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west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Tuesday, June 29, 2021  
WELL WORK PLUGGING PERMIT  
Not Available Plugging

VIKING INTERNATIONAL RESOURCES CO., INC.  
1300 FORT PIERPONT DR., SUITE 201  
MORGANTOWN, WV 26508

Re: Permit approval for MULLENAX 8  
47-085-08510-00-00

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.

A blue ink signature of James A. Martin.

James A. Martin  
Chief

Operator's Well Number: MULLENAX 8  
Farm Name: HILL, LLOYD  
U.S. WELL NUMBER: 47-085-08510-00-00  
Not Available Plugging  
Date Issued: 6/29/2021

Promoting a healthy environment.

07/02/2021

## 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.

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### CONDITIONS

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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.

WW-4B  
Rev. 2/01

1) Date 5/27/2021  
2) Operator's Well No. Mullenax N.U. #8  
3) API Well No. 47-085 - 08510

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 \_\_\_  
(If "Gas, Production x or Underground storage \_\_\_) Deep \_\_\_ / Shallow \_\_\_

5) Location: Elevation 900' Watershed Gillespie Run  
District Grant County Ritchie Quadrangle Cairo

6) Well Operator Virco 7) Designated Agent Brittany Woody  
Address 1300 Fort Pierpont Dr., Suite 201 Address 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508 Morgantown, WV 26508

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Derek Haught Name NA  
Address PO Box 85 Address \_\_\_\_\_  
Smithville, WV 26178

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

**See Attachment**

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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 Derek M. Haught Date 5/26/21

**Well Info:**

Well Name - N.U. Mullenax #8  
 API - 47-085-0-8510  
 Location - 39.137306, -81.196483  
 County, State - Ritchie, WV  
 Elevation - 900 ft  
 TD - 1755 ft  
 Well Casing Record -

Casing Size	Casing Depth	Comment
10"	195 ft	Pulled - Open Hole 12"
8-1/4"	986 ft	Pulled - Open Hole 9-3/4"
6-1/4"	1400 ft	Left in well - Open Hole 7-7/8"
2-3/8"	1707 ft	Open Hole - 6"

**Perforations -**

- Shot Interval: 1735' - 1745'

**Comments -**

- Hole diameter sizes are assumptions. No record of hole sizes in well file.

**Purpose:**

Provide a procedure for safely and effectively plugging & abandoning a well.

**Scope:**

This procedure pertains to all SWN Production Company, LLC (SWN) personnel and third parties involved in or near the following procedure on a SWN location in the SW Appalachia Division.

**HSE:**

- Must wear 4-Gas Monitor at all times, powered on, and calibrated up to date
- Complete JSEA, LOTO, and Hot Work documents as needed
- Follow proper PPE requirements per "2015 HSE Handbook". Verify pressure control equipment integrity
- Always express STOP work authority if deemed necessary
- Hold pre-job safety meeting
- Must follow SWN Conventional Well P&A Minimum Requirements Document
- Access road and location to be constructed per WVDEP regulations and pre-seeded
- All tubulars pulled from the well need to be NORM tested. Contractor gets all salvage pulled from the well
- All fluids circulated from the wellbore are to be disposed of properly and documentation provided

**Responsibilities:**

Production Engineer(s) - Responsible for providing a working procedure specified for the well that the work is being performed on. Responsible for coordinating work and seeing that it is finished in a timely manner.

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**Procedure for Setting Downhole Plug:**

