

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, June 11, 2019 WELL WORK PLUGGING PERMIT Horizontal Plugging

BRC OPERATING COMPANY, LLC 200 CRESCENT COURT, SUITE 1900

DALLAS, TX 75201

Re: Permit approval for MWV RUPERT 5H 47-067-00945-00-00

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 RUPERT 5H ERHAEUSER COMPANY 2-00945-00-00

Operator's Well Number: MWV RUPERT 5H Farm Name: WEYERHAEUSER COMPANY U.S. WELL NUMBER: 47-067-00945-00-00 Horizontal Plugging Date Issued: 6/11/2019

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.

	47-067-009451
WW-4B Rev. 2/01	1) Date February 20 2) Operator's Well No. MWV Rupert 5H 3) API Well No. 47-67 - 00045
DEPARTMENT OF ENVI	EST VIRGINIA RONMENTAL PROTECTION OIL AND GAS
APPLICATION FOR A PER	MIT TO PLUG AND ABANDON
4) Well Type: Oil/ Gas X/ Liquid (If "Gas, Production or Und	derground storage) Deep/ ShallowX
5) Location: Elevation 3025	Watershed Staff Branch
District Kentucky	County Nicholas Quadrangle Richwood 7.5
6) Well Operator 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	Name Halliburton
Address P.O. Box 36	Address 4999 East Pointe Dr.
Clendenin, WV 25045	Zanesville, OH 43701

10) Work Order: The work order for the manner of plugging this well is as follows: See attached

RECEIVED Office of Oil and Gas

APR 1 0.2019

WV Department of Environmental Protection Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

Date 3-29-19

47-067-00945P 06/14/2019

MWV Rupert 5H

5-1/2" 20# P110 production casing set at 12,200' and cemented to surface/topped off Shallowest perforation is @ 11,630' MIRU workover rig and BOP Perform BOP function test Fill casing with 6% KCl mud. GEL RIH with wire line and retrieve plugs @ 4352 and 4490 RIH with wire line and set CIBP @ 6,818' 68 50 TIH with 2-7/8" workstring open ended to 6,850' RU Halliburton cement unit M&P 8.9 bbl Class A cement @ 15.6 ppg Set 1st plug from 6810 to 6410' **G§SO** - **G4SO** Displace with 6% Kelmud GraL Add 100ft comont plus 3075-2975 (Sealevol) POOH 3 stands above 6410, and WOC TIH and tag cement. 6450 M&P 8.9 bbl Class A cement @ 15.6 ppg Set 2nd balanced plug from 1600 to 1,200' Displace with 6% KCl mud. POOH 3 stands above 900' WOC. TIH and tag cement. M&P 8.9 bbl Class A cement @ 15.6 ppg Set 3rd plug from 400' to surface. WOC Cut production, intermediate and surface casing 2' below surface PER WU STATE CODE. Weld cap with API number and set monument.

> GEL => FRESH WATER WITH A MINIMUM OF 670 BENTONITE, BY WEIGHT,

RECEIVED Office of Oil and Gas

APR 1 0.2019

WV Department of Environmental Protection

IF KICK OFF POINT IS 7130', SET CIBPAS CLOSE TO THAT DEPTH AS POSSIBLE,

gN mª Laglihi 6/11/19

A

47-067-00945P 06/14/2019

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 #: 47-67-00945

Farm name: MeadWestvaco Corp.			Operator Well No.: MWV Rupert 5H	
LOCATION: Elevation: 3,0	25'		Quadrangle: Richwood	
District: Kenlucky			County: Nicholas	
Latitude: 13.650	Feet South of 38	Deg.	15 Min. 00 Sec.	
Longitude_8.010	Feet West of 80	Deg.	³² Min. ³⁰ Sec.	

BRC Operating Company, LLC Company:

Address: 200 Crescent Court, Suite 200	Casing & Tubing	Used in drilling	Lett in well	Coment fill up Cu. Ft.
Dallas, TX 75201	20"	130'	130'	180 Tail
Agent: Marc A. Monteleone	13/3/8"	1,550'	1,550'	1,443 Tail
Inspector: Ed Gainer	:9 5/8"	6,799'	6,799'	2,706 Lead/202 Tail
Date Permit Issued: 10/7/10	5 1/2"	12,200	12,200'	1,398 Lead/1,757 Toil
Date Well Work Commenced: 6/23/11				
Date Well Work Completed: 7/29/11				
Verbal Plugging:				
Date Permission granted on:	-			
Rotary Cable Rig				
Total Vertical Depth (ft): 7,728				
Total Measured Depth (ft): 12,200				
Fresh Water Depth (ft.): 182				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? N				
Coat Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N	•			

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7.600 - 7.760

Gas: Initial open flow 0 MCF/d Oil: Initial open flow___ Bbl/d 0 Final open flow MCF/d Final open flow

Bbl/d Time of open flow between initial and final tests 72 Hours

Static rock Pressure 3.100 psig (surface pressure) after 36 Hours

Second producing formation		Pay zone dep	lh (fi)
Gas: Initial open flow	_MCF/d (Dil: Initial open flow	Bbl/d
Final open flow	MCF/d	Final open flow	Bbl/d
Time of open flow betwee	n initial a	nd final tests	Hours
Static rock Pressure	psig (su	face pressure) after	Hours

RECEIVED Office of Oil and Gas

APR 1 0 2019

WV Department of Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments 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.

