

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

Tuesday, May 28, 2019 WELL WORK PLUGGING PERMIT Horizontal Plugging

BRC OPERATING COMPANY, LLC 200 CRESCENT COURT, SUITE 1900

DALLAS, TX 75201

Permit approval for MWV RUPERT 2H Re: 47-067-00942-00-00

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 2H

Farm Name:

WEYERHAEUSER COMPAN

U.S. WELL NUMBER: 47-067-00942-00-00

Horizontal Plugging

Date Issued: 5/28/2019

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. 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.

47-067 - 009421+ 05/31/2019 ruary 20 , 20 19

WW-4B Rev. 2/01 1) Date February 20 , 20 19 2) Operator's Well No. MWV Rupert 2H 3) API Well No. 47-67 -000942

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

4.4	Well Type: Oil / Gas X / Liquid	Liniantian / Wasta disposal /
41		derground storage) Deep/ Shallow X
5)	Location: Elevation 3012'	Watershed Staff Branch
5)	District Kentucky	County Nicholas Quadrangle Richwood 7.5
	BBC Operating Company LLC	Charles Brightman
6)	Well Operator BRC Operating Company, LLC Address 200 Crescent Court, Suite 1900	7) Designated Agent Charles Brightman Address 286 Sunday Rd
	Dallas, TX 75201	Hico, WV 25854
8)	Oil and Gas Inspector to be notified	9) Plugging Contractor
	Name Jeremy James	Name Halliburton
	Address P.O. Box 36	Address 4999 East Pointe Dr.
	Clendenin, WV 25045	Zanesville, OH 43701
	Work Order: The work order for the mann	ner of plugging this well is as follows:
		Office RECEIVEL APR 10.20
Not	See attached	Office of Old and APR 1 0 20 Environmental Protection and gas inspector 24 hours before permitted

RECEIVED Office of Oil and Gas

MWV Rupert #2

4-1/2" 11.6# L80 production casing set at 7,830' and cemented

Previous plug set @ 7,830'

MIRU workover rig and BOP

Perform BOP function test

Fill casing with 69 GEL.

TIH with 2-7/8" workstring open ended to 7,830'

RU Halliburton cement unit

M&P 4.5 bbl Class A cement @ 15.6 ppg

Set 1st plug from 7,830 to 7,430'

Displace with 6% ! 654

POOH 3 stands above 7,430' and WOC

TIH and tag cement.

POOH standing up tubing. FREEPOINT & CUT 41/2 CASING

RIH with wire line to 3,500'. Shoot and cut 4-1/2" casing.

POOH laying down 4-1/2" casing.

M&P 16 bbl Class A cement @ 15.6 ppg

Set 3⁵⁰ balanced plug from 3,500 to 3,100'

POOH 3 stands above 3,100' and WOC

TIH and tag cement.

M&P 16 bbl Class A cement @ 15.6 ppg

527 4 balanced plug from 2,300 to 1,900'

POOH 3 stands above 1,900' and WOC

TIH and tag cement.

M&P 16 bbl Class A cement @ 15.6 ppg

Set final plug from 400' to surface. WOC

Cut production, intermediate and surface casing 2' below surface

Weld cap with API number and set monument.

- SEE ATTACHED MONUMENT / MARKER GUIDANCE.

WV Department of

MAY 28 2019

Environmental Protection PER JENCHY JUMES

* ADD MINIMUM 100' CLASS A CRIMENT PLUG

CASING SHOR OF 95/8" FRON 5125 - 5025"

* ADD MINIMUM 100 CLASS A CEMENT PLUG ACROSS ELEVATION FROM 3060' - 2960'

GEL => FRESH WATER W/ MINIMUM OF 6% BENTONTE

WEIGHT.

SET A MINIMUM 100' CLASS A CEMENT PLUC ACROSS ANY CASING CUT.

should contain the name, address and telephone number of the person filing the comment, the well operator's name and well number, and the approximate location of the proposed well site including district and county as indicated in the permit application. Comments may be accompanied by other pertinent documents in support of the comment. Other than as prescribed in this rule, no particular form for the comment is prescribed.