1. Verify all HSE requirements are understood and followed
2. Verify proper documentation is included in working procedure
3. MIRU plugging rig and equipment. Install all sediment and erosion controls and secondary containment.
4. Dig out around wellhead and set 4-5 ft of 20" conductor. Hand cement outside of conductor with bag cement.
  - a. This is to control and capture inadvertent returns from the backside of the 6-1/4" casing
5. Check pressures and bleed off if present. RU and pull rods and tubing out of the well if present. Tally tubing if pulled and then NORM test.
6. Check TD with cable tools
  - a. **NOTE: If TD is significantly different from the well record TD notify WVDEP Inspector as well as SWN manager and engineer**
7. TIH w/ work string to TD, pump tubing capacity, pump 30 bbls of 6% gel, spot cement plug from TD - 1600 ft ( 26 sacks - Class A)
8. TOOH w/ work string to 1450 ft, spot cement plug from 1450 ft - 1350 ft ( 17 sacks - Class A)
9. TOOH w/ work string above cement plug and flush tubing to ensure cement is clear of pip. WOC
10. Check TOC @ 1350 ft , reset plug if needed, if not TOOH w/ work string to 1050 ft
11. Pump 20 bbls of 6% gel then spot cement plug from 1050 ft - 900 ft ( 17 sacks - Class A)
12. TOOH w/ work string. Find free point on 6 1/4" casing (Est. free point @ 600 -700 ft), and cut/ rip casing (around 650 ft)
13. TOOH w/ 6 1/4" casing pulling several joints
14. TIH w/ work string to set cement plug across casing cut to 700ft. Pump 37 bbls of 6% gel ahead and spot cement plug from 700 ft – 600 ft (44 sacks – Class A)
15. TOOH w/ work string. Pull remaining 6-1/4" casing and NORM test.
16. TIH w/ work string to 300 ft, if well has not circulated pump 6% gel until wellbore circulates. Then spot cement plug from 300 ft - 200 ft ( 44 sacks - Class A),
17. TOOH w/ work string to 100 ft. Spot cement plug from 100 ft - Surface ( 67 sacks - Class A)
18. TOOH w/ work string, top off well with cement if needed
19. Erect monument per WVDEP regulations
20. RDMO equipment, dispose of circulated fluids properly, reclaim location and access road per WVDEP regulations

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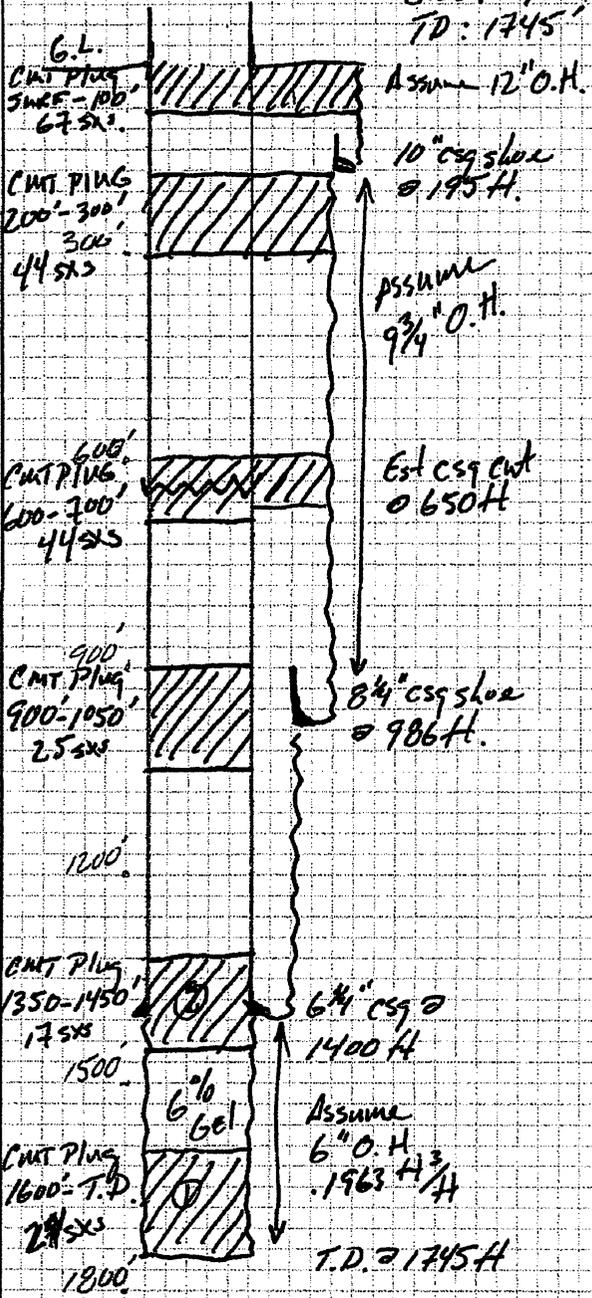
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WV Department of  
Environmental Protection



Well Name: Mullanax B  
 API #: 47-085-08510  
 County/ST: Ritchie, WV  
 Elev: 900ft  
 TD: 1745' Shot: 1735'-1745'

CASING	Depth	O.H.	Comment
10"	195'	12"	Pulled
8 1/4"	986'	9 3/4"	Pulled
6 1/4"	1400'	78"	Left in well
2 3/8"	1707'	6"	



