



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, June 28, 2021
WELL WORK PLUGGING PERMIT
Vertical Plugging

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

Re: Permit approval for HECK 32
47-085-05413-00-00

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: HECK 32
Farm Name: BOONE, JOHN
U.S. WELL NUMBER: 47-085-05413-00-00
Vertical Plugging
Date Issued: 6/28/2021

Promoting a healthy environment.

07/02/2021

I

4708505413P

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 within two years of the date of issuance of this permit.

07/02/2021

4708505413P
1) Date 5/10/21
2) Operator's
Well No. Heck #32
3) API Well No. 47-085 - 05413

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 810' 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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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 Derek M Haught Date 5/5/21

07/02/2021



Production Company™

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.

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. Check pressures and bleed off if present.
5. Check TD with cable tools. Clean out 4-1/2" casing down to the CIBP @1960 ft.
 - a. **NOTE: If TD is significantly different from the well record TD notify WVDEP Inspector as well as SWN manager and engineer**
6. Drill out CIBP and push CIBP to original TD at 3990 ft.
7. TIH w/ work string to 3300 ft, pump tubing capacity, pump 25 bbls of 6% gel, spot cement plug from 3300 - 3100 ft (15 sacks - Class A)
8. TOO H w/ work string to 1950 ft, spot cement plug from 1950 ft - 1750 ft (15 sacks - Class A)
9. TOO H w/ work string above cement plug and flush tubing to ensure cement is clear of pipe. WOC
10. Check TOC @ 1750 ft , reset plug if TOC is below 1750 ft, if not TOO H w/ work string
11. Ru and find free point on 4 1/2" casing. Shoot 4 ½" collar at 1106 ft.
12. Pull remaining 4 1/2" casing and NORM test.
13. TIH w/ work string to 1150 ft, if well has not circulated pump 6% gel until wellbore circulates (72 bbls). Then spot cement plug from 1150 ft - 800 ft (100 sacks - Class A),
14. TOO H w/ work string to 100 ft. Spot cement plug from 100 ft - Surface (30 sacks - Class A)
15. TOO H w/ work string, top off well with cement if needed
16. Erect monument per WVDEP regulations
17. RDMO equipment, dispose of circulated fluids properly, reclaim location and access road per WVDEP regulations

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Well Info:

Well Name – W.L. Heck #32
 API – 47-085-0-5413
 Location – 39.3228830, -81.0889330
 County, State – Ritchie, WV
 Elevation – 810 ft
 TD – 4000 ft
 Well Casing Record –

Casing Size	Casing Depth	Comments
10"	40 ft	
8 5/8"	886 ft	11" Open Hole, Cement to Surface
4 1/2"	3990 ft	7 7/8" Open Hole, TOC @ 1150' per CBL

Perforations –

- Speechley Formation: 3240' - 3250'
- Shot Interval: 3240' – 3250'

Comments –

- Hole diameter sizes are assumptions. No record of hole sizes in well file.
- ***Believe there is a CIBP set in the 4-1/2" casing at 1960 ft when the Injun was completed. No record that the CIBP was drilled out.

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:

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Reviewed Tm6
Recorded _____

State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date November 12, 1991
Operator's Well No. Rock 92
Farm John Boone
API No. 47-085-05413

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil X / Gas X / Liquid Injection / Waste Disposal /
(If "Gas," Production y / Underground Storage / Deep / Shallow /)
LOCATION: Elevation: 810 Watershed Gillespie Run
District: Grant County Ritchie Quadrangle Cairo

COMPANY D & D Energy, Inc.
ADDRESS Mineral Wells, W.V.
DESIGNATED AGENT Donald Conner
ADDRESS Mineral Wells, W.V. 26150
SURFACE OWNER John Boone
ADDRESS Petroleum, W.V.
MINERAL RIGHTS OWNER _____
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Samuel Harsman ADDRESS Harrisville, W.V.
PERMIT ISSUED 3-25-91
DRILLING COMMENCED 5-30-91
DRILLING COMPLETED 5-30-91
IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED OR _____

