

west virginia department of environmental protection

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

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

Monday, August 27, 2018 WELL WORK PERMIT Vertical / Plugging

TEAVEE OIL & GAS, INC. 112 BROOKS STREET

CHARLESTON, WV 253010000

#### Re: Permit approval for HARSHBARGER 4 47-011-00854-00-00

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.

Please be advised that form WR-35, Well Operators Report of Well Work 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 SHBARGER 4

Operator's Well Number: Farm Name: U.S. WELL NUMBER: Vertical Date Issued: 8/27/2018

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.

٠,		47-011-0085
WW-4B Rev.	· ·	1) Date June 19 , 2018 2) Operator's Well No. J.H. Harshbarger #4 3) API Well No. 47-01 -00054
	DEPARTMENT OF ENVIR	ST VIRGINIA CONMENTAL PROTECTION DIL AND GAS
	APPLICATION FOR A PERM	IIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas <u>XX</u> / Liquid (If "Gas, Production <u>XX</u> or Und	l injection/ Waste disposal/ Herground storage) Deep/ Shallow
5)	Location: Elevation <u>980.7 feet</u> District Grant District	Watershed Big Two Mile Creek County Cabell Quadrangle Milton WV
6)	Well Operator Address Teavee Oil & Gas Inc. PO Box 27 Winfield, WV 25213	7)Designated AgentDuane K. Bowers AddressPO Box 27 Winfield, WV 25213
8)	Oil and Gas Inspector to be notified Name Allen Flowers Address 165 Grassy Lick Lane Liberty, WV 25124	9) Plugging Contractor Name_To Be Determined Office of Oil and Gas AddressAUG 3 2018 WV Department of
RI	H to check wellbore conditions. Try removing packer set ot 2,802'. But tubing to the top of shots @ 3,408', gel hole to 1,000'. Set	Environmental Protection

cil/water zone @ 1,550'-1,350'. POOH & remove remaining casing out of well. RIH with tubing to 940' and plug across water zone from 960'-860'.

pull tubing to 410' and plug across water bearing zone @ 410-285', 50' above and below water zone. Pull to 100' and set top plug from 100'-0'.

Install 7\* monument labeled with API# and plugged date.Rig down equipment and fluid tanks, reclaim all effected property, seed and mulch entire location.

If not able to remove packer, a cement plug will be placed above the packer from 2,800'-2,700'. If 6.625" casing is unable to be removed holes will be ripped at all necessary plug depths.

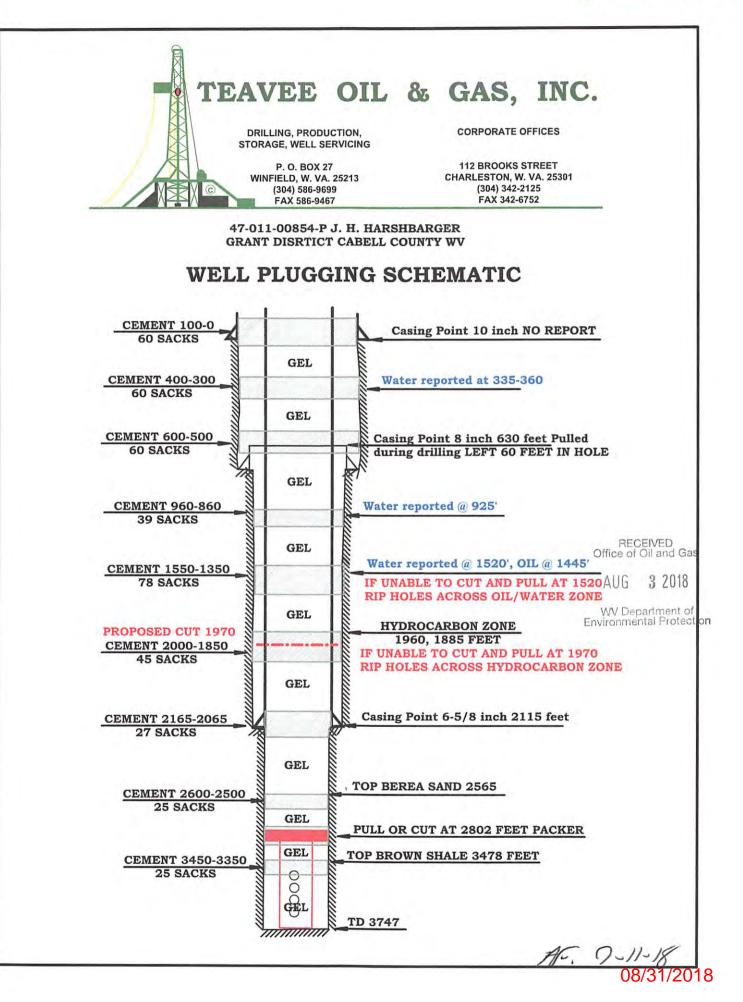
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector

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A.S. \_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_\_//-\_//



Woll No. 4

#### BIG TWO MILL CAS COMPANY J. B. BARSHARCER FARM GRANT DISTRICT, CAMELL COUNTY, W. VA.

Formation	<u>000</u>	Botiom	Romarks
Red Rock, Clay and Boalders	0	335	Show of ell 1445'
Sand	355	360	
Not recorded	360	900	
Sand	900	1/40	
Salt Sand	1/0	1760	
Maxton Sand	1760	1775	
Slate	1775	1780	
Little Lime Pencil Cave Big Lime Keener Sand Slate Big Injun	1780 1795 1803 1910 2015 2030	1795 1803 2015 2030 2110	Show of oil 1885: Show of gas 1960:
Slate	2110	2555	Gas 2569' to 2577'
Brown Shale	2555	2565	
Berge Grit	2565	2577	
Black Shell	2577	2587	

well commonded January 16, 1923

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1 . .

Drilling Crew: C. W. Eline, Wm. Handloy, Drillers Ommie Harbour, Zoll Bartin, Holpors

Shot: March 15, 1928 - 40 gts.

Woll gauged 35/10 after shot

March 22, 1928 well tubod and turned into line.

	<u>C</u>		
<u>S120</u>	Usod	Pulled Out	Loft In
8-1/4" 6-5/8"	630 2115	570	2115

### Well No. 4

#### BIG TWO MILE GAS COMPANY J. H. HARSHBARGER FARM GRANT DISTRICT, CABELL COUNTY, W. VA.

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#### Deepening of Well

Formation	Top	Bottom	Remarks
Slate and Shall	2577	2390	· ·
Light Brown Shale	2890	3000	
Slate and Shell	3000	3265	
Light Brown Shale	3265	3285	
White_Slate	3285	3460	
Grey Shale	3460	3478	:
Brown <sup>*</sup> Shale	3478	3508	
White Slate	3508	3545	
Dark Brown Shale	3545	3880	Gas 3443; Increase 3463
White Slate	3630	3690	Increase 3485; Increase 3645
Srown Ehale	3690	3741	Increase 3695
Slate	3741	3746	
Total Depth		3743	

