

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

June 24, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4301943, 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.

Chief

James Martin

Operator's Well No: 4133

Farm Name: LINCOLN LAND ASSOC.

API Well Number: 47-4301943 Permit Type: Plugging

Date Issued: 06/24/2015

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. 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.

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

1) Date: 4/17/2015 2) Operator's Well No. 804133 P&A 3) API Well No. 47-043-01943

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 780' Watershed	Middle Fork of Mud River				
-200	District Duval County	Lincoln Quadrangle Hager, WV 7.5'				
6)	Well Operator Address Chesapeake Appalachia, L.L.C. P.O. Box 18496 Oklahoma City, OK 73154-0496	7) Designated Agent Address Address Jessica Greathouse P.O. Box 6070 Charleston, WV 25362				
8)	Oil and Gas Inspector to be notified Name Ralph Triplett Address 5539 McClellan Highway Branchland, WV 25506	9) Plugging Contractor Name Address Address P.O. Box 18496 Oklahoma City, OK 73154-0496				
10)	Work Order: The work order for the manner of plugging this	s well is as follows:				
	See Attached She	eet				
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.						
Wo	ork Order approved by Inspector Rolling &	Date 04/27/15				

06/26/2015

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804133 P&A Procedure

NOTE: Well has two 3" packers (anchor packer at 1998' and seed bag packer at 1763').

- 1) Prepare road and location, MIRU service rig
- 2) Run in hole to check TD (approximately 2200'). (NOTE: There is a bailer lost in hole between 2200' and 2280'.)
- 3) Attempt to pull 3" and packers
 - A) If successful
 - a) Run W.S. to 2200', spot gel
 - b) Spot 100' cement plug 2200'-2100'
 - c) Proceed to step 4
 - B) If unsuccessful
 - a) Run W.S. to 2200', spot gel
 - b) Spot 150' cement plug 2200'-2050', pull W.S.
 - c) Cut 3" at free-point (approximately 1745') and pull
 - d) Proceed to step 4
- 4) Pull or run W.S. to 1745', spot gel
- 5) Spot 100' cement plug 1745'-1645', pull W.S. to 1590'
- 6) Spot 100' cement plug 1590'-1490', pull W.S. (NOTE: If 3 ½" cut is higher, plugs in 5 & 6 may be combined to make one long plug.)
- 7) Run in hole with tools to check top of plug. If TOC is below 1525' then reset plug.
- 8) Cut 6 5/8" at free-point (approximately 930') and pull
- 9) Run W.S. to 930', spot gel
- 10) Spot 150' cement plug 930'-780', pull W.S.
- 11) Attempt to pull 8 1/4"
 - A) If successful or if 8 1/4" is not present
 - a) Run W.S. to 330', spot gel
 - b) Spot 100' cement plug 330'-230'
 - c) Proceed to step 12
 - B) If unsuccessful
 - a) Run W.S. to 330', spot gel
 - b) Spot 100' cement plug 330'-230', pull W.S.
 - c) Cut 8 1/4" at free-point (approximately 190') and pull
 - d) Proceed to step 12

12) Pull or run W.S. to 190', spot gel

13) Spot 190' cement plug 190' - surface

- 14) Pull W.S. and top off with cement
- 15) Erect monument and reclaim as prescribed by law

