

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Thursday, March 7, 2019 WELL WORK PLUGGING PERMIT Vertical Plugging

TRIAD HUNTER, LLC 125 PUTNAM ST

MARIETTA, OH 45750

Permit approval for 5 47-095-00559-00-00

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:

FERRELL, J. F. Farm Name:

U.S. WELL NUMBER: 47-095-00559-00-00

Vertical Plugging

Date Issued: 3/7/2019

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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 under the terms of that agreement.

WW-4B Rev. 2/01

1)Date	,	² 03/08/2019
2) Operator's Well No. FERRELL, J.F.5		03/08/2019
3) API Well No. 47-095		- 00559

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

	(If "Gas, Production X o	Underground storage) Deep/ Shallowx
		1000 A 15000
5)	Location: Elevation 945' GL (955 GPS)	Watershed HILLS RUN
	District ELLSWORTH	County TYLER Quadrangle PORTERS FALLS
6)	Well Operator Triad Hunter, LLC	7) Designated Agent UNLIMITED ENERGY SERVICES LLC
	Address 125 Putnam Street	Address 264 INDUSTRIAL PARK ROAD
	MARIETTA, OHIO 45750	JANE LEW, WEST VIRGINIA 26378
8)	Oil and Gas Inspector to be notified Name CRAGIN BLEVINS	Name UNLIMITED ENERGY SERVICES LLC
	Address 1407 19TH STREET	Address 64 INDUSTRIAL PARK ROAD
	VIENNA, WEST VIRGINIA 26105	JANE LEW, WEST VIRGINIA 26378
	(See Attachment)	manner of plugging this well is as follows:
		manner of plugging this well is as follows:
		RECEIVED Gas Office of Oil and Gas WY Department of one environmental Protection
Not	(See Attachment)	Office of Oil and Gas

Unlimited Energy Services Plug to Abandon Procedure

- 1) Unlimited Energy Services service rig pulls Rods and tubing out of hole.
- 2) Run tubing to a minimum of 50 feet below producing pay zone, pump and set cement plug using class A cement to a minimum of 50 feet above the producing pay zone, pump a 6% gel ahead of the cement. (Cement plug will be a minimum of 100 feet).
- 3) Tag cement top to ensure plug meets minimum, add cement if necessary find free point on casing, cut and remove casing and pull out of the hole.
- 4) Run tubing to a minimum of 50 feet below cut casing. Pump and set cement plug using Class A Cement to a minimum of 50 feet above cut casing, pump a 6% gel ahead of the cement. Pull tubing (Cement plug will be a minimum of 100 feet elevation plug).
- 5) Tag cement top to ensure plug meets minimum, add cement if necessary.
- 6) Pull and set tubing to a minimum of 100 feet below surface, pump Class A cement to surface (minimum of 100 feet surface and fresh water strata plug)
 - 7) Erect monument 3 foot by 6 foot with identification number and fill with cement.

8) Rig down all equipment. Reclaim location and lease road as necessary. And prepare release forms.

WV Department of Environmental Protection

FEB 2 5 2019

47-095-0559

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Office of Oil and Gas

FEB 25 2019

WV Department of Environmental Proteotion

03/08/2019

WW-4A Revised 6-07 1) Date: 25

2) Operator's Well Number

FERRELL, J. F. 5

3) API Well No.: 47 -

095

00559

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

4)		ner(s) to be served:	5) (a) Coal Operator		
	(a) Name Address	John W Eddy Est 142 Mountainview Drive	Name Address	N/A	
		Kingwood, WV 26537			
	(b) Name		(b) Coal Ow	ner(s) with Declaration	
	Address		Name	N/A	
			Address		
	(c) Name		Name	-	
	Address		Address		
6)	Inspector	CRAGIN BLEVINS	(c) Coal Less	see with Declaration	
	Address	1407 19TH STREET	Name	N/A	
		VIENNA, WEST VIRGINIA 26105	Address		
	Telephone				

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
By: Mike Horan

Operations Manager

Panala 4. Mikhines stotary Publiq 25 Putnam Street
In and For The State of Ohio MARIETTA, OHIO 45750

Any Commission Expires

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 depprivacyoffier@wv.gov.



