

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 <u>www.dep.wv.gov</u>

Monday, December 12, 2022
WELL WORK PLUGGING PERMIT
Vertical Plugging

WEST VIRGINIA LAND RESOURCES, INC. 46226 NATIONAL ROAD WEST

ST. CLAIRSVILLE, OH 43950

Re: Permit approval for M-1789 47-051-02477-00-00

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: M-1789

Farm Name: BASIL MCCRACKEN EST

U.S. WELL NUMBER: 47-051-02477-00-00

Vertical Plugging
Date Issued: 12/12/2022

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.

WW-4B Rev. 2/01

1) Date	SEPT	EME	BER:	28,	20	22
2)Opera	tor'	3			_	-
Well	No.			M-17	789	
3)API V	iell i	No.	47-	061	-	70482

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

APPLICATION	FOR A PERMIT TO PL	UG AND ABANDON
Well Type: Oil/ Gas	X / Liquid injecti	on/ Waste disposal/
(If "Gas, Production	or Underground	storage/ Shallow
Location: Elevation 1:	355.81' Watershi	ed Fourmile run of harts run of Pennsylyanna Fork of Fish Creek
		MARSHALL Quadrangle CAMERON WV,PA
		nated Agent DAVID RODDY
		Address 1 BRIDGE STREET
MONONGAH, WA	26554	MONONGAH, WV 26554
Name STRADER GOWER	<u> </u>	ing Contractor
~~~		Address
VALLEY GROVE, W	V 26060	
	MSHA 101 C Exemption	<b></b>
		RECEIVED Office of Oil and Gas
		OCT 1 3 2022
		WV Department of Environmental Protection
fication must be given to the		
	Location: Elevation 13 District LIB  Well Operator Address 1 BRIDGE STREE MONONGAH, W.  Oil and Gas Inspector to be nowame STRADER GOWER Address 2525W ALEXANDE VALLEY GROVE, W.  Work Order: The work order for the strength of the strength	Location: Elevation or Underground  Location: Elevation 1355.81'

### **EXHIBIT No.1**

From the experience and technology developed since 1970 in plugging oil and gas wells for the mining through, West Virginia Land Resources will utilize the following method to plug all future wells.

### SOLID PLUG METHOD

Well Clean Out

- (a) If active well: Clean out to the total depth and plug back according to the state regulations to a minimum of 200 feet below the lowest minable coal seam.
- (b) If abandoned well: Clean out to the first plug 200 feet below the lowest minable coal seam.

### Cement

- (a) Circulate through the tubing or drill steel an expanding Class A cement plug from a minimum of 200 feet below the minable coal seam to a point 100 feet above the minable coal seam.
- (b) Circulate through the tubing or drill steel an expanding Class A cement plug from 100 feet above the coal seam to the surface

A monument will be installed with API number and stating "solid plug."

Marshall County 101C

Docket No. M-2016-016-C



### 101C MSHA Petition Summary

Marshall County Coal Ohio County Coal