Run Signature

11/12/2014 Date

Were core samples taken? Yes____No__X

Were cuttings caught during drilling? Yes X No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MWD Gamma Ray (7,043' - 12,407') MWD-Measurement While Drilling

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

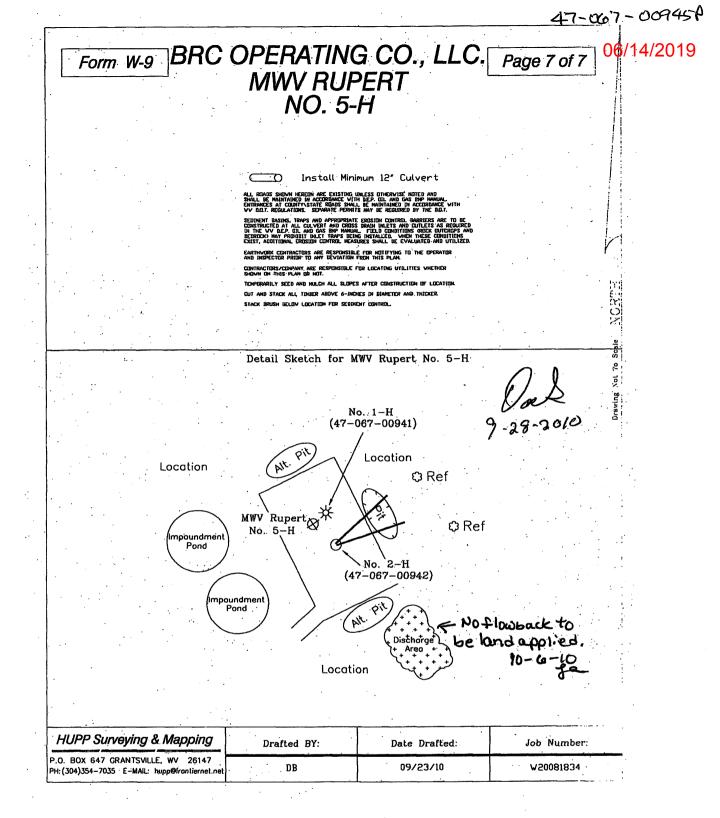
Perforated Intervals, Fracturing, or Stimulating:

Perforations - 4 sets:

12,432' - 12,292'	25 Holes
12,252' - 12,112'	25 Holes
12,072' - 11,932'	25 Holes
11,892' - 11,752'	25 Holes

Plug Back Details Including Plug Type and Depth(s):

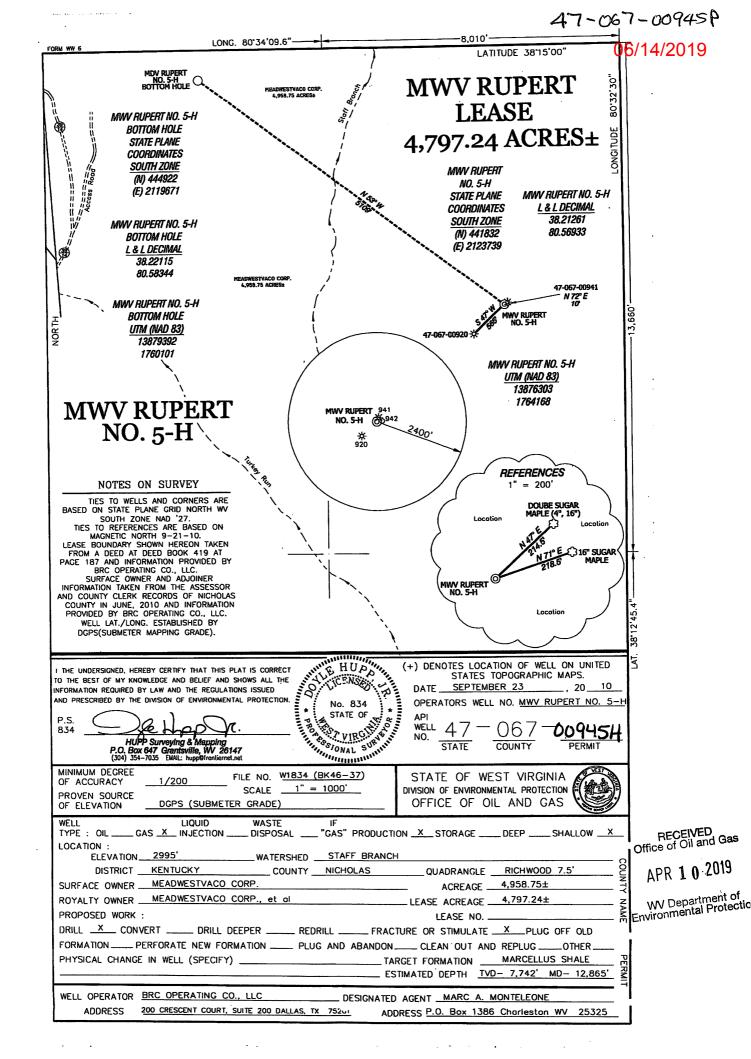
Geologic Age	Formation	Lithology	Top Depth	Bottom Dept	th
Mississippian	Greenbrier	Limestone	2490	2543	
Mississippian		Shale	2543	2858	
Mississippian	Injun	Sandstone	2858	2875	
Mississippian		Shale	2875	2884	
Mississippian	Squaw	Sandstone	2884	2890	
Mississippian		Shale	2890	2967	
Mississippian	Weir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



