



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

August 31, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8702434, 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: 3
Farm Name: CHAMBERS, C. B.
API Well Number: 47-8702434
Permit Type: Plugging
Date Issued: 08/31/2015

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. 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.

8702434P

WW-4B
Rev. 2/01

- 1) Date August 4, 2015
- 2) Operator's
Well No. C. B. Chambers 3
- 3) API Well No. 47-007 - 2004

**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 ___ or Underground storage ___) Deep ___ / Shallow X
- 5) Location: Elevation 1027' Watershed Edgle Fork
District Smithfield County Roane Quadrangle Looneyville 7.5'
- 6) Well Operator HG Energy, LLC 7) Designated Agent Diane White
Address 5260 Dupont Road Address 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Joe Taylor Name To Be Determined Upon Approval of Permit
Address 1478 Claylick Road Address _____
Ripley, WV 25271

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

** See Attached Sheet **

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AUG 13 2015

**WV Department of
Environmental Protection**

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

Work order approved by inspector



Date

8-11-15

870234P

WW-4B - Conti
Rev. 2/01

1) Date: August 4, 2015
2) Operator's Well Number CB Chambers 3
3) API Well No: 47 - 087 - 2434
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 _____ Gas _____ Liquid Injection _____ Waste Disposal _____
(If "Gas", Production _____ Underground Storage _____) Deep _____ Shallow

5) LOCATION: Elevation: 1027' Watershed: Edgle Fork
District: Smithfield County: Roane Quadrangle Looneyville 7.5'

6) WELL OPERATOR: HG Energy, LLC 4.94E+08 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 Joe Taylor Name To Be Determined Upon Approval of Permit
Address 1478 Claylick Road Address _____
Ripley, WV 25271

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

TD- 2,095'

Manners of plugging:

Pull 5 1/2" casing liner (If unable to pull, free point, part and pull as much as possible. Place 100' plug across shoe and stub. Erforate for additional plug placement)

- Plug #1 -
2000' - 1900'
Located above Big Injun and across 6 5/8" casing shoe
Free point, part and pull 6 5/8" casing at approx 1500'
- Plug #2 -
Approx 1550' - 1450'
Located at 6 5/8" casing stub
- Plug #3 -
1075' - 900'
Located at elevation and 8 1/4" casing shoe
- Plug #4 -
Approx 650' - 550'
Located at 8 1/4" casing stub and below fresh water
- Plug #5 -
100' - 0'
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

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Well: C.B. Chambers #3

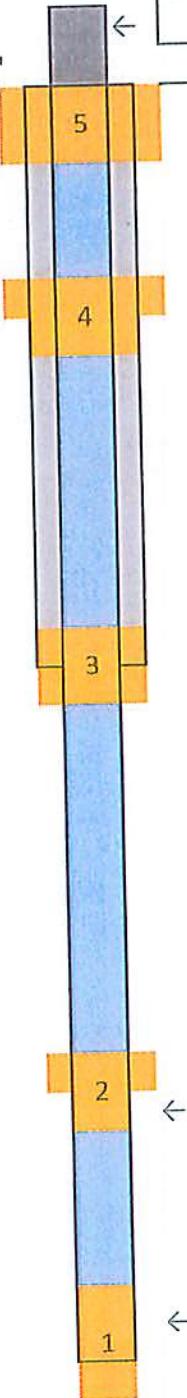
Monument min. 6" dia. metal pipe, 30" above surface, 10' in well below surface, sealed with cement, API id.

Elevation 1027'

Casing Information		
Size	Depth	Weight
8 1/4"	930'	#/ft.
6 5/8"	1935'	#/ft.
5 3/16"	1350'	#/ft.

