

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Wednesday, June 26, 2019
WELL WORK PLUGGING PERMIT
Horizontal Plugging

BRC OPERATING COMPANY, LLC 200 CRESCENT COURT, SUITE 1900

DALLAS, TX 75201

Re: Permit approv

Permit approval for MWV RUPERT 4H

47-067-00943-00-00

This well work permit 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 any additional specific 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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin

Chief

Operator's Well Number: MWV RUPERT 4H

Farm Name: WEYERHAEUSER COMPANY

U.S. WELL NUMBER: 47-067-00943-00-00

Horizontal Plugging Date Issued: 6/26/2019

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.

WW-4B Rev. 2/01

1) Date February 20,	20 19
2)Operator's	
Well No. MWV Rupert 4H	20010
3) API Well No. 47-67	- 00943

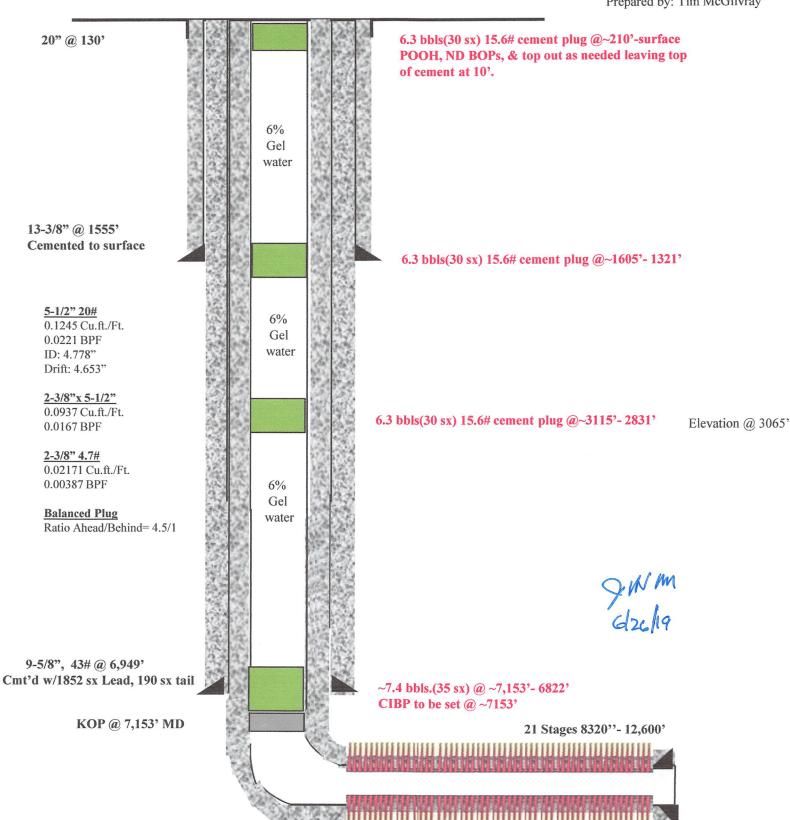
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

APPLICATION FOR A PERM	IT TO PLUG AND ABANDON
4) Well Type: Oil/ Gas X/ Liquid (If "Gas, Production or Und	erground scorage
5) Location: Elevation 3065 District Kentucky	Watershed Staff Branch County Nicholas Quadrangle Richwood 7.5
6) Well Operator Address Address BRC Operating Company, LLC 200 Crescent Court, Suite 1900 Dallas, TX 75201	7) Designated Agent Charles Brightman Address 286 Sunday Rd. Hico, WV 25854
8) Oil and Gas Inspector to be notified Name Jeremy James Address P.O. Box 36 Clendenin, WV 25045	9) Plugging Contractor Name Halliburton Address 4999 East Pointe Dr. Zanesville, OH 43701
See attached PROPOSED WELLBORG	
	RECEIVED Office of Oil and Gas APR 10.2019 WW Department of Environmental Protection oil and gas inspector 24 hours before permitted
Notification must be given to the distribution work can commence. Work order approved by inspector	Date 3-29-19

47-067-00943P

BRC Operating Company, LLC MWV Rupert #4H API No. 47-067-00943 **Proposed Wellbore Schematic**

Prepared by: Tim McGilvray



5-1/2" 20# P-110 @ 12,702', Cemented w/1684 sx Lead, 1487 sx Tail TOC at surface, PBTD: 12,630'(MD), TD: 12,702'. TVD: 7725'

