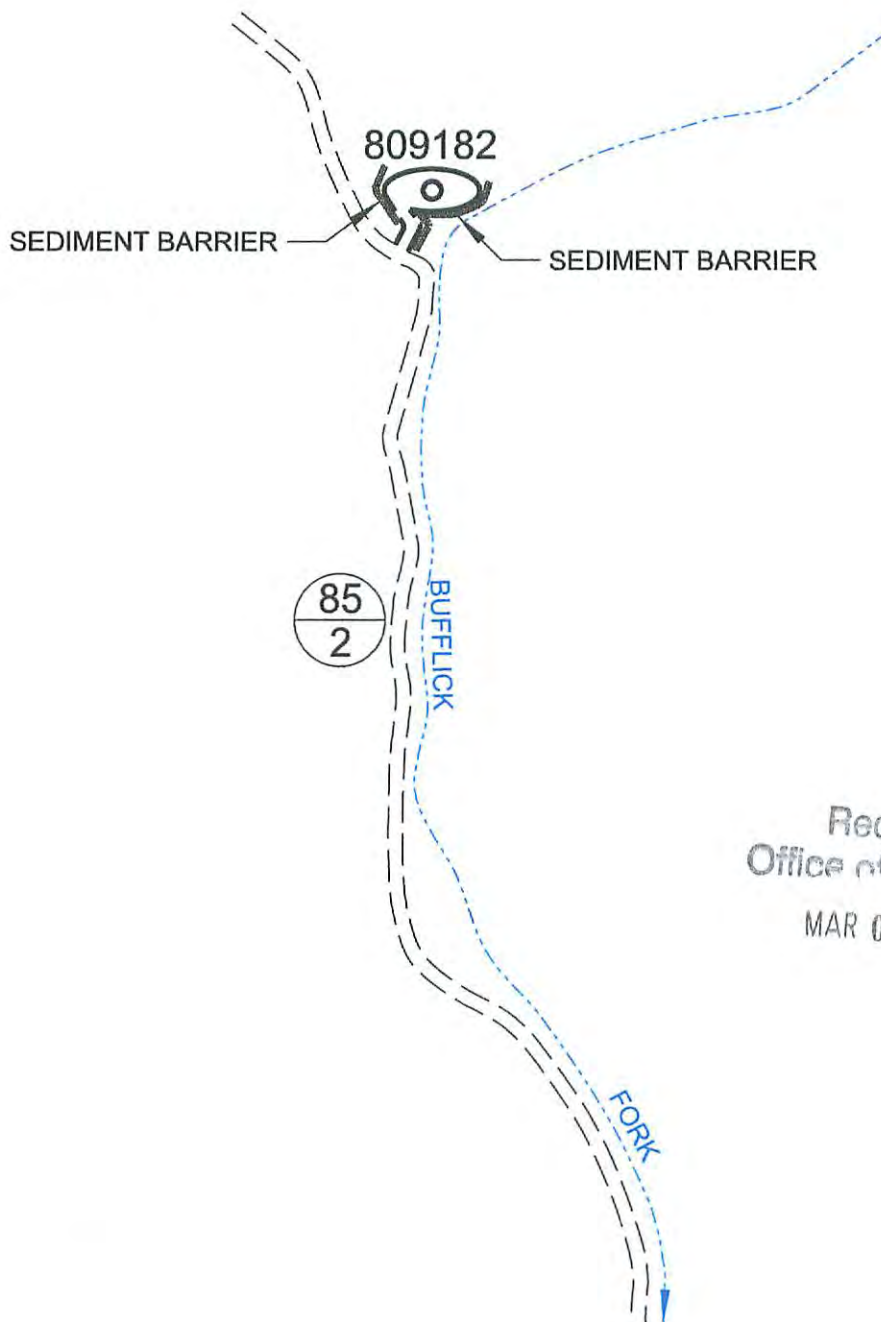
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 Environmental Protection

CHESAPEAKE APPALACHIA, L.L.C.

39018587

RECLAMATION DIAGRAM WELL LOCATION 809182

API 47-039-01858



Received
Office of Oil & Gas
MAR 03 2016

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 and 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.