Curt plugs

- ① Pump 30 bbls 6% gel. Spot #1 plug from T.D → 1600ft (145ft → 28.5ft<sup>3</sup> → 24 sacks Class A)
- ② Spot #2 plug from 1450ft → 1350ft (100ft → 19.63ft<sup>3</sup> → 17 sacks Class A)
- ③ W.O.C. Reset curt plug if lower than 1350ft.
- ④ Spot #3 curt plug from 1050ft - 900ft Pump 20 bbls 6% gel thru spot curt plug (150ft → 29.5ft<sup>3</sup> → 25 sacks Class A)
- ⑤ Find F.P. on 6 1/4" csq (Est. F.P. 600-700ft) Cut csq @ 650ft. Pump 37 bbls 6% gel and spot curt plug from 700ft - 600ft (100ft → 51.05ft<sup>3</sup> → 44 sacks Class A)
- ⑥ Circulate hole w/ 6% gel. Spot curt plug from 300ft - 200ft (100ft → 51.05ft<sup>3</sup> → 44 sacks Class A).
- ⑦ Spot curt plug from 100ft → SURFACE (100ft → 78.54ft<sup>3</sup> → 67 sacks Class A)
- ⑧ Set monument

Total #sacks → 221sacks

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State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: HILL, LLOYD

Operator Well No.: ~~MULLENAX 8~~

LOCATION: Elevation: 900.00 Quadrangle: HARRISVILLE

District: GRANT County: RITCHIE  
Latitude: 10600 Feet South of 39 Deg. 10Min. 0 Sec.  
Longitude 8200 Feet West of 81 Deg. 10 Min. 0 Sec.

Company: ALLIED ENERGY CORPORATION  
ROUTE 1, BOX 30-A  
PETROLEUM, WV 26161-0000

Agent: THOMAS H. FLUHARTY

Inspector: SAM HERSMAN  
Permit Issued: 02/03/98  
Well work Commenced: \_\_\_\_\_  
Well work Completed: \_\_\_\_\_  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary Cable Rig \_\_\_\_\_  
Total Depth (feet) \_\_\_\_\_  
Fresh water depths (ft) \_\_\_\_\_

Salt water depths (ft) \_\_\_\_\_

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
10"	195		
8-1/4"	986		
6-1/4"	1400	1400	

OPEN FLOW DATA

Producing formation \_\_\_\_\_ Pay zone depth (ft) 1735-45  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM 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 ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

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WV Department of  
Environmental Protection

For: ALLIED ENERGY CORPORATION

By: Jon M. Makeever, President  
Date: 12-11-98

AMERICAN OIL DEVELOPMENT CO.

WELL RECORD.

N. U. Mullennax *Farm.* \_\_\_\_\_ Acres.  
 Grant *District,* Ritchie *County,* West Virginia *State,*

Well No. 8

Rig Commenced March 31, 19 19  
 Rig Completed April 5th, 19 19  
 Drilling Commenced April 27th, 19 19  
 Drilling Completed May 24th, 19 19

O. P. Hendershot *Contractor,*

R. C. Jackson *Contractor,*

FORMATIONS	Top	Bottom	Thickness	Oil	Gas	Water	QUALITY
Gas Sand	1520	1585	65				
Break	1585	1700	115				
Salt Sand	1700	1752	52				
First Pay	1735	1745	10				

Total Depth 1755 feet, at \_\_\_\_\_ per foot, \$ \_\_\_\_\_, Less use of Gas \_\_\_\_\_ days, at \_\_\_\_\_ per foot.

CASING RECORD.

Size	Charged to Well		Put in Well		Pulled Out		Left in Well		Transferred Before Completion		Left at Well, Not in Use		REMARKS
	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	
10			195		195								
8 1/4			986		986								
6 1/4			1400				1400						

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Approved by \_\_\_\_\_

Production }  
 First 24 hours } Ten Bbls.

WV Department of Environmental Protection  
 \_\_\_\_\_ Supr.

REMARKS.

Shot May 27th, 1919 with 40 quarts. Two 5" x 5' shells. Anchor - 10 ft.

Lease No.

