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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)

Monday, June 28, 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 0  
47-085-08010-00-00

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: 0  
Farm Name: STALLMAN, VIRGINIA  
U.S. WELL NUMBER: 47-085-08010-00-00  
Not Available Plugging  
Date Issued: 6/28/2021

Promoting a healthy environment.

07/02/2021

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47085080108

## 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

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

07/02/2021

1) Date 5/14 2021  
2) Operator's  
Well No. Heck #7  
3) API Well No. 47-085 - 08010

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 937' 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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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

**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 ( 28 sacks - Class A)
8. TOOH w/ work string to 1505 ft, spot cement plug from 1505 ft - 1405 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 @ 1405 ft , reset plug if needed, if not TOOH w/ work string to 950 ft
11. Pump 20 bbls of 6% gel then spot cement plug from 950 ft - 850 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 15 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 150 ft. Spot cement plug from 150 ft - Surface ( 100 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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**Well Info:**

Well Name – W.L. Heck #7  
 API – 47-085-0-8010  
 Location – 39.1427190, -81.1940580  
 County, State – Ritchie, WV  
 Elevation – 937 ft  
 Well Casing Record –

Casing Size	Casing Depth	Comment
10"	200 ft	Pulled – Open Hole 12"
8 ¼"	1000 ft	Pulled – Open Hole 9-3/4"
6 ¼"	1455 ft	Left in well – Open Hole 8"
No Casing	1768 ft	Open Hole – 6"

**Perforations –**

- Top Salt Sand: 1697'
- Shot Interval: 1755' – 1765'

**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
- All fluids circulated from the wellbore are to be disposed of properly and documentation provided

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**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.

47-085-08010

Well No 7

Oil

W. L. Heck Farm

Grant District, Ritchie County, W. Va.

Drilled by John Crothers

Commenced drilling June 12th 1913

Finished July 3rd. 1913.

All 10" and 8 $\frac{1}{4}$ " casing pulled out.

10"	casing	200,ft.
8 $\frac{1}{4}$ "	"	1000 ft.
6 $\frac{1}{4}$ "	" 17#	400.ft.
6 $\frac{1}{4}$ "	" 13# on top	1055 ft.
Top of Salt sand		1697 ft.
Got oil at		1758 ft.
Total depth		1768 ft.

Shot July 8th 1913 by the Hines Torpedo Co., Foster Murdy, shooter, with 40 qts., two 5' 5" - 20 qt. shells 3 ft anchor. Shot from 1755 ft to 1765 ft.

Frank Neely.

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IR-26-N  
OVERSE

INSPECTOR'S WELL INSPECTION SUMMARY FORM

WELL TYPE \_\_\_\_\_

API# 47-085-8010-N

ELEVATION: \_\_\_\_\_

OPERATOR: D + D ENERGY, INC.

DISTRICT: GRANT

TELEPHONE: \_\_\_\_\_

QUADRANGLE: CAIRO 75

FARM: VIRGINIA STALLMAN

COUNTY: MARSHALL RITCHIE

WELL NO.: HECK 7

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APR 18 1995

SURFACE OWNER \_\_\_\_\_

COMMENTS (Y/N) \_\_\_\_\_ TELEPHONE \_\_\_\_\_  
Division of Environmental Protection

TARGET FORMATION \_\_\_\_\_

DATE APPLICATION RECEIVED \_\_\_\_\_

DATE PERMIT ISSUED: 12-28-90

DATE VISITED 4-11-95

Inspector report

NO API # ON WELL (PLAT MADE)  
NO TANK OR TRASH ON SITE.  
HAS 6 5/8" CASING ONLY  
WELL TO BE REWORKED THIS YEAR  
NO SALT OR OIL SPIES SHOWING

*Samuel Heroman*  
INSPECTOR'S SIGNATURE

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-----RECORD ALL VISITS TO THIS WELL ON BACK-----

