



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

July 22, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9501149, 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: J. LEMASTERS 17
Farm Name: WALTERS & DAWSON
API Well Number: 47-9501149
Permit Type: Plugging
Date Issued: 07/22/2015

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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

9501149A

WW-4B
Rev. 2/01

1) Date June 5, 2015
2) Operator's
Well No. Jasper Lemasters 17
3) API Well No. 47-065 - 1149

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 X / Waste disposal ___ /
(If "Gas, Production ___ or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 982' Watershed Left Hand Fork
District McElroy County Tyler Quadrangle Centerpoint 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 Name Mike Goff
Address P. O. Box 134
Pullman, WV 26421
9) Plugging Contractor Name To be Determined Upon Approval of Permit
Address _____

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

"See Attached Sheet"

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

Received
Office of Oil & Gas
JUN 15 2015

Work order approved by inspector Michael Goff Date 6/8/2015

9501149P

WW-4B
Rev. 2/01

1) Date: June 5, 2015
2) Operator's Well Number Jasper Lemasters 17
3) API Well No: 47 - 095 - 1149
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 x Waste Disposal _____
(If "Gas", Production _____ Underground Storage _____) Deep _____ Shallow x
5) LOCATION: Elevation: 982' Watershed: Left Hand Fork
District: McElroy County: Tyler Quadrangle Centerpoint 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 Mike Goff Name To Be Determined Upon Approval of Permit
Address P. O. Box 134 Address _____
Pullman, WV 26421

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

TD- 3,025'

Manners of plugging:

- Plug #1 ~~2925'~~ 2825' 2800'
- If unable to pull all 4 1/2" casing - free point, part and pull (approx 1750')
- Plug #2 -at casing cut approx 1800' - 1700'
- Plug #3 -through coal - 1525' - 1425' (preforate if casing isn't able to be removed)
- Plug #4 - Elevation plug - 1030' - 930' (preforate if casing isn't able to be removed)
- If unable to pull all 7" casing - free point, part and pull (approx 300')
- Plug #5 - at casing shoe, thru coal, at casing cut - 475' - 250'
- Plug #6 - Surface plug - 100' - 0'

MAG
6/8/2015

6% Gel between all plugs
Monument min. 6" metal pipe, 30" above surface, 10' in well below surface, sealed w/cement & API ID

Received
Office of Oil & Gas
JUN 15 2015

9501149P

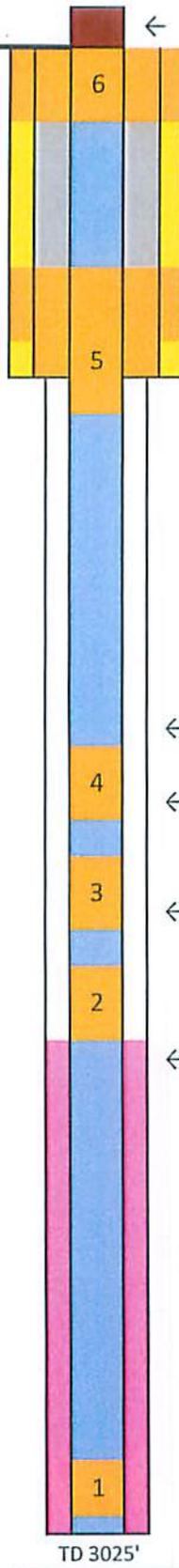
Well: J. Lemasters #17

Elevation: 982'

Monument: min. 6" diameter metal pipe 30" above surface, 10' into well, sealed w/ cement API ID

Casing Information		
Size	Depth	Weight
7"	423'	#/ft.
4 1/2"	2951'	#/ft.

