

# 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

March 17, 2015

### WELL WORK PLUGGING PERMIT

### Plugging

This permit, API Well Number: 47-4301863, 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 penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: 2403

Farm Name: ROBERTS, C.

API Well Number: 47-4301863

Permit Type: Plugging

Date Issued: 03/17/2015

# 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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

### **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.

FORM WW-4 (B) 1) Date: 2/9/2015 Observe 2) Operator's Well No. 802403 P&A File Copy 3) API Well No. 47-043-01863 (Rev. 2/01) STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS APPLICATION FOR A PERMIT TO PLUG AND ABANDON Well Type: Oil Gas Liquid injection Waste disposal Production X or Underground storage (Is Gas, Deep Shallow 5) Location: Elevation 659 Watershed Middle Fork of Mud River District Carroll County Lincoln Quadrangle Hamlin, 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 Ralph Triplett Name Name Chesapeake Appalachia, L.L.C. 5539 McClellan Highway Address P.O. Box 18496 Address Branchland, WV 25506 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

Received

Date

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Office of Oil and Gos Office (Jureson per referencedie)

### 802403 P&A PROCEDURE

# NOTE: 8 1/4" may have been pulled

- Prepare road and location, MIRU service rig
- 2) RIH with tools to check TD approximately at 2090'
- 3) Attempt to pull 3" and packer
  - A) If successful:
    - a) Run W.S. to 2090', spot gel, pull W.S. to 2060'
    - b) Spot 100' cement plug 2060'-1960'
    - c) Proceed to step 4
  - B) If unsuccessful:
    - a) Run W.S. to 2090', spot gel
    - b) Spot 130' cement plug 2090'-1960', pull W.S.
    - c) Cut 3" at free-point (approximately 1650') and pull
    - d) Proceed to step 4
- 4) Pull or run W.S. to 1650', spot gel
- 5) Spot 100' cement plug 1650'-1550', pull W.S.
- 6) RIH with tools to check top of plug (If TOC is below 1590' then reset plug)
- 7) Rip or shot holes approximately at 1520', 1495', 1345', 1320'
- 8) Run W.S. to 1520', spot gel
- 9) Spot 100' cement plug 1520'-1420', pull W.S. to 1345'
- 10) Spot 100' cement plug 1345'-1245', pull W.S.
- 11) Cut 6 5/8" at free-point (approximately 820') and pull
- 12) Run W.S. to 820', spot gel
- 13) Spot 150' cement plug 820'-670', pull W.S. to 470'
- 14) Spot 100' cement plug 470'-370', pull W.S.
- 15) Attempt to pull 8 1/4" if present
  - A) If successful or 8 1/4" is not present:
    - a) Run W.S. to 325', spot gel
    - b) Spot 100' cement plug 325'-225'
    - c) Proceed to step 16
  - B) If unsuccessful:
    - a) Run W.S. to 360', if possible
    - b) Spot 100' cement plug 360'-260', pull W.S.
    - c) Cut 8 1/4" at free-point (approximately 195') and pull
    - d) Proceed to step 16

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- 16) Run or pull W.S. to 190'
- 17) Spot 190' cement plug 190'-surface 200- 500 foco 18) Pull W.S. and top off with cement
- 19) Erect monument and reclaim as prescribed by law

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Office of Oil and Gas WV Dept. of Environmental Protection

UNITED FUEL GAS COMPANY
Incorporated

Well 802403 API 47-043-01863

Serial Well No. 3403 Lease No..... Paragon Print 500 42047 CASING AND TUBING Drilling RECORD OF WELL No. 403 TEST BEFORE SHOT Used in Drilling Left in Well Catherine Roberts Farm of Acres of Water in 🙎 10ths Carroll District 16 0 10ths of Merc. in.. Lincoln County 13 0 Volume... .Cu. f Branchland W. Va. Field, State of 10 36 16" 36 \*6" TEST AFTER SHOT of Water in 5 81/4 Rig Commenced July 27, 1925 of Merc. in 10ths 192 6% Rig Completed August 8, 1925 192 5 3-16 Volume......Rock pressure.... Q Drilling Commenced August 10, 1925 41/8 0 Drilling Completed deptomber 12, 1925 4 O Date Shot D-12-1925 Drilling to cost per foot 3 Contractor is: Our own tools. 2 Oil Flowed..... ...bbls. 1st 24 hrs Address: Oil Pumped....... bbls. 1st 24 hrs SHUT IN Date Sopt. 19, 1985 Driller's Names Tubing or Well abandoned and Abs Brookover Size of Packer Plugged Ben Pauley Kind of Packer A. S. Chor R. L. Jaynes, Poreman. 1st Perf. Set On Defrom 2nd Perf. Set 46 from 10 800