MWV Rupert 4H

& TOP OUT GRAVING TOC @ 10'

5-1/2" 20# P110 production casing set at 12,702' and cemented to surface/topped off Shallowest perforation is @ 8,320 MIRU workover rig and BOP Perform BOP function test RIH with wire line and remove tbg plugs @ 3,820 & 4,020' Rotate tubing to unset Baker packer set @ 7,894' Fill casing with 6% KCl mud. GEL. POOH and lay down 2-3/8" 4.7# L80 tubing, packer, GLM RIH with wire line and set CIBP @ 6,960' 7 153' TIH with 2-7/8" workstring open ended to 6960 7 (53 M&P 8.9 bbl Class A cement @ 15.6 ppg
Set 1st plug from 6960 to 6560 7153' - 6822' Add 100F1 Cement plug @ 3,100-3,000 (see 1944) Displace with 6% KCl mud GEL, POOH 3 stands above 6560 and WOC TIH and tag cement. ADD CEMENT IF NECESSARY. M&P 8.9 bbl Class A cement @ 15.6 ppg Set 2nd balanced plug from 3115' - 2831'. Displace with 6% KCl mud. POOH 3 stands above 1,165 3115'. WOC. TIH and tag cement. ADD CEMENT IF NEEDLA. Set 3rd plug from 1 16051 - 13211 WITH 6.3 BAL, 15.6 th CEMENT PLUG Cut production, intermediate and surface casing 2' below surface Weld cap with API number and set monument. WHAT SET SURFACE PLUG FROM (210' TO SURFACE. POOH. ND BOP'S

RECEIVED
Office of Oil and Gas

APR 1 0 2019

WV Department of Environmental Protection

WR-35 Rev (9-11)

State of West Virginia Department of Environmental Protection

DATE: 1/22/13 REV. 11/12/14 API#: 47.67.00943

Office Well Operator	of Oil and's Report o		Work	MI.	47-67-00943	on opposite the date of
Farm name: MoadWestvaco Corp.	Operator	Well No.	: MWV Rup	pert 4H	alli da	
LOCATION: Elevation: 3,065	Quadrang	le: Richw	ood		***************************************	
District: Kentucky	County: N	licholas				
Latitude: 650 Feet South of 38 Deg.	12	Min30	Se	C.	vandonda	
Longitude 9690 Feet West of 80 Deg.	32	Min30	Se	c.		
Company: BRC Operating Company, LLC		······		and a first second seco		•
Address: 200 Crescent Court, Suite 200	Casing & Tubing		ed in lling	Left in well	Cement fill up Cu. Ft.	
Dallas, TX 75201	20"		130'	130	180 Tail	
Agent: Marc A. Monteleone	13 3/8	"	1,555	1,555'	662 Lead/213 Tail	
Inspector: Ed Gainer	9 5/8"	· .	6,949'	6,949'	1,852 Lead/190 Tail	[
Date Permit Issued: 7/21/10	5 1/2"		2,702'	12,702	1,684 Lend/1,487 Toil	
Date Well Work Commenced: 2/28/11						
Date Well Work Completed: 5/25/12						
Verbal Plugging:						
Date Permission granted on:						
Rotary Cable Rig V						
Total Vertical Depth (ft): 7,743						
Total Measured Depth (ft): 12,702						
Fresh Water Depth (ft.): 182						
Salt Water Depth (ft.):						
Is coal being mined in area (N/Y)? N						
Coal Depths (ft.):	-1-1		***************************************		4	
Void(s) encountered (N/Y) Depth(s) N						
OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay z Gas: Initial open flow 2,718 MCF/d Oil: Initial open flow Final open flow 1.300 MCF/d Final open flow Time of open flow between initial and final tests 72 Static rock Pressure 3,100 psig (surface pressure) aft Second producing formation Pay zon Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow	one depth (owHo er 36 F e depth (ft)	ft) ^{7.050 - 7} Bbl/d Bbl/d burs Hours		lata on separate sh	Off	RECEIVED Gas fice of Oil and Gas APR 1 0 2019
Time of open flow between initial and final tests	Ho	urs				nenartment of
Static rock Pressurepsig (surface pressure) after	er[lours			c	APR I V W Department of W Department Projection nvironmental Projection
I certify under penalty of law that I have personally examined a all the attachments and that, based on my inquiry of those individual that the information is true, accurate, and complete.					on this documen	t and

