



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 07, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9501658, 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: JOSHUA HAUGHT 6
Farm Name: LEMASTERS, DAVID W., ETAL
API Well Number: 47-9501658
Permit Type: Plugging
Date Issued: 08/07/2015

Promoting a healthy environment.

08/07/2015

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.

95016581

WW-4B
Rev. 2/01

1) Date _____, 20____
2) Operator's
Well No. Joshua Haught 6
3) API Well No. 47-095 - 1058

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 _____ or Underground storage _____) Deep _____ / Shallow X
- 5) Location: Elevation 1120' Watershed Indian Creek
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 Michael 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"

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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 Michael Goff Date 7/14/15

08/07/2015

9501658P

WW-4B
Rev. 2/01

- 1) Date: June 22, 2015
- 2) Operator's Well Number Joshua Haught 6
- 3) API Well No: 47 - 095 - 1658
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: 1120' Watershed: Indian Creek
District: McElroy County: Tyler Quadrangle Centerpoint 7.5'
- 6) WELL OPERATOR: HG Energy, LLC 4.94E+08
Address 5260 Dupont Road
Parkersburg, WV 26101
- 7) DESIGNATED AGENT Diane White
Address 5260 Dupont Road
Parkersburg, WV 26101
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Michael Goff
Address PO 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:

TD- 3,095'

MAG
7/14/15

Manners of plugging:

- Plug #1 2950' - 2850'
Located above highest perforation
Free point, part and pull 4 1/2" casing at approx. 1900'
- Plug #2 - 1950' - 1850'
Located at 4 1/2" casing stub
- Plug #3 - 1175' - 1075'
Located at elevation
- Plug #4 - 975' - 875'
Located at Pittsburg Coal
- Plug #5 - 450' - 350'
Located at 8 5/8" casing stub, below Fresh Water
- Plug #6 - 100' - 0'

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

- 6" minimum diameter metal pipe
- 30" above surface
- 10' in well below surface
- 6% Gel between all plugs
- API identification (1/2") height numbering

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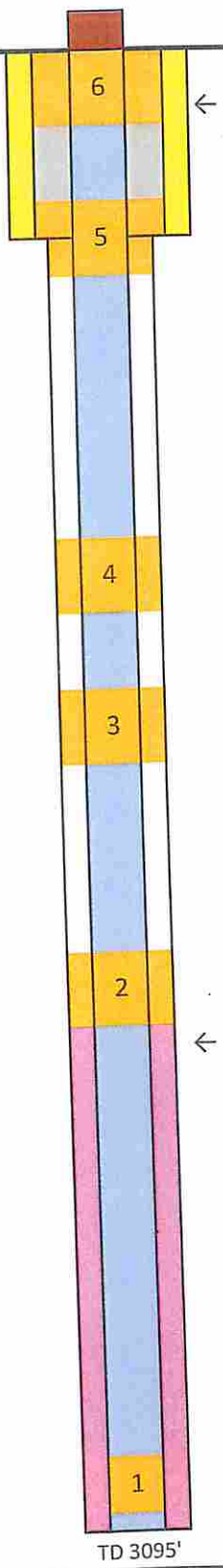
08/07/2015

Well: Joshua Haught #6

Monument to extend 30" above surface. 10' into well. 6" min metal pipe, sealed with cement. API i.D.

Elevation: 1120'

Casing Information		
Size	Depth	Weight
8 5/8"	397	20#/ft.
4 1/2"	3045	10.5#/ft.



← cement to surface

Freepoint Cut and Pull Casing	
Size	Approx. Depth
4 1/2"	1900'

Hole Size 7 7/8" →

Cement Plugs		
NO.	Bottom	Top
1	2950'	2850'
2	1950	1850
3	1175	1075
4	975	875
5	450	350
6	100	0

Pittsburgh Coal 932'

*MDC
7/14/15*

Bottom Hole Cement Level Calculations

Sacks Used Cement Depth
275 2021.931

Hole Size Casing Size Depth
7.875 4.5 3045

diameter delta Conv. Factor bbls / ft.
41.765625 1029.4 0.040573

cubic ft. per vertical ft. depth
0.227795902

Sacks per vertical ft. depth
0.268799164

Yield options

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

← 275 Sks Cement T.O.C. 2020'

← Highest Perforation 2982'

TD 3095'

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35

9-Sep-96

API # 47 -095- 1658

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

Well Operator's Report of Well Work

Farm name: Lemasters, David W. Operator Well No.: Joshua Haught No.6

LOCATION: Elevation: 1,120.00 Quadrangle: Center Point
District: McElroy County: Tyler
Latitude: 8,250 Feet south of 39 Deg 27 Min 30 Sec.
Longitude: 10,950 Feet west of 80 Deg 40 Min 0 Sec.