### DRILLER'S RECORD

Formation	Тор	Bottom	Thickness	Remarks
Surfaço	0	36	36	Tubing packer set at 355 6" from
			Thickness  36	Tubing packer set at 355'6" from bettom.  6-5/8" m8%" m10" bettom hole packer setat 1598' steel line measurement when casing set on bettom.  Berea pay, 2040 to 2050 ft.  Cauged when Berea was first drilled.  14/10 water in 2" but blow down to 10/10 water in 2" before sheeting.  Steel line run on top of Big Line.  Small show of oil 2056-2058 ft.
Lims Slate Lims Slate Slate Sand Slate Lims Sand	985 998 1006 1025 1033 1040 1150 1166 1210 1214 1295 1300 1315 1345 1345 1541	992 1005 1025 1033 1040 1165 1160 1210 1214 1295 1360 1315 1343 1343 1345 1535 1541 1566	7 13 20 110 15 34 15 4 15 15 15 15 15 15 15 15 15 15 15 15 15	Slate 1506 1570 4 Square 1570 1576 6 Slate 1576 1590 14 Shell 1590 1602 12 Slate end shells 1602 1714 112 Shell 1790 76 Slate ashells 1790 2021 231 Brown Shale 2021 2038 17 Beres Sand 2038 203/20/2015 Shell 2060 2075 15 Slate ashells 2075 2095 20 Total depth 2095  RECEIVED Office of Oil and Gas FEB 1 2 2015

WW4-A	
Revised	
2/01	

1) Date: 2/9/2015 2) Operator's Well No. 802403 P&A 47-043-01863 3) API Well No.

# STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT

			ENVIRONMENTAL PRO		
4)	Surface Ou	ner(s) to be served:	F APPLICATION TO PLU	-commence of the commence of t	
4)	(a) Name	Virginia Gladys Roberts		<ol><li>Coal Operator</li><li>(a) Name</li></ol>	or None
	Address	P.O. Box 154		Address	Notice
	, , , , , , , , , , , , , , , , , , , ,	West Hamlin, WV 2557		71441655	
			•	Coal Owner(	s) with Declaration
	(b) Name	See Attached List for Ad	cess	(b) Name	See Attached List for Coal Owners
	Address	Surface Owners		Address	
	(c) Name			Name	
	Address			Address	
	71001000			Addicas	
				Coal Lesse	e with Declaration
6)	Inspector	Ralph Triplett		(c) Name	None
٠,	Address	5539 McClellan Highway		Address	Holic
	Addioco	Branchland, WV 25506		71001000	**************************************
		Branomana, WV 20000			<del></del>
	Telephone	304-389-0350			
	relephone	004-000-0000			
	(2) The plat (s The reason yo instructions on Take notice the Notice and App	olication and accompanying do	ell location on Form WW-6. that you have rights regarding on are not required to take a lest Virginia Code, the under cuments for a permit to plug	nny action at all. signed well operator p and abandon a well v	proposes to file or has filed the with the Chief of the Office of
		est Virginia Department of En			ication, and the plat have been
		sation and depicted on the atta			
		on or before the day of mailin		/	7
-	· · · · · · · · · · · · · · · · · · ·	A Constitution of the limit			11111
3	SEIFE	Official Seal Notary Publis	Well Operator:	Chesapeake Appala	
5	10	Phyllis A. Copley	By:	Miller	
ζ	· 题。	nyuis A. Copiey 5	lts:	The second secon	ns, Appalachia South
5	100	My Commission Expires	Address:	P.O. Box 18496	70/5/0/00
3		September 16, 2018	1990 (\$100 \$100 \$100 \$100 \$100 \$100 \$100 \$1	Oklahoma City, OK	73154-0496
Q		· · · · · · · · · · · · · · · · · · ·	Telephone:	405-935-4073	
		art	_		
Subs	scribed and swo	n before me this	day of February	the year of	2015
			Thyloa. Co	plus N	lotary Public
МуС	Commission Exp	ires	September 16, 2018	1	RECEIVED
Forn	n WW-9				
					Office of Oil and Gas