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

Richard J. Simmers, Chief Division of Oil and Gas Resources Management 2045 Morse Road – Bldg. F-2 Columbus, OH 43229-6693

Phone: (614) 265-6922, Fax: (614) 265-6910

ORDER BY THE CHIEF

RECEIVED

Office of Oil and Gas

February 5, 2016

FEB 1 4 2019

ORDER NO. 2016-29

WV Department of Environmental Protection

TO:

Mud Masters

739 Southgate Parkway Cambridge, OH 43725

RE:

Mud Masters Lore City Treatment Facility

Lore City, Ohio

Guernsey County, Lore City Township

SUBJECT:

Temporary Authorization to Store, Recycle, Treat, and Process Brine and

Other Waste Substances Pursuant to R.C. 1509.22

Pursuant to Ohio Revised Code Section 1509.22, the Chief of the Division of Oil and Gas Resources Management ("Chief" or "Division") issues the following Order:

BACKGROUND:

- 1. Mud Masters proposes to operate an oil and gas waste facility to be located at 64036-A Wintergreen Road, Lore City, Ohio in Guernsey County ("Lore City Facility"). The Lore City Facility is a treatment facility that proposes to treat brine or other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources for lawful disposal. The brine or other waste substances will be treated for the purpose of disposal in an adjacent Class II injection well or if the brine or other waste substances are not suitable for injection, will be stabilized for landfill disposal.
- 2. Division (B)(2)(a) of R.C. 1509.22 states, in pertinent part, that "* * no person shall store, recycle, treat, process, or dispose of in this state brine or other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources without an order or a permit issued under this section or section 1509.06 or 1509.21 of the Revised Code or rules adopted under any of those sections."

03/08/2019

Mud Masters
Lore City Facility
Page 2 of 4

Chief's Order No. 2016-29

3. On October 30, 2015, the Division received an application from Mud Masters requesting to temporarily store, treat, and process brine and other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources at the Lore City Facility. In its application, Mud Masters supplied the Division with information and details regarding its proposed operations. The Lore City Facility will accept liquid and semi-solid oilfield wastes for the purpose of treating them for disposal. Those waste materials suitable for disposal in a Class II underground injection well will be treated prior to pumping them to an adjacent injection well for disposal. The material not suitable for underground injection will be stabilized and tested prior to RECEIVED transportation to a landfill for lawful disposal.

FEB 1 4 2019

ORDER:

IT IS HEREBY ORDERED:

WV Department of Environmental Protection

Mud Masters has temporary approval at the Lore City Facility to temporarily store, treat, and process brine or other oilfield waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources, subject to the following conditions:

- 1. Mud Masters shall conduct all operations at the Lore City Facility in compliance with R.C. Chapter 1509 and Ohio Adm.Code 1501:9.
- 2. Brine shall not be disposed of in a manner not specified in R.C. 1509.22(C)(1)(a) through R.C. 1509.22(C)(1)(c). Disposal of brine pursuant to R.C. 1509.22(C)(1)(d) requires separate written approval by the Chief.
- 3. Mud Masters shall conduct all operations at the Lore City Facility in accordance with the application submitted to the Division for this facility. Mud Masters shall notify the Division prior to implementing any changes in operations at the Lore City Facility.
- 4. Mud Masters shall stabilize oilfield waste substances by adding quick-lime, Portland cement, or an alternate stabilization agent approved by the Chief, if the waste substance is to be disposed of in this state at a licensed solid waste landfill. If the waste substance is to be transported or disposed of out of state, Mud Masters shall comply with all applicable state and federal laws.
- 5. Mud Masters shall implement the Radiological Protection Plan ("RPP") submitted to the Division with the application for the Lore City Facility and shall continuously update the protocols and procedures in accordance with the plan.
- 6. Not later than one year after the date of this order, Mud Masters shall perform a radiation and contamination survey of the Lore City Facility, including the on-site vessels and equipment, to determine if there is a need to modify the procedures and protocols in the RPP

RECEIVED Office of Oil and Gas

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Mud Masters
Lore City Facility
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Chief's Order No. 2016-29

WV Department of Environmental Protection

to ensure the protection of its employees, contractors, and the public health and safety as well as the environment. Any modifications of the RPP will be incorporated and made a part of this order and Mud Masters shall operate the Lore City Facility in accordance with the modified plan.

- 7. Mud Masters shall maintain waste and material management records for Lore City Facility and provide those records to the Division upon request. The records shall include, but not be limited to, manifests of all incoming oilfield waste substances and the final disposition of all the outgoing oilfield waste substances.
- 8. Mud Masters shall notify the Division at least 14 days before terminating operations at the Lore City Facility.
- 9. Mud Masters shall remediate any brine or other waste substances associated with the exploration, development, well stimulation, production operations, or plugging of oil and gas resources that is released in ground water or in or on the land or discharged in surface water as a result of the operations at the Lore City Facility.
- 10. This Chief's Order shall terminate upon any of the following, whichever occurs first:
 - a) The Division issues a permit to Mud Masters for the Lore City Facility pursuant to rules promulgated under to R.C. 1509.22(C);
 - b) The Division denies a permit to Mud Masters for the Lore City Facility pursuant to rules promulgated under R.C. 1509.22(C); or
 - c) Six months after the effective date of rules adopted under R.C. 1509.22(C):
 - d) The location of the Lore City Facility changes from 64036-A Wintergreen Road, Lore City, Ohio.

e) The ownership of the Lore City Facility changes from Mud Masters.