### MSHA LOIC SUMARY

#### Definitions

A. Diligent Effort is defined as pulling 150% casing weight and making at least 3 attempts. Assume casing is 3,000' when length is unknown.

### II. Active Well

- A. Check for Methane
- B. Notify MSHA we are plugging an active well
- C. Kill Well
- D. Pull Sucker Rods and tubing
- E. Make Diligent Effort to Pull Casing
- F. If casing cannot be pulled...
  - i. Run Bond Log
    - 1. Discuss Action Plan with Mine Personal
  - ii. Notify MSHA that casing cannot be pulled
  - iii. Cut, rip, or perforate every 200'. First cut will be 200' above the end of casing up to 200' below Pittsburgh coal
    - MSHA can waive 200' cuts if bond log shows adequate material behind casing.
  - iv. Cut, Rip, or Perforate every 50' from 200' below Pittsburgh to 100' above Pittsburgh (see Appendix A).
  - v. Cut, Rip, or Perforate every 5' from 10' below Pittsburgh Coal to 10' above Pittsburgh (see Appendix A)
- G. Pump Class A Cement from TD to 200' below Pittsburgh
- H. Pump Thixotropic Cement from 200' below Pittsburgh to 100' above
- I. Pump Class A cement from 100' above Pittsburgh to surface.
- J. Install Well Marker

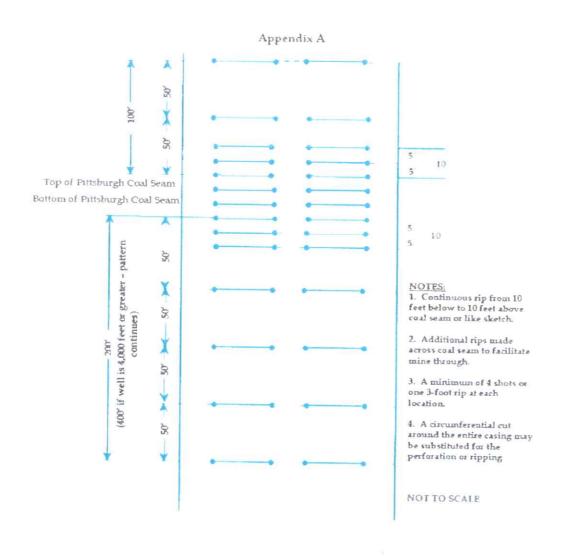
### III. Abandoned Well

- A. Check for Methane
  - i. Notify MSHA if actively producing methane
- B. Kill Well
- C. If well is less than 4,000' deep, clean out well 220' below Pittsburgh (cleanout an extra 20' to allow for variance in coal elevation).
- D. If well has casing, make diligent effort to pull casing as defined above.
- E. If casing cannot be pulled...
  - i. Run Bond Log
  - ii. Notify MSHA that casing cannot be pulled
  - iii. Cut, Rip, or Perforate every 50' from 200' below Pittsburgh to 100' abov Office of Oil Pittsburgh (see Appendix A).

OCT 13

WV Letarin Environmenta

- iv. Cut, Rip, or Perforate every 5' from 10' below Pittsburgh Coal to 10' above Pittsburgh (see Appendix A).
- F. Pump expanding cement under 200 PSI to form a plug 200' below Pittsburgh
- G. Verify plug
- H. Pump Class A Cement from verified plug to 200' below Pittsburgh
- I. Pump Thixotropic Cement from 200' below Pittsburgh to 100' above
- J. Pump Class A cement from 100' above Pittsburgh to surface.
- K. Install well marker



RECEIVED
Office of Oil and Gas

OCT 1 3 2022

WV Department of Environmental Protection

^{***}If the depth is greater than 4,000 feet, all 200' number change to 400' respectively

Select County: (051) Marshall Reset Enter Permit #: 70482 Get Data

✓ Production ✓ Stratigraphy Select datatypes: (Check All) LocationOwner/CompletionPay/Show/Water

Plugging Sample

Report Time: Monday, December 12, 2022 9:02:19 AM

WV Geological & Economic Survey:

Well: County = 51 Permit = 70482 Link to all digital records for well

Location Information: View Map