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Well 802403 P&A API 47-043-01863

### Access Surface Owners

Barbara Carper Rt 1 Box 51 Hamlin, WV 25523

Gregory A. Roberts 1623 Ardoyne Avenue Cleveland, OH 44109

C&R Equipment Co., Inc. 168 Sug Drive Hamlin, WV 25523 Gregory Gue

Gregory Gue & Joseph Gregory Gue 5112 Kingman Avenue Portage, IN 46368 Gregary Allen Gue & Joseph Michael Gue 10503 E. 1680 North Road Oakewood, IL 61858

Virginia Gladys Roberts P.o. Box 154 West Hamlin, WV 25571

William Grady Graham 6253 Straight Fork Road Sweetland, WV 25523

Well 802431 P&A API 47-043-01863

### Coal Owners

Ricky L. Adkins & Glenneth Plumley 253 Scary Creek Road Hamlin, WV 25523

Yvonne King Hart Okel Iseman Estate 113 Center Street Glenville, WV 26351

Martin Naomi Herman & Walter Graham Jr. 6188 Straight Fork Hamlin, WV 25523

Helen Eloise Richardson 2821 Gulf City Road #74 Ruskin, FL 33570

Bera Miller 5956 Straight Fork Hamlin, WV 25523 C O Harrison Properties 444 Richardson Road Creston, WV 26141

Roy A. Campbell 124 Summit Ridge Hurricane, WV 25526

Aquilonia Land Co. P.O. Box 26 Millwood, WV 25262

H3 LLC 1477 Johnson Creek Road Milton, WV 25541

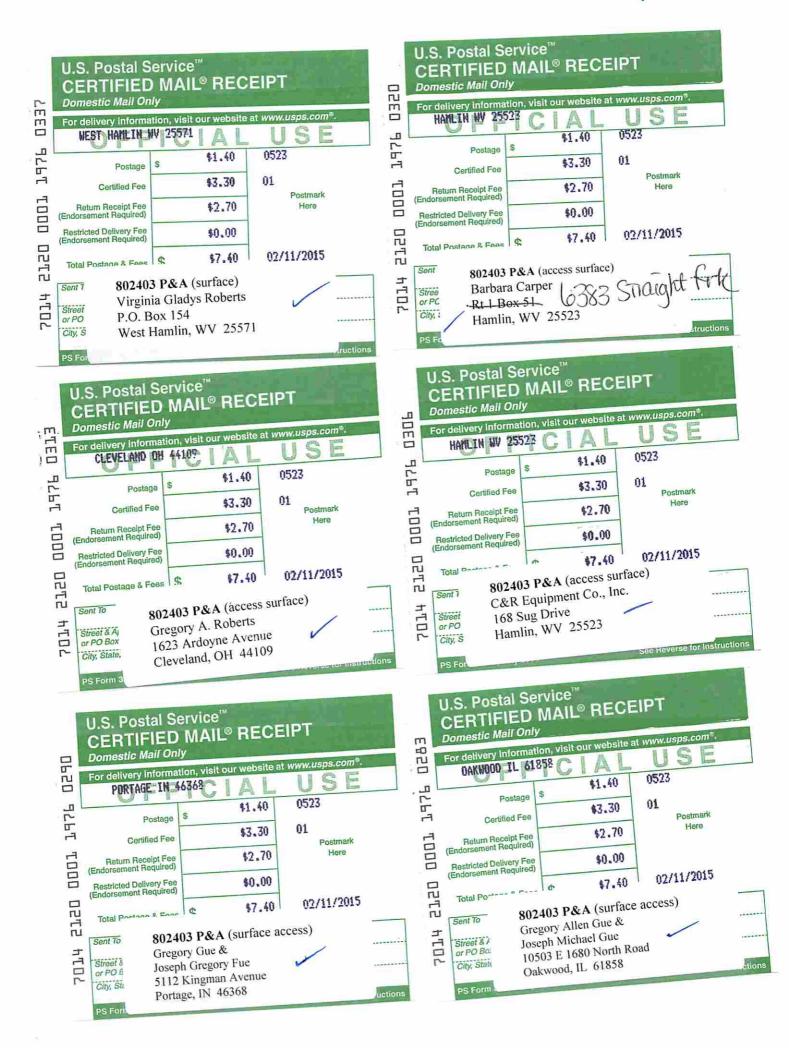
Jeff Tignor 8711 Aarons Fork Road Elkview, WV 25071

