

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 13, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-7900896, 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

Chie

Operator's Well No: 4172

Farm Name: MAYNARD, W. A.

API Well Number: 47-7900896

Permit Type: Plugging
Date Issued: 03/13/2015

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. <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.

Cx 1/23/1000

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

1) Date: 1/23/2015 2) Operator's Well No. 804172 P&A 3) API Well No. 47-079-00896

STATE OF WEST VIRGINIA

		ı	DEPARIMI	OFFICE O	FOIL AND		CTION		
4)	Well Type: (Is Gas, Prod	Oil X or l	Gas	N FOR A PER X d storage	Liquid inject			aste disposal	X
5)	Location:	Elevation District	748' Curry	Watershed County	Putnam	Qua	Turkey drangle	Creek Garretts Bend	I, WV 7.5'
6)	Well Operator Address	Chesapeake P.O. Box 184 Oklahoma Ci	96		7) Designal Address	ted Agent	P.O. Box	Greathouse 6070 on, WV 25362	=: =: =:
8)	Address 105 K	ector to be not e Stevens entuck Road a, WV 25248	tified		9) Plugging Name Address	Chesapea P.O. Box	18496	achia, L.L.C.	_1 _1 _1
			S	see Attached Si	heet				EIVED Oil and Gas
								JAN :	2 9 2015
									artmem of Ital Protection
Noti	fication must be g	given to the dist	trict oil and g	gas inspector 2	4 hours before	e permitted	work can c	commence.	
Wo	k Order approved	d by Inspector						Date	

API: 47-079-00896

804172 P&A Procedure

- 1) Prepare road and location, MIRU Service Rig
- Run in hole with tools to check TD at approximately 2130' 2)
- 3) Attempt to pull 3 1/2" and packer
 - A) If successful
 - Run W.S. to 2100', spot gel a)
 - Spot 100' cement plug 2100'-2000', pull W.S. b)
 - c) Proceed to step 4
 - B) If unsuccessful
 - Run W.S. to 2100', spot gel a)
 - Spot 100' cement plug 2100'-2000', pull W.S. b)
 - c) Cut 3 1/2" at free-point (approximately 1830') and pull
 - Run W.S. to 1880' (if possible), spot gel d)
 - Spot 100' cement plug 1880'-1780' (be careful not to get cement e) above 1780') pull W.S.
- 4) Attempt to pull 5 3/16" casing
 - If successful A)
 - Run W.S. to 1620', spot gel a)
 - Spot 100' cement plug 1620'-1520', pull W.S. to 1465' b)
 - Proceed to step 5 c)
 - B) If unsuccessful
 - Run W.S. to previous top of cement (approximately 1780') a)
 - Spot 100' cement plug 1780'-1680', pull W.S. b)
 - Cut 5 3/16" at free-point (approximately 1600') and pull c)
 - Run W.S. to 1600', spot gel d)
 - Spot 100' cement plug 1600'-1500', pull W.S. to 1465' e)
 - Proceed to step 5
- Spot 100' cement plug 1465'-1365', pull W.S. 5)
- Run in hole with tools to check top of cement If TOC is below 1390', re-set plug 6)
- Cut 6 5/8" at free-point (approximately 880') and pull 7)
- Run W.S. to 880', spot gel 8)
- Spot 100' cement plug 880'-780', pull W.S. 9)

RECEIVED YOUR RECORDS DO NOT Office of Oil and Gas

10) Attempt to pull 8 1/4"

INDICATE ANY 81/4"CASK. JAN 29 2015

A) If successful

> Run W.S. to 480', spot gel a)

Spot 100' cement plug 480'-380' b)

WV Department of Environmental Protection

- Proceed to step 11 c)
- B) If unsuccessful
 - Run W.S. to 480', spot gel a)
 - Spot 100' cement plug 480'-380', pull W.S. b)
 - Cut 8 1/4" at free-point (approximately 150') and pull c)
 - Proceed to step 11 d)
- Pull or run W.S. to 150'
- Spot 150' cement plug 150'-surface

Pull W.S. and top of with cement 13)

Set monument and reclaim as prescribed by law 14)

03/13/2015

Smar.