Date /

Richard L. Simmers, Chief

Division of Oil and Gas Resources Management

Addressee is hereby notified that this action is final and effective and may be appealed pursuant to Section 1509.36 of the Ohio Revised Code. If the Order is appealed to the Ohio Oil and Gas Commission, the appeal must be in writing and must set forth the Orders complained of and the grounds upon which the appeal is based. Such appeal must be filed with the Oil and Gas

Office of Oil and Gas

47-095-00559P 03/08/2019

FEB 1 4 2019

Mud Masters Lore City Facility Page 4 of 4

WV Department of Environmental Protection Chief's Order No. 2016-29

Commission, 2045 Morse Road, Building H-3, Columbus, Ohio 43229-6693, within thirty (30) days after receipt of this Order.

In addition, within three (3) days after the appeal is filed with the Oil and Gas Commission, notice of the filing must be submitted to Richard J. Simmers, Chief, Division of Oil and Gas Resources Management, Ohio Department of Natural Resources, 2045 Morse Road, Building F, Columbus, Ohio 43229-6693.

CERTIFIED MAIL No: 91 7199 9991 7036 4067 2414

91 7199 9991 7036 4067 2414

cc:

Legal Section

Steve Opritza, Permitting Manager

Engineering Section

Brent Bear, Region Supervisor

Douglas Bennett, Guernsey County Oil and Gas Inspector

WW-9 (5/16)

API Number 47 -	095	_00559	03/08/2019
Operator's Well N	o.		

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Triad Hunter, LLC	OP Code 494494833
Watershed (HUC 10) Hills Run	Quadrangle Porters Falls
Do you anticipate using more than 5,000 bbls of water	r to complete the proposed well work? Yes No
Will a pit be used? Yes No	
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 V	Vastes:
Land Application (if select	ed provide a completed form WW-9-GPP)
Underground Injection (U	IC Permit Number
Reuse (at API Number Off Site Disposal (Supply	form WW-9 for disposal location)
Other (Explain_	tolil w w -5 for disposariocation)
Will closed loop systembe used? If so, describe: All	flowback materials will be contained in open top pit.
Drilling medium anticipated for this well (vertical and	d horizontal)? Air, freshwater, oil based, etc. N/A
-If oil based, what type? Synthetic, petroleu	m, 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 mediu	m will be used? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? Fit	uids will be disposed by contractor/operator at Mud Masters, LLC: See Attachments.
	Oil and Gas of any load of drill cuttings or associated waste rejected at any provided within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Cas of the provisions of the permit are enforceable by law. Viola or regulation can lead to enforcement action. I certify under penalty of law that I have application form and all attachments thereto and that, the information, I believe that the information is tru submitting false information, including the possibility	erms and conditions of the GENERAL WATER POLLUTION PERMIT issued. West Virginia Department of Environmental Protection. I understand that the ations of any term or condition of the general permit and/or other applicable law personally examined and am familiar with the information submitted on this based on my inquiry of those individuals immediately responsible for obtaining e, accurate, and complete. I am aware that there are significant permittees for of fine or imprisonment.
Company Official (Typed Name) Mike Horan	FEB and of ion
Company Official Title Operations Manager	Wy Department of Wy Departmental Protection
company official Title	THIRING ENVIOR
W.	CI STANIAL STA
Subscribed and sworn before me this 19	day of February ADAM ROWAN
asum I. hounn	Notary Public, State of Chic
My commission expires November 18,	Notary Public, State of Chic My Commission Expires 11-18-20
iviy commission expires /vavcingsiv 18,	
	2.20

Onn ww-2	Operator's	Well No	03/08/2019
Proposed Revegetation Treatment: Acres Disturbed	ONE Preveg ctation	pll 5.5	
Lime Two Tons/acre or to cor	тесі to p11 6.5		
Fertilizer type 10-20-20			
Fertilizer amount 500	lbs/acre		
Mulch_50 Bales 2.5	Tons/acre		
	Seed Mixtures		
Temporary	Pern	ianent	
Seed Type lbs/acre	Seed Type	lbs/acre	
	Orchard Grass	30%	
	Rye(annual @BT)	35%	
	Timothy (Climax)	25%	
	Clover (Med.Red)	10%	
Photocopied section of involved 7.5' topographic she			
Plan Approved by:			·
Conments:			
			• •
			PECENED Gas
Pida.	15.4		" " K 1012
Fide:			FEB 2 3 2 WV Department of Environmental Protect
Field Reviewed? () Yes	()No		Environmental 1

WW-9- GPP Rev. 5/16

	Page	L	of 2	03/08/2019
ΛΡΙ Number			00559	
Operator's W	ell No.			