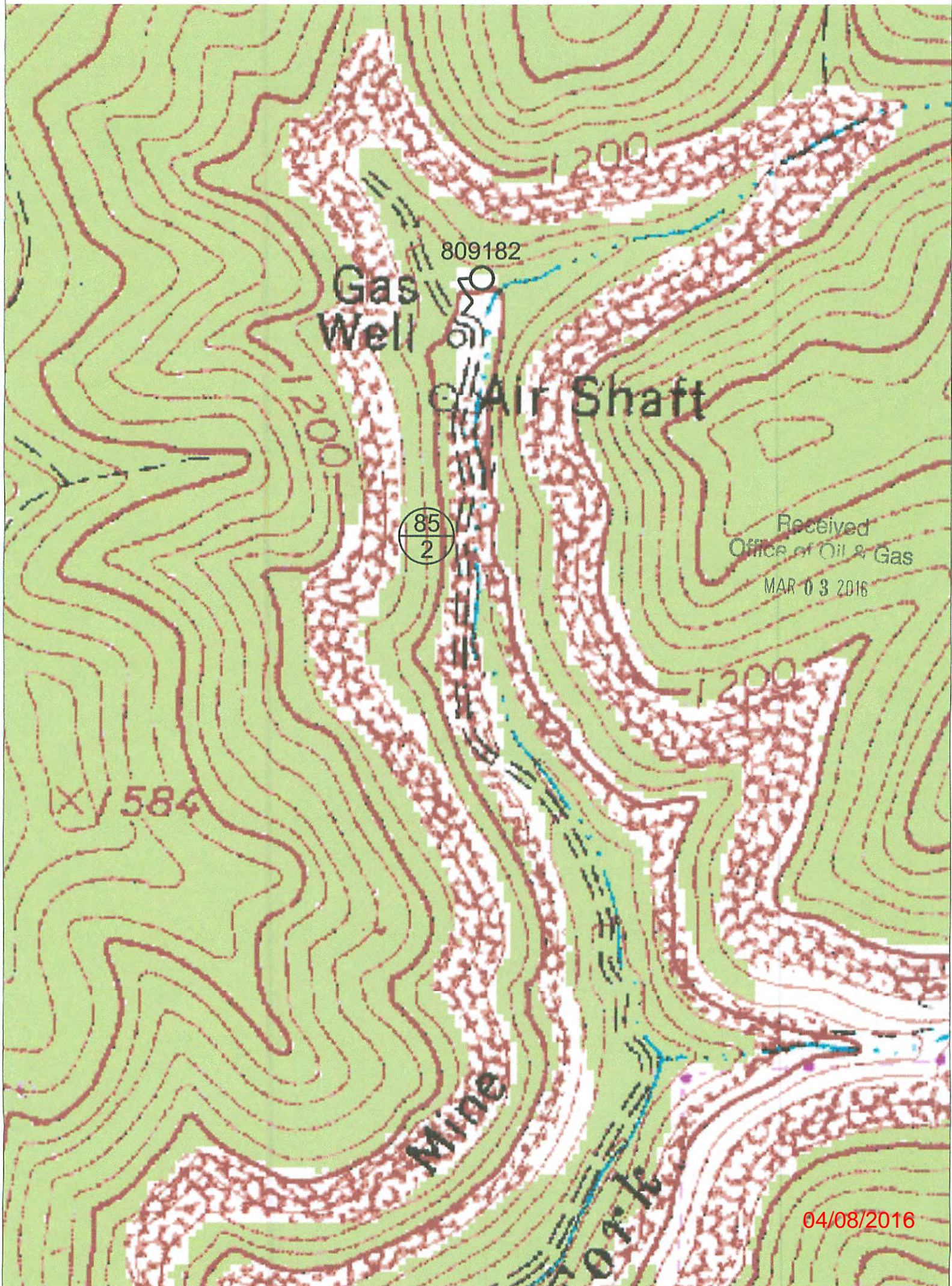
04/08/2016

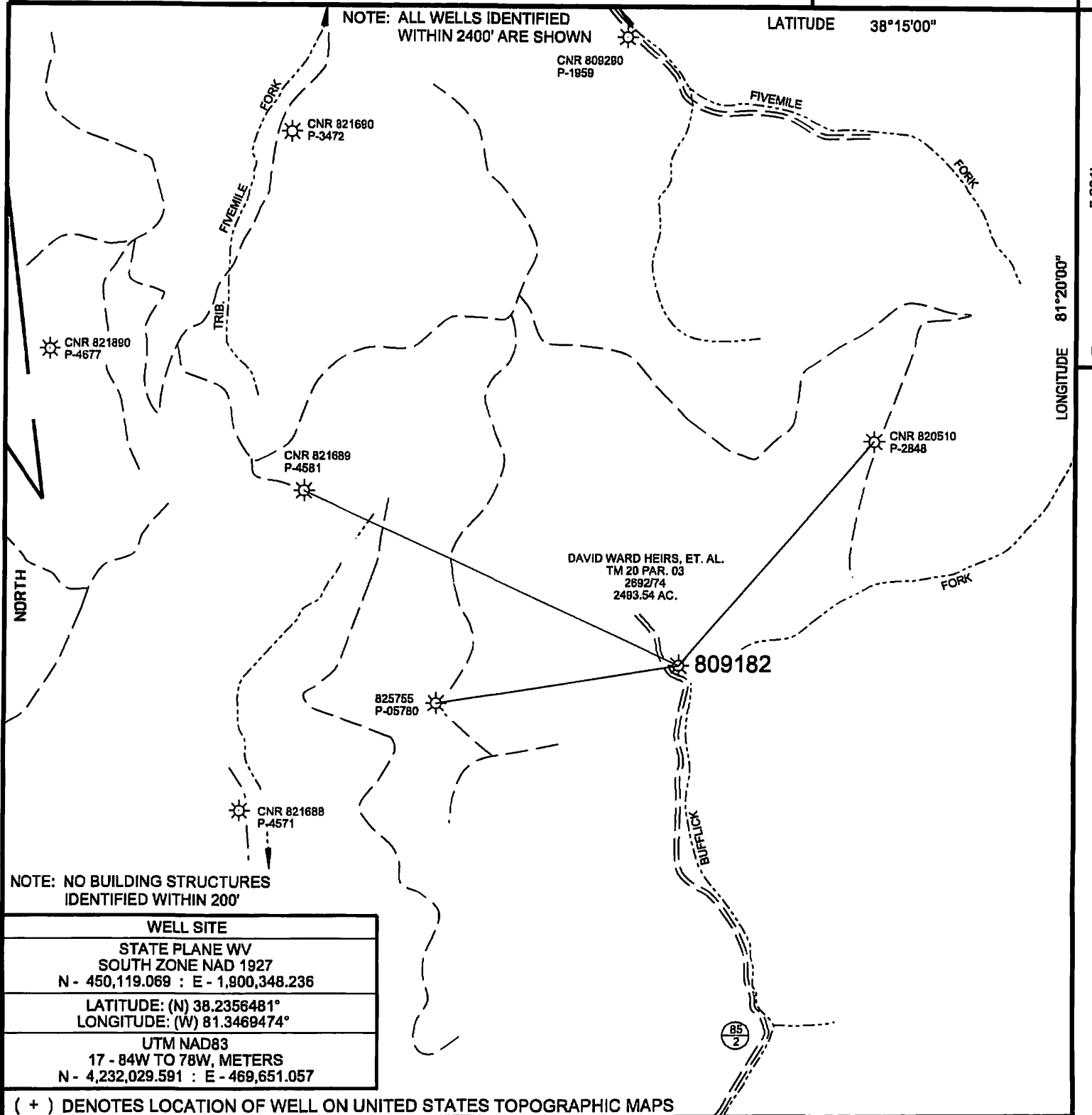
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CHESAPEAKE APPALACHIA, L.L.C.

TOPOGRAPHICAL MAP OF ACCESS AND
WELL LOCATION 809182

API 47-039-01858





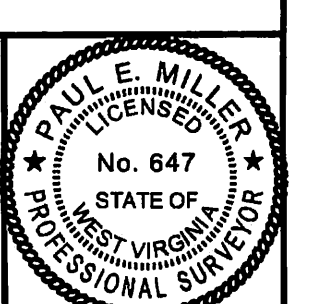
WELL SITE	
STATE PLANE WV SOUTH ZONE NAD 1927 N - 450,119.069 : E - 1,800,348.236	
LATITUDE: (N) 38.2356481° LONGITUDE: (W) 81.3469474°	
UTM NAD83 17 - 84W TO 78W, METERS N - 4,232,029.591 : E - 469,651.057	

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

FILE NO. 809182 P&A.DGN
 DRAWING NO. 809182 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 FEBRUARY 26, 20 16
 OPERATOR'S WELL NO. 809182
 API WELL NO. 47 039 01858 P
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 920' WATER SHED BUFFLUCK FORK OF HUGHES CREEK
 DISTRICT CABIN CREEK COUNTY KANAWHA
 QUADRANGLE MONTGOMERY, WV 7.5'

SURFACE OWNER DAVID WARD HEIRS, ET. AL. ACREAGE 2493.54
 OIL & GAS ROYALTY OWNER DAVID WARD HEIRS, ET. AL. LEASE ACREAGE 8.000
 LEASE NO. 1-025660-000

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 CLEAN OUT AND REPLUG

TARGET FORMATION _____ ESTIMATED DEPTH _____

WELL OPERATOR CHESAPEAKE APPALACHIA, L.L.C. DESIGNATED AGENT JESSICA GREATHOUSE
 ADDRESS P.O. BOX 18496, OKLAHOMA CITY, OK 73154-0496 ADDRESS CHESAPEAKE APPALACHIA, L.L.C. PO BOX 6070, CHARLESTON, WV 26382

FORM VW-6

COUNTY NAME
 PERMIT

04/08/2016