Acres

THUNDER CORPORATION

Name N. U. Mullennax

470.8508510P

Well No. 8

N.	S.	E.	W.	Loc. Made	Purchase From
District Grant				Dr'g Start 4-27-19	Date Purchase
County Ritchie				Dr'g Finish 5-24-19	Sold to
State W. Va.				Dr'g Cont'or R.C. Jackson	Date Sold
Rights Owner				Deepened	Abandoned

FORMATION

CASING RECORD

Kind	Top	Bottom	M'ure line	Tests	Size	Bottom (line)	Bottom (taly)	Pulled	C
Gas Sand	1520	1585			10"		195'	195'	
Break	1585	1700			8 1/4"		986'	986'	
Salt Sand	1700	1752			6 1/4"		1400'		
First Pay	1735	1745							
T.D.		1755							

PACKERS AND SHOES

Kind	Size	Depth Set	Dat

TORPEDO RECORD

Date	No. Ots	Shell	Top	Bottom
5-27-19	40	25'	1735	1745

DRILLING DEEPER

Start	Finish	Int. Dep.	Fin'h	Cc

ABANDONMENT RECORD

Mat'l	From	To	PLUG		
			Size	Kind	Depth

Int. Prod.	Sand	I.P.	30 Days
Oil	Salt	10Bbls	
Gas			

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WW-4A  
Revised 6-07

1) Date: 5/27/21  
2) Operator's Well Number  
Mullenax N.U. #8  
3) API Well No.: 47 - 085 - 08510

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

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Heather M. Mullens</u>	Name <u>N/A</u>
Address <u>311 Whitehall Way</u>	Address _____
<u>Cary, NC 27511</u>	_____
(b) Name <u>Rebecca L. Dimit</u>	(b) Coal Owner(s) with Declaration
Address <u>194 Highland Meadows Dr</u>	Name _____
<u>Davisville, WV 26140</u>	Address _____
(c) Name <u>Christopher H. Border</u>	Name _____
Address <u>105 Highland Meadows Dr</u>	Address _____
<u>Davisville, WV 26140</u>	_____
6) Inspector <u>Derek Haught</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 85</u>	Name _____
<u>Smithville, WV 26178</u>	Address _____
Telephone <u>304-206-7613</u>	_____

**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.

Well Operator Virco  
 By: Brittany Woody  
 Its: Senior Regulatory Analyst  
 Address 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
 Telephone 304-884-1610

*Brittany Woody*

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WV Department of  
Environmental Protection  
Subscribed and sworn before me this

20th day of April 2021

Notary Public

My Commission Expires 5/6/2023

Oil and Gas Privacy Notice



The Office of Oil and Gas processes your personal information, such as name, address and phone number, for 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 [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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 MAY 27 2021

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Rebecca L. Dimit  
 194 Highland Meadows, Dr.  
 Davisville, WV 26142

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7020 2450 0001 6476 9919

Heather M. Mullens  
 311 Whitehall Way  
 Cary, NC 27511

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
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Postage \$

HANNON WV  
 MAY 27 2021

Christopher H. Border  
 105 Highland Meadows Dr.  
 Davisville, WV 26142

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WW-9  
(5/16)

JUN 3 2021

API Number 47 - 085 - 08510  
Operator's Well No \_\_\_\_\_

WV Department of  
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STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Virco OP Code 7434

Watershed (HUC 10) Gillespie Run Quadrangle Cairo

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  Any well effluent will be contained in tanks before disposing off-site

If so, please describe anticipated pit waste: \_\_\_\_\_

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 completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number TBD pending selection of plugging contractor )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be 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. N/A

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? \_\_\_\_\_

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 penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Brittany Woody*  
Company Official (Typed Name) Brittany Woody  
Company Official Title Senior Regulatory Analyst

Subscribed and sworn before me this 20th day of April 2021  
*Elizabeth A Day*  
My commission expires 5/6/2023



Proposed Revegetation Treatment: Acres Disturbed ONE Prevegetation pH 5.5

Lime Two Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch 50 Bales 2.5 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
_____	_____	Orchard Grass	30%
_____	_____	Rye (annual @BT)	35%
_____	_____	Timothy (Climax)	25%
_____	_____	Clover (Med.Red)	10%

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.

Plan Approved by: Derek M. Haught

Comments: \_\_\_\_\_

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Title: Oil & Gas Inspector

Date: 5/26/21

Field Reviewed? (  ) Yes (  ) No

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

Operator Name: Virco  
Watershed (HUC 10): Gillespie Run Quad: Cairo  
Farm Name: \_\_\_\_\_

- 1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

Plug to abandon operations.

- 2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

Containment will be in place around the well. A portable pit will be used for fluids.

- 3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

N/A

- 4. Summarize all activities at your facility that are already regulated for groundwater protection.

N/A

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- 5. Discuss any existing groundwater quality data for your facility or an adjacent property.