API COUNTY PERMIT TAX DISTRICT QUAD 75 QUAD 15 LAT DD LON DD UTME UTMN
4705170482 Marshall 70482 Liberty Cameron Cameron 39.801193 -80.541654 539237,6 4405792.4

There is no Bottom Hole Location data for this well

Owner Information:
API CMP_DT SUFFIX STATUS SURFACE_OWNER WELL_NUM CO_NUM LEASE LEASE_NUM MINERAL_OWN OPERATOR_AT_COMPLETION PROP_VD PROP_TRGT_FM TFM_EST_PR
4705170482 -4-1- unknown Prpty Map_John Wendt

Completion information:

API CMP_DT SPUD_DT ELEV DATUM FIELD DEEPEST_FM DEEPEST_FM UNITAL_CLASS FINAL_CLASS TYPE RIG CMP_MTHD TVD TMD NEW_FTG KOD G_BEF G_AFT O_BEF O_AFT NGL_BEF NGL_AFT P_BEF TI_BEF P_AFT TI_AFT BH_P_BEF

470170482 ++- ++- ++- ++-

There is no Pay data for this well

There is no Production Gas data for this well

There is no Production Oil data for this well ** some operators may have reported NGL under Oil

There is no Production NGL data for this well ** some operators may have reported NGL under Oil

There is no Production Water data for this well

There is no Stratigraphy data for this well

There is no Wireline (E-Log) data for this well

There is no Sample data for this well

12/16/2022

WW-4A Revised 6-07

1) Date:	SEPTEMBE	SEPTEMBER 28, 2022			
2) Operator's Well Numb	ber				
6	M-1789				
3) API Well No : 47 -	051	_	70482		

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

			Coal Operator	
	a) Name	BASIL MCCRACKEN EST. (C/O ANN REEVES)	Name	WEST VIRGINIA LAND RESOURCES INC.
Α	ddress	324 HORNE RUN RD.	Address	1 BRIDGE STREET
		AMITY, PA 15311		MONONGAH, WV 26554
(1	o) Name		(b) Coal Own	ner(s) with Declaration
A	ddress		Name	
			Address	
(0	c) Name		Name	
A	ddress		Address	
6) In:	spector	STRADER GOWER	(c) Coal Less	see with Declaration
	$_{ m ddress}$	2525W ALEXANDER RD.	Name	de With Decialation
		VALLEY GROVE, WV 26060	Address	
$T\epsilon$	elephone	(304) 993-6188	11441000	
	- C			

# 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.

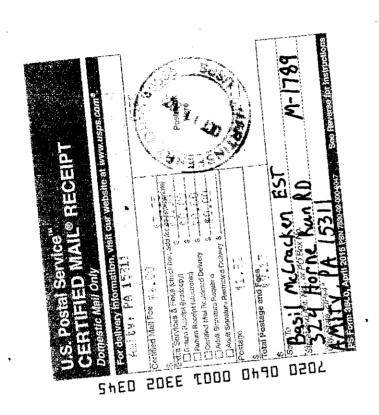
10-	
E	
THE PARTY OF THE P	OFFICIAL SEAL
OF WEST L	STATE OF WEST VIRGINIA
12/ A 7 2 W	NOTARY PUBLIC
EL STATE OF THE	Christian K Warfield
	Murray American Energy Inc
18	6126 Energy Road
MAI SEMPER	Moundsville WV 26041
M	ly Commission Expires June 10, 2024
200000000000000000000000000000000000000	

Well Operator	WEST VIRGINIA LAND RESOURCES INC.	Office of Oil and Gas
By:	JAY HORES	OCT 1 2 2022
Its:	PROJECT ENGINEER	2022
Address	6126 ENERGY ROAD	WV Department, of
	MOUNDSVILLE, WV 26041	Environmental Protection
Telephone	(304) 843-3565	Fretection

Subscribed and sworth before me this _	day of	October		
My Commission Expires	held		Notary Public	
My Commission Expires	June 10,	2024		

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 <a href="mailto:depprivacyoffier@wv.gov">depprivacyoffier@wv.gov</a>.



RECEIVED Office of Oil and Gas-

OCT 1 3 2022

WV Department O. Environmental Protection

WW-9 (5/16)

API Number 47	051	_	70482
Operator's Well No.			

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN
Operator Name WEST VIRGINIA LAND RESOURCES INC. OP Code
Watershed (HUC 10) FOURMILE RUN OF HARTS RUN OF PENNSYLVANIA FORK OF FISH CREEK Quadrangle CAMERON WV,PA
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No Will a pit be used? Yes No
If so, please describe anticipated pit waste:
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)  Reuse (at API Number)
Off Site Disposal (Supply form WW-9 for disposal location)  Other (Explain_ Tanks, see attached letter
Will closed loop system be used? If so, describe: Yes. Gel circulated from tank thru well bore and returned to tank
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Get or Cement
-If oil based, what type? Synthetic, petroleum, etc. RECEIVED  Office of Oil and Gas
Additives to be used in drilling medium? Bentonite, Bicarbonate of Soda
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Shaker cutting buried on site.
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A WV Department of
-Landfill or offsite name/permit number? N/A Environmental Protection
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 o btaining 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  Company Official Title Project Engineer
Subscribed and sworn before me this 7 day of October  OFFICIAL SEAL STATE OF WEST VIRGINIA NOTARY PUBLIC Christian K Warfield Murray American Energy Inc 6126 Energy Road Moundsville WV 26041  My commission expires June 10, 2024  My Commission Expires June 10, 2024

47-051-02477P

# AMERICAN CONSOLIDATED NATURAL RESOURCES & WEST VIRGINIA LAND RESOURCES

### AMERICAN CONSOLIDATED NATURAL RESOURCES & WEST VIRGINIA LAND RESOURCES

46226 National Road St. Clairsville, OH 43950

 phone:
 304.843.3565

 fax:
 304.843.3546

 e-mail:
 JayHores@acnrinc.com

**JAY HORES**Project Engineer

October 7, 2022

Department of Environmental Protection Office of Oil and Gas 601-57th Street Charleston, WV 25320

To Whom It May Concern,

As per the Division of Environmental Protection, Office of Oil and Gas request, Consolidation Coal Company submits the following procedures utilizing pit waste.

Upon submitting a well work application (without a general permit for Oil & Gas Pit Waste Discharge Application), Consolidation Coal Company will construct no pits, but instead will use mud tanks to contain all drilling muds.

Once the well is completed, that material (minus the cave material) will be trucked to the next well to be plugged or to DEP facilities number U-0033-83, O-1001-00, U-1035-91U-46-84, U-78-83, O-1044-9, or U-100-83.

Sincerely,

Jay Hores

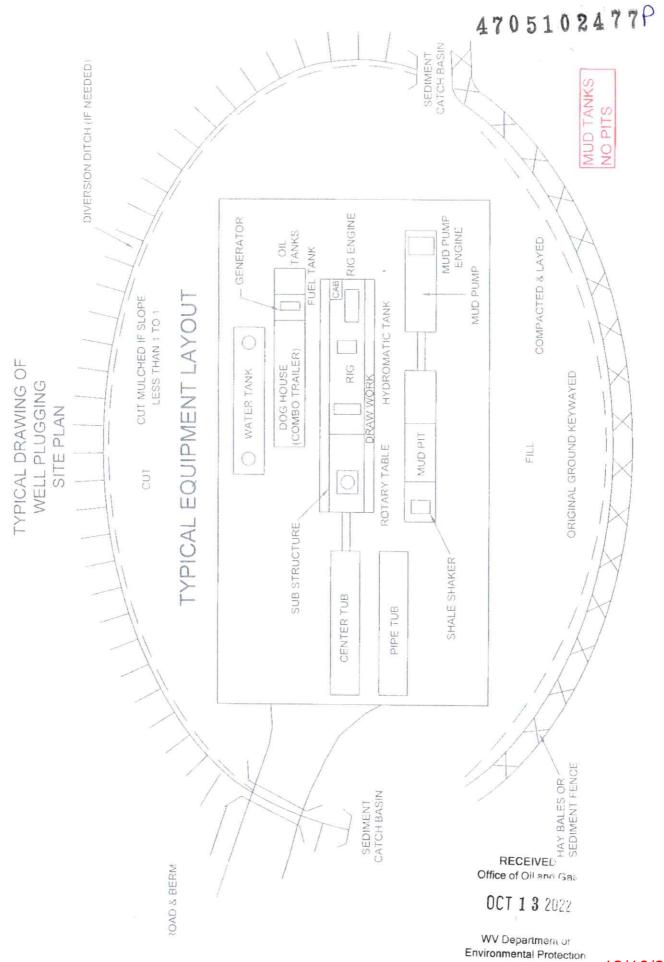
Project Engineer

RECEIVED
Office of Oil and Gas

OCT 1 3 2022

WV Department of Environmental Protection Form WW-9

Proposed Revegetation Treatment: Acres Disturbed 1	Preveg etation pH
Lime 3 Tons/acre or to correct to p	
Fertilizer type 10-20-20 or equivalent	
Fertilizer amount 500	_lbs/acre
Mulch_2Ton	ns/acre
Se	eed Mixtures
Temporary	Permanent
Seed Type Ibs/acre	Seed Type lbs/acre
Seed Mix in accordance with WVDEP Oil	Seed Mix in accordance with WVDEP Oil
and Gas, Erosion and Sediment Control	and Gas, Erosion and Sediment Control
Field Manual	Field Manual
L, W), and area in acres, of the land application area.	lication (unless engineered plans including this info have been water volume, include dimensions (L, W, D) of the pit, and dimen
Maps(s) of road, location, pit and proposed area for land application. If water from the pit will be land applied, provide L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.	ication (unless engineered plans including this info have been water volume, include dimensions (L, W, D) of the pit, and dimen
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided L. W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dimen
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided. It, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dimen
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided L. W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dimen
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided L. W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dime
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided L. W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dime
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided L. W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dime
Maps(s) of road, location, pit and proposed area for land application area. If water from the pit will be land applied, provided L. W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.  Plan Approved by: Strader Gener	water volume, include dimensions (L, W, D) of the pit, and dime



WW-9- GPP Rev. 5/16

N/A

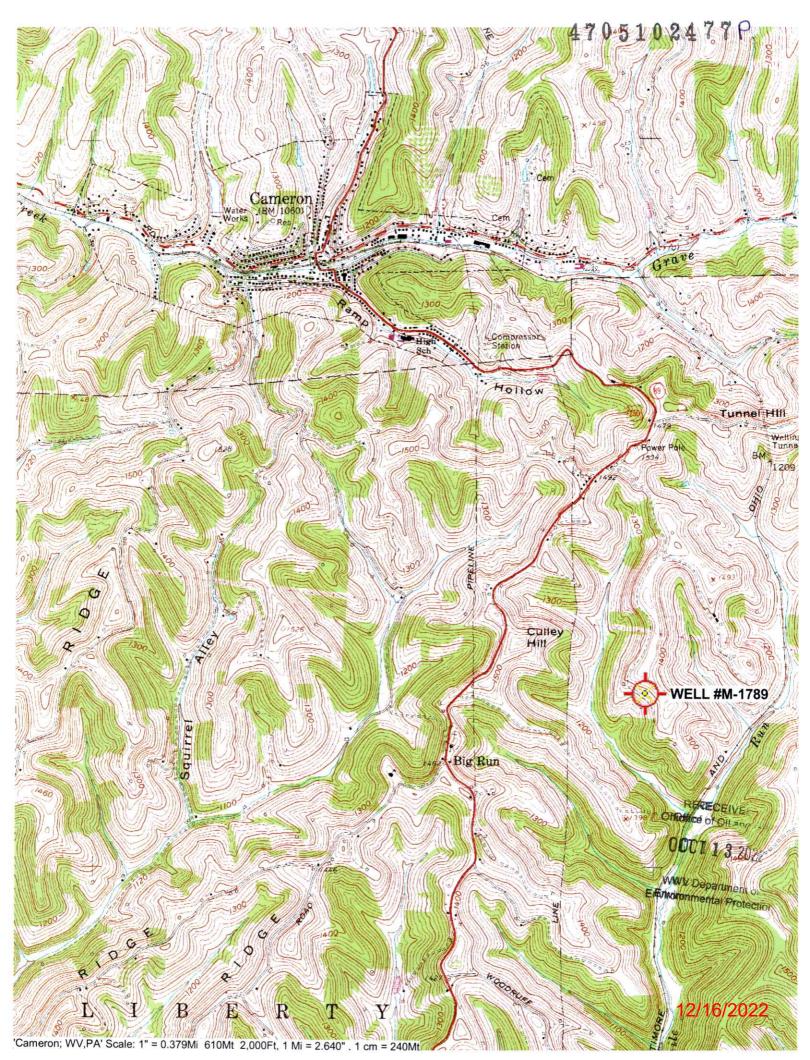
Pa	age	)	_ofZ	
API Number 47	051		70482	
Operator's Well No.				

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

•	perator Name: WEST VIRGINIA LAND RESOURCES INC.	
W	atershed (HUC 10): FOURMILE RUN OF HARTS RUN OF PENNSYLVANIA FORK OF FISH CREEK Quad: CAMERON W	V,PA
a	rm Name:	
ł.	List the procedures used for the treatment and discharge of fluids. Include a list of all operations groundwater.	that could contaminate the
<u> </u> 2.	Describe procedures and equipment used to protect groundwater quality from the list of potential of	ontaminant sources above.
	<u> </u>	
١.	List the closest water body, distance to closest water body, and distance from closest Well He discharge area.	ad Protection Area to the
L	Summarize all activities at your facility that are already regulated for groundwater protection.	
_		RECEIVED
		Office of Ull arra
		OCT 13 2022
		WV Departm : " )* Environmental Projection

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

WW-9- GPP Rev. 5/16	N/A	Page 7 of 2  API Number 47 - 051 - 70482  Operator's Well No.
6. Provide a statement that no	o waste material will be used for deicing	or fill material on the property.
7. Describe the groundwater provide direction on how to	protection instruction and training to be oprevent groundwater contamination.	pe provided to the employees. Job procedures shall
Provide provisions and free	quency for inspections of all GPP elemen	its and equipment.
		RECEIVED Office of Oil and Gas
		OCT 1 3 2022  WV Department of Environmental Protection
Signature:		- Colocup.





# West Virginia Department of Environmental Protection Office of Oil and Gas

## WELL LOCATION FORM: GPS

WELL LO	CATION FORM. GIS		
API: 47-051-70	482 well no.:_	M-1789	
FARM NAME: JOHN V	VENDT		
RESPONSIBLE PARTY NAME:	WEST VIRGINIA LAND RE	SOURCES INC.	
RESPONSIBLE PARTY NAME: COUNTY: MARSHALL	DISTRICT: LI	BERTY	
QUADRANGLE: CAMERO	ON WV,PA		
SURFACE OWNER: BASIL MO	CCRACKEN EST. (C/O	ANN REEVES)	
ROYALTY OWNER:			
UTM GPS NORTHING: 4,40 UTM GPS EASTING: 539	05,841 m	(1355')	
UTM GPS EASTING: 539	,205 m _{GPS ELEVATI}	_{ION:} 413 m	
height above mean sea le  2. Accuracy to Datum – 3.0  3. Data Collection Method: Survey grade GPSX: Post Pr	or a plugging permit or assigned A as will not accept GPS coordinate e: 17 North, Coordinate Units: me vel (MSL) – meters.  5 meters	API number on the es that do not meet	
Mapping Grade GPS: Post	WV Department Environmental Prof	, of tech	
	l-Time Differential	n 1	
4. Letter size copy of the to I the undersigned, hereby certify this belief and shows all the information prescribed by the Office of Oil and O	required by law and the regulation	knowledge and	
Tiste	Professional Surveyor	SEPTEMBER 28, 2022	
Signature	Title	Date	



### Kennedy, James P < james.p.kennedy@wv.gov>

### Plugging permits issued 4705102475 4705102477

1 message

**Kennedy, James P** <james.p.kennedy@wv.gov> Mon, Dec 12, 2022 at 10:50 AM To: "Roddy, David" <DavidRoddy@acnrinc.com>, Strader C Gower <strader.c.gower@wv.gov>, ebuzzard@marshallcountywv.org

To whom it may concern plugging permits have been issued for 4705102475 4705102477.

James Kennedy

WVDEP OOG

#### 4 attachments