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	886	886	to surface
7			
5 1/2			
4 1/2	3990	3990	to 1100
3			
2			
Liners used			

*TAC @ 1150'
File callers @
1062'
1126'
plus 282'*

GEOLOGICAL TARGET FORMATION: Devonian Shale Depth 4000 feet
Depth of completed well 4000 feet Rotary X / Cable Tools _____
Water strata Depth: Fresh 70 feet; Salt 1000 feet
Coal seam depths: None Is coal being mined in the area? _____

OPEN FLOW DATA
Producing formation Big Injun Sand Pay zone depth 1862-1896 feet
Gas: Initial open flow -0- Mcf/d Oil: Initial open flow -0- bbl/d
Final open flow 20 Mcf/d Final open flow 1 bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 250 psig (surface measurement) after 24 hours shut in
(If applicable due to multiple completion--)
Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ bbl/d
Final open flow _____ Mcf/d Oil: Final open flow _____ bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure _____ psig (surface measurement) after _____ hours shut in

RIT 05413 F

(Continue on reverse side)

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DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforate 1862-1870 6 Holes

Perforate 1888-1896 6 Holes

Water frac with 600 BBL and 25,000# of 20/40 Sand

WELL LOG

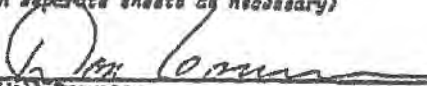
FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Maxton Sand			1620	1666	
Big lime			1686	1757	
Keener			1757	1804	
Big injun			1804	1898	Gas @ 1864-1866 Gas @ 1887

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(Attach separate sheets as necessary)


Well Operator

By: Donald Conner

Date: November 18, 1991

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

18611



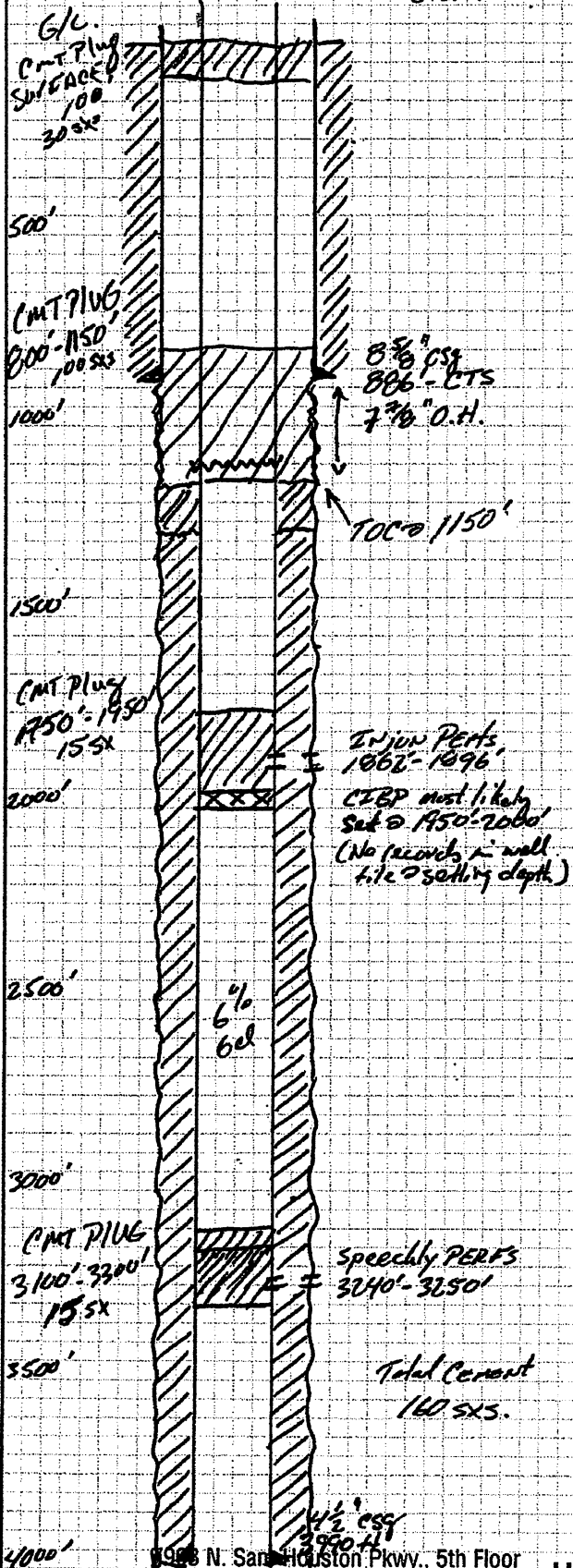
Well Name: W.L. Heck #32
 API #: 47-005-05413
 County/ST: Pipecl. e, WV
 Elev: 810'