OK ROT 15 04/21/15

06/26/2015

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UNITED FUEL GAS COMPANY

MAP SQUARE

30362 SERIAL WELL NO. 4133 LEASE NO... March 16,1927-RECORD OF WELL No. 1 CASING AND TUBING ткат эдуфактанотт F. E. May 6128 DELITING LEFT IN 13 of Water in . 2 .inch 10ths. - of Merc. ininch 10ths. 176,000 Cu. ft. Farm of L.L.A. Acres in Duval 16 District Lincoln County 13 Field, State of W.Va. 10 TEST AFTER SHOT 8 1/4 257 257 Rig Coanmenced 1540 193 6 5/8 1540 Rig Completed 193 5 3/16 Rock Pressure 1/15/ Sept. 17, 1914 Drilling Commenced 193 4 7/8 Drilling Completed Oct. 27, 1914 Date Shot 10-28-1914 Drilling to cost per foot 3 2288 Size of Torpedo 90 qts. Contractor is: Wayland Oil & Gas Co. Oil Flowed bbls. 1st 24 hrs. Oil Pumped bbls, 1st 24 hrs. SHUT IN DateTubing or Casing Driller's Name Well purchased from the U.D.N.G.Cd.3 Well abandoned and Size of Packer 3x6-5/8 by the U.F.G.Co. Jan. 1, 1930. Plugged 193 ... Kind of Packer inchor int st 19991 1st Perf. Set..... from 2nd Peri. Set _feem__

DRILLER'S RECORD Foreign "ell No.3267

FORMATION	TOP	воттом	THICKNESS	REMARKS
Red Hock and Slate		150	150	Used 1-3%6-5/8" soud bag macker.
Sand	150	. 245	95	Fell repair d, pocket drilled and
Slate Sand	245 275	275 480	30 205	retubed with 3" March 1927.
Slate & Shells	480	600	120	
Sand	600	840	240	
Lime Shells	840	920	· 80	
Salt Sand	920	1500	- 580	
Slate	1500	1505	5	
Little Lime	1505	1535	٥ږ	·
Pencil Cave	1535	1538	3	·
Big Lime	1538	1725	187	
Big Injun	1725	1770	45	
Slate and Shells	1770	1990	220	
Slate	1990	2196	206	
Brown Shale	2196	2211	15	
Berea Sand	2211	2229	18	
Cotal Depth		2280		
	i		i	Test of well July 1924, 395,000 cu.rt.
			1	Rock pressure 225
•		ļ		·
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UEL GAS COMPANY WWW 804133 PAP API 47-043-0194 Serial Well No 4/ 33 Lease No. 1-40 CASING AND TUBING TEST BEFORE SHOT RECORD OF WELL No. Lincoln Land Ass'n Farm of Used in Drilling Left in Well Size Acres of Water in. Duval District 16 10ths Lincoln County 13 Volume. Field, State of W. Va. 10 TEST AFTER SHOT 257 81-4 of Water in. Rig Commenced 1540 192 1540 6 5-8 10ths Rig Completed 192 Volume. 5 3-16 Drilling Commenced September 17, 191492 47-8 Rock pressure Drilling Completed October 27, 1914 192 Date shot 10-28-14 Drilling to cost per foot 3 Size of Torpedo 90 qt. Contractor is: Wayland Oin & Gas Co.. 2_2 2130 Oil Flowed.....bbls. 1st 24 hrs. Address: Tango, W. Va. SHUT IN Oil Pumped.....bbls. 1st 24 hrs Date.... Tubing or Casing Drillers' Names C. M. Means ...2...in Well abandoned and W. Williamson X 6-5/8 Plugged.... Size of Packer 2 Kind of Packer..... 1st Perf. Set.....from... 2nd Perf. Set.....from..... DRILLER'S RECORD Formation Top Bottom Thickness Remarks Red Rock & Slate 0 150 **150** Sand & Elate 150 460 38**0**€ Hater at 165 and 300. Slate & Shells 480 600 120 Sand 600 840 240 Lime Shells 840 920 80 Water in Calt Sand at 930' Salt Sand 920 1500 580 Slate 1500 1505 5 Little Lime 1505 1535 **3**0 Pencil Cave 1535 1538 3 Big Lime 1538 1725 187 Big Injun 1725 1770 45 Slate & Shells

1770

1990

2196

2211

Slate

Brown Shale

Berea Sand

Depth

1990

2196

2211

2229

2229

220

206

15

18

9-27-20 R. P. 220 Volume 680241

Small show of gas in Berea Sand

WW4-A	
Revised	
2/01	

1) Date: 4/17/2015 2) Operator's Well No. 804133 P&A 3) API Well No. 47-043-01943