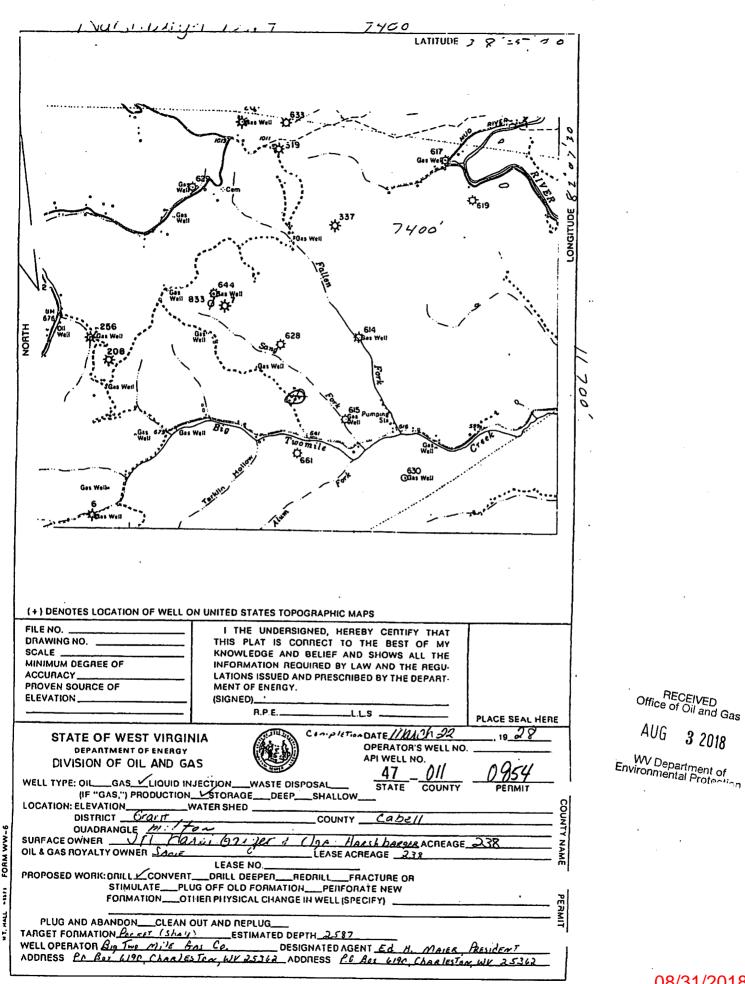
Shot October 12, 1934 with 2300 15. gelatin Top of shot 3408'; bottom of shot 3746' Combination wall and anchor packer set at 2802' Tubed with 3747 ft. of 3" tubing Turned into line October 14, 1934 Gauged 31/10 moreury in 2" one hour after shot

Office of Oil and Gas

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WV Department of Environmental Protection

47-01-00854P



08/31/2018

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WW-4A Revised 6-07 47-011-008541

1)	Date:	June 19, 2018
2)	Operator's	Well Number

J.H. Harshbarger #4

3) API Well No.: 47 - 011 - 00854-P

#### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface	Owner(s) to be served:	5) (a) Coal Operator		
(a) Nam	e Kim R. & Ladonna S. Jackson	Name	N/A	
Address	R.R. 2 Box 329 Milton WV 25541-97	786 Address		
(b) Nam	e	(b) Coal Ow	ner(s) with Declaration	· · · · · · · · · · · · · · · · · · ·
Address		Name	N/A	
		Address		
(c) Nam	e	Name		RECEIVED
Address		Address		Office of Oil and Gas
				AUG 3-2018
6) Inspector	Allen Flowers	(c) Coal Les	see with Declaration	1100 0 2010
Address	165 Grassy Lick Lane	Name	N/A	WV Department of
	Liberty, WV 25124	Address		Environmental Protection
Telepho	ne (304)552-8308			

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.

a	Well Operator	Teavee Oil & Gas Inc
2 26	By:	Duane K. Bowers Flyand, Journe
P P.	Its:	Designated Agent
A NO	Address	P.O. Box 27
x x 118		Winfield, WV 25213
or all	Telephone	(304)586-9699
Subscribed and sworn before My Commission Expires	May 25th 202	ay of 2018 OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA CHRISTIAN V. SMITH 146 LAKEVIEW DRIVE WINFIELD, WV 25213
	1	My Commission Expires May 26, 2021

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 <u>depprivacyoffier@wv.gov</u>.

#### SURFACE OWNER WAIVER

011-00854-P

Operator's Well Number

J.H. Harshbarger #4

#### 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. (<u>Note:</u> 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 RECEIVED Office of Oil and Gas

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WV Department of Environmental Protection

<u>Time Limits and methods for filing comments.</u> 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.

<u>Comments must be in writing.</u> 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.