Were core sample	es taken? YesN	oX	Were cutting	ngs caught during drillin	g? Yes_X_No
	Mechanical or Geophysic CCL-Casing Collar Locator	al logs recorded on thi	s well? If yes,	please list	
FRACTURING DETAILED G	OR STIMULATING,	PHYSICAL CHANG D OF THE TOPS	E, ETC. 2). T AND BOTTO	THE WELL LOG WHI OMS OF ALL FORM	DRATED INTERVALS, ICH IS A SYSTEMATIC IATIONS, INCLUDING
Perforated Interv	als, Fracturing, or Stimula	ating:			
Perforations:	12,600' - 8,320'	525 Holes			
respectation and otherwise verificate structural trice					
**************************************		***************************************			
Plug Back Detail	s Including Plug Type and	d Depth(s):			
Formations Enco	ountered:	Тор Де	oth		Bottom Depth

Geologic Age	<u>Formation</u>	Lithology	Top Depth	Bottom Depth
Mississippian	Greenbrier	Limestone	2490	2543
Mississippian		Shale	2543	2858
Mississippian	Injun	Sandstone	2858	2875
Mississippian		Shale	2875	2884
Mississippian	Squaw	Sandstone	2884	2890
Mississippian		Shale	2890	2967
Mississippian	Weir	Sandstone	2967	2975
Mississippian		Shale	2975	3433
Mississippian	Berea	Sandstone	3433	3433 3455 RECEIVED Office of Oil and Gas 3523
Mississippian		. Shale	3455	3523 APR 1 0 2019
Devonian	Gordon	Sandstone	3523	3548 APR 10 4
Devonian		Siltstone & Shale	3548	4493 WV Departmental Protection
Devonian	Huron	Shale	4493	3548 APR 1 0 2 4493 WV Department of Environmental Protection 7382
Devonian	Rhinestreet	Organic Shale	7382	7620
Devonian	Marcellus	Organic Shale	7620	TD

