



west virginia department of environmental protection

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

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

June 28, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-10302598, issued to HG ENERGY, LLC, 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 all 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. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: 4
Farm Name: HOGE, E. M.
API Well Number: 47-10302598
Permit Type: Plugging
Date Issued: 06/27/2016

Promoting a healthy environment.

07/01/2016

PERMIT CONDITIONS

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

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.
4. This well is under a consent order and must be plugged under the terms of that agreement.

1) Date: May 27, 2016
2) Operator's Well Number E M Hoge 4
3) API Well No: 47 - 103 - 2598
State County Permit

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 x Gas _____ Liquid Injection _____ Waste Disposal _____
(If "Gas", Production _____ Underground Storage _____) Deep _____ Shallow x
5) LOCATION: Elevation: 1061' Watershed: Fluharty Fork
District: Green County: Wetzel Quadrangle Centerpoint 7.5'
6) WELL OPERATOR: HG Energy, LLC 494497948 7) DESIGNATED AGENT Diane White
Address 5260 Dupont Road Address 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101
8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) PLUGGING CONTRACTOR
Name Derek Haught Name To Be Determined Upon Approval of Permit
Address P. O. Box 85 Address _____
Smithville, WV 26178 Address _____

10) WORK ORDER: The work order for the manner of plugging this well is as follows:

TD- 2,910'

Manners of plugging;

Plug #1 - 2850' - 2750'
If unable to pull 5 3/16" liner, perforate for plug placement
Plug # 2 - 2540' - 2440'
If unable to pull 5 1/2" liner, place plug at top of liner
Plug #3 - 2300' - 2200'
Located at 6 5/8" casing shoe
Free point, part and pull all possible 6 5/8", estimated depth of 900'
If unable to pull 6 5/8" casing below elevation, perforate for plug placement 1100' - 1000'
Plug #4 - 1100' - 775'
Located at elevation, Pittsburgh Coal, 6 5/8" casing stub
If unable to pull 6 5/8" casing below Pittsburgh Coal, perforate for plug treatment
Plug #5 - 425' - 325'
Located at 10" casing shoe
Plug #6 - 100' - 0'
Located through the top of 10" casing to surface

Recover all possible casing. If casing can not be recovered, perforate for plug placement.

Monument -
6" minimum diameter metal pipe
30" above surface
10' in well below surface
Sealed with cement
API identification (1/2") height numbering

6% Gel between all plugs

Dmit
6-7-16

Office of Oil & Gas
JUN 16 2016

Well: E.M. Hoge 4
 API: 47-103-02598

Monument min. 6" dia. metal pipe, 30" above surface, 10' in well below surface, sealed with cement, API id.

Elevation 1061'

Casing Information		
Size	Depth	Weight
10"	103' - 368'	#/ft.
6 5/8"	2240'	#/ft.
5 3/16"	2910' - 2740'	#/ft.
5 1/2"	2740' - 2488'	#/ft.
5 1/2"	2488' - 2240'	#/ft.

Freepoint Cut and Pull Casing	
Size	Approx. Depth
5 1/2"	2488'
6 5/8"	900'

Cement Plugs		
NO.	Bottom	Top
1	2850	2750
2	2540	2440
3	2300	2200
4	1100	775
5	425	325
6	150	0

Pittsburgh Coal 810' →



TD 2910'

Note: 6% gel between all plugs

Received
 Office of Oil & Gas
 JUN 16 2016

10302598P

WW-4A
Revised 6-07

1) Date: May 27, 2016
2) Operator's Well Number
E. M. Hoge 4
3) API Well No.: 47 - 103 - 2598

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

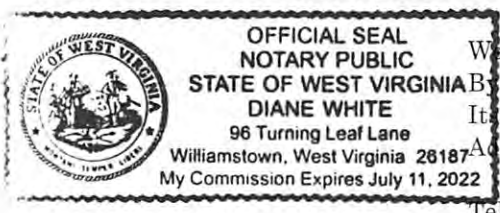
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>WV Department of Natural Resources</u>	Name <u>NA</u>
Address <u>Capital Complex, Bldg 3, Room 643</u>	Address _____
<u>Charleston, WV 25305</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>NA</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Derek Haught</u>	(c) Coal Lessee with Declaration
Address <u>P. O. Box 85</u>	Name <u>NA</u>
<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.