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

Agent: PHILIP S. ONDRUSEK
Inspector: Mike Underwood
Permit Issued: 9/9/96
Well work Commenced: 12/18/96
Well work Completed: 1/16/97
Verbal plugging permission granted on:
Rotary X Cable _____ Rig _____
Total Depth (feet) 3095'
Fresh water depths (ft) NA
Salt water depths (ft) NA
Is coal being mined in area (Y/N) N
Coal Depths (ft): 930-940

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	397'	397'	210 Sacks
4 1/2"	3045'	3045'	275 Sacks

OPEN FLOW DATA *Well was drilled as a waterflood injection well. No open-flow data was obtained

Producing formation Gordon Pay zone depth (ft) 2920-2990
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 PERFORATED 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.

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For: PENNZOIL PRODUCTS COMPANY
By: [Signature]
Date: 3/13/98

WV Department of
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Treatment :

Perforations:

~~2892-2896~~ 2982 - 2986 4 holes/ft (16 holes)

Treatment:

Treated via 4.5" Casing with 300 gals. 15% HCl, 196 bbls.
Borate cross-linked gelled water and 9300 lbs. of 20/40 sand.Well Log :

TD = 3095

Sand & Shale	0	-	930
Coal	930	-	940
Shale	940	-	964
Sand	964	-	1000
Shale	1000	-	1310
Sand	1310	-	1346
Shale	1346	-	1424
Sand	1424	-	1473
Shale	1473	-	1494
Sand	1494	-	1526
Shale	1526	-	1534
Sand	1534	-	1574
Shale	1574	-	1724
Sand	1724	-	1774
Shale	1774	-	1804
Sand	1804	-	1852
Shale	1852	-	1904
Sand	1904	-	1936
Shale	1936	-	2143
Big Lime	2143	-	2252
Big Injun	2252	-	2396
Shale	2396	-	2920
Gordon	2920	-	2990
Shale	2990	-	3095

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08/07/2015

CK# 100.00 95016588
3077

WW-4A
Revised 6-07

1) Date: June 23, 2015
2) Operator's Well Number
Joshua Haught 6
3) API Well No.: 47 - 095 - 1658

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:
(a) Name David & Barbara Lemasters ✓
Address 31 East Street
Middlebourne, WV 26149
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Michael Goff
Address P. O. Box 134
Pullman, WV 26421
Telephone 304-549-9823

5) (a) Coal Operator
Name NA
Address _____
(b) Coal Owner(s) with Declaration
Name NA
Address _____
(c) Coal Lessee with Declaration
Name NA
Address _____

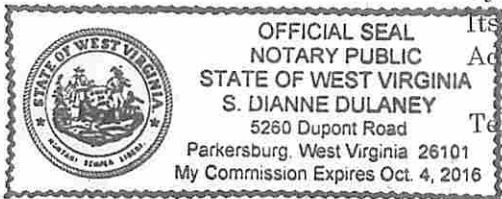
MAG
7/14/15

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

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Subscribed and sworn before me this 23rd day of June, 2015
S. Dianne Dulaney
My Commission Expires Oct 4 2016
Notary Public
WV Department of Environmental Protection

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.

08/07/2015

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7014 3490 0001 9122 0289

U.S. Postal Service™	
CERTIFIED MAIL® RECEIPT	
<i>Domestic Mail Only</i>	
For delivery information, visit our website at www.usps.com ®.	
OFFICIAL USE	
Postage	\$ 1.64
Certified Fee	3.45
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.85



<i>Sent To</i>	David & Barbara Lemasters
<i>Street & Apt. No., or PO Box No.</i>	31 East Avenue
<i>City, State, ZIP+4</i>	Middlebourne WV 26149

PS Form 3800, July 2014 See Reverse for Instructions



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MAG
2/12/15

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 Indian Creek Quadrangle Centerpoint 7.5'

Elevation 1120' 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 2014.