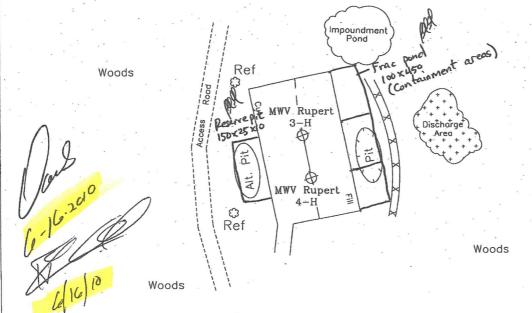
Form W-9

BRC OPERATING CO., LLC. Page 7 of 7 MWV RUPERT 4-H

Install Minimum 12" Culvert

Detail Sketch for MWV Rupert 4-H

Woods

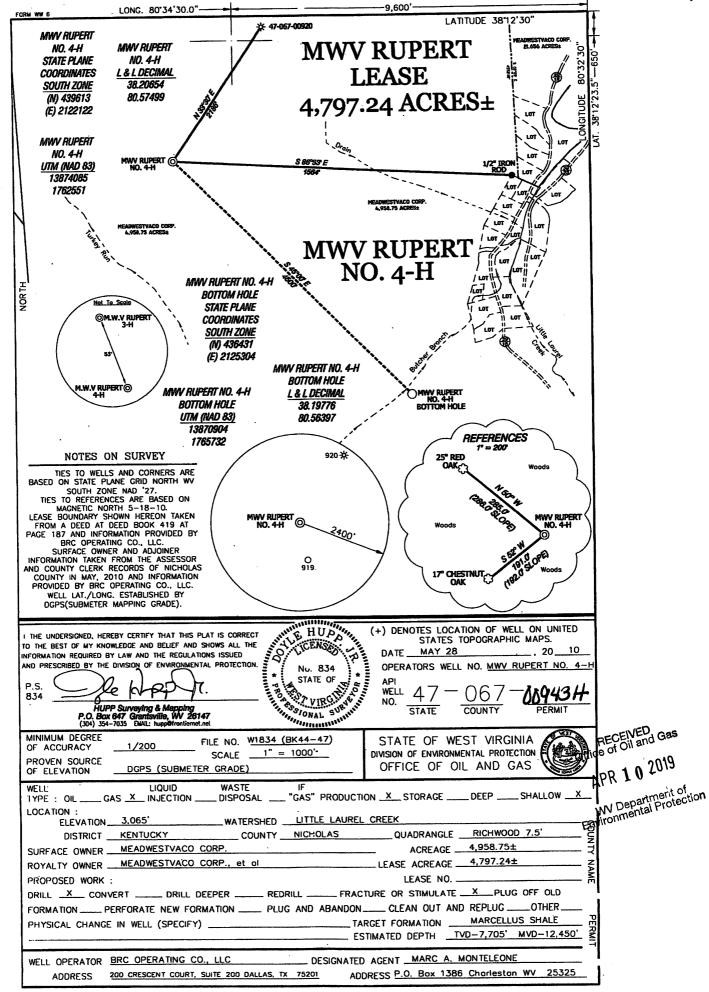


HUPP Surveying & Mapping	Drafted BY:	Date Drafted:	Job Number:
P.O. BOX 647 GRANTSVILLE, WV 26147 PH:(304)354-7035 E-MAIL: hupp@frontiernet.net	DB	05/28/10	W20081834

Office of Oil and Gas

APR 1 0.2019

W Department of Environmental Protection



WW-4A Revised 6-07

1)	Date:	February 20, 2019
2)	Operator's W	Vell Number
MWV	Rupert 4H	

3) API Well No.: 47 -

- 00943

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

(a) Name	ner(s) to be served:	5) (a) Coal Operato	r	
` '	Weyerhaeuser Company	Name	N/A	
Address	220 Occidenetal Ave South	Address		
	Seattle, WA 98104			
(b) Name			wner(s) with Declaration	
Address		Name	N/A	
		Address		
(c) Name		Name		1
Address		Address		
6) Inspector	Jeremy James	(c) Coal I (ssee with Declaration	
Address	P.O. Box 36	Name	N/A	
Address	Clendenin, WV 25045	Address	1471	
Telephone	304-951-2596	Audress		
relephone	304-331-2330			
(2) The	its and the plugging work order; and plat (surveyor's map) showing the well n you received these documents is that you you are not required to take any action at all		cation which are summarized in the ins	tructions on the reverses side.
(2) The The reason However, Take notic accompan Protection the Applic	plat (surveyor's map) showing the well	have rights regarding the appl nia Code, the undersigned wel ndon a well with the Chief of t cribed on the attached Applica gistered or certified mail or d	operator proposes to file or has filed the Office of Oil and Gas, West Virginia ion and depicted on the attached Form	is Notice and Application and Department of Environmental WW-6. Copies of this Notice,
(2) The The reason However, Take notic accompan Protection the Applic	plat (surveyor's map) showing the well n you received these documents is that you you are not required to take any action at all. the that under Chapter 22-6 of the West Virgit ying documents for a permit to plug and abard, with respect to the well at the location description, and the plat have been mailed by recumstances) on or before the day of mailing of	have rights regarding the appl nia Code, the undersigned wel ndon a well with the Chief of t cribed on the attached Applica gistered or certified mail or d or delivery to the Chief.	operator proposes to file or has filed the Office of Oil and Gas, West Virginia ion and depicted on the attached Form valivered by hand to the person(s) name	is Notice and Application and Department of Environmental WW-6. Copies of this Notice,
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Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