79 60896P

WW # 804172 UNITED FUEL GAS COMPANY 079-0896

SERIAL WELL NO.4172

SERIAL WELL NO.41/2		LEASE NO	.29400		MA	P SQUAREAL-55
RECORD OF WE	LL No. 1	on the	CAS	ING AND TU	BING	TEST BEFORE SHOT
W.A.Maynard	Farm of 130	Acres	012g	DHILLING	LEFT IN	5 of Water in 3 . incl
in Curry		District	16			of Merc. inincl
Put	nam	County	13			Volume Cu. ft
F	ield, State of W.	.Va.	10			TEST AFTER SHOT
			8 1/4			-80 of Water in -3 incl
Rig Co.amenced		193	6 5/8	1407	1407	10ths. of Merc. inincl
Rig Completed		193	5 3/16	1775	1775	10ths.
Drilling Commenced June	7, 1925	193	4 7/8			Rock Pressure
Drilling Completed June	30, 1925	193	4	1		Date Shot 6-30-1925
Drilling to cost	per foot		3	1	2136	Size of Torpedu 40
Contractor is: C.O.Nichols			2			Shot 2077-2097 Oil Flowed bbls. 1st 24 hrs
Address: Charleston	"W.Va.			SHUT IN		Oil Pumped bbls, 1st 24 hrs.
		•	Date	July.6,1	925	
Driller's Name Well purchase	d from the C.	D.N.G.CO.	. 3in		Tubing or Casing	Well abandoned and
by the U.F.G.CO. Jan.1	,1930.		Size of Packe	-3×5-5/1	6	Plugged 193
			Kind of Pac	kerAnchor	set 185	4
			Ist Perf. Set	2087 In	om	
			2.17.66			2

Elev. 7521	DR	ILLER'S RECO	ORD		
FORMATION	ТОР	воттом	THICKNESS		REMARKS
Salt Sand	875	945	76		
Slate	945	960	15		
Sand	960	1020	60	Water at 1000	
Slate	1020	1023	3		
Sand	1023	1215	192		
Slate	1215	1245	30		
Sand	1245	1360	115		
Little Lime	1360	1390	30		
Pencil Cave	1390	1395	5		
Big Lime	1395	1575	180	Gas 1550-1560	
Big Injun	1575	1616	41	" 1600-1013	
Slate & Shells	1615	2060	415		
Brown Shale	2060	2072	12		
Black Lime	2072	2077	5		
Berea Grit	2077	2097	20	Gas 2077-2085	
Slate	2097	2136	<i>5</i> 9		
Total Depth		2136			
*	ŀ				
¥	2 2				RECEIVED Office of Oil and Gas
		ža.			JAN & 9 2015
		c		ı	WV Department of Environmental Protection
					റാ 👼 വ

WW4-A Revised 2/01 1) Date: 1/23/2015 2) Operator's Well No. 804172 P&A 3) API Well No. 47-079-00896