Laura Chapman 8711 Aarons Fork Road Elkview, WV 25071 Lena Barrett & Glasco Barrett, Jr. 8027 Court Street Hamlin, WV 25523

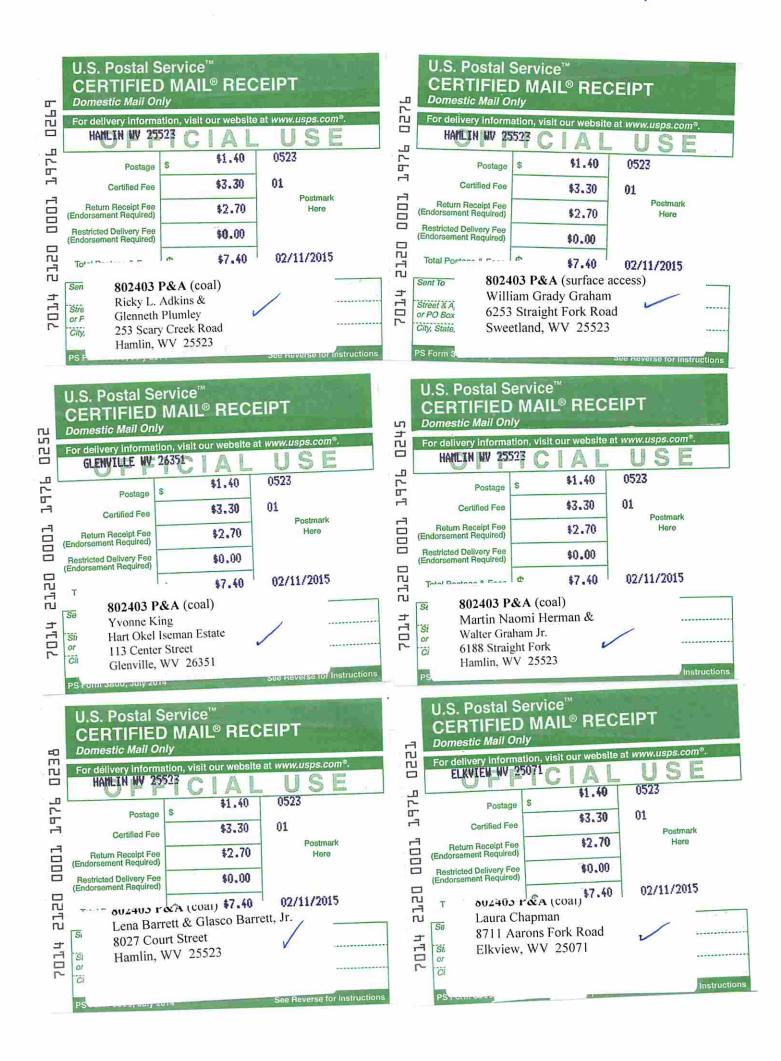
Sadie F. Roberts 62 Middle Creek Hamlin, WV 25523