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 Owi	ner(s) to be served:	LOFAFFL	CATION TO LE	5) Coal Operato				
	(a) Name	Treassa F. Cecil			(a) Name	None			
	Address	P.O. Box 183		_ /					
		Griffithsville, WV 25	521	_/	Coal Owner(s) with Declaration			
				_	(b) Name	Pocahontas Land Corporation			
					Address	800 Princeton Avenue			
	(b) Name	Deloris Lovejoy				P.O. Box 1517			
	Address	1 First American Wa	v	- /		Bluefield, WV 24701	-		
		Westlake, TX 76262	<u> </u>	- /-			-		
				•	Name	Chesapeake Applachla, L.L.C.			
		•		<u> </u>	Address	Attention: Fred Jones	/		
	(c) Name	Lowel & Regeana Bia	as			P.O. Box 6070	-		
	Address	5488 Straight Fork		- /		Charleston, WV 25362-0070	-		
	, 1001000	Griffithsville, WV 25	521	-			•		
		Offinitiovine, TVV 23	JZ 1	<u>-</u>	Name				
				-			-		
٥١		D 1 1 T 1 1 0			Address		-		
6)	Inspector	Ralph Triplett		-	0 11	10 B 1 - 0			
	Address	5539 McClellan High		5.		e with Declaration			
		Branchland, WV 255	06	_	(c) Name	None	_		
				_	Address				
	Telephone	304-389-0350		42					
							=		
то	THE PERSO	NS NAMED ABOVE	: You sho	uld have receive	ed this Form and	the following documents:			
	(1) The applie	ation to Plug and Abandon	a Mall on Ea	rm MMM 4B which	sals out the parties in	volved in the work and			
				CANAL CONTROL DESIGN CONTROL CONTROL	sets out the parties in	volved in the work and			
		he well its and the pluggin							
	(2) The plat (s	(2) The plat (surveyor's map) showing the well location on Form WW-6.							
	The reason you	u received these documen	ts is that you	have rights regardi	ng the application whi	ch are summarized in the			
		the reverses side. Howev		The same of the sa					
			2			and the property of the control of t			
						proposes to file or has filed the			
			ā			with the Chief of the Office of			
	Oil and Gas, W	/est Virginia Department o	f Environmen	tal Protection, with	respect to the well at	the location described on the			
		•				lication, and the plat have been			
	mailed by regis	tered or certified mail or d	elivered by ha	and to the person(s) named above (or by	publication in certain			
	circumstances)	on or before the day of m	ailing or deliv	ery to the Chief.					
	Cararara	Carrenonnesses		Well Operator:	Chesapeake Appala	achia I.I.C.	-		
	GISTO	Official Seal Notary Public State of West Virginia		By:		ita	-		
	18 B. S. S.	Phyllis A. Copley		Its:	Completion Superin		-		
		and the second s				Rendent	-		
		Williard Circle Hurricane, WV 25526) My Commission Expires		Address:	P.O. Box 18496	70454 0400	2		
	3	September 16, 2018			Oklahoma City, OK	73154-0496	-		
	mm	mmmm		Telephone:	405-935-4073		-		
			14						
Subs	scribed and swo	rn before me this ///	day of	April	the year of	2015			
			Thurle	5a. ('Sal	les N	lotary Public			
Av C	Commission Exp	ires	Senton	nber 16, 2018		RECEIVED			
.iy c	zaminiaatori exp		Septen	1001 10, 2010		Office of Oil and G	-		
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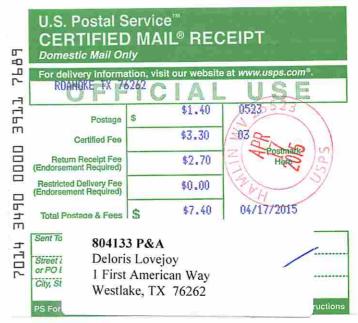
06/26/2015