5.5. Identification Markings.

- 5.5.a. Every well shall have attached or stamped, in a permanent manner, the API identification number which consists of the state (47), county (001 through 109), and permit number. Such number shall be no less than one-half (1/2) inch in height and detectable by any interested person approaching the well. Any additional information the well operator may desire to display may be incorporated in the permanent identification plat or stamp in such a manner that it will not confuse or distort the permanent API identification number.
- 5.5.b. Except as provided below, upon the completion of the plugging and filling of any abandoned well, a permanent monument or marker consisting of a length of pipe (minimum diameter size six (6) inches) filled with concrete (or the equivalent thereof if approved by the Chief) shall be erected over the well; the marker shall extend no less than thirty (30) inches above the surface and not less than ten (10) feet below the surface and into the well, and shall be sealed with concrete for the purpose of making the marker permanent. The API well identification number which consists of the state (47), county (001 through 109), and permit number shall be attached or stamped in a permanent manner to said monument; and such numbering shall be no less than one half (1/2) inch in height and detectable by any interested person approaching the marker. The erection of the marker shall in no way interfere with the bleeder pipe from the well where such pipe is required, or the vent or other device installed pursuant to W. Va. Code § 22-6-24. Such manner shall be accurately described on Form WR-38, "Affidavit of Plugging and Filling Well" (see subsection 13.10 below) as to time and manner of plugging and filling the well, and shall be approved by the Chief as a satisfactory landmark that may be used as such in the location of adjacent wells. Two (2) permanent reference points with courses and distances from the abandoned well shall be designated and prescribed on the plat required by subdivision 5.2.d above in the form prescribed by section 9 below, accompanying Form WW-4, "Notice of Intention to Plug and Abandon a Well," if any change in the plat is necessary, accompanying Form IV-38, "Affidavit of Plugging and Filling Well" (see subsection 13.10 below).
- 5.6. Parties Responsible. All contractors and drillers, including all service companies carrying on business or doing work in oil and gas fields in West Virginia, as well as lease holders and operators generally, shall take notice of and are hereby directed to observe and apply the provisions of W. Va. Code § 22-6 and this rule; and all contractors, drillers, service companies and operators shall be held responsible for violations thereof.

5.7. Evidence of Performance.

- 5.7.a. After the completion of the work authorized to be done by any permit required by W. Va. Code § 22-6-6, the permittee shall comply with filing requirements of W. Va. Code § 22-6-22 and section 12 of this rule.
- 5.7.b. In addition to the requirements of subdivision 5.7.a, following completion of plugging a well, the permittee shall also comply with the affidavit requirements of W. Va. Code § 22-6-23 and subsection 13.10 below.

WR-35 Rev (9-11)

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	1/22/13 Rev 11/12/14	
API#:	47-67-00942	

TION: Elevation: 3,010	Quadrangle: Richwood				
District: Kenlucky					
Latitude: 13,650 Feet South of 36 Deg.	County: Nicho	Company of the last of the las			
Longitude 7,990 Feet West of 80 Deg.					
Company: BRC Operating Company, LLC					
Address: 200 Crescent Court, Suite 200	Casing & Tubing	Used in drilling	Loft in well	Cement fill up Cu, Ft.	
Dallas, TX 75201	20"		130'	180 Tail	
Agent: Marc A. Montelcone	13/ 3/8"		1,277	657 Lead/196Toll	
Inspector: Ed Gainer	9.5/8"		5,073	1.559 Lead/360 Tail	
Date Permit Issued: 5/3/2010	7 5/8" Liner		7,062	696 Tail	
Date Well Work Commenced: 10/2/10	4 1/2"		9,698'	696 Tail	
Date Well Work Completed: 10/30/12		Tubing plug	4,526		
Verbal Plugging:		Tubing plug	4,650'		
Date Permission granted on:					
Rotary Cable Rig V					
Total Vertical Depth (ft): 7,752					
Total Measured Depth (ft): 9,698					
Fresh Water Depth (ft.): 182					
Salt Water Depth (ft.):					
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.):					
Void(s) encountered (N/Y) Depth(s) N					
EN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay zo las: Initial open flow N/A MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests N/A tatic rock Pressur 2432 psig (surface pressure) after	one depth (ft) 7 ow Bb Bbl Hours er N/A Hours e depth (ft) DW Bbl Hours	560-7,760 M/d /d s J/d /d	a on separate s	Office API Environme	
under penalty of law that I have personally examined as	nd am familiar	with the inform		on this documer he information I	