Casing	Depth	O.H.	Comment
8 7/8"	806'	11"	CTS
4 1/2"	3990'	7 7/8"	TOC @ 1150'

Fire collars on CBL @ 1062', 1106'

Perforations: 1062'-1096' Injun
 3240'-3250' Specialty

NOTE: Believe there is a CIBP set @ 1950'-2000'. No record of it in well file. No record of wellbore being plugged back to Injun.



Procedures

- 1) DERR Equipment - Dig out around wellhead and set 4-5 lbs of 20' conductor if needed to control returns. Hoist cement conductor w/ bag cement.
- 2) Check pressures and bleed off if present. Check T.D of cable tools. Clean out 4 1/2" csq down to CIBP. Est. setting depth 1950'-2000'.
- 3) Drill out CIBP and push it to T.D. (3990').
- 4) T.H of workstring to 3200 ft. Pump 15 bbls 6 1/2 gal. Spot cement plug from 3300' - 3100' (15 sxs - Class)
- 5) T.O.H of workstring to 1950'. Pump 15 bbls 6 1/2 gal. Spot cement plug from 1950' - 1750' (15 sxs - Class).
- 6) T.O.H of workstring above TOC plug and proc. Check TOC @ 1150'. Raset cement plug if needed.
- 7) T.O.H of workstring. Run and cut/tip 4 1/2" csq collar @ 1106'.
- 8) Pull 4 1/2" csq. Normal test casing.
- 9) T.H of workstring to 1150 ft. If wellbore has not circulated pump 72 bbls of 6 1/2 gal or until the wellbore circulated.
- 10) Spot cement plug from 1150' - 800 ft (100 sxs - Class A)
- 11) T.O.H of workstring to 100 ft. Spot cement plug from 100 ft to surface (30 sxs - Class A)
- 12) T.O.H of workstring
- 13) Erect Monument and per WVDEP REGS.
- 14) RDMO EQUIPMENT Dispose of Circulated Fluids properly
- 15) Reclaim location and road to WVDEP REGS.

470 8505413P

WW-4A
Revised 6-07

1) Date: 5/11/21
2) Operator's Well Number
Heck #32

3) API Well No.: 47 - 085 - 05413

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>Kenneth E. Warman, Sr.</u>	Name <u>N/A</u>
Address <u>10335 Gillespie Run Road</u>	Address _____
<u>Petroleum, WV 26161</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
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.

MAY 10 2021

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

WV Department of
Environmental Protection

Brittany Woody

Subscribed and sworn before me this 20th day of April 2021
 My Commission Expires 5/6/2023
 Notary Public



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 depprivacyofficer@wv.gov.