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ARANDON A WELL

		TON	TICE OF APPL	ICATION TO PLU	IG AND ABANDO	ON A WELL		
4)	Surface Own	ner(s) to be served:			Coal Opera	tor		
	(a) Name	Paul Lloyd Mayna	rd	/	(a) Name	None		
	Address	Rt 2 Box 1			Address			
		Hurricane, WV 25	5526	350 En				
				_				
						r(s) with Declar		
	(b) Name	Leslie V. Maynard		-	(b) Name		attached sheet	
	Address	9576 Taylor Court		_/	Address	for Coal Ow	ners	
		Pinkerington, OH	43137					
				_		•		
	e is raru				200			
	(c) Name			- 7:	Name			
	Address				Address			
				_				
					Coal Less	ee with Decla	ration	
3)	Inspector	Jamie Stevens			(c) Name	None		
	Address	105 Kentuck Road	i	=	Address	3		
		Kenna, WV 25248		-		,		
		Assimilar		-				
	Telephone	304-206-7775		<u>.</u>				
	reiephone	304-200-1113		_		***************************************		
-	THE DEDOC	NO NAMED ADO	VC. V	utal bassa as as bo	d this Come are	l the fellowing	dasumantai	
IO	THE PERSO	NS NAMED ABO	VE: You sho	uid have receive	ed this Form and	i the following	documents.	
	(1) The applica	ation to Plug and Aban	don a Well on Fo	orm WW-4B, which s	sets out the parties	involved in the wo	ork and	
		he well its and the plug						
		urveyor's map) showing						
	The reason you	ı received these docun	nents is that you	have rights regarding	g the application w	hich are summaria	zed in the	
	instructions on	the reverses side. How	wever, you are no	ot required to take a	ny action at all.			
	Take notice the	at under Chapter 22-6 o	of the Mest Virgin	nia Code, the unders	signed well operator	r proposes to file r	or has filed the	
		lication and accompan						
		/est Virginia Departmer						
		cation and depicted on						
		tered or certified mail of			named above (or b	y publication in ce	ertain	
	circumstances)	on or before the day of	of mailing or deliv	ery to the Chief.	7	1/	0	
	Laggagaga	*******	~~~	Well Operator:	Chesapeake Appa	alachia L.L.C.	,	
	A STOTO	Official Seal Notary Publis Stole of West Virginia	ζ	Ву:	Nau	1 11		
	CAA A	Phyllis A. Copley		Its:	Manager Operations - Appalachia South P.O. Box 18496			
	(1) [1] [1]			Address:				
		My Commission Expires	20020 5	Address.	Oklahoma City, O	V 72154 0406		
	1	September 16, 2018	\{\}			K 73154-0490		
	mmm	······································	w)	Telephone:	405-935-4073			
			7 1					
Subs	cribed and swo	rn before me this 🛮 🧟	Srd day of	January	the year of	2015	RECEIVED	
		T T	Quelli a.	Coplus		Notary Public		
A. C	ommission Cu-	iras	Contan	nber 16, 2018			Office of Oil and Gas	
	Commission Exp		v Septen	10, 2016				

JAN 29 2015

API: 47-079-00896

804172 P&A -- COAL OWNERS

Paul Lloyd Maynard Rt 2 Box 1 Hurricane, WV 25526

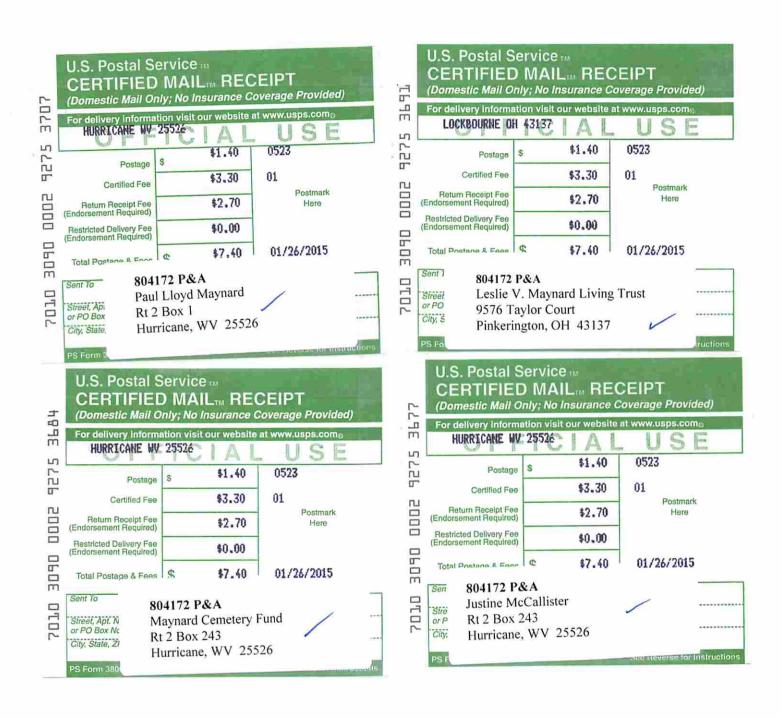
Maynard Cementery Fund Rt 2 Box 243 Hurricane, WV 25526