Freepoint Cut and Pull Casing	
Size	Approx. Depth
5 1/5"	1350'
6 5/8"	1500'
8 1/4"	600'

Cement Plugs		
NO.	Bottom	Top
1	2000	1900
2	1550	1450
3	1075	975
4	650	550
5	100	0



Bottom Hole Cement Level Calculations

Sacks Used Cement Depth
70 2208.649

Hole Size Casing Size Depth
6.5 4.5 2668

diameter delta Conv. Factor bbls / ft.
22 1029.4 0.021372

cubic ft. per vertical ft. depth
0.119991257

Sacks per vertical ft. depth
0.152388896 ← Edit Yield Options

Yield options

50/50 posmix 6% gel = 1.64
Neat w/ salt flakes = 1.19
50/50 w/ 2% gel = 1.27

Note: 6% gel between all plugs

TD 2095'

[Handwritten Signature]
8-11-15

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Lease No.	Acres	Farm Name	C. B. Chambers	Well No.	3
N. S. 19 E. W. 38-9		Location Made		Purchased From	
Civil District	Smithfield	Rig Completed	Sept. 28, 1910	Date Purchased	
County	Roane	Dr'g Commenced	Oct. 29, 1910	Sold to	
State	W. Va.	Dr'g Completed	Dec. 5, 1910	Date Sold	
GAS OIL	Rights Owned By	Dr'g Contractor	S. P. Dr'g. Tools	Date Abandoned	

FORMATION				CASING RECORD					
Kind	Top	Bottom	Steel Line Meas.	Tests	Size	Bottom Casing Steel Line	Put In Well Tally Meas.	Pulled Tally Meas.	Cemented
Conductor		11			10"		210'	210'	Date
Dunkard Sand	920	1020			8 1/2"		930'	930'	Size Csg.
Salt Sand	1587	1885			6 5/8"		1935'		Top Csg.
Water	1635	1695			5 1/2"		1349		Bot. Csg. 7-19-57
Big Lime	1920	2050							
Big Injun	2050	2095							
Gas	2051								
Oil	2085	2095							

PACKERS AND SHOES				
Kind	Size	Depth Set	Date Set	
5 1/2" x 6 5/8" x 16"		1320	7-19-57	100% Well

TORPEDO RECORD					
Date	No. Qts.	Size Shell	Top Shot	Bottom	Results
Dec. 8, '10	20				
May 15, '22	60		2075	2095	

T. D.	2095				
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Remarks:
Rush Run

Initial Prod.	Sand	* At Completion	* 30 Days After	*
Oil	Injun	20 Bbls.		
Gas				

APPROVED
Supt.

* Oil in Barrels
* Gas in M. Cu. Ft.
TESTS, REPORTS AND REMARKS ON REVERSE SIDE

CK# 3127
100.00

8702434P

1) Date: August 4, 2015
2) Operator's Well Number
CB Chambers 3
3) API Well No.: 47 - 087 - 2434

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>Russell Schoolcraft, Jr.</u> ✓	Name <u>NA</u>
Address <u>4045 Clay Road</u>	Address _____
<u>Spencer, WV 25276</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>NA</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Joe Taylor</u>	(c) Coal Lessee with Declaration
Address <u>1478 Claylick Road</u>	Name <u>NA</u>
<u>Ripley, WV 25271</u>	Address _____
Telephone <u>304-380-7469</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	HG Energy, LLC	RECEIVED Office of Oil and Gas AUG 13 2015
By:	Diane White <i>Diane White</i>	
As:	Agent	
Address	5260 Dupont Road Parkersburg, WV 26101	
Telephone	304-420-1119	

WV Department of Environmental Protection

Subscribed and sworn before me this 4th day of August, 2015
S. Jianne Dulaney Notary Public
My Commission Expires Oct. 4, 2016

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.

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name HG Energy, LLC OP Code 494497948

Watershed Edgle Fork Quadrangle Looneyville 7.5'

Elevation 1027' County Roane District Smithfield

Description of anticipated Pit Waste: Fluids encountered while plugging subject well

Will a synthetic liner be used in the pit? 20 MIL.