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

Postage \$ 41.50

Postmark Here

Heck #28
#32

Kenneth E Warman, Sr.
 10335 Gillespie Run Road
 Petroleum, WV 26161

SEE REVERSE FOR INSTRUCTIONS

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 Environmental Protection

07/02/2021

SURFACE OWNER WAIVER

4708505413P

Operator's Well
Number

Heck #32

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

_____	Date _____	Name <u>Virco</u>	_____
Signature		By <u>Brittany Woody</u>	_____
		Its <u>Senior Regulatory Analyst</u>	Date _____
		Signature	Date <u>07/02/2021</u>

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4708505413

WW-9
(5/16)

API Number 47 - 085 05413
Operator's Well No. Heck #32

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

My commission expires 5/6/2023



07/02/2021

Operator's Well No. Heck #32

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

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Comments:

WV Department of
Environmental Protection

Title: Oil & Gas Inspector

Date: 5/5/21

Field Reviewed? (X) 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

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

N/A

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.

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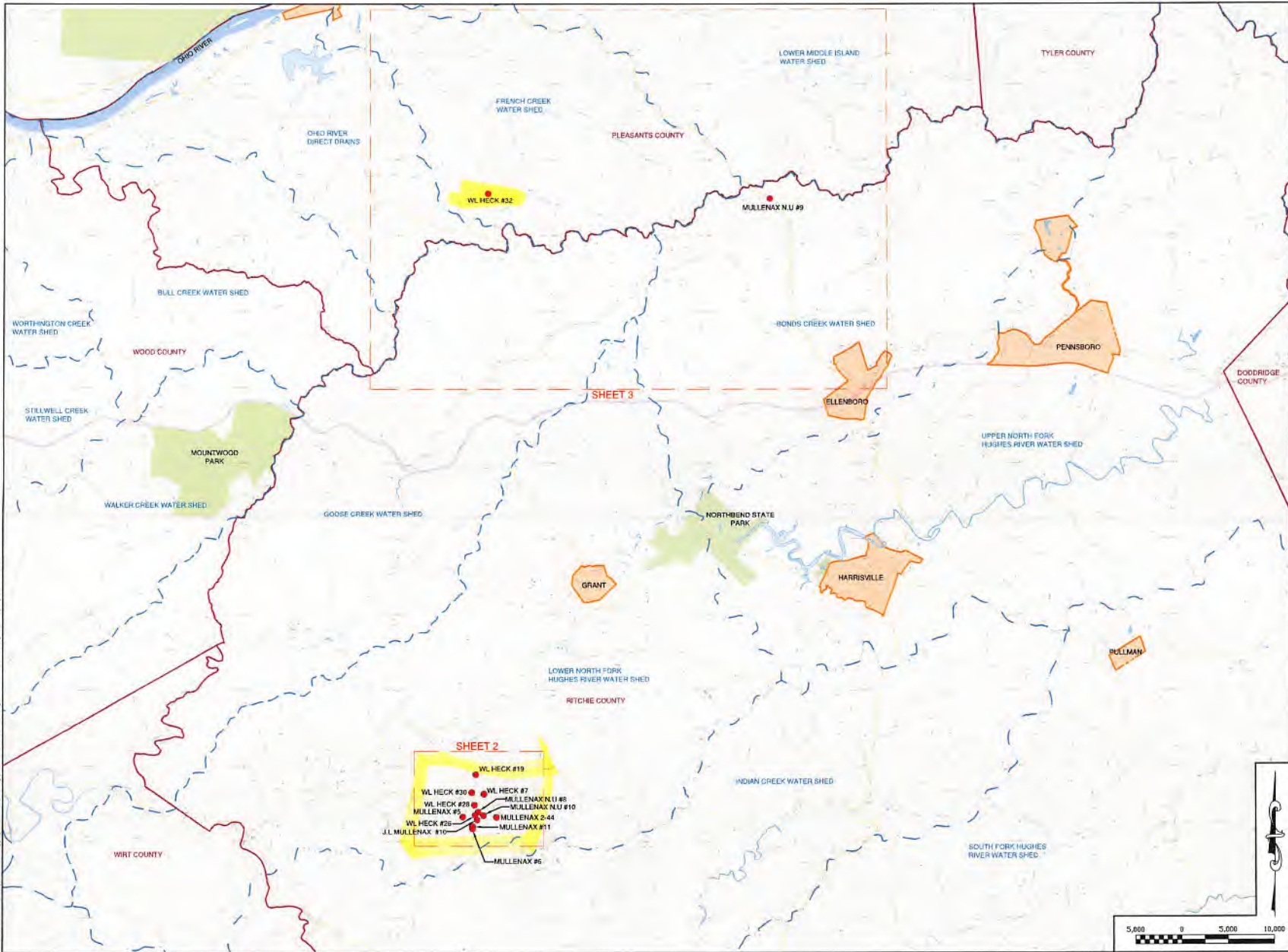
WV Department of
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8. Provide provisions and frequency for inspections of all GPP elements and equipment.