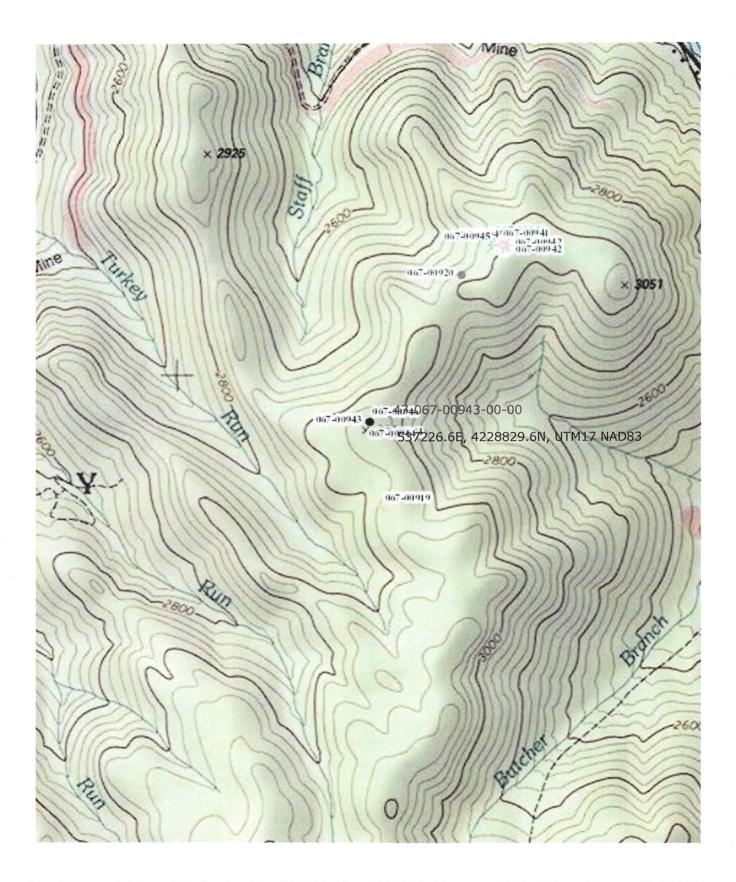
WW-9 (5/16)

API Number 47	67	_ 00943	_
Operator's Well		MWV Rupert 4H	_

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

FLUIDS/ CUTTINGS DISPOSAL	
Operator Name_BRC Operating Company, LLC	OP Code
Staff Branch	Ouadrangle Richwood 7.5
Do you anticipate using more than 5,000 bbls of water to complete the	ne proposed well work? Yes No No
If so, please describe anticipated pit waste: N/A	If so, what ml.?
Will a synthetic liner be used in the pit? Yes No	If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application (if selected provide a co	ompleted form WW-9-GPP)
Underground Injection (UIC Permit Nur Reuse (at API Number	nber)
Off Site Disposal (Supply form WW-9 for	or disposal location)
Other (Explain	
Will closed loop systembe used? If so, describe: N/A	I NA
Drilling medium anticipated for this well (vertical and horizontal)?	Air, freshwater, oil based, etc.
Drill cuttings disposal method? Leave in pit, landfill, removed offs	ite, etc. N/A
-If left in pit and plan to solidify what medium will be use	d? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? N/A	
in a constant of the constant	of any load of drill cuttings or associated waste rejected at any
West Virginia solid waste facility. The notice shall be provided with	nin 24 hours of rejection and the permanent
where it was properly disposed.	
on April 1, 2016, by the Office of Oil and Gas of the West Virginian provisions of the permit are enforceable by law. Violations of any or regulation can lead to enforcement action. I certify under penalty of law that I have personally exapplication form and all attachments thereto and that, based on my the information, I believe that the information is true, accurate, a submitting false information, including the possibility of fine or in Company Official Signature Company Official Signature Company Official (Typed Name)	amined and am familiar with the information submitted on this inquiry of those individuals immediately responsible for o btaining and complete. I am aware that there are significant penalties for a prisonment. RECEIVED Office of Oil and Gas
Company Official Title DESILENATED ALEUT	W Department of W Department of Environmental Protection
and a	0 1
Subscribed and sworn before me this day of	ypul , 20/1
(Kulle to	Table 1
(-29-2021	ANGELEE HARADER My Notary ID # 126914507
My commission expires	Expires May 29, 2021



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WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

WELL LO	CATION FURMI: GIS
_{API:} 47-6700943	WELL NO.: MWV Rupert 4H
FARM NAME:	
RESPONSIBLE PARTY NAME:	BRC Operating Company, LLC
COUNTY: Nicholas	bistrict: Kentucky
QUADRANGLE: Richwood	7.5
SURFACE OWNER: Weyerh	
ROYALTY OWNER: Westro	ck Company
UTM GPS NORTHING: 42288	
	.57 GPS ELEVATION: 3065'
preparing a new well location plat for above well. The Office of Oil and Gathe following requirements:	meters
· · ·	me Differential X
Mapping Grade GPS: Post	Processed Differential
Rea	-Time Differential
I the undersigned, hereby certify this	pography map showing the well location. data is correct to the best of my knowledge and required by law and the regulations issued and as.
Signature	Title Date