Kin K Jan Signature

Date 07/27/18 Name By Its

FOR EXECUTION BY A CORPORATION,

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Date

Signature

08#31/2018

# 47-011-00 854P

146 LAKEVIEW DRIVE WINFUED, VI 752 018 My Commission Expires May 26, 2021

WW-9	A PI Number 47 - 011 _00854
(5/16)	API Number 47 - 011 _ 00854 Operator's Well No. J. H. Harshbarger #4
DEPARTMENT OF I OFFIC	OF WEST VIRGINIA ENVIRONMENTAL PROTECTION E OF OIL AND GAS DISPOSAL & RECLAMATION PLAN
Operator Name_ Teavee Oil & Gas Inc.	OP Code 306769
Watershed (HUC 10) Big Two Mile Creek	Quadrangle Milton, WV
Do you anticipate using more than 5,000 bbls of water to c Will a pit be used? Yes X No	omplete the proposed well work? Yes No
If so, please describe anticipated pit waste: Salt	water, crude oil, Bentonite gel, Cement tailings
Will a synthetic liner be used in the pit? Yes	
Proposed Disposal Method For Treated Pit Waste	25:
XXX Land Application (if selected pr Underground Injection (UIC Po Reuse (at API Number Off Site Disposal (Supply form	ermit Number)
Other (Explain Will closed loop systembe used? If so, describe:No	
Drilling medium anticipated for this well (vertical and hor -If oil based, what type? Synthetic, petroleum, etc	
Additives to be used in drilling medium? N/A	
Drill cuttings disposal method? Leave in pit, landfill, remo	oved offsite, etc. Very little formation returns expected, leave in pitcelVED
-If left in pit and plan to solidify what medium wi	Office of Oil and Gas
-Landfill or offsite name/permit number?N/A	AUG 3 2018
	WAY Department of
	and Gas of any load of drill cuttings or associated waste rejected at any Protection rided within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Gas of the Wes provisions of the permit are enforceable by law. Violations or regulation can lead to enforcement action. I certify under penalty of law that I have perso	and conditions of the GENERAL WATER POLLUTION PERMIT issued at Virginia Department of Environmental Protection. I understand that the s of any term or condition of the general permit and/or other applicable law enally examined and am familiar with the information submitted on this d on my inquiry of those individuals immediately responsible for obtaining

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	Elvanet. 1 Sources	
Company Official	(Typed Name)	Duane K. Bowers	

202

Company Official Title Designated Agent

Subscribed and swom before me this 1971 day of Junc , 20 Conternation of Ficial Seal NOTARY PUBLIC STATE OF WEST VIRGINIA

My commission expires may 26th

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Form	WW-9	
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posed Revegetation Trea	tment: Acres Disturbed 1.	.5 Preveg etation	<sub>грН</sub> <u>6.5</u>
Lime 2	Tons/acre or to correct	ct to pH 7	
Fertilizer type 10	10 10		
Fertilizer amount	600	lbs/acre	
Mulch 2		Tons/acre	
Te	emporar y	<u>Seed Mixtures</u> Peri	manent
Seed Type	lbs/acre	Seed Type	lbs/acre
		Kentucky 31 Tall F	escus 50#
		•	
		Winter Wheat 100#	ŧ

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: <u>Allwis. Flowers</u>	Office of	EIVED Oil and Gas
Comments: Mulel & Gesal Stre	WV Den Environmer	ntal Protection
Protate 291. notice to itigreurice.		-
		-
Title:         State:         0         11-16           Field Reviewed?         Yes		

WW-9- GPP Rev. 5/16

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 Page
 of

 API Number
 47 - 011
 - 00854

 Operator's Well No.
 J.H. Harshbarger #4

Quad: Milton

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

Operator Name: Teavee Oil & Gas Inc.

Watershed (HUC 10): Big Two Mile Creek

Farm Name: J. H. Harshbarger

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

See our attached approved treatment process.

There is nothing in our plugging procedure that will contaminate the ground water. 20 MIL pit liner will be utilized in this plugging operation, into which all recovered fluids will be captured.