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

Signature: Brittany Moady

Date: 5/6/21



PROJECT LOCATION

LOCATION MAP NOT TO SCALE

6		
5		
4		
3		
2		
1		

NO.	DATE	DESCRIPTION

PREPARED FOR:

PREPARED BY:

2561 DAVENSON RUN ROAD, SUITE 103
CLARKSBURG, WV 26301
WWW.ASCENTCONSULTINGENGINEERS.COM
(304) 933-5483

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

TITLE: **OVERALL PLUGGING MAP**

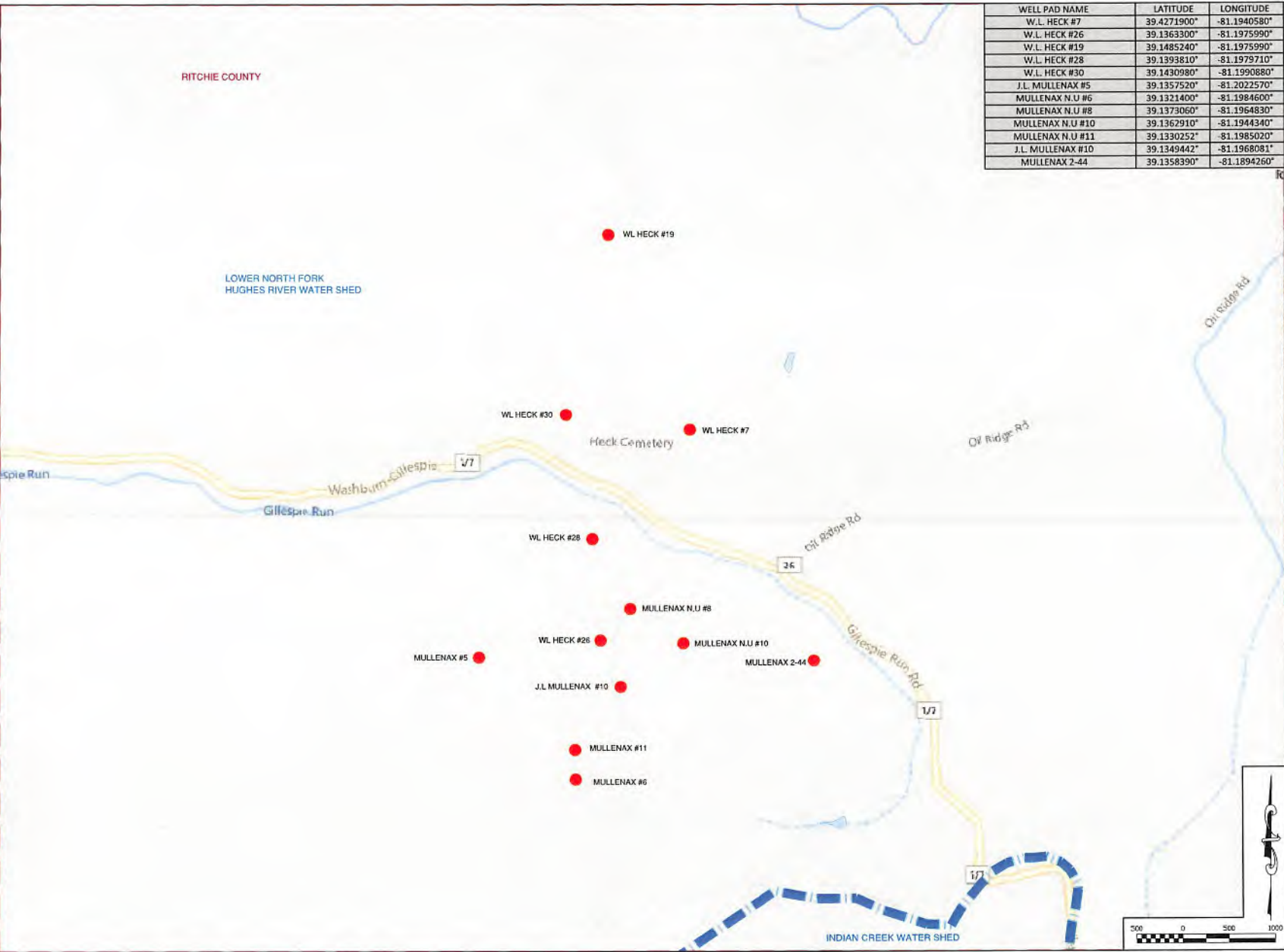
PLAN STATUS:	SHEET No.
	1

5,000 0 5,000 10,000

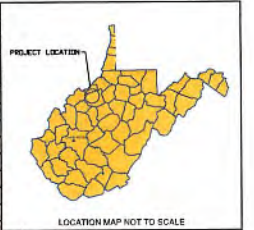
D:\PROJECTS\2412_Plugging Map SWN\Drawings\2412-PLUGGING MAP.dwg
 PLOT DATE/TIME: 4/27/2021 10:42 AM

4708505413P

D:\0 FILE: S:\Project 2412 Plugging Map SWN\Drawings\2412-PLUGGING MAP.dwg PLOT DATE/TIME: 4/21/2023 10:31 AM



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°	-81.1990680°
J.L. MULLENAX #5	39.1357520°	-81.2022570°
MULLENAX N.U #6	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°



NO.	DATE	DESCRIPTION
6		
5		
4		
3		
2		
1		

PREPARED FOR:

BEAL:

PREPARED BY:

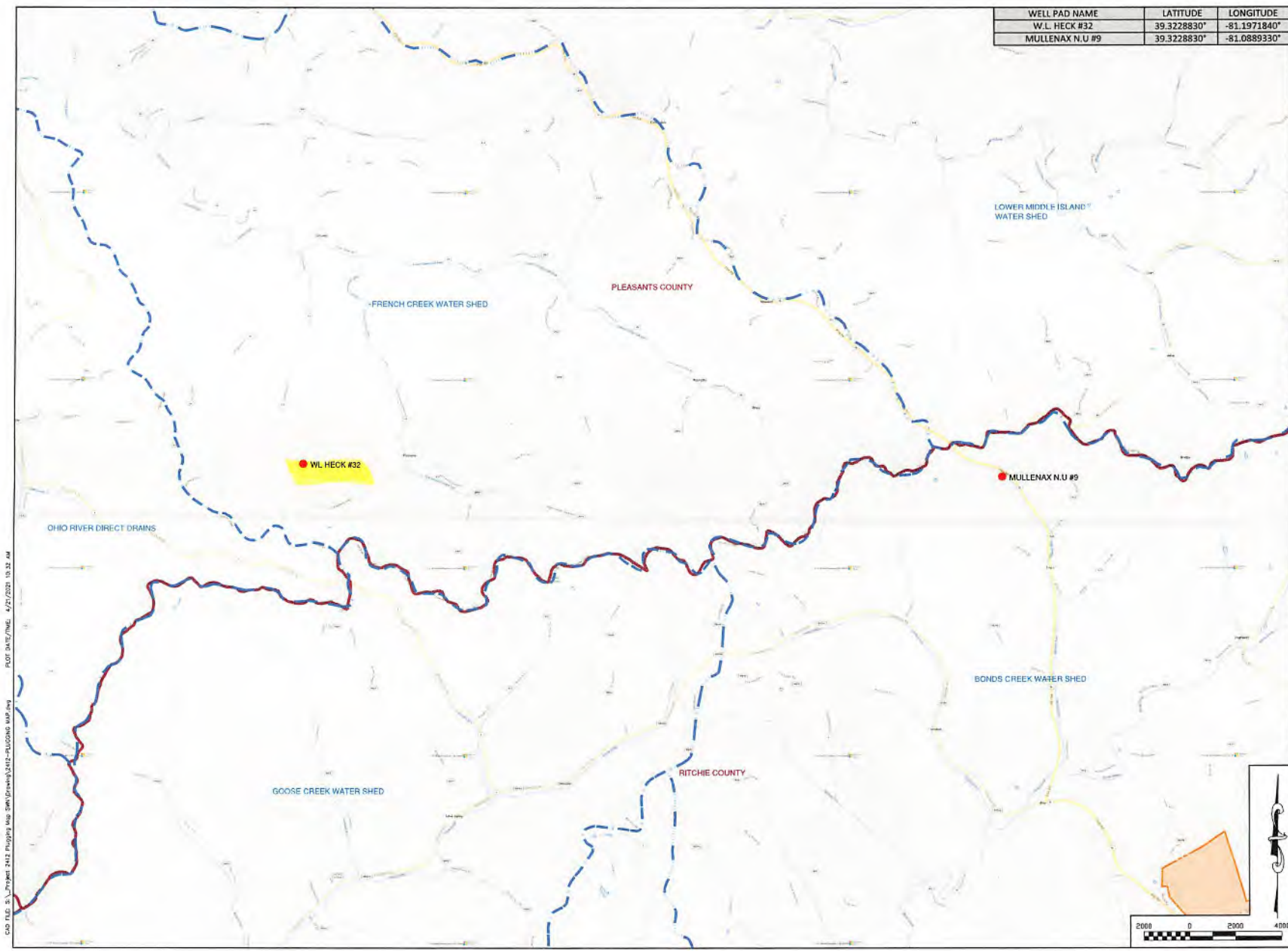
2561 DAVENSON RUN ROAD, SUITE 103
CLARKSBURG, WV 26301
WWW.ASCENTCONSULTINGENGINEERS.COM
304.933.3453

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

TITLE: **PLUGGING MAP**

PLAN STATUS: _____ SHEET No. **2**

4708505413P



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



LOCATION MAP NOT TO SCALE

6		
5		
4		
3		
2		
1		
NO.	DATE	DESCRIPTION

PREPARED FOR:
Swn
 Southwestern Energy

SEAL:

PREPARED BY:

ASCENT
 Consulting & Engineering
 2261 DAVISSON RUN ROAD, SUITE 103
 CLARKSBURG, WV 26301
 WWW.ASCENTCONSULTINGENGINEERS.COM
 (304) 833-3463

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

TITLE:
PLUGGING MAP
 PLAN STATUS: SHEET No. **3**

C:\P\FILE_312\Project Map_SWN\ASCENT\312-PLUGGING MAP.dwg PLOT DATE/TIME: 4/27/2021 10:32 AM

4708505413P

Heck #32

4708505413P

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

RECEIVED
Office of Oil and Gas
MAY 10 2021
WV Department of
Environmental Protection

07/02/2021