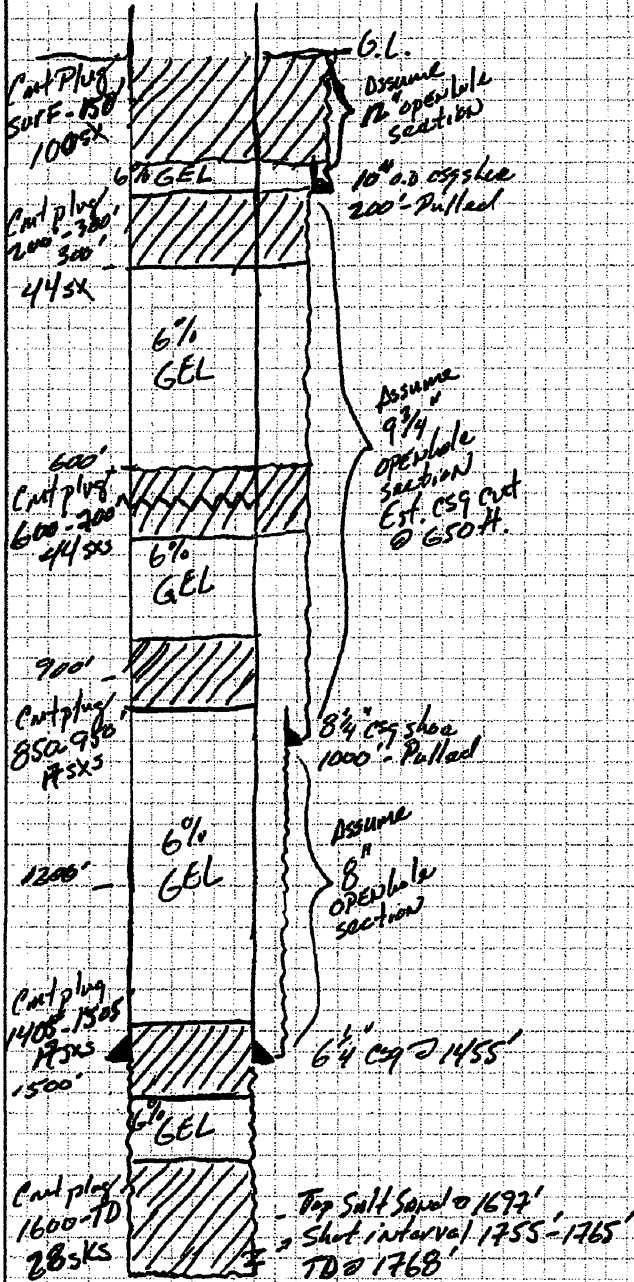
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Environmental Protection



WELL NAME : W.L. Heck #7  
 API # : 47-085-08010  
 County/St. : Ritchie, WV  
 ELEV : 937'

Casing	Depth	Off	Comment
10"	200'	12"	Pulled
8 1/4"	1000'	9 3/4"	Pulled
6 1/4"	1455'	8"	Left in well
Shot Interval : 1755' - 1765'			



PROCEDURE

- 1) Dig out around wellhead and set 4-8 ft of 20" conductor. Hand cement outside of cond. w/ bag cement. (This is to control and capture inadvertent returns from the backside of the 6 1/4" CSG)
- 2) RU and pull rods and tubing out of well if present. Tally tubing if pulled. (T.NORM. + tubing)
- 3) Check T.D. w/ pipe tools. Note: If T.D. is significantly different from the well record T.D. Contact WVDEP inspector.
- 4) RU and TIH w/ work string to TD. Pump 6% gel to fill up to 900ft. (30 bbls).
- 5) Spot cement plug from TD - 1600 ft. (Class A; 1.18 t/1.5x) 28 sacks
- 6) TOOH w/ work string to 1505 ft. Pump cement plug from 1505 ft - 1405 ft (Class A; 1.18 t/1.5x)
- 7) TOOH above the cement plug top. WOC. Reset cement plug if TOC is below 1405 ft. TOOH w/ work to 950 ft. Spot cement plug from 950 ft - 850 ft (Class A) - 17 sacks
- 8) TOOH w/ work string. RU and find true point on 6 1/4" CSG (Estimate F.P. @ 600-700) Cut/rip 6 1/4" CSG and pull several joints.
- 9) TIH w/ work string and spot cement plug across casing cut (650') from 300' - 600' (Class A) - 44 sacks Pump 15 bbls 6% gel ahead of cut
- 10) TOOH w/ work string. Pull remaining 6 1/4" CSG. (T.NORM. + casing)
- 11) TIH w/ work string to 300 ft. Spot cement plug from 300' - 200' (Class A) - 44 SX
- 12) TOOH w/ work string to 150 ft. Spot cement plug from 150 ft - SURFACE (Class A) 100 SXs.
- 13) TOOH w/ work string
- 14) ERECT monument per WVDEP REGS
- 15) RDMO equipment. Dispose of circulated fluid properly
- 16) Reclaim bedrock + road to WVDEP

- Total Cement
- Plug 1 - 28 SX
  - Plug 2 - 17 SX
  - Plug 3 - 17 SX
  - Plug 4 - 44 SX
  - Plug 5 - 44 SX
  - Plug 6 - 100 SX