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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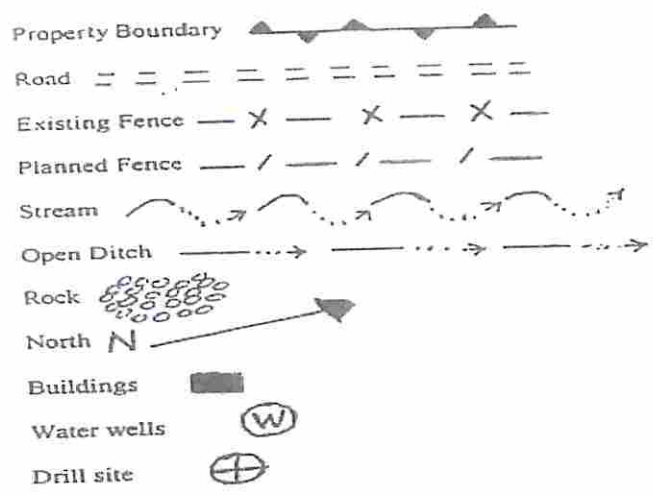
Subscribed and sworn before me this 23 day of June, 2015

S. Dianne Dulaney

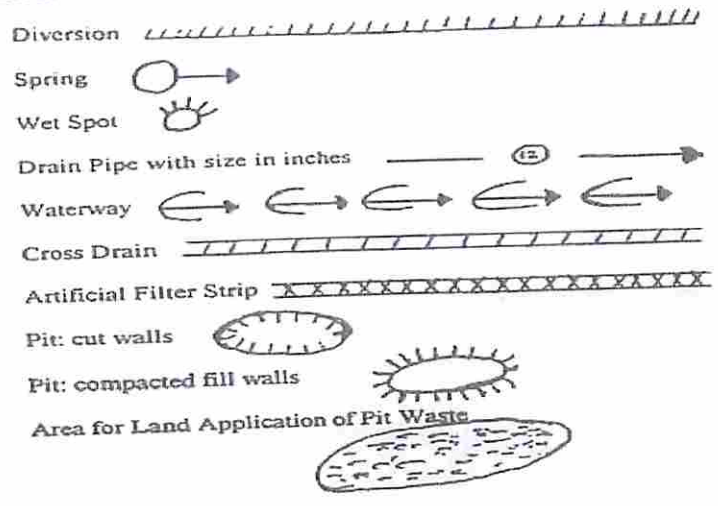
My commission expires Oct 4 2016



08/07/2015



LEGEND



Proposed Revegetation Treatment: Acres Disturbed 0.7 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

****Sediment control should be in place at all times****

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 Doff

Comments: Preseed & Mulch any disturbed areas

Title: Oil & Gas Inspector

Date: 7/14/15

Field Reviewed? () Yes () No

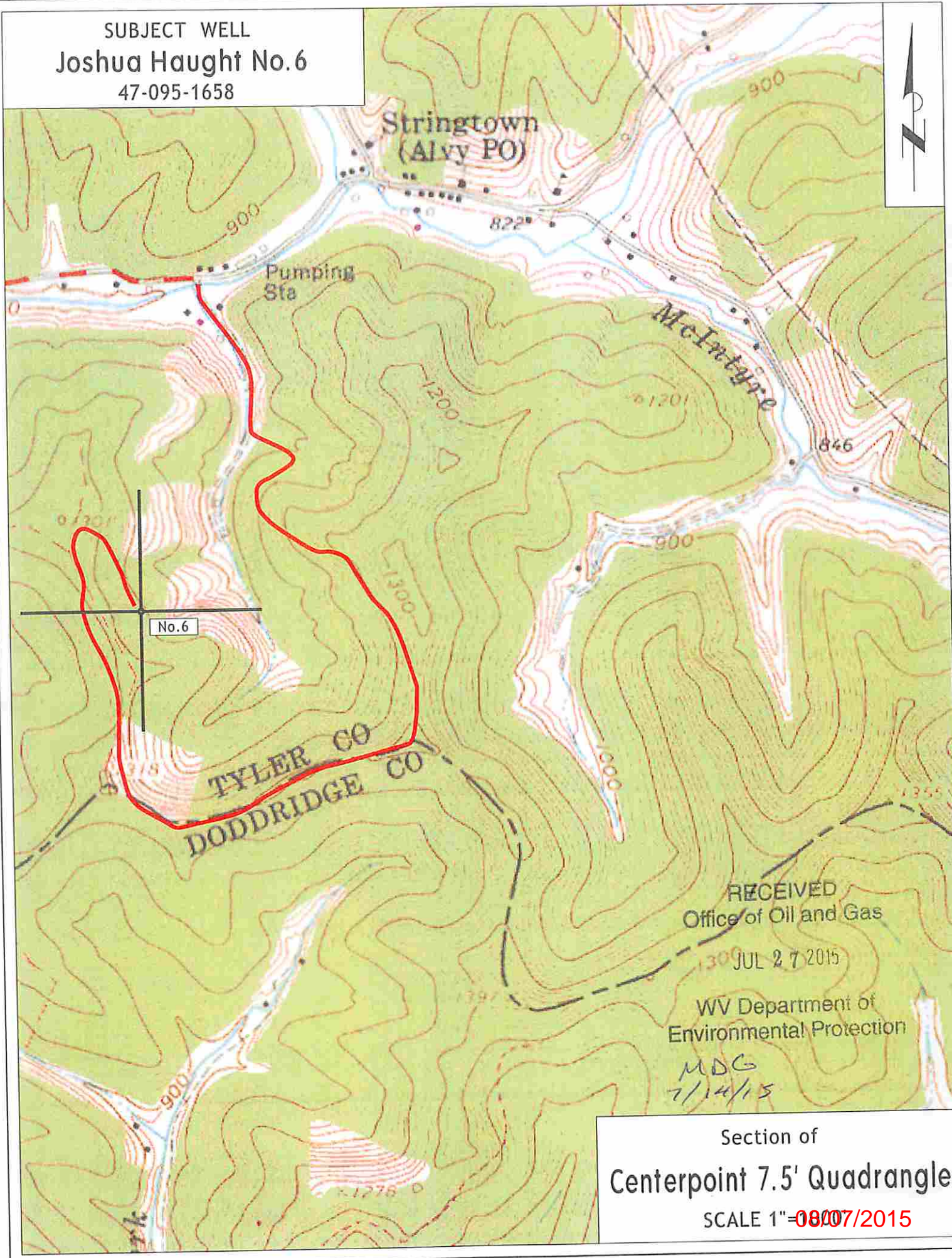
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SUBJECT WELL
Joshua Haught No.6
47-095-1658