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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

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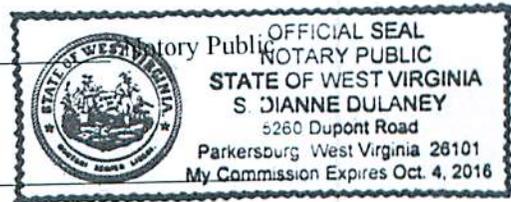
AUG 13 2015

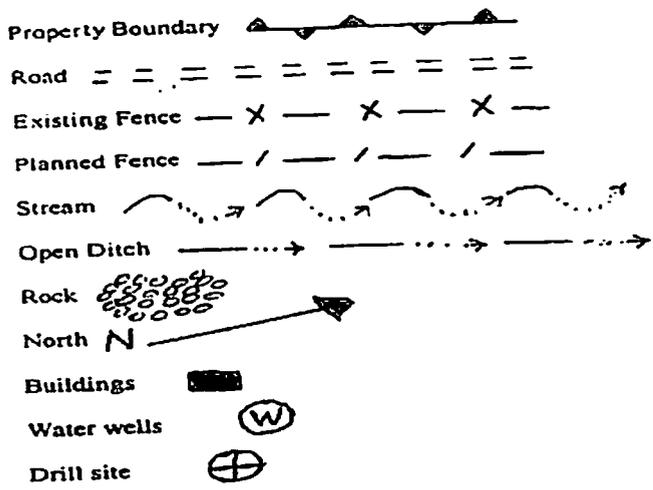
WV Department of
Environmental Protection

Subscribed and sworn before me this 4th day of August, 2015

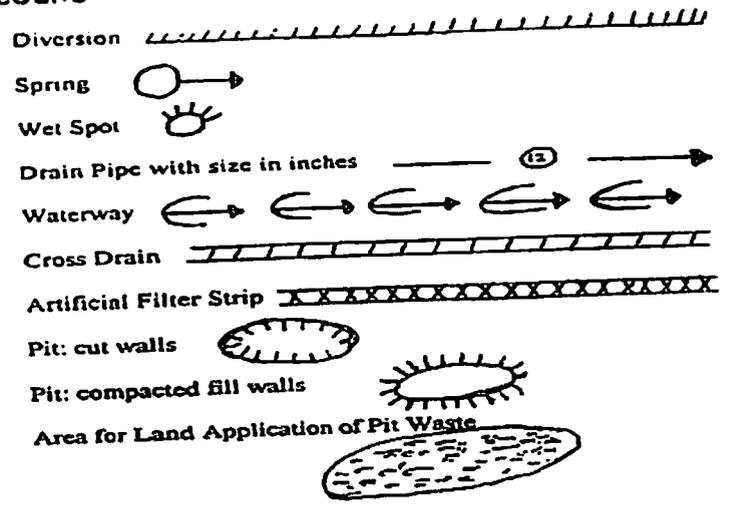
[Signature]

My commission expires Oct. 4, 2016





LEGEND



Proposed Revegetation Treatment: Acres Disturbed .07 acres Prevegetation pH _____
 Lime 3 Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20 or equivalent) 500 lbs/acre (500 lbs minimum)
 Mulch Straw 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

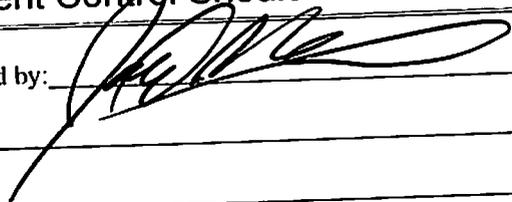
Attach: Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