Justine M. McCallister Rt 2 Box 243 Hurricane, WV 25526

RECEIVED
Office of Oil and Gas

JAN 29 2015

WV Department of Environmental Protection



RECEIVED
Office of Oil and Gas

JAN 2 9 2015

WV Department of Environmental Protection 03/13/2015 Rev. 02/01

API Number	47-079-00896			
Operator's Well No.	804172 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 <u>494477557</u>
WatershedTurkey Creek	Quadrangle Garretts Bend, WV 7.5'
Elevation 748' County Putnam	District Curry
Description of anticipated Pit Waste: Plugging Returns/Cement	
Will a synthetic liner be used in the pit? Yes 20	MIL
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	r 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 December 31, 1999, by the Office of Oil and Gas of the West Virginia December 31, 1999, by the Office of Oil and Gas of the West Virginia December 31, 1999, by the Office of Oil and Gas of the West Virginia December 31, 1999, by the Office of Oil and Gas of the West Virginia December 31, 1999, by the Office of Oil and Gas of the West Virginia December 31, 1999, by the Oil and Gas of the Oil an	epartment of Environmental Protection. I any term or condition of the general with the information submitted on hose individuals immediately responsible amplete. I am aware that there are
Company Official Title Manager - Operations, Appala	achia South
Subscribed and sworn before me this 23rd day of January Puflic a. Cipluy	,2015 Notary Public.
My Commission Expires September 16, 2018	