Well Operator	<u>HG Energy, LLC</u>
By:	<u>Diane White</u> <i>Diane White</i>
It:	Agent
Address	<u>5260 Dupont Road</u>
	<u>Parkersburg, WV 26101</u>
Telephone	<u>304-420-1119</u>

Subscribed and sworn before me this 27th day of May
Diane White Notary Public
My Commission Expires July 11, 2022

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Received
Office of Oil & Gas
May 16 2016

07/01/2016

WW-9
(5/16)

API Number 47 - 103 - 2598
Operator's Well No. E. M. Hoge 4

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy, LLC OP Code 494497948

Watershed (HUC 10) Fluharty Fork Quadrangle Centerpoint 7.5'

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 MUST BE CONTAINED IN TANKS. gmm*

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 _____)

Will closed loop system be used? If so, describe: No

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. NA

-If oil based, what type? Synthetic, petroleum, etc. NA

Additives to be used in drilling medium? NA

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. NA

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) NA

-Landfill or offsite name/permit number? NA

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 Diane White

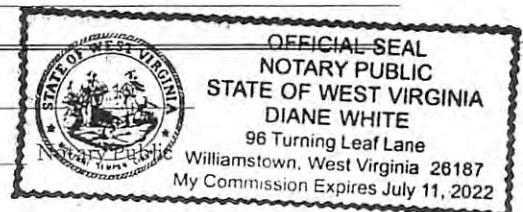
Company Official (Typed Name) Diane White

Company Official Title Agent

Subscribed and sworn before me this 27th day of May

Diane White

My commission expires July 11, 2022



*DMIT
6-7-16*

*Received
Office of Oil & Gas
JUN 16 2016*

07/01/2016

Proposed Revegetation Treatment: Acres Disturbed 1.1 acre Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Straw 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

**** Sediment Control Will Be In Place At All Times ****

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: [Signature]

Comments: _____

Title: Oil & Gas Inspector

Date: 6-7-16

Field Reviewed? Yes

No

Received
Office of Oil & Gas
JUN 16 2016

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

Operator Name: HG Energy, LLC
Watershed (HUC 10): Fluharty Fork Quad: Centerpoint 7.5'
Farm Name: E M Hoge

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

Not Applicable

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

Not Applicable

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

Not Applicable

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

Not Applicable

Received
Office of Oil & Gas
JUN 16 2016

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

DRH
6-7-16

Not Applicable

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

Not Applicable

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.