**** Sediment Control Should Be in Place at all Times ****

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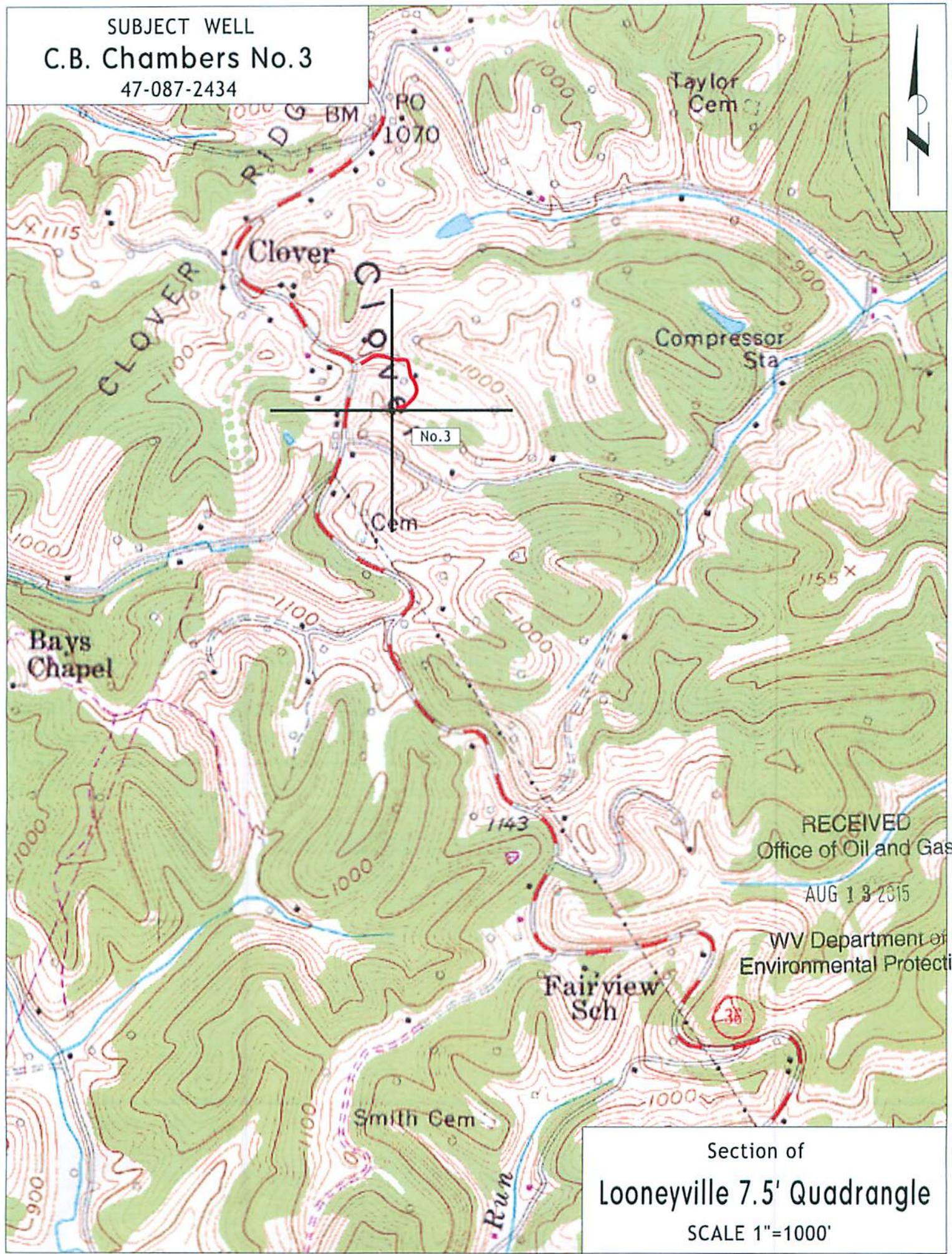
Plan Approved by: 

Comments: _____

WV Department of
Environmental Protection

Title: OGG Inspector Date: 8-11-15
 Field Reviewed? () Yes (X) No

SUBJECT WELL
C.B. Chambers No.3
47-087-2434



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Section of
Looneyville 7.5' Quadrangle
SCALE 1"=1000'

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

API: 47- 087 - 2434 WELL NO: 3

FARM NAME: C.B. Chambers No.3

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Roane DISTRICT: Smithfield

QUADRANGLE: Looneyville 7.5'

SURFACE OWNER: Russell Schoolcraft Jr.

ROYALTY OWNER: H.G. Energy, LLC et al.

UTM GPS NORTHING: 4,285,745 (NAD 83)

UTM GPS EASTING: 475,242 (NAD 83) GPS ELEVATION: 313 m. (1027')

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"/>

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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

July 30, 2015
Date