



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

September 14, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-6100548, 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: 6

Farm Name: VARNER, A.

API Well Number: 47-6100548

Permit Type: Plugging

Date Issued: 09/14/2015

Promoting a healthy environment.

9/18/2015

1) Date July 20, 2015
2) Operator's
Well No. A Vamer 6
3) API Well No. 47-031 - 0340

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

5) Location: Elevation 1045' Watershed Thomas Run
District Clay County Monongalia Quadrangle Blacksville 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 Gayne Knitowski Name To Be Determined Upon Approval of Permit
Address PO Box 108 Address
Gomania, WV 26720

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

****See attached sheet****

Received
Office of Oil & Gas
AUG 10 2015

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

Work order approved by inspector  Date 8/3/2015
9/18/2015

WW-4B - Conti
Rev. 2/01

1) Date: July 20, 2015
2) Operator's Well Number A Varner 6
3) API Well No: 47 - 061 - 0548
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 X Liquid Injection _____ Waste Disposal _____
(If "Gas", Production _____ Underground Storage _____) Deep _____ Shallow x

5) LOCATION: Elevation: 1045' Watershed: Thomas Run
District: Clay County: Monongalia Quadrangle Blacksville 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 Gayne Knitowski Name To Be Determined Upon Approval of Permit
Address PO Box 108 Address _____
Gormanian, WV 26720

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

TD- 3,186'

Manners of plugging;

- Plug #1 2950' - 2850'
Located above the Gordon
- Plug #2 - 2625' - 2525'
Located at 6 5/8" casing shoe
- Free Point, part and pull 6 5/8" casing
- Plug #3 - approx 2300' - 2200'
Located at 6 5/8" casing stub
- Plug #4 -1700' - 1600'
Located at 8 1/4" casing shoe
- Free point, part and pull 8 1/4" casing
- Plug #5 - approx 1300' - 1000'
Located at 8 1/4" casing stub and through coal
- Plug #6 - 350' - 250'
Freshwater
- Plug #7 - 100' - 0'
Surface

Received
Office of Oil & Gas
AUG 10 2015

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