Harry Roberts Estate Lawrence Roberts 14934 Redwood Bend Trail Houston, TX 77062

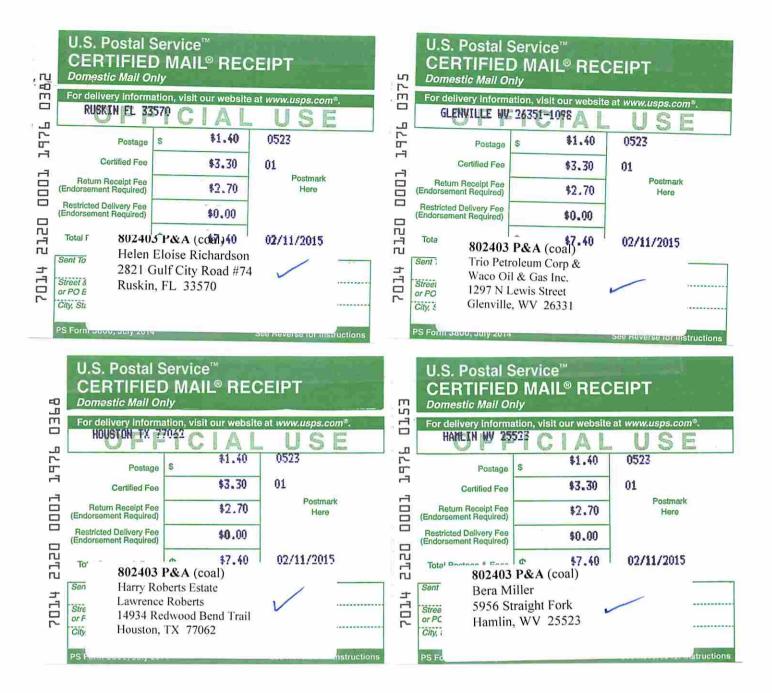
Trio Petroleum Corp & Waco Oil & Gas Inc. 1297 N Lewis Street Glenville, WV 26331



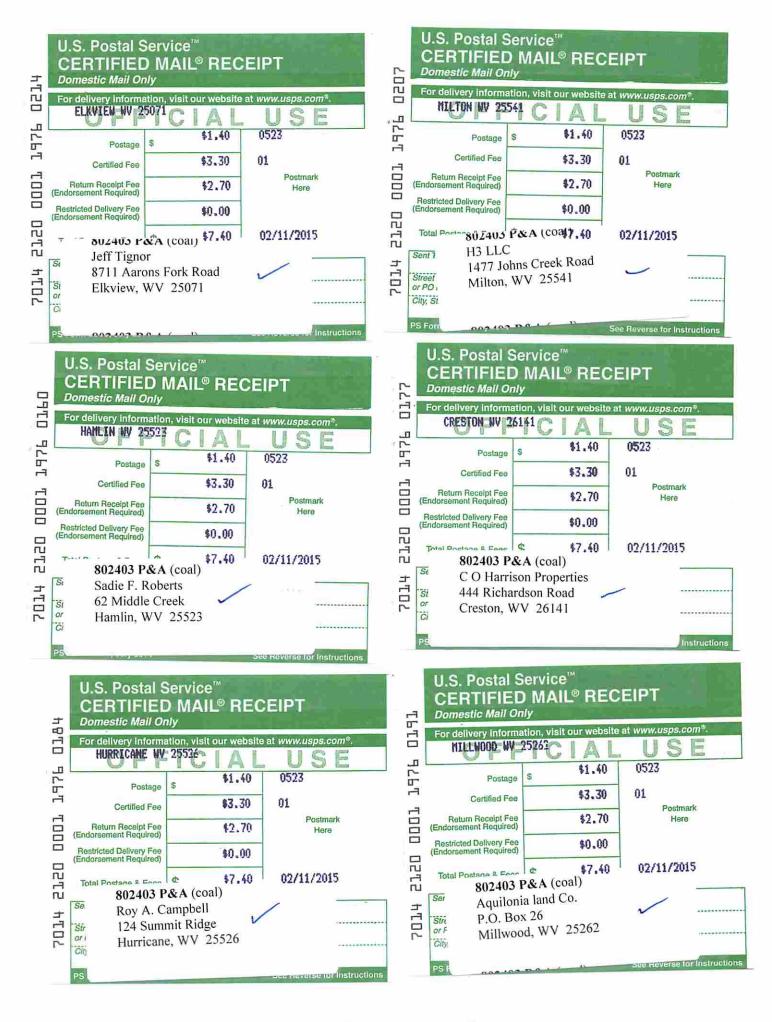
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WV Department of Environmental Protection 03/20/2015