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WV Department of
Environmental Protection
MDC
7/14/15

Section of
Centerpoint 7.5' Quadrangle
SCALE 1" = 800'

08/07/2015

9501658A

WW-7
5-02

MAG
7/14/15

West Virginia Department of Environmental Protection
Office of Oil & Gas

WELL LOCATION FORM: GPS

API: 47- 095 - 1658 WELL NO: 6

FARM NAME: Joshua Haught No.6

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Tyler DISTRICT: McElroy

QUADRANGLE: Centerpoint 7.5'

SURFACE OWNER: David & Barbara Lemasters

ROYALTY OWNER: American Energy Partners, LLC et al.

UTM GPS NORTHING: 4,365,161 (NAD 83)

UTM GPS EASTING: 525,368 (NAD 83) GPS ELEVATION: 340 m. (1120')

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 Post Processed Differential
 Real-Time Differential

Mapping Grade GPS Post Processed Differential
 Real-Time Differential

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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. WV Department of Environmental Protection

Diane White Diane C. White
Signature

Designated Agent
Title

June 3, 2015
Date

08/07/2015



HG Energy, LLC
5260 Dupont Road
Parkersburg, WV 26101
(304) 420-1100 - Office
(304) 863-3172 - Fax

June 22, 2015

Jeff McLaughlin
WVDEP
Division of Oil & Gas
601 57th Street
Charleston, West Virginia 25304

RE: Joshua Haught No. 6 (47-095-01658)
McElroy District, Tyler County
West Virginia

Dear Mr. McLaughlin:

Enclosed are Forms WW-4(A), WW-4(B), WW-9, and WW-7, topo map, well record, copy of certified mailing receipt and a check in the amount of \$100.00 to cover the permit fee to plug and abandon the above-captioned well.

Very truly yours,

Diane C. White

Enclosures

cc: David & Barbara Lemasters – Certified
Michael Goff - Inspector

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JUL 27 2015

WV Department of
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08/07/2015

I
Now

Operator: HG ENERGY, LLC
API: 9501658
WELL No: JOSHUA HAUGHT 6
Reviewed by: g m m Date: 8/7/15
45 Day End of Comment: 08/03/15

CHECKLIST FOR FILING A PERMIT

Plugging

ck# 3077
\$100⁰⁰

- WW-4B
- Inspector signature on WW-4B
- Completion / Well Records of Previous Work
- WW-4A (Notarized)
- Certified Mail Receipts, Waivers, or Affidavits of Personal Service
- Surface Owner Waiver
- Coal Owner / Lessee / Operator Waiver
- WW-9 (Page 1) (Notarized)
- Inspector Signature on WW-9 (Optional)
- Topographic Map of location of well
- WW-7

OR

- Mylar Plat (Surface owner on plat matches WW-4A)
- Bond
- Company is Registered with the SOS
- Worker's Compensation / Unemployment Insurance account is OK
- \$100.00 check (\$0.00 if no pit)