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

Earthen pit will be dig and a berm created around it so all well fluids will enter the lined pit.

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

Big Two Mile Creek of Mud River which is located 1,115' from the well head. There are no Well Head Protection Areas.

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

None

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

47-011-00854P

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N/A

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

This is a plugging operation, no drill cuttings are anticipated, all saltwater will be treated, diluted, and predischarge tested and approved by DEP Oil & Gas Inspector. All crude oil will be skimmed and barreled, for sale. No waste material will be used for deicing or fill material at this location or 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 company employees are trained in house to identify leaks from the well head and fl as well as equipment leaks. Operator qualifications on spill materials is part of our train mission. All contractors will be held responsible to meet or exceed all company operat safety protocol.	ning
	Office of Oil and
	AUG 3 201

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

WV Department of Environmental Protection

Daily inspection of all flow lines and tanks along with all other associated equipment will be inspected for leaks and or spills. Spills will be promptly and securley controlled, cleaned, disposed of, and reported to the proper personnel. Containment will be used under all flowlines to help prevent leaks from contacting the ground.

JOWEN Signature:

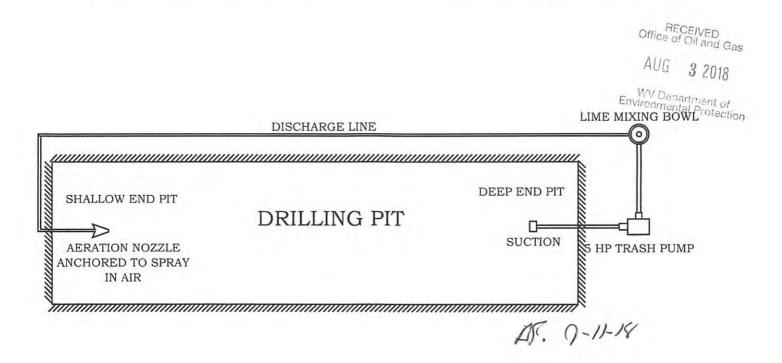
Date: June 19, 2018



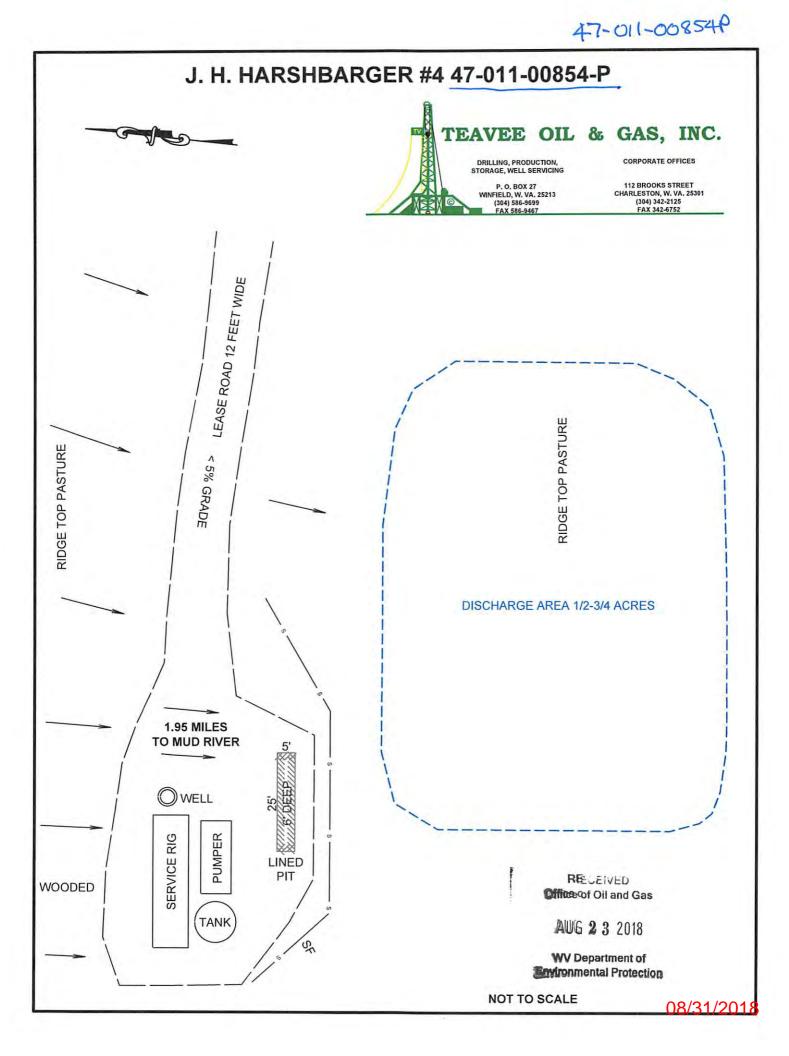
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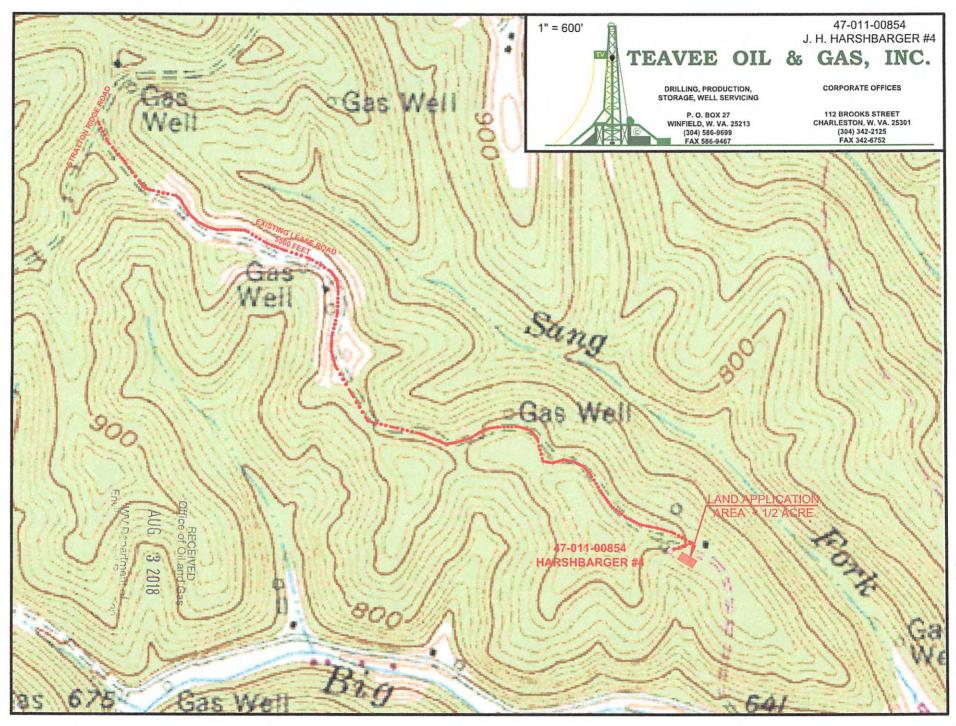
# **AERATION TECHNIQUE #038**

- 1. TEST PIT WATER FOR OPTIONAL PRETREATMENT PARAMETERS
- 2. START 5 H.P. TRASH PUMP MIX HYDRATED LIME TO PIT WATER AND SPRAY UP INTO AIR OVER SHALLOW END OF PIT
- 3. AERATE PIT WTAER FOR 8 HOURS OR LONGER TO GET pH HIGH
- 4. RECORD ALL INFORMATION ON WR-34 AND COMPANY RECORDS
- 5. LET PIT STAND FOR REQUIRED NUMBER OF SETTLING DAYS
- 6. CHECK FOR PREDISCHARGE PARAMETERS (IF PIT IS NOT ACCEPTABLE CONTINUE AERATION OF WATER FOR ADDITIONAL TIME