Were core samples taken?	YesNo_X	Were cutting	s caught during drilling	? Yes_X No_
Were Electrical, Mechanica Genoma Ray (4,923' - 6,954') MWD	al or Geophysical logs i Gamma Rav (6,590° - 7,760°) Cr	recorded on this well? If yes, p used Hole Production Log (7,000" -9,500")	lease list Formation Mic	oro Imager (4,925' - 6,978')
DETAILED GEOLOGI	CAL RECORD OF	HE FOLLOWING: 1). DE CAL CHANGE, ETC. 2). TH THE TOPS AND BOTTON RE FROM SURFACE TO TO	E WELL LOG WHIC	
Perforated Intervals, Fractu	ring, or Stimulating:	•		
7,919' - 9,608' 255	Holes			
			tel automorphism and au	
Phys Deal Day 1. J. J.				
Plug Back Details Including	Plug Type and Depth(s):	V	
				
Formations Encountered: Surface:		Top Depth /		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	3455
Mississippian		Shale	3455	
Devonian	Gordon	Sandstone	3523	3523
Devonian		Siltstone & Shale		3548
Devonian	Huron	Shale	3548	4493
Devonian	Rhinestreet		4493	7378
Devonian	Marcellus	Organic Shale	7378	7770
Devoman	iviarcellus	Organic Shale	7770	TD

Form W-9 BRC OPERATING CO., LLC. Page 7 of 7 MWV RUPERT NO. 2-H

Install Minimum 12" Culvert

CONTRACTORS/COMPANY ARE RESPONSIBLE FOR LOCATING UTILITIES WHETHER SHOWN ON THIS PLAN OR NOT.

TEMPORARY SEED AND MUCCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUIT AND STACK ALL TIMBER ABOVE 6-DICHES AND ABOVE.

STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL.

Detail Sketch for MWV Rupert No. 2-H

Woods

Woods All Sediment Controlls To Bein place Before Dolg, Begins All Exsiting Roads to Be Maintained to Current A condition atall , Dischorge Times.

4-12-2010

Alt. Pit ☼ Ref MWV Rupert No. 1-H MWV Rupert No. 2-H Water 150 x 300 X 15

☼ Ref Woods

Water

Фії and Gas

APR 1 0 2019

WV Department of Environmental Protection

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	08/05/09	W20081834

WW-4A Revised 6-07

05/31/2019 1) Date: February 20, 2019 2) Operator's Well Number MWV Rupert 2H

3) API Well No.: 47 -

00942

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

 Surface Ow Name 	ner(s) to be served: Weyerhaeuser Company	5) (a) Coal Operator Name	N/A
Address	220 Occidental Ave South	Address	1000
11441000	Seattle, WA 98104		
(b) Name		(b) Coal Ow	vner(s) with Declaration
Address		Name Address	N/A
(c) Name Address		Name Address	
6) Inspector	Jeremy James P.O. Box 36	(c) Coal Les	ssee with Declaration
Address	Clendenin, WV 25045	Address	197
Telephone	304-951-2596	- Mudress	
(1) The well		Vell on Form WW-4B, which	eived this Form and the following documents: a sets out the parties involved in the work and describes the
The reason However,	n you received these documents is that you you are not required to take any action at all	have rights regarding the application.	cation which are summarized in the instructions on the reverses side.
Protection, the Applic	ying documents for a permit to plug and ab	andon a well with the Chief of the scribed on the attached Application egistered or certified mail or de	operator proposes to file or has filed this Notice and Application and ne Office of Oil and Gas, West Virginia Department of Environmental ion and depicted on the attached Form WW-6. Copies of this Notice, divered by hand to the person(s) named above (or by publication in
	Well Op	erator BRC Operating Comp	pany, LLC Office of PECEIVER

Subscribed and sworn before me this

ANGELEE HARADER

My Notary ID # 126914507

Expires May 29, 2021

Notary Public

Environmental Pr

My Commission Expires

By:

Its:

Address

Telephone

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.