Rev. 02/01

API Number	47-043-01863		
Operator's Well No.	802403 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 49447755	7
Watershed Middle Fork of Mud River	QuadrangleHaml	in, WV 7.5'
Elevation 659' County Lincoln	District	Carroll
Description of anticipated Pit Waste: Plugging Returns/Cement		
Will a synthetic liner be used in the pit? Yes	ZO ML.	-
Proposed Disposal Method For Treated Pit Wastes:  X Land Application Underground Injection ( UIC Permit Num Reuse (at API Number Off Site Disposal (Supply form WW-9 for Other (Explain	disposal location)	
Proposed Work For Which Pit Will Be Used:  Drilling Workover Swabbing X Plugging Other (Explain	)	
I certify that I understand and agree to the terms and conditions of the GENER issued on December 31, 1999, by the Office of Oil and Gas of the West Virginia De understand that the provisions of the permit are enforceable by law. Violations of a 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 withis application form and all attachments thereto and that, based on my inquiry of the for obtaining the information, I believe that the information is true, accurate, and consignificant penalties for submitting false information, including the possibility of fine Company Official Signature	epartment of Environmental Pr any term or condition of the ge with the information submitted of those individuals immediately r mplete. I am aware that there	rotection. I neral on esponsible
Company Official (Typed Name) Dave Gocke		<del></del>
Company Official Title Manager - Operations, Appala	achia South	
Subscribed and sworn before me this 9th day of February Phyllis a. Caplu		RECEIVED Office of Oil and Gas Notary Public. FEB 1 2 2015
My Commission Expires September 16, 2018		
RECEIVED Office of Oil and Gas	Official Soul	WV Department of Notary Purpose of Notary Purpos

FEB 1 2 2015

WV Department of Environmental Protection

03/20/2015

# Attachment #1

API #: 47-043-01863 Operator's Well No. 802403 P&A

Property Boundary	Diversion Leaves Control of the Cont	
Rond = = = = = = = = =	Spring	
Existing Fence — X — X — X —	Wet Spot	
Planned Fence///	Drain Pipe with size in inches @	
Stream	Waterway $\longleftrightarrow$	
Open Ditch	Cross Drain	
Rock ESSE	Artificial Filter Strip	
North N	Pit: cut walls	
Buildings	Pit: compacted fill walls	
Water wells	Area for Land Application of Pit Waste	
Drill site		
Proposed Revegetation Treatment: Acres Disturbed	d 1.0 Prevegetation pH 6.1	—
Lime 3	Tong/gorg or to correct to all C.F.	
Lime	Tons/acre or to correct to pH6.5	
Fertilizer (10-20-20 or equivalent) 1/3 TON	<u>V</u> lbs/acre (500 lbs minimum)	
Mulch Hay 2	Tons/acre	
Much May 2	Tonsacre	
	eed Mixtures	
Area I	Area II	
Seed Type Ibs/acre CHESAPEAKE CONTRACTOR'S MIX 40	Seed Type Ibs/a	
CHESAPEAKE CONTRACTOR'S MIX 40 ALSIKE CLOVER 5	ORCHARD GRASS ALSIKE CLOVER	15
ANNUAL RYE 15	ALSINE GLOVER	5
Attach:		
Drawing(s) of road, location, pit and proposed area for	r land application.	
Photocopied section of involved 7.5' topographic shae		
Thorocopied section of involved 7.5 topographic state	st.	
Plan Approved by:		<del></del>
Title: inspector 006		
Title: <u>inspector</u> 006  Date: <u>2-23-15</u>		