Not Applicable

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

Not Applicable

Received
Office of Oil & Gas
JUN 16 2016

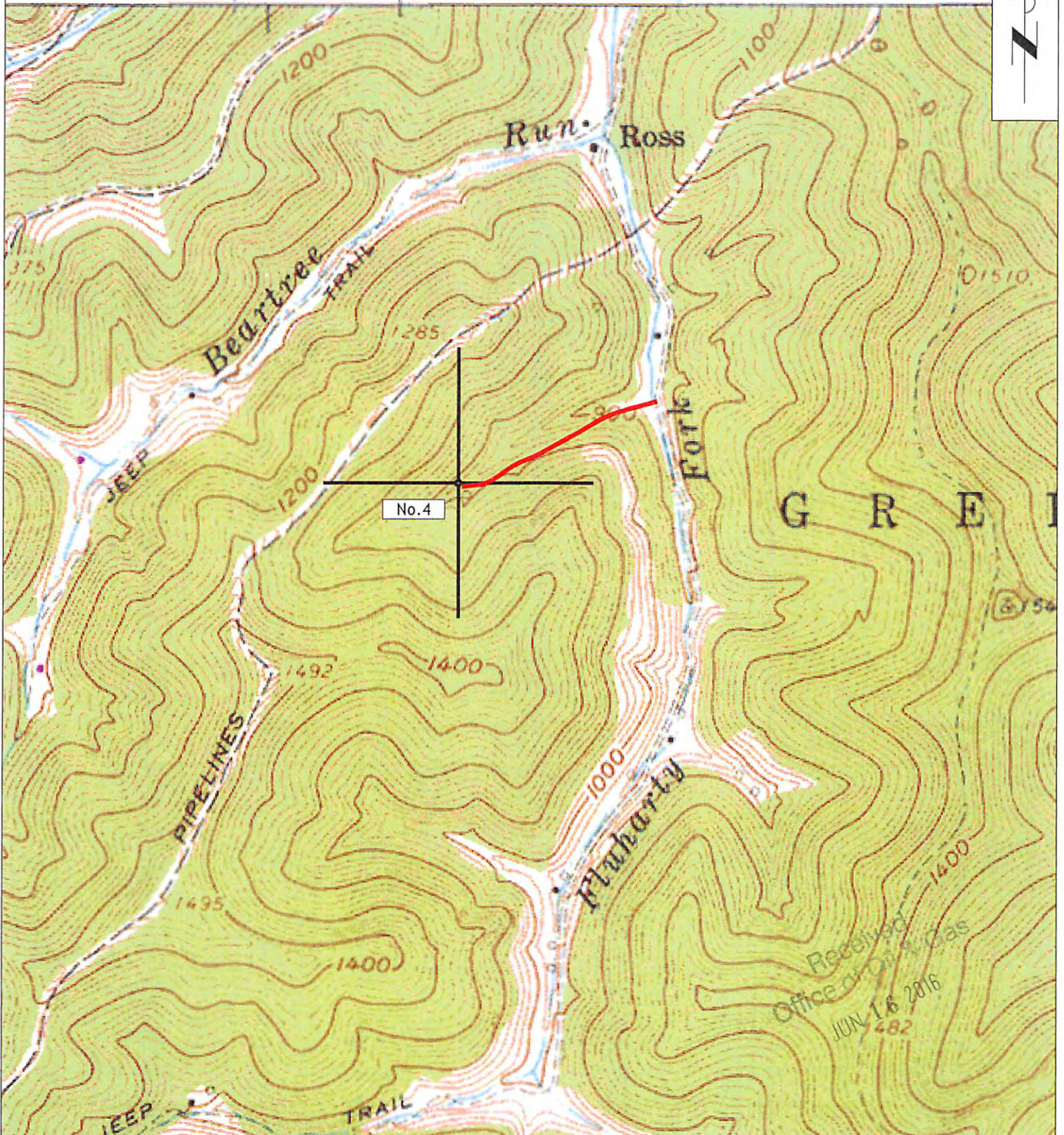
Signature: Diane White

Date: 5/27/16

DMH
6-7-16

SUBJECT WELL
E.M. Hoge No. 4
47-103-2598

AND OTHER



Received
Office of Oil & Gas
JUN 16 2016
482

Section of
Centerpoint 7.5' Quadrangle
SCALE 1"=1000 07/01/2016

10302598 P

WW-7
5-02

West Virginia Department of Environmental Protection
Office of Oil & Gas

WELL LOCATION FORM: GPS

API: 47- 103 - 2598 WELL NO: 4

FARM NAME: E.M. Hoge No.4

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Wetzel DISTRICT: Green

QUADRANGLE: Centerpoint 7.5'

SURFACE OWNER: W.Va. Dept. of Natural Resources

ROYALTY OWNER: H.G. Energy, LLC

UTM GPS NORTHING: 4,371,137 (NAD 83)

UTM GPS EASTING: 525,368 (NAD 83) GPS ELEVATION: 323 m. (1059')

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 & 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	<input type="checkbox"/>	Post Processed Differential	<input type="checkbox"/>
		Real-Time Differential	<input type="checkbox"/>
Mapping Grade GPS	<input checked="" type="checkbox"/>	Post Processed Differential	<input checked="" type="checkbox"/>
		Real-Time Differential	<input type="checkbox"/>

Received
Office of Oil & Gas
JUN 16 2016

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.

Diane White Diane C. White
Signature

Designated Agent
Title

May 26, 2016
Date

07/01/2016