Charles Brightman

286 Sunday Rd.

Hico, WV 25854

303-880-8121

Agent

47-067-00942H 05/31/2019

API Number 47 - 67 _ 00942 Operator's Well No. MWV Rupert 2H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name BRC Operating Company, LLC	OP Code	
Vatershed (HUC 10) Staff Branch	Quadrangle Richwood 7.5	
Do you anticipate using more than 5,000 bbls of water to	complete the proposed well work? Yes	No 🗸
Will a pit be used? Yes No		-
If so, please describe anticipated pit waste: N/A	4	
Will a synthetic liner be used in the pit? Yes	No ✓ If so, what ml.?	
Proposed Disposal Method For Treated Pit Wast	es:	
Land Application (if selected p	rovide a completed form WW-9-GPP)	
Underground Injection (UIC)	Permit Number	
Reuse (at API Number		
	n WW-9 for disposal location)	
Other (Explain_		
Vill closed loop systembe used? If so, describe: N/A		
orilling medium anticipated for this well (vertical and ho	rizontal)? Air, freshwater, oil based, etc. N/A	
-If oil based, what type? Synthetic, petroleum, e	tc. N/A	
dditives to be used in drilling medium? N/A		
rill cuttings disposal method? Leave in pit, landfill, rem	noved offsite, etc. N/A	
-If left in pit and plan to solidify what medium w	vill be used? (cement, lime, sawdust) N/A	Office of Cil and
-Landfill or offsite name/permit number? N/A		of Oil and
	10 0 1 1 01 21	APR 1 0 201
Permittee shall provide written notice to the Office of Oil West Virginia solid waste facility. The notice shall be prowhere it was properly disposed.	and Cas of any load of drill cuttings or associated vivided within 24 hours of rejection and the permittee	shalfalso displose
where it was properly disposed.	vided within 24 hours of rejection and the permittee	offinental Prof
on April 1, 2016, by the Office of Oil and Gas of the We provisions of the permit are enforceable by law. Violation or regulation can lead to enforcement action.	on on any term or condition of the general permit and conally examined and am familiar with the informated on my inquiry of those individuals immediately recurate, and complete. I am aware that there are seen as	n. I understand that the d/orother applicable law ation submitted on this esponsible for o btaining
Company Official Signature	men	
Company Official (Typed Name) Charles BRID		
Company Official Title DESIGNATED AGENT		
224	O 1 . 10	
Subscribed and sworn before me this 3 day	of april, , 20 19	
Uplucter	VI - 7. A	ELEE HARADER
My commission expires 5-29-2021		ary ID # 126914507 res May 29, 2021
The state of the s	EADI	ווומן בס, בעבו

47-067-0942H 05/31/2019

	Lime 5 gals = 2.	5 Tons/acre or to correct t	o pH 6.5			
	Fertilizer type	Liquid starter eq(10-20-20	0)			
Fertilizer amount 7 gals = 500			ibs/acre			
	Mulch hydro jet	& fibers =500 / EA	Cons/acre			
			Seed Mixtures			
	Т	emporary	Permanen	Permanent		
	Seed Type	lbs/acre	Seed Type	lbs/acre		
N/A			Tall Fescue Blend	250		
			43% Kentucky 31 Tall Fescue	e, 43% Red Fescue		
			7% White Clover, 7% A	Annual Rye		
				· · · · · · · · · · · · · · · · · · ·		