Hole Size 8 3/4" →



120 sacks cement to surface

Freepoint Cut and Pull Casing	
Size	Approx. Depth
4 1/2"	1750
7"	300

Cement Plugs		
NO.	Bottom	Top
1	2925	2825
2	1800	1700
3	1525	1425
4	1030	930
5	475	250
6	100	0

← 6 1/4" Hole Size

← Elevation 982'

← Coal 1470' - 1475'

← 150 Sks Cement T.O.C. 1800'

MAG
6/8/2015

Bottom Hole Cement Level Calculations

Sacks Used Cement Depth
150 1799.897

Hole Size Casing Size Depth
6.25 4.5 2951

diameter delta Conv. Factor bbls / ft.
18.8125 1029.4 0.018275

cubic ft. per vertical ft. depth
0.10260616

Sacks per vertical ft. depth
0.130309823

Yield options

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

Received
Perforation 2866' - 2874'
Office of Oil & Gas
JUN 15 2015

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Frac

Well Operator's Report of Well Work

Farm name: WALTERS, J/R.S. & L. DAWSON Operator Well No.: J. LEMASTERS 17

LOCATION: Elevation: 982.00 Quadrangle: CENTER POINT

District: MCELROY County: TYLER
Latitude: 14450 Feet South of 39 Deg. 30Min. 0 Sec.
Longitude 7625 Feet West of 80 Deg. 40 Min. 0 Sec.

Company: PENNZOIL PRODUCTS COMPANY
P. O. BOX 5519
VIENNA, WV 26105-5519

Agent: JAMES A. CREWS

Inspector: MIKE UNDERWOOD
Permit Issued: 03/20/92
Well work Commenced: 4-10-92
Well work Completed: 4-10-92
Verbal Plugging
Permission granted on:
Rotary Cable Rig
Total Depth (feet) 3025'
Fresh water depths (ft)

Salt water depths (ft)

Is coal being mined in area (Y/N)?
Coal Depths (ft):

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
SEE ORIGINAL WELL RECORD			

OPEN FLOW DATA

(Injection Well)

Producing formation Gordon Pay zone depth (ft) 2863 - 2877
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATEL INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PENNZOIL PRODUCTS COMPANY

Timothy P. Roush
By: Supervisor - Surveying/Mapping
Date: 3-1-93

received
Office of Oil & Gas
JUN 15 2015

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Well has not been fractured or stimulated.

982

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fire and salt water, coal, oil and gas
Sand & Shale			0	315	
Coal			315	325	
Sand & Shale			325	1425	
Salt Sand			1425	1470	
Coal			1470	1475	
Shale			1475	1784	
Little Lime			1784	1852	
(73) Big Lime 1013			1852	2024	
(1042) Big Injun-Loyalhanna 84			2024	2106	
(1124) Pocono Shale 759			2106	2290	
Shale			2290	2840	
(1858) Gordon Series			2840	2902	
Shale			2902	3025	
T.D.			3025		

(Attach separate sheets as necessary)
Pennzoil Products Company
Office of Oil & Gas
JUN 15 2015

Well Operator
By: *Timothy P. Roush*
Date: September 29, 1989
Timothy P. Roush

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including those encountered in the drilling of a well."

9501149P

WW-4A
Revised 6-07

1) Date: June 5, 2015
2) Operator's Well Number
Jasper Lemasters 17
3) API Well No.: 47 - 095 - 1149

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>Jerry Walters</u>	Name <u>NA</u>
Address <u>17 Stackpole Run Road</u>	Address _____
<u>Jacksonburg, WV 26377</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>NA</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Mike Goff</u>	(c) Coal Lessee with Declaration
Address <u>P. O. Box 134</u>	Name <u>NA</u>
<u>Pullman, WV 26421</u>	Address _____
Telephone <u>304-549-9823</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

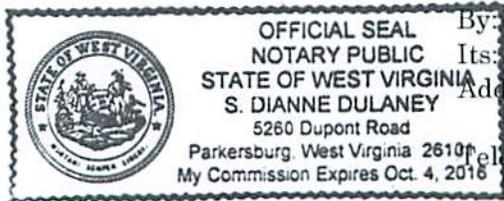
By: Diane White *Diane White*

Agent _____

Address 5260 Dupont Road

Parkersburg, WV 26101

Telephone 304-420-1119



Subscribed and sworn before me this 5th day of June

S. Dianne Dulaney Notary Public

My Commission Expires Oct 4, 2016

Received
Office of Oil & Gas
JUN 15 2015

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.