N/A

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

No waste materials will be used for the deicing of area or equipment. Waste materials, if any, will not be used for material fill on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

All employees are assigned spill protection training. Spill kits and containment are available and utilized on every work site.

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

Inspections will be done before and during operations by designated employees.

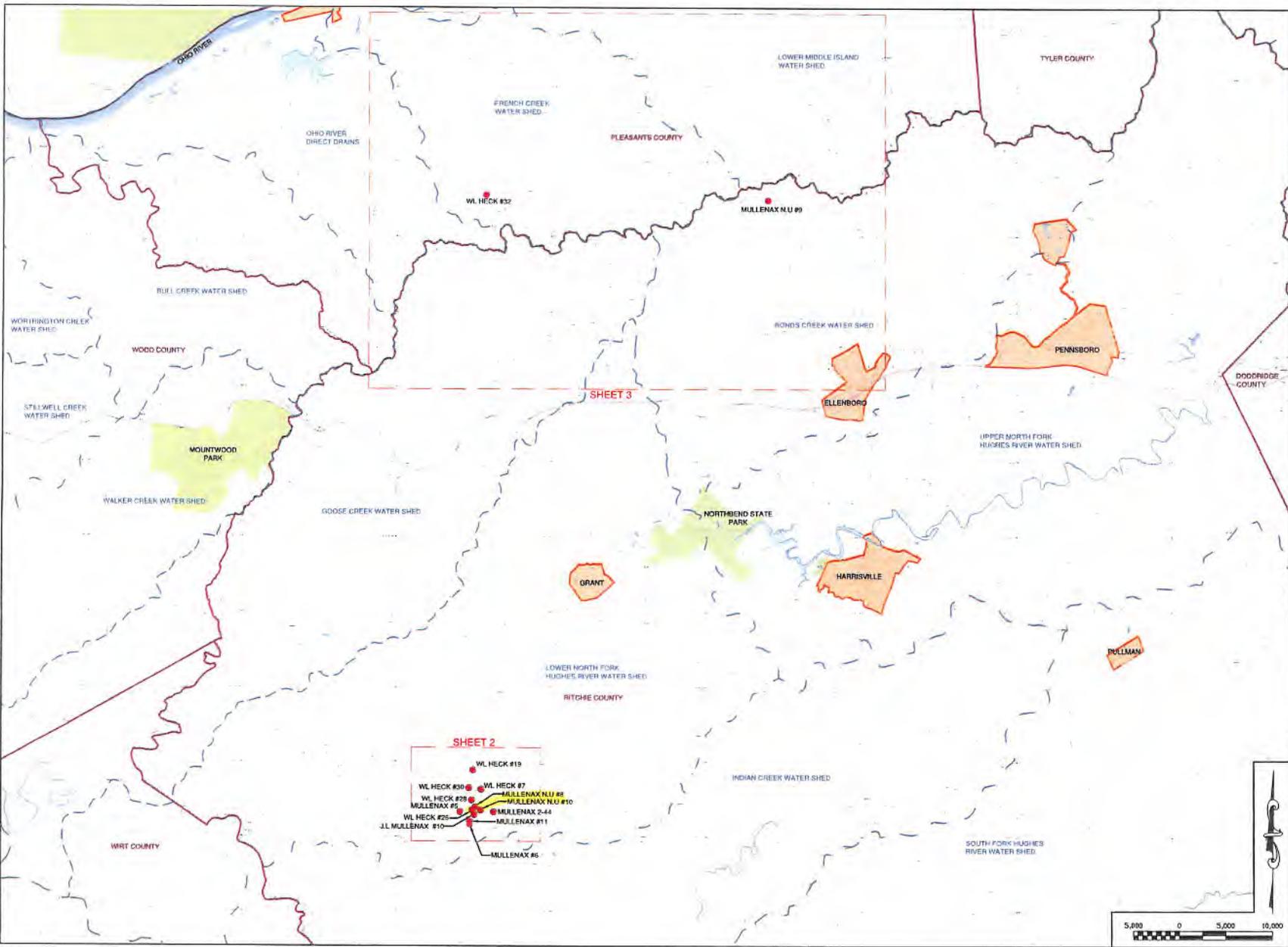
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Office of Oil and Gas

MAY 28 2021

WV Department of  
Environmental Protection

Signature: Bethany Woody

Date: 5/27/21



LOCATION MAP NOT TO SCALE

5	
4	
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NO.	DATE	DESCRIPTION
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PREPARED FOR:

SEAL:

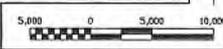
PREPARED BY:



2361 DAWSSON RUN ROAD, SUITE 103  
 CLARKSBURG, WV 26301  
 WWW.ASCENTCONSULTINGENGINEERS.COM  
 (304) 833-3483

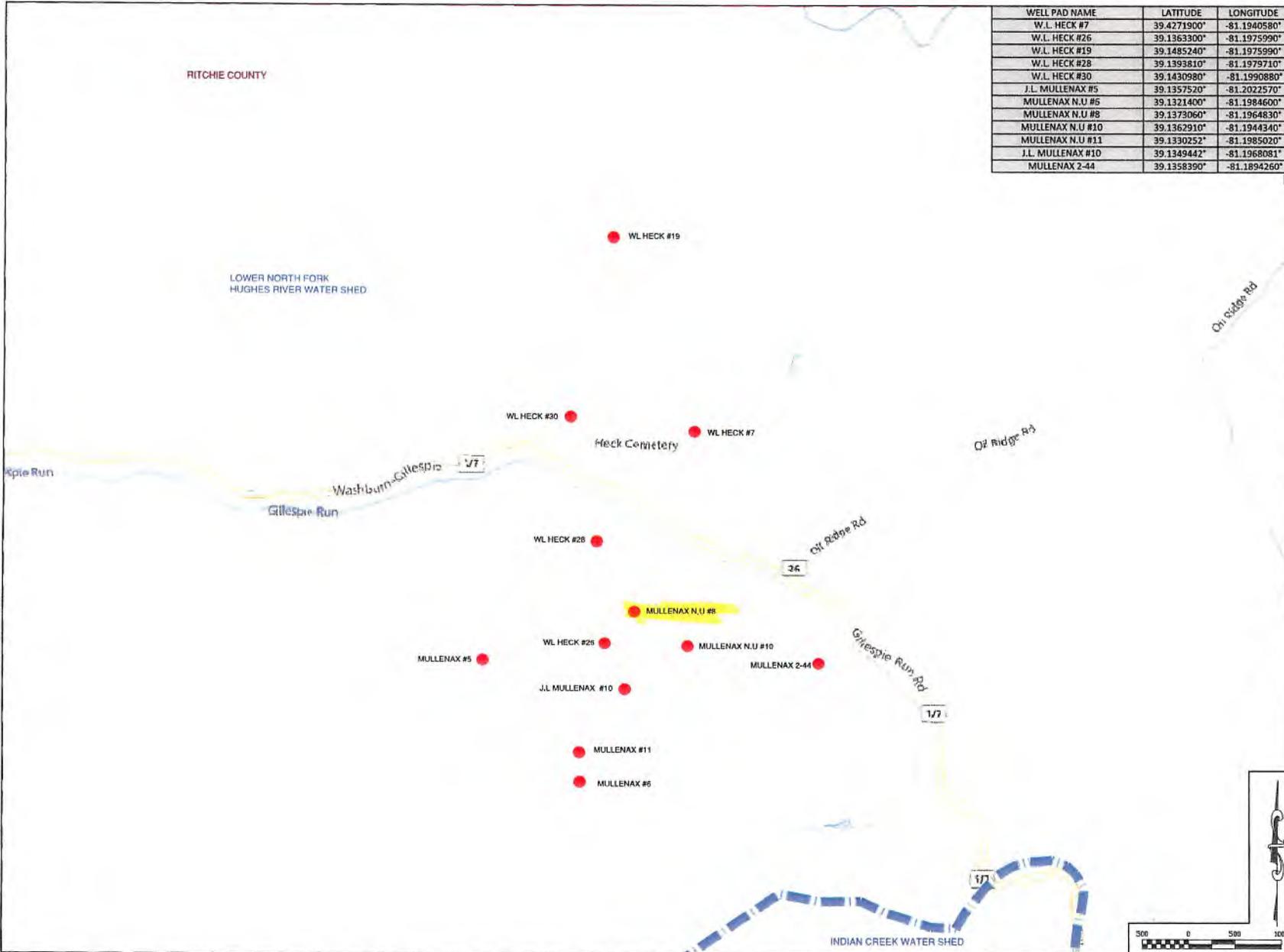
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DATE:	4-13-21	DESIGN:	ZLA
SCALE:	AS SHOWN	CHECKED:	MRN