RECEIVED Office of Oil and Gas

APR 1 0 2019

WV Department of Environmental Protection



WW-4A Revised 6-07

47-067-00945P

06/14/2019

1)	Date:	February 20, 2019
2)	Operator's	Well Number

3) API Well No.: 47 -

MWV Rupert 5H

67 - 00945

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4)	Surface Owne	er(s) to be served:	5) (a) Coal Operator	
,	(a) Name	Weyerhaeuser Company	Name	N/A
	Address	220 Occodental Ave South	Address	
		Seattle, WA 98104		
	(b) Name		(b) Coal Own	ner(s) with Declaration
	Address		Name	N/A
			Address	
	(c) Name		Name	
	Address		Address	
6)	Inspector	Jeremy James	(c) Coal Less	see with Declaration
	Address	P.O. Box 36	Name	N/A
		Clendenin, WV 25045	Address	
	Telephone	304-951-2596		
	-			

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

ell Operator	BRC Operating Company, LLC	
ANGELEE HARADER BY:	Charles Brightman	
My Notary ID # 126914507 Ins:	Agent	
Expires May 29, 2021 Address	286 Sunday Rd.	
and and a second s	Hico, WV 25854	RECEIVED Office of Oil and Gas
Telephone	304-880-8121	
		APR 1 0 2019
Subscribed and sworn before me this Jud	lay of April_ 2019	WV Department of Environmental Protection
My Commission Expires 5-29 - 2021		

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 <u>depprivacyoffier@wv.gov</u>.

47-067-00945P
WW-9 06/14/2019 (5/16) API Number 47 - 67 00945 Operator's Well No. <u>MWV Rupert 5H</u> 000000000000000000000000000000000000
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
Watershed (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 Vill a pit be used? Yes No Vill a pit be used? Yes No Vill a pit be used?
If so, please describe anticipated pit waste: N/A
Will a synthetic liner be used in the pit? Yes No Vince No Pite No Pite Will a synthetic liner be used in the pit? Yes No Vince No Pite Will BE CONTAIN Proposed Disposal Method For Treated Pit Wastes: Land Application (if selected provide a completed form WW-9-GPP) OFFSITE PROPERLY, Underground Injection (UIC Permit Number)
Reuse (at API Number) Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain)
Will closed loop systembe used? If so, describe: N/A
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A
-If oil based, what type? Synthetic, petroleum, etc. N/A
Additives to be used in drilling medium?N/A
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. <u>N/A</u>
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? <u>N/A</u>
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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 for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature	APR 1 0 2019
Company Official (Typed Name) <u>CHARIES BRIGHTMAN</u> Company Official Title <u>DESIGNATED</u> AGENT	WV Department of Environmental Protection
Subscribed and sworn before me this <u>3rd</u> day of <u>April</u> My commission expires <u>5-29-2021</u>	, 20 9 Notary Hublic ANGELEE HARADER My Notary ID # 126914507 Expires May 29, 2021

47-067-00945P

MWV Rupert 5H / API#47-6700945

Operator's Well No.