LEGEND

Received

FEB 2 5 2015

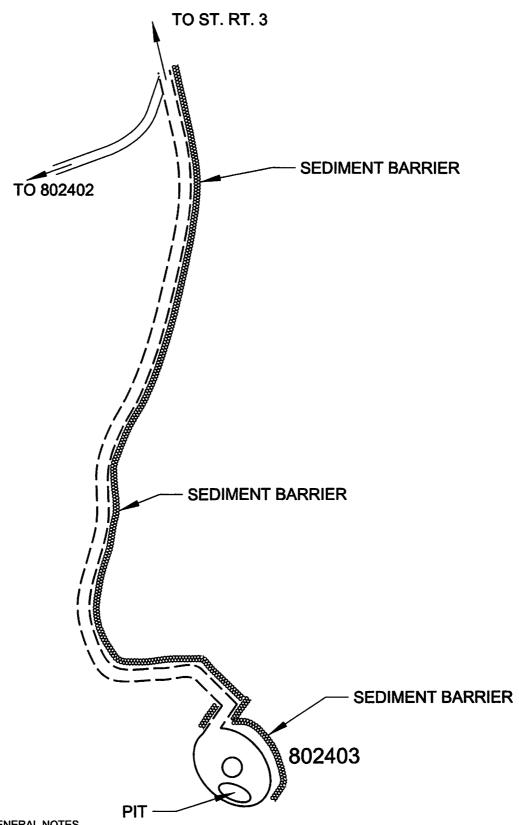
Office of Oil and Gas

03/20/2015

# CHESAPEAKE APPALACHIA, L.L.C.

**RECLAMATION DIAGRAM WELL LOCATION 802403** 

API 47-043-01863



**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 show in approximate pre-planning

All culvert pipes will be a minimum of 15 inches in diameter. all culvert pipes installed will be accomanied 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 out fall of culverts will be protected from erosion and sedimentation using large roacks of 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 contruction phase, where applicable, and in areas that will allow. The CEIVED3/20/2015 structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1.

Office of Oil and Gas

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

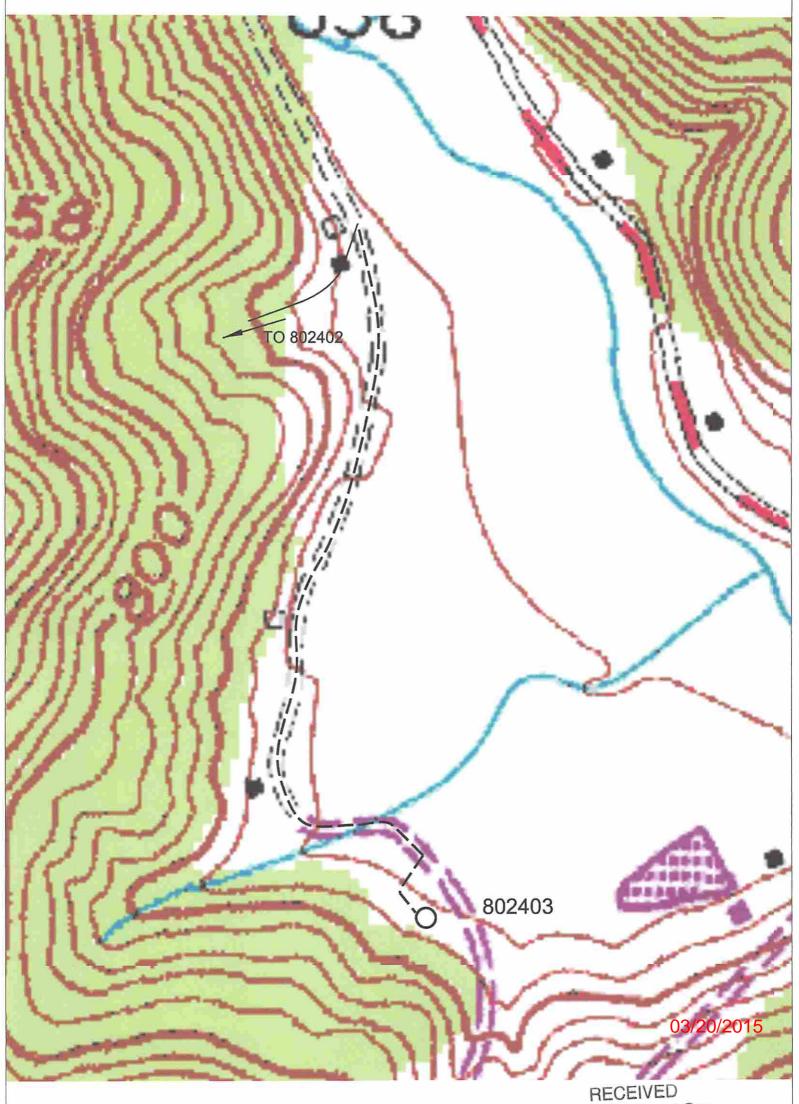
WV Department of **Environmental Protection** 

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# CHESAPEAKE APPALACHIA, L.L.C.

TOPOGRAPHICAL MAP OF ACCESS AND WELL LOCATION 802403

API 47-043-01863



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