9501149P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 095 - 1149
Operator's Well No. Jasper Lemasters 17

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 Left Hand Fork Quadrangle Centerpoint 7.5'

Elevation 982' County Tyler District McElroy

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

Will a synthetic liner be used in the pit? Yes - 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 _____)

MAG
6/8/2015

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.

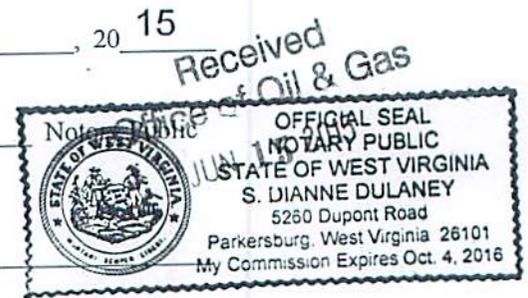
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is 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

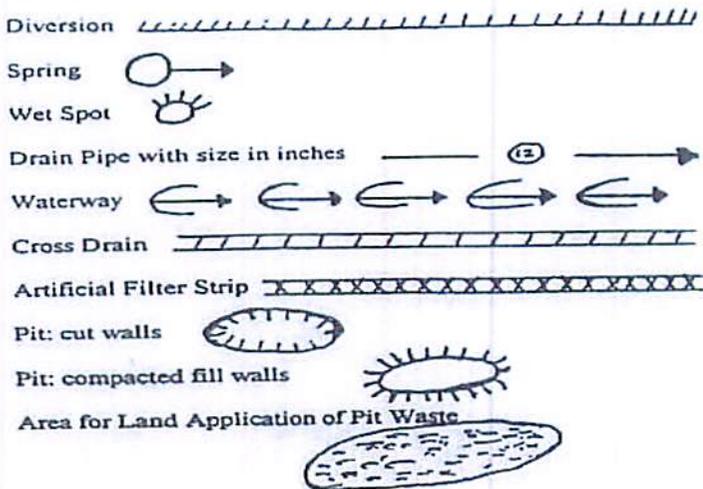
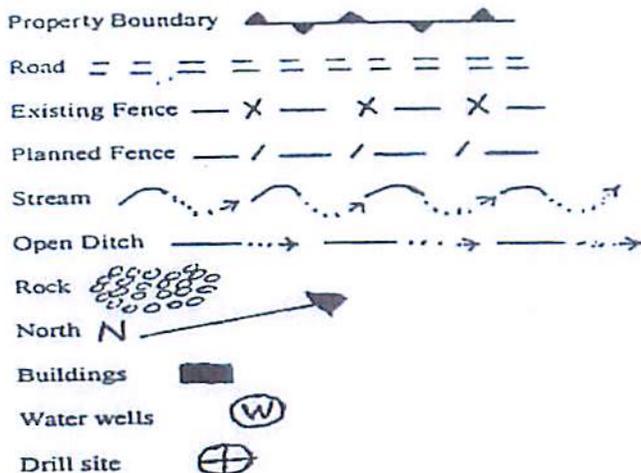
Subscribed and sworn before me this 5th day of June, 2015

S. Dianne Dulaney

My commission expires Oct 4, 2016



LEGEND



Proposed Revegetation Treatment: Acres Disturbed 0.9 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
Tall Fescue		40
Ladino Clover		5