WV Department of Environmental Protection











Office of Oil and Gas

APR 2 2 2015

WV Department of Environmental Protection Form WW-9 Rev. 02/01

API Number	47-043-01943		
Operator's Well No.	804133 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 49	4477557			
Watershed	Middle Fo	rk of Mud River		Quadrangle _	Hager, W	V 7.5'		
Elevation780'		County	Lincoln	_ Dis	strict	Duval		
Description of anticipa	ated Pit Waste:	Plugging Retu	ırns/Cement	10:11				
Will a synthetic liner b	e used in the pit?	Yes						
Proposed Disposal M	X Land Ap Undergre Reuse (a	plication ound Injection (I at API Number_ Disposal (Supply		or disposal locatio)))			
- - - -	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 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								
Company Official (Tyr	oed Name)	Robert E. Sch	hindler	A A A A A A A A A A A A A A A A A A A				
Company Official Title)	Completions S	Superintender	t				
Subscribed and sworr	n before me this	17 th day of Phyllis (April a. Coplu			ry Public.		
My Commission Expir	es <u>Septer</u>	nber 16, 2018		Pfi	ficial Soal Notary Publica State of West Virginia VIIIS A. Copt and Circle Hurricane, WV by Commission Expirea September 16, 2018	ey } 125525 }		

Attachment #1

API #: 47-043-01943 Operator's Well No. 804133 P&A

LEGEND					
Property Boundary	Diversion (2:21/21/11/11/11/11/11/11/11/11/11/11/11/1				
Rond = = = = = = = = = = = = = = = = = = =	Spring O				
Existing Fence — X — X — X —	Wet Spot				
Planned Fence / / /	Drain Pipe with size in inches @				
Stream 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	d1.0 Prevegetation pH6.1				
Lime 3	Tons/acre or to correct to pH6.5				
Fertilizer (10-20-20 or equivalent) 1/3 TON	N lbs/acre (500 lbs minimum)				
Mulch Hay 2 Tons/acre					
Seed Mixtures					
Area I	Area II				
Seed Type Ibs/acre	Seed Type	lbs/acre			
CHESAPEAKE CONTRACTOR'S MIX 40	ORCHARD GRASS	15			
ALSIKE CLOVER 5 ANNUAL RYE 15	ALSIKE CLOVER	5			
7.11.11.27.12.11.12					
Attach:					
Drawing(s) of road, location, pit and proposed area for	r land application.				
Photocopied section of involved 7.5' topographic sheet.					
Plan Approved by: Rakol D. Trupuell					
Title: District Inspector					
Date: Ospril 27, 2015					

06/26/2015

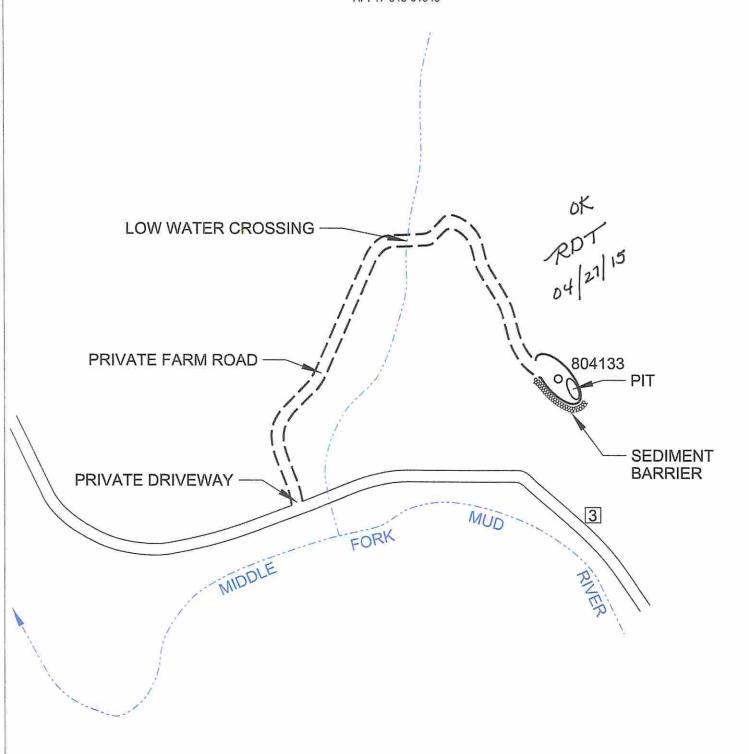
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4301943P

CHESAPEAKE APPALACHIA, L.L.C.