Attachment #1

API #: 47-079-00896 Operator's Well No. 804172 P&A

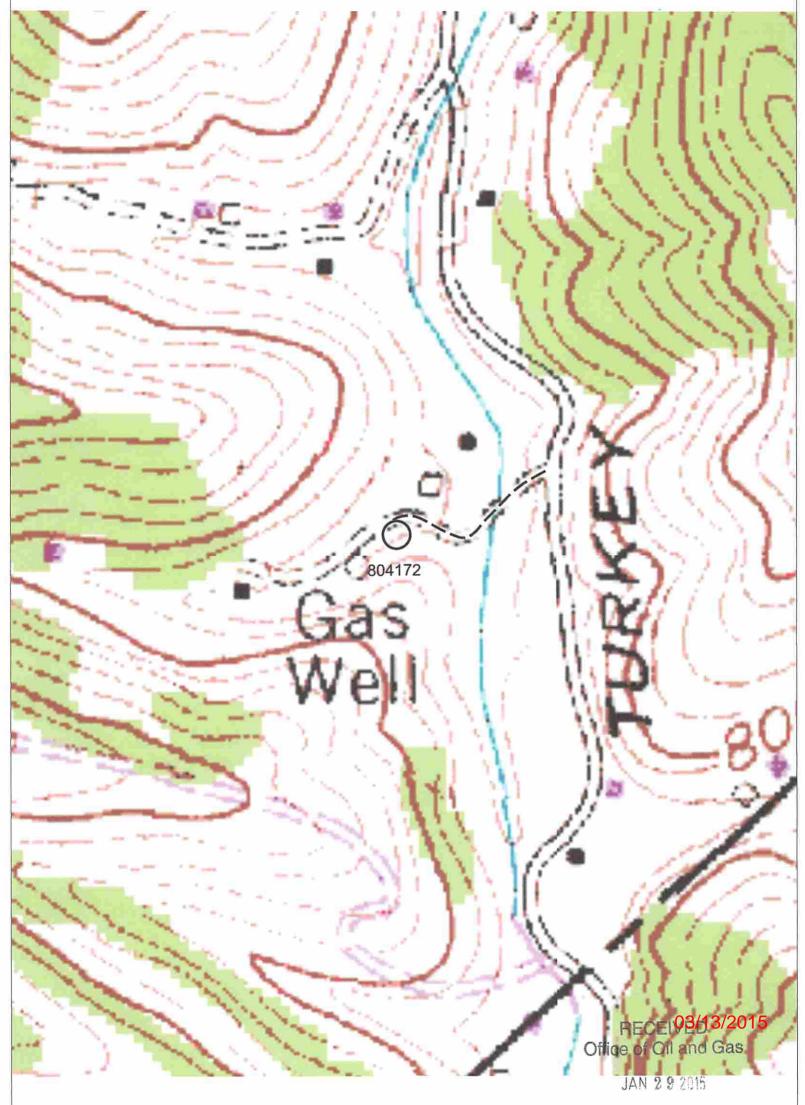
	Li	EGEND		
Property Boundary	_	Diversion (1211)	<u> </u>	
Rond = = = = = = = =	=	Spring -		
Existing Fence — X — X — X	-	Wet Spot		
Planned Fence / / /		Drain Pipe with size in inches	® -	
Stream Change Towns		Waterway \longleftrightarrow	$\Longrightarrow \Longleftrightarrow \epsilon$	=
Open Ditch		Cross Drain		
Rock 635885		Artificial Filter Strip XXXX	XXXXXXXXX	-XXXXXX
North N		Pit: cut walls		
Buildings		Pit: compacted fill walls	WILL STATE OF THE	
Water wells		Area for Land Application of Pi	t Waste	
Drill site				
	_			
Proposed Revegetation Treatment: Ac	res Disturbed	1.0 Prevegetation p	H <u>6.1</u>	
I	ime 3	Tons/acre or to correct to p	pH 6.5	
Fertilizer (10-20-20 or equival	ent) 1/3 TON	l lbs/acre (500 lbs minimum)		
Totalibor (To Bo Bo of Oquivar	<u></u>			
M	íulch <u>Hay 2</u>	_Tons/acre		
	Se	eed Mixtures		
Area I			Area II	
Seed Type	lbs/acre	Seed T	ype	lbs/acre
(Y-31	40	ORCHARD GRASS		15
ALSIKE CLOVER	5	ALSIKE CLOVER		5
ANNUAL RYE	15			
Attach:				
Orawing(s) of road, location, pit and prop	oosed area for	land application.		
Photocopied section of involved 7.5' topo	ographic sheet	i.		
			<u>. </u>	
Plan Approved by:			550	
Fitle:				EIVED Dil and Gas
			CHICE OF A	,m <u>ann 1522</u>
Date:				£ 2015
Field Reviewed? () Yes	() No	IAN/ Page	orment of
				ta Projection

7900896P

CHESAPEAKE APPALACHIA, L.L.C.

TOPOGRAPHICAL MAP OF ACCESS AND WELL LOCATION 804172

API 47-079-00896



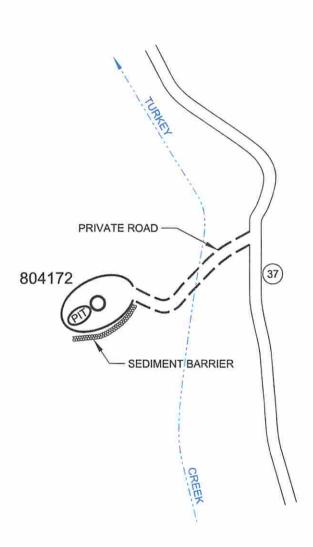
CHESAPEAKE ENERGY CORPORATION - EASTERN DIVISION
P.O. BOX 579 - 8165 COURT AVENUE - HAMLIN, WV 25523
304 824-5141 - FAX 304 824-2247

W// Denathrem of

CHESAPEAKE APPALACHIA, L.L.C.

RECLAMATION DIAGRAM WELL LOCATION 804172

API 47-079-00896



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 configurations.

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. These structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1.

03/13/2015