TITLE: **OVERALL PLUGGING MAP**  
 PLAN STATUS: SHEET NO. 1



C:\01 FILES 8\Project 2412\Maping Map SWN\Drawings\2412-PLUGGING MAP.dwg  
 PLOT DATE/TIME: 4/21/2021 10:42 AM

47-085-08510P



WELL PAD NAME	LATITUDE	LONGITUDE
W.L. HECK #7	39.4271900°	-81.1940580°
W.L. HECK #26	39.1363300°	-81.1975990°
W.L. HECK #19	39.1485240°	-81.1975990°
W.L. HECK #28	39.1393810°	-81.1979710°
W.L. HECK #30	39.1430980°	-81.1990880°
J.L. MULLENAX #5	39.1357520°	-81.2022570°
MULLENAX N.U. #5	39.1321400°	-81.1984600°
MULLENAX N.U. #8	39.1373060°	-81.1964830°
MULLENAX N.U. #10	39.1362910°	-81.1944340°
MULLENAX N.U. #11	39.1330252°	-81.1985020°
J.L. MULLENAX #10	39.1349442°	-81.1968081°
MULLENAX 2-44	39.1358390°	-81.1894260°



LOCATION MAP NOT TO SCALE

NO.	DATE	DESCRIPTION
6		
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PREPARED FOR:

Southwestern Energy®

SEAL:

PREPARED BY:

**ASCENT**  
Consulting & Engineering

2361 DAVISSON RUN ROAD, SUITE 103  
CLARKSBURG, WV 26301  
WWW.ASCENTCONSULTINGENGINEERS.COM  
(304) 333-3463

PROJECT NUMBER:	2412	DRAWN:	CMK
DATE:	4-13-21	DESIGN:	ZLA
SCALE:	AS SHOWN	CHECKED:	MRN
TITLE: <b>PLUGGING MAP</b>			
PLAN STATUS:		SHEET NO.:	2



CAD FILE: S:\Projects\2412 Plugging Map SW\Drawings\2412-PLUGGING MAP.dwg  
 PLOT DATE/TIME: 4/27/2021 10:31 AM

47-085-08510P

D:\PROJECTS\2412\Project 2412\Project Map 2000\Drawing\2412-PLUGGING MAP.dwg PLOT DATE/TIME: 4/20/2021 10:32 AM

WELL PAD NAME	LATITUDE	LONGITUDE
WL HECK #32	39.3228830°	-81.1971840°
MULLENAX N.U #9	39.3228830°	-81.0889330°



LOCATION MAP NOT TO SCALE

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NO.	DATE	DESCRIPTION

PREPARED FOR

SEAL:

PREPARED BY:

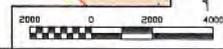
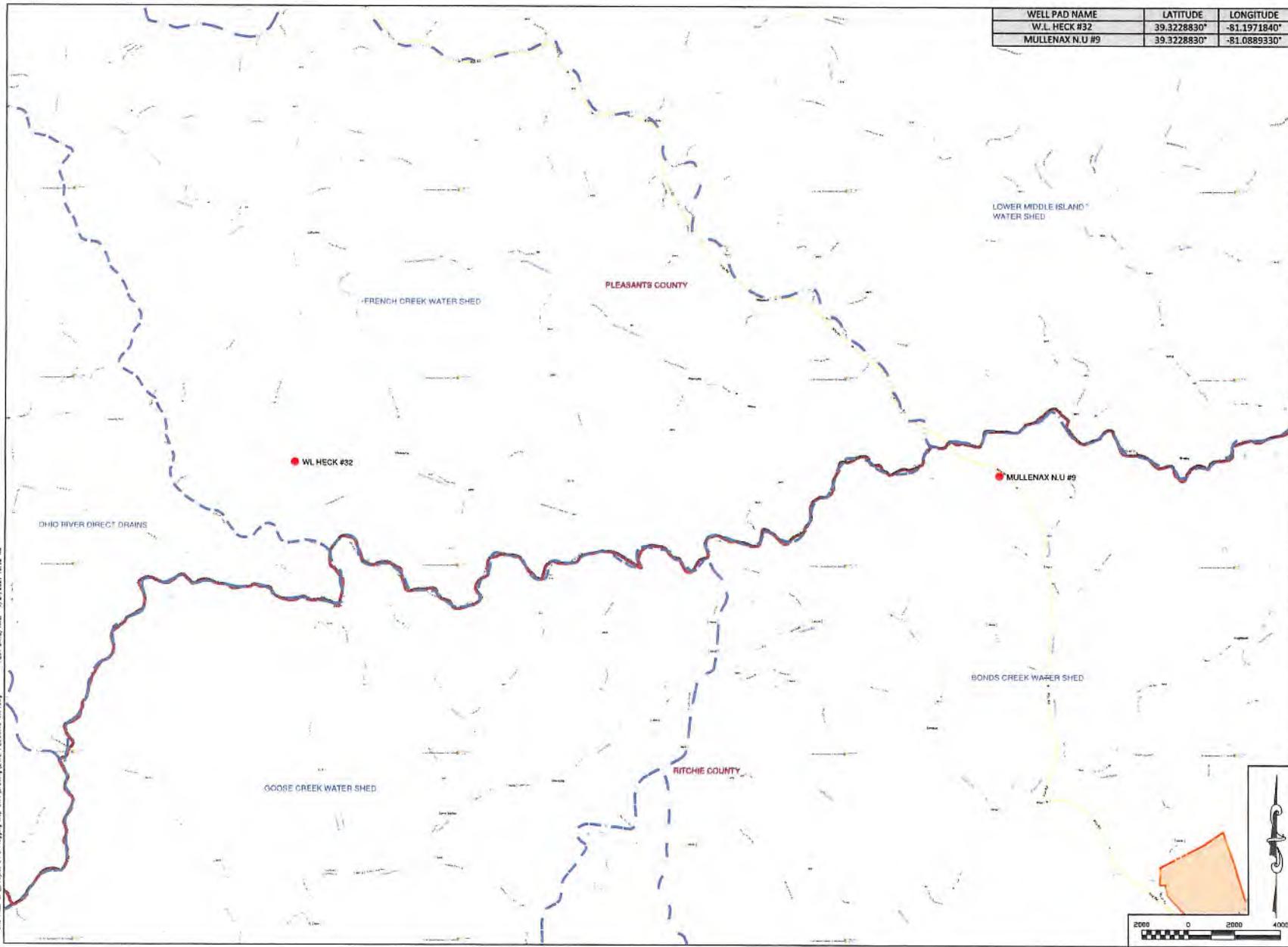


2361 DAVISSON RUN ROAD, SUITE 103  
CLARKEBURG, WV 26031  
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(304) 293 - 3483

PROJECT NUMBER:	2412	DRAWN:	CMK
DATE:	4-13-21	DESIGN:	ZLA
SCALE:	AS SHOWN	CHECKED:	MRN

TITLE: **PLUGGING MAP**

PLAN STATUS:	SHEET No:
	3



47-085-08510P

WW-7  
8-30-06



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

API: 47-085-08510 WELL NO.: 8

FARM NAME: Mullenax N.U.

RESPONSIBLE PARTY NAME: Virco

COUNTY: Ritchie DISTRICT: Grant

QUADRANGLE: Cairo

SURFACE OWNER: Heather M. Mullens, Rebecca L. Dimit, & Christopher H. Border

ROYALTY OWNER: Heather M. Mullens, Rebecca L. Dimit, & Christopher H. Border

UTM GPS NORTHING: 4,332,077.60

UTM GPS EASTING: 483,114.10 GPS ELEVATION: 900'

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.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS  : Post Processed Differential \_\_\_\_\_

Real-Time Differential  \_\_\_\_\_

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.

Brittany Woody  
Signature

Senior Regulatory Analyst

Title

5/27/21  
Date

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MAY 28 2021

WV Department of  
Environmental Protection

11/10/2016

PLUGGING PERMIT CHECKLIST

Plugging Permit

- WW-4B
- WW-4B signed by inspector
- WW-4A
- SURFACE OWNER WAIVER or PROOF THAT APPLICATION WAS SENT BY REGISTERED OR CERTIFIED MAIL
- COAL OWNER/COAL OPERATOR/COAL LESSEE WAIVERS or PROOF THAT APPLICATION WAS SENT BY REGISTERED OR CERTIFIED MAIL
- WW-9 PAGE 1 (NOTARIZED)
- WW-9 PAGE 2 with attached drawing of road, location, pit and proposed area for land application
- WW-9 GPP PAGE 1 and 2 if well effluent will be land applied
- RECENT MYLAR PLAT OR WW-7
- WELL RECORDS/COMPLETION REPORT
- TOPOGRAPHIC MAP OF WELL, SHOWING PIT IF PIT IS USED
- MUST HAVE VALID BOND IN OPERATOR'S NAME
- CHECK FOR \$100 IF PIT IS USED

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Environmental Protection

07/02/2021