RECLAMATION DIAGRAM WELL LOCATION 804133

API 47-043-01943



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.

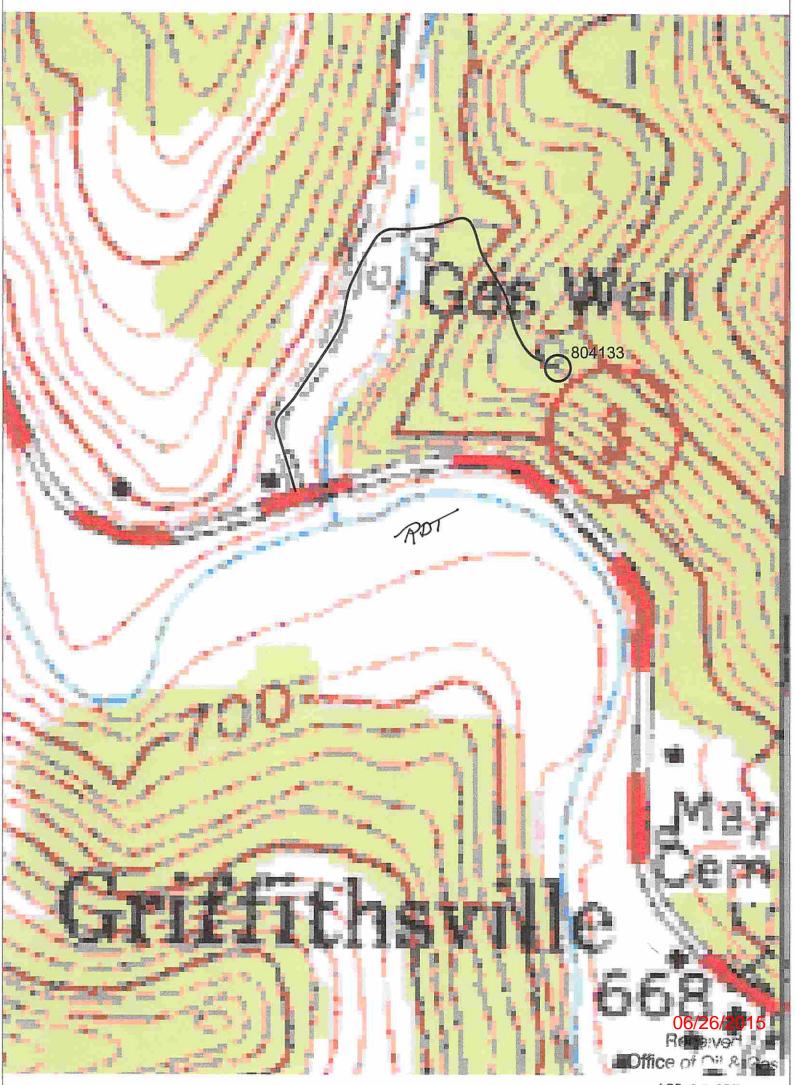
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CHESAPEAKE APPALACHIA, L.L.C.