250 SX 7908 N. Sam Houston Pkwy., 5th Floor  
 Houston, TX 77064

office: 281.931.8884 main: 1.800.BLOWOUT  
 fax: 281.931.8302 web: www.boots-coots.com

07/02/2021



4708508010P

1) Date: 5/11/21  
2) Operator's Well Number  
Heck #7

3) API Well No.: 47 - 085 - 08010

**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>Scott &amp; Karen Pumphrey</u>	Name <u>N/A</u>
Address <u>3226 Reyerson Circle</u>	Address _____
<u>Baltimore, MD 21227</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

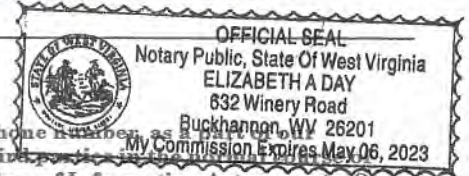
*Brittany Woody*

Subscribed and sworn before me this 20<sup>th</sup> day of April, 2021

My Commission Expires 5/10/2023 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 its regulatory duties. Your personal information may be disclosed to other State agencies or third parties for 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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Adult Signature Required

Adult Signature Restricted Delivery

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 MAY 05 2021

7020 3290 0000 4204 3585

Scott & Karen Pumphrey  
 3226 Reyerson Circle  
 Baltimore, MD 21227

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**SURFACE OWNER WAIVER**

4708508010P

Operator's Well  
Number

Heck #7

**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 57<sup>th</sup> 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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WW-9  
(5/16)

API Number 47 - 085 - 08010  
Operator's Well No Heck #7

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, JWM*

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 \_\_\_\_\_)

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JUN 1 2023

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 Wv Department of Environmental Protection

-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, 2023

My commission expires 5/6/2023



07/02/2021

Operator's Well No. Heck #7

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: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Title: Oil & Gas Inspector Date: 5/5/21

Field Reviewed? (  ) Yes (  ) No

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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.

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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Signature: Brittany Noddy

Date: 5/16/21

RITCHIE COUNTY

LOWER NORTH FORK  
HUGHES RIVER WATER SHED

WL HECK #19

WL HECK #30

WL HECK #7

Heck Cemetery

Off Ridge Rd

WL HECK #28

Off Robbe Rd

MULLENAX N.U #8

WL HECK #26

MULLENAX N.U #10

MULLENAX 2-44

MULLENAX #5

J.L. MULLENAX #10

MULLENAX #11

MULLENAX #6

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 #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°



LOCATION MAP NOT TO SCALE

6		
5		
4		
3		
2		
1		
NO.	DATE	DESCRIPTION

PREPARED FOR  
**Swn**  
Southwestern Energy<sup>®</sup>

SEAL:

PREPARED BY:  
**ASCENT**  
Consulting & Engineering  
2361 DAWISSON RUN ROAD, SUITE 103  
CLARKSBURG, WV 26301  
WWW.ASCENTCONSULTINGENGINEERS.COM  
13041 231 - 3483

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

TITLE:  
**PLUGGING MAP**

PLAN STATUS: SHEET No. 2



2021 FILE: S:\Projects\2021\Projects\Map 2412\Drawings\2412-PLUGGING MAP.dwg PLOT DATE/TIME: 4/17/2021 10:31 AM

4708508010P



D:\PROJECTS\2012\Projects\Map\_Site\Drawings\2412-PLUGGING MAP.dwg  
 PLOT DATE/TIME: 4/21/2012 10:32 AM

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

PROJECT LOCATION



LOCATION MAP NOT TO SCALE

6		
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4		
3		
2		
1		
NO.	DATE	DESCRIPTION

PREPARED FOR:



SEAL:

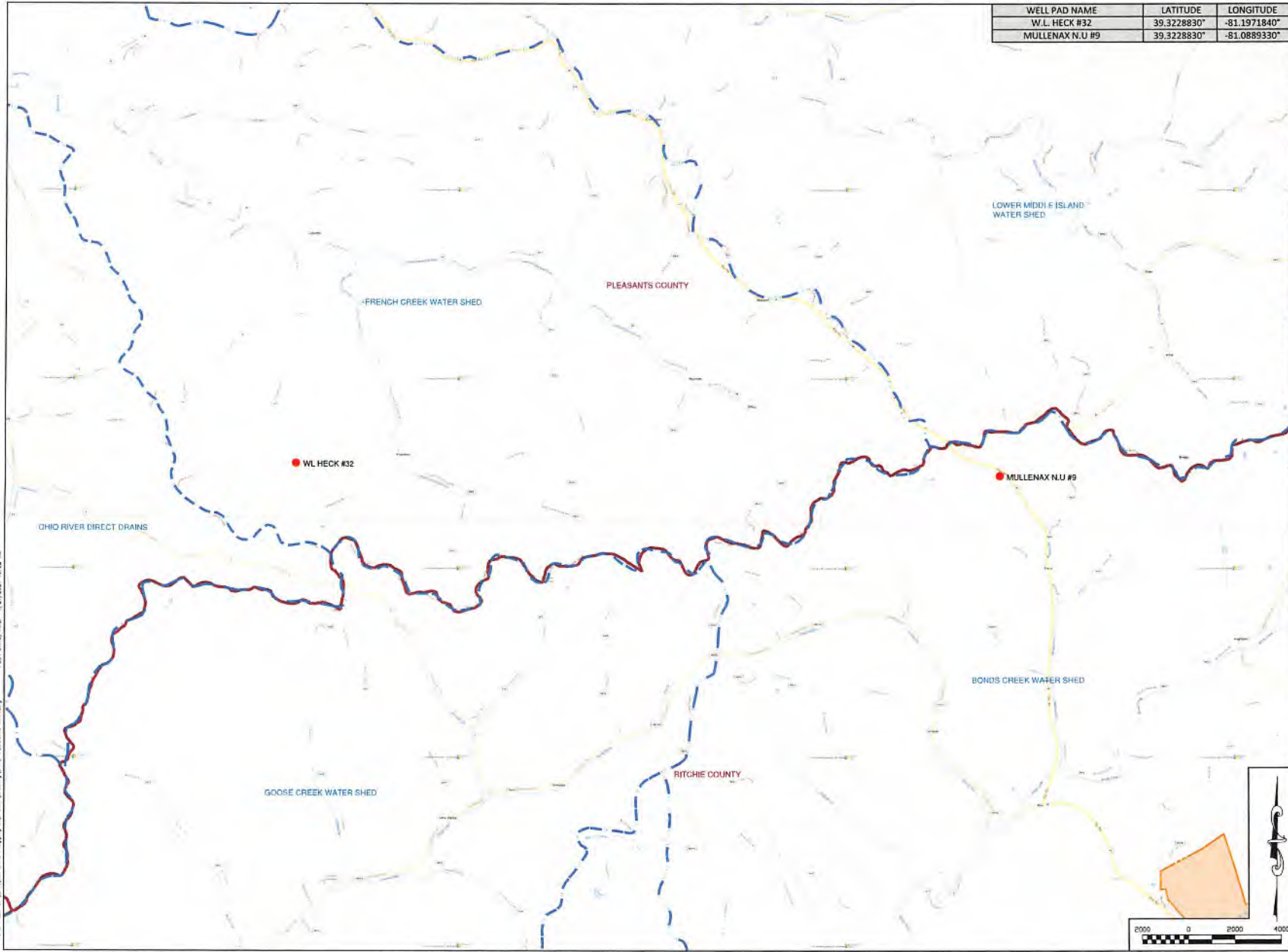
PREPARED BY:



2361 DAVENSON RUN ROAD, SUITE 103  
CLARKSBURG, WV 26301  
WWW.ASCENTCONSULTINGENGINEERS.COM  
(304) 893-3463

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

TITLE:	PLUGGING MAP
PLAN STATUS:	SHEET NO. 3



4708508010P

WW-7  
8-30-06



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

API: 47-085-08010 WELL NO.: 7

FARM NAME: Heck

RESPONSIBLE PARTY NAME: Virco

COUNTY: Ritchie DISTRICT: Grant

QUADRANGLE: Cairo

SURFACE OWNER: Scott & Karen Pumphrey

ROYALTY OWNER: Scott & Karen Pumphrey

UTM GPS NORTHING: 4,332,641.10

UTM GPS EASTING: 483,244.10 GPS ELEVATION: 937'

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: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:  
Survey grade GPS  : Post Processed Differential \_\_\_\_\_  
Real-Time Differential
- Mapping Grade GPS \_\_\_\_\_ : Post Processed Differential \_\_\_\_\_  
Real-Time Differential \_\_\_\_\_