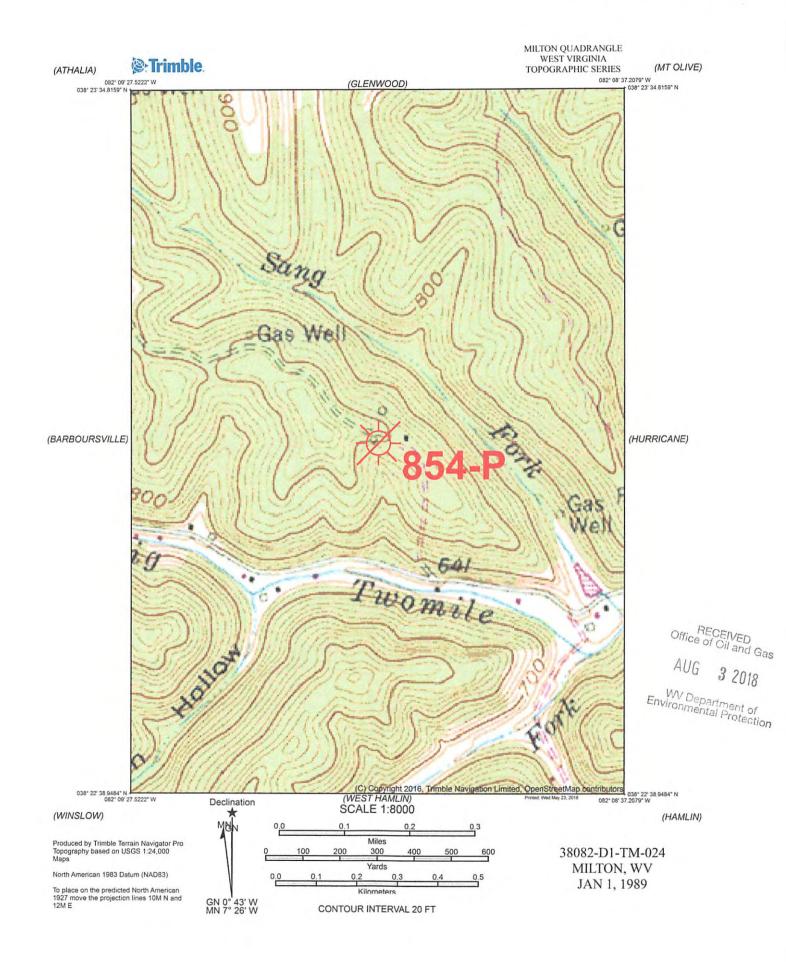
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47-011-008541

# 47-011-00854P



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47-011-00854 West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS API: \_\_\_\_\_\_ 47-011-00854-P \_\_\_\_\_ WELL NO: \_\_\_\_\_ J. H. HARSHBARGER #4 FARM NAME: J. H. HARSHBARGER RESPONSIBLE PARTY NAME: TEAVEE OIL & GAS, INC. COUNTY: CABELL COUNTY DISTRICT: GRANT DISTRICT QUADRANGLE: MILTON, WEST VIRGINIA SURFACE OWNER: \_\_\_\_\_ KIM JACKSON ROYALTY OWNER: FLAT WELL ROYALTY UTM GPS NORTHING: 4249187.62 METERS UTM GPS EASTING: 17 399502.63 METERS GPS ELEVATION: 271.19 METERS (980,7') The responsible party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit 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: Office of Oil and Gas Survey grade GPS \_\_\_\_\_: Post Processed Differential \_\_\_\_\_ Real-Time Differential AUG 3 2018 Mapping Grade GPS 🗹: Post Processed Differential 🗸 WV Department of Real-Time Differential Environmental Protection 4. Letter size copy of the topograpic 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. DUANE K. BOWERS PS 1995 ★ NO. 1995 PROFESSIONAL SURVEYOR Title Signature 03/22/2018

Date

-MW