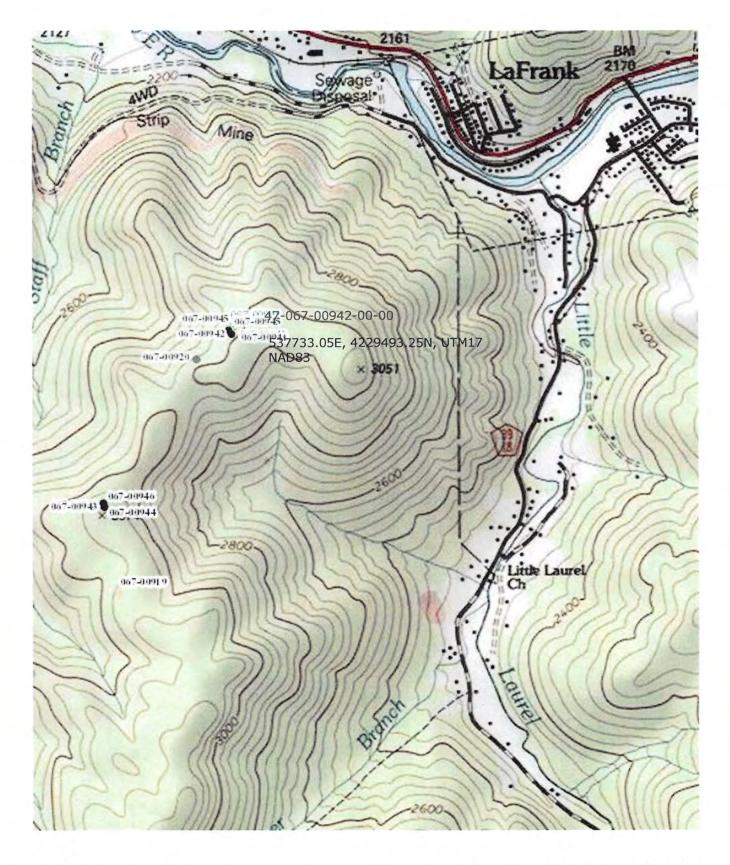
Photocopied section of involved 7.5' topographic sheet.

	47-067-009421
Plan Approved by: Jerseny Jomes Add 100- Comments: Short D Sea level	64 cement plug @ 95/22019
Comments: Short D Sealevel	
<i>'</i>	
	And the second s
	0.00 10
.5	1-29-19
Field Reviewed? () Yes () No	

Office of Oil and Gas

APR 1 0 2019

WV Department of Environmental Protection



 $http://deparcgis1/ooggis/index.html?x = 537733.05 \& y = 4229493.25 \& datum = NAD83 \& pntla... \\ \ \ 5/28/2019 = 1200 +$

BRC OPERATING CO. LLC. Page 1 of 1 MWV RUPERT NO. 2-H Proposed MWV Rupert No. 2-H HUPP Surveying & Mapping BRC OPERATING CO LLC. 4" = 2000° 200 Crescent Court Suite 200 P.O. BOX 647 GRANTSVILLER WWW TELEX

Richwood Duad

Per (304) 354-2033 E-MAILS turbater on temperature out

Dallas TX 75201

WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

WELL NO.: MWV Rupert 2H API: 47-6700942 FARM NAME: RESPONSIBLE PARTY NAME: BRC Operating Company, LLC _____bistrict: Kentucky COUNTY: Nicholas QUADRANGLE: Richwood 7.5 SURFACE OWNER: Weyerhaeuser Company ROYALTY OWNER: Westrock Company **UTM GPS NORTHING:** 4229493.25 UTM GPS EASTING: 537733.05 GPS ELEVATION: 3012' The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements: Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: 1. height above mean sea level (MSL) - meters. 2. Accuracy to Datum - 3.05 meters Data Collection Method: Survey grade GPS X _: Post Processed Differential ____ Real-Time Differential X Mapping Grade GPS ____: Post Processed Differential Real-Time Differential Letter size copy of the topography map showing the well location. I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and

DESIGNATED AGENT
Title

prescribed by the Office of Oil and Gas.