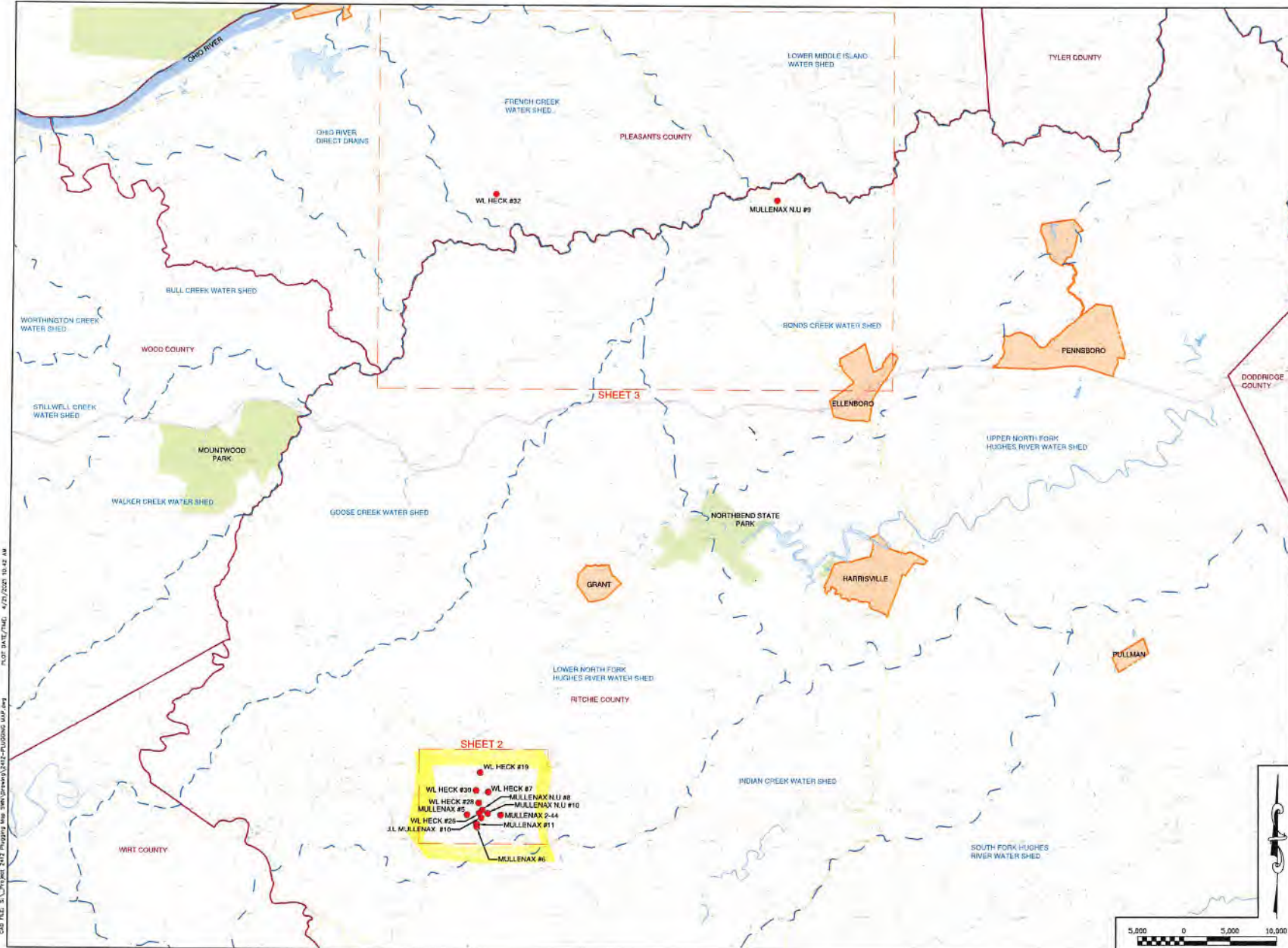
RECEIVED  
Office of Oil and Gas  
MAY 10 2021  
WV Department of  
Environmental Protection

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 Nbody  
Signature

Senior Regulatory Analyst  
Title

5/6/21  
Date



LOCATION MAP NOT TO SCALE

6	
5	
4	
3	
2	
1	

PREPARED FOR:  
**Swn**  
 Southwestern Energy

NO. DATE DESCRIPTION

BEAL:

PREPARED BY:

2361 DAVISSON RUN ROAD, SUITE 103  
 CLARKSBURG, WV 26301  
 WWW.ASCENTCORP.COM  
 (304) 333-3453

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

TITLE: **OVERALL PLUGGING MAP**

PLAN STATUS: SHEET No. **1**



C:\P\2021\2412 Plugging Map\2412 Plugging Map - Plugging Map.dwg  
 PLOT DATE/TIME: 4/27/2021 10:42 AM

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HECK #7

4708508010P

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