06/14/2019

Form WW-9

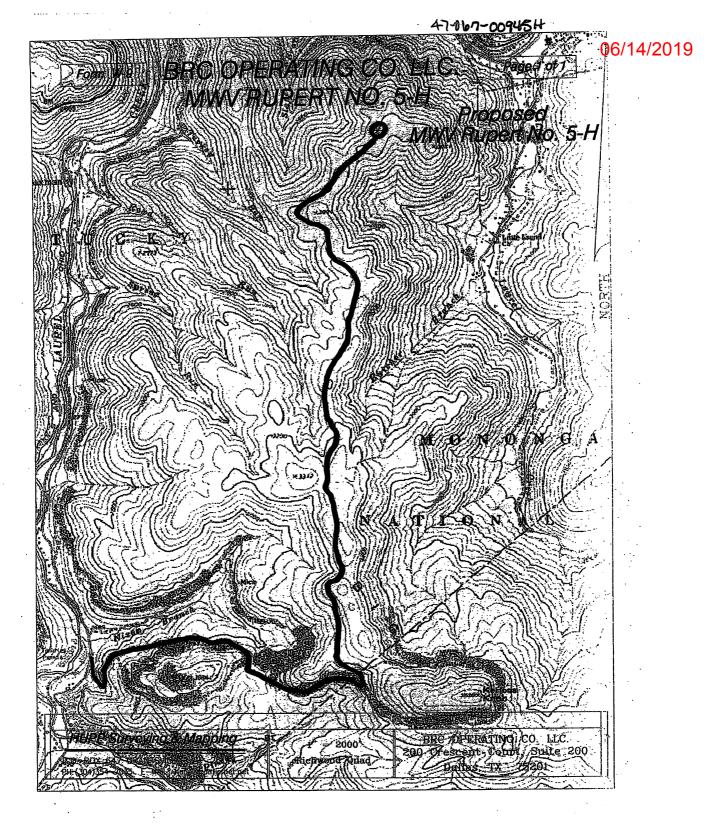
ent
lbs/acre
250
ue, 43% Red Fescue
Annual Rye

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

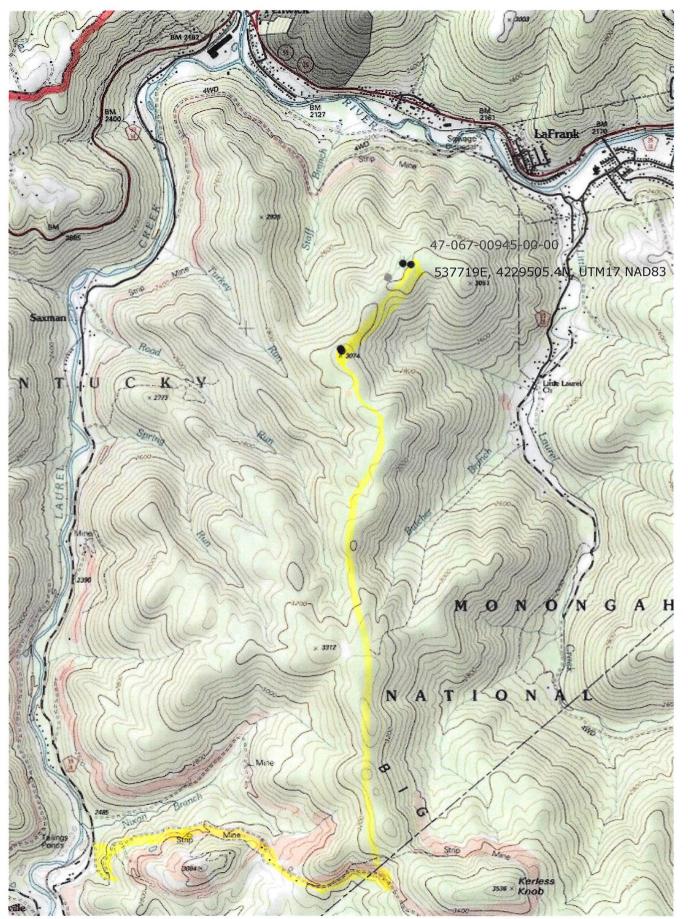
n Approved by:	Add 10	oft con	mentp	lug 3075	- 2975	(Sog /2vol)
						RECEIVED Office of Oil and G
						APR 1 0 201
						WV Department Environmental Prot
•	or OOG			3-29-19		



RECEIVED Office of Oil and Gas

APR 1 0 2019

WV Department of Environmental Protection



47-067-00945P 06/14/2019

http://deparcgis1/ooggis/index.html?x=537719&y=4229505.4&datum=NAD83&pntlabel=... 6/10/2019

47-067-00945P 06/14/2019

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:

- 1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) meters.
- Accuracy to Datum 3.05 meters
- 3. Data Collection Method:

WW-7

Survey grade GPS × : Post Processed Differential

Real-Time Differential X

Mapping Grade GPS ____: Post Processed Differential _____

Real-Time Differential

4. 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 prescribed by the Office of Oil and Gas.

DESIBULATED ALENT Title hole Digtimon Signature Date