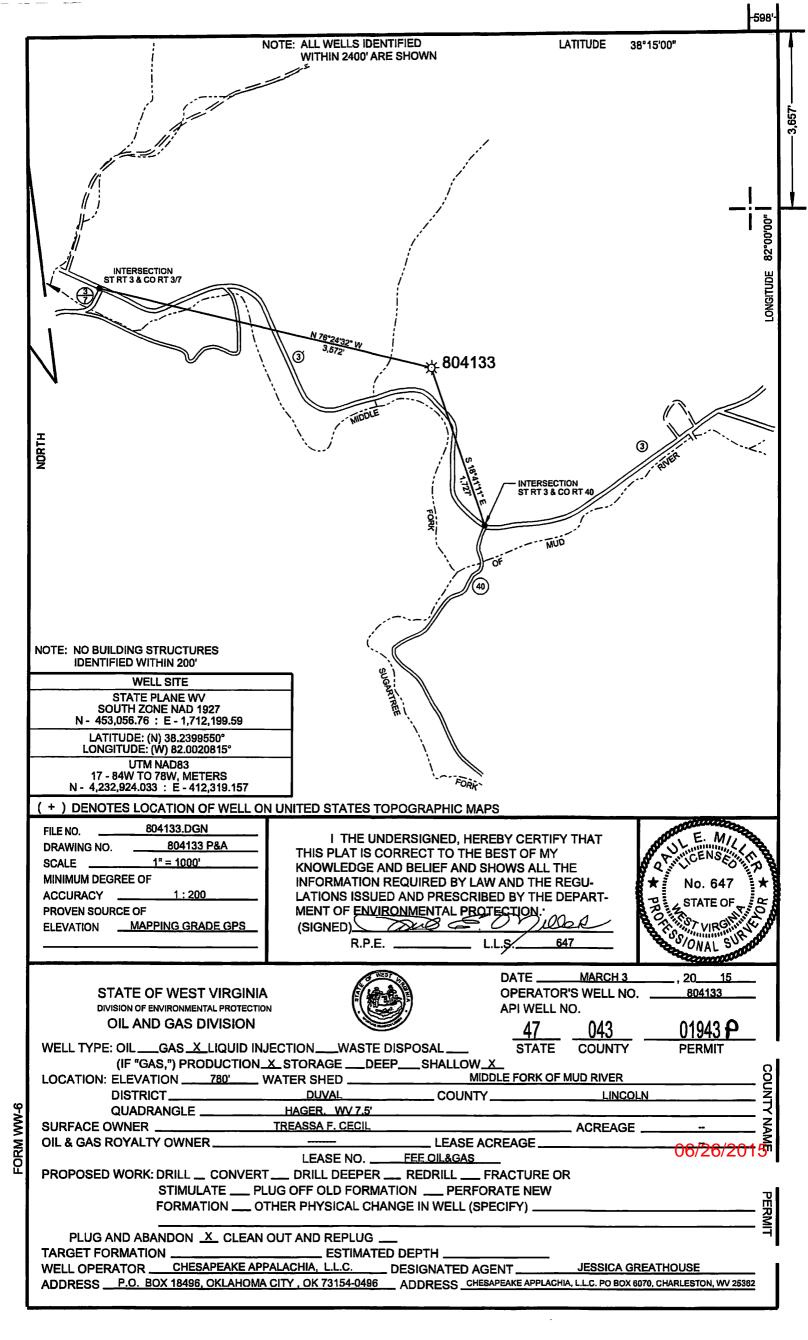
TOPOGRAPHICAL MAP OF ACCESS AND WELL LOCATION 804133

API 47-043-01943



APR 29 2015

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



١	Operator:	CHESAPEAKE APPALACHIA, L.L.C.	Atlatit :- A	Order *
	API:	4301943	* Well is on AN Agreed	
	WELL No:	4133		
	Reviewed by:	9. NM Date: 6/18/15		
	15 Day End o	f Comment: 04 27 15		

CHECKLIST FOR FILING A PERMIT

		Plugging	CK # 5254205
	WW-4B		CK ± 5254705 \$/00°
	Inspector signature on WW-4B		W 18
/	Completion / Well Records of Previous W	ork	
	WW-4A (Notarized)		
1	Certified Mail Receipts, Waivers, or Affid	avits of Personal Service	
	Surface Owner Waiver		
	Coal Owner / Lessee /Operator Waiver		
-	WW-9 (Page 1) (Notarized)		
V	Inspector Signature on WW-9 (Optional)		
1	Topographic Map of location of well		
	WW-7		
	OR		
	Mylar Plat (Surface owner on plat matche	s WW-4A)	
V	Bond		
-	Company is Registered with the SOS		
V	Worker's Compensation / Unemployment	Insurance account is OK	
	\$100.00 check (\$0.00 if no pit)		