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

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Michael Gaff

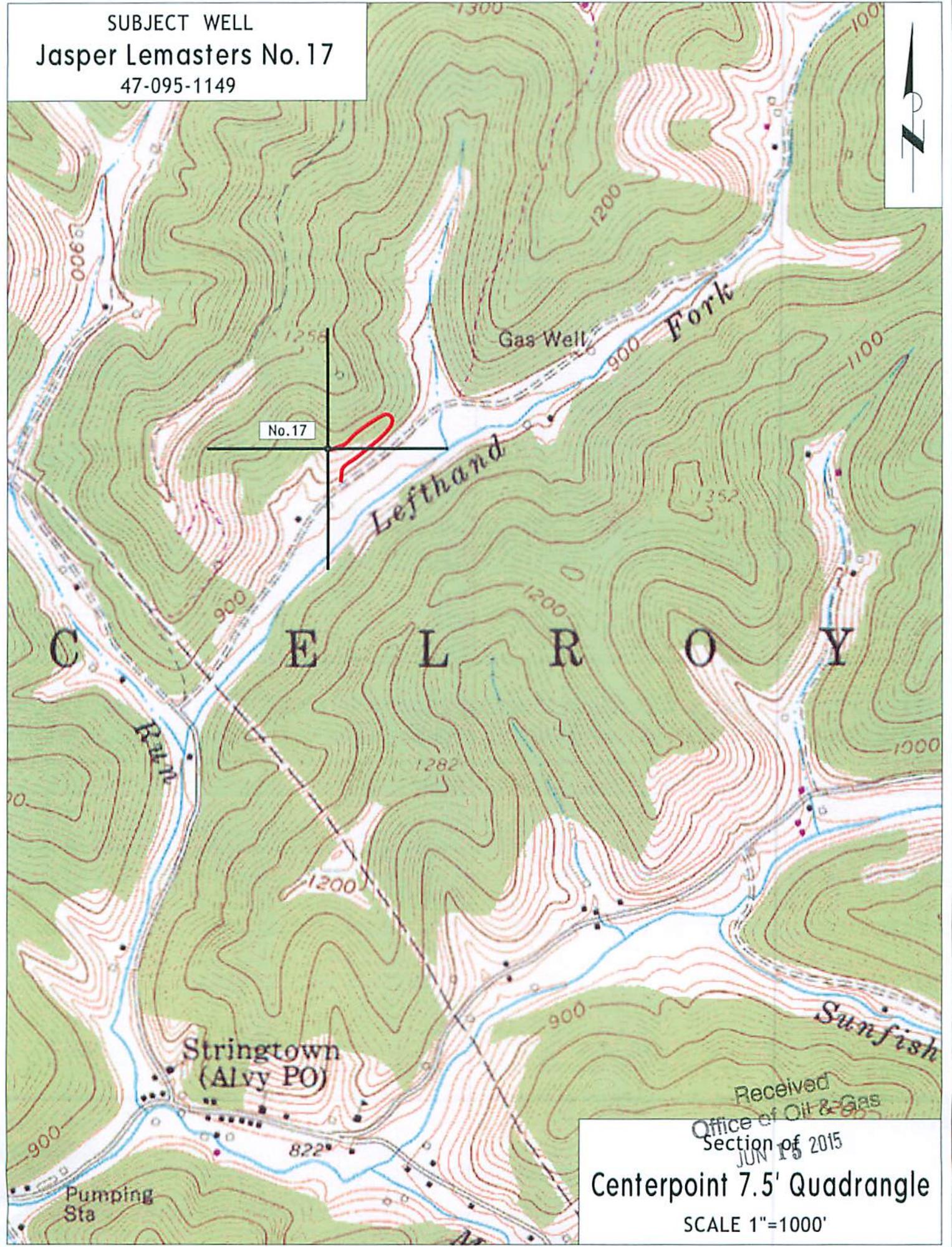
Comments: Preseed & Mulch any disturbed areas.

Title: Oil & Gas Inspector

Date: 6-8-2015 JUN 15 2015
Received Office of Oil & Gas

Field Reviewed? () Yes () No

SUBJECT WELL
Jasper Lemasters No. 17
47-095-1149



Received
Office of Oil & Gas
Section of 2015
JUN 15
Centerpoint 7.5' Quadrangle
SCALE 1"=1000'

9501149 P

WW-7
5-02

West Virginia Department of Environmental Protection
Office of Oil & Gas

WELL LOCATION FORM: GPS

API: 47- 095 - 1149 WELL NO: 17

FARM NAME: Jasper Lemasters No.17

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Tyler DISTRICT: McElroy

QUADRANGLE: Centerpoint 7.5'

SURFACE OWNER: Jerry Walters

ROYALTY OWNER: American Energy Partners, LLC et al.

UTM GPS NORTHING: 4,367,895 (NAD 83)

UTM GPS EASTING: 526,358 (NAD 83) GPS ELEVATION: 299 m. (981')

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

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

June 3, 2015
Date

Received
 Designated Agent
 Office of Oil & Gas
 JUN 15 2015

Title