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

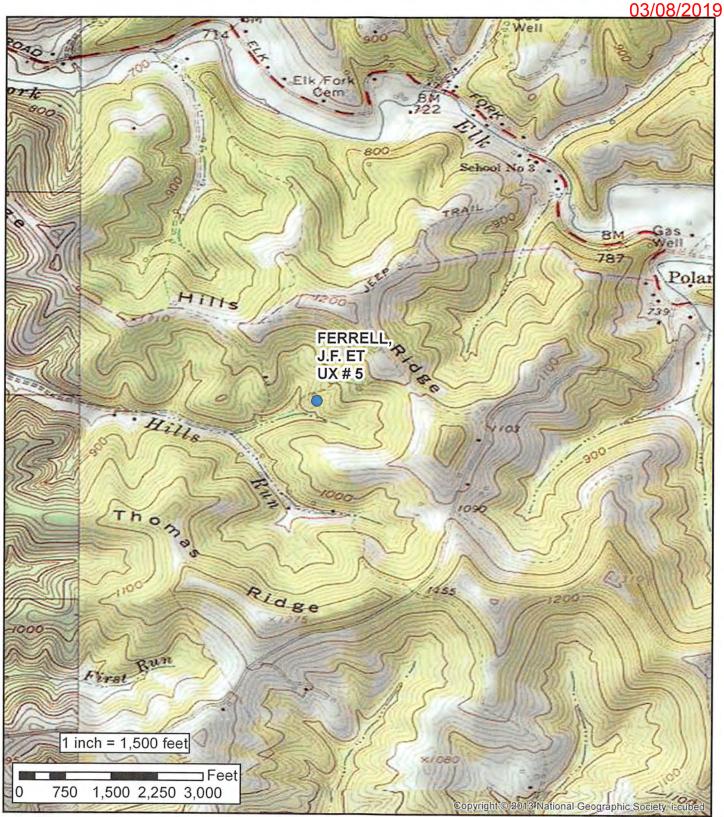
Watershed (HUC 10): Hills Run	Quad: Porters Falls
farm Name:	
 List the procedures used for the treatment and digroundwater. 	ischarge of fluids. Include a list of all operations that could contaminate the
Plug to abandon operations.	
Describe procedures and equipment used to prote	ect groundwater quality from the list of potential contaminant sources above.
Containment will be in place around the	e well. And a portable pit will be used for fluids.
List the closest water body, distance to closest discharge area.	t water body, and distance from closest Well Head Protection Area to the
N/A	
	·
s. Summarize all activities at your facility that are a	already regulated for groundwater protection.
. Summarize all activities at your facility that are a	already regulated for groundwater protection.
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<u> </u>	RECEIVED Office of Oil after
· · · · · · · · · · · · · · · · · · ·	already regulated for groundwater protection. RECEIVED Office of Oil and FEB 25 WV Departmental or your facility or an adjacent property.

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

WW-9- GPP Rev. 5/16	Page of 2 03/08/201 API Number 47 - 095 - 00559 Operator's Well No
N/A	
. Provide a statement that no waste material wil	ll be used for deicing or fill material on the property.
No waste materials will be used for t any will not be used for material fill o	he deicing of area or equipment. And waste materials if on the property.
provide direction on how to prevent groundw	tion and training to be provided to the employees. Job procedures shall cater contamination. Ty employee. Spill kits and containment are on each work
Provide provisions and frequency for inspect	ions of all GPP elements and equipment. operations by designated employees.

Inspections are done before during operations by designated en	mployees.
	RECEIVED Gas
Signature:	Office of 0. 2019
Date:	PECEIVED Gas Office of Oil and Gas FEB 2 5 2019 WV Department of Environmental Protection

47-095-00559P



Well Name: Ferrell, J.F. #5

Triad Hunter, LLC A subsidiary of Blue Ridge Mountain Resources, Inc.

Tyler County - Ellsworth District - West Virginia

PER 2 5 2019

Wy Department of Environmental Protection



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-095-00559 WELL NO.: 5	_
FARM NAME: FERRELL, J. F.	_
RESPONSIBLE PARTY NAME: Triad Hunter, LLC	
COUNTY: TYLER DISTRICT: ELLSWORTH	
QUADRANGLE: Porters Falls	
SURFACE OWNER: John W Eddy EST	••
ROYALTY OWNER: Unknown	-
UTM GPS NORTHING: 4374189.9523	
UTM GPS EASTING: 511675.6408 GPS ELEVATION: 945'	
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 X Marring Crade CBS A Part Proposed Differential	RECEIVED Gas
	on h Lors
belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.	FEB & • - WV Department of WV Department Protection
Signature Operations Manager 7/3/19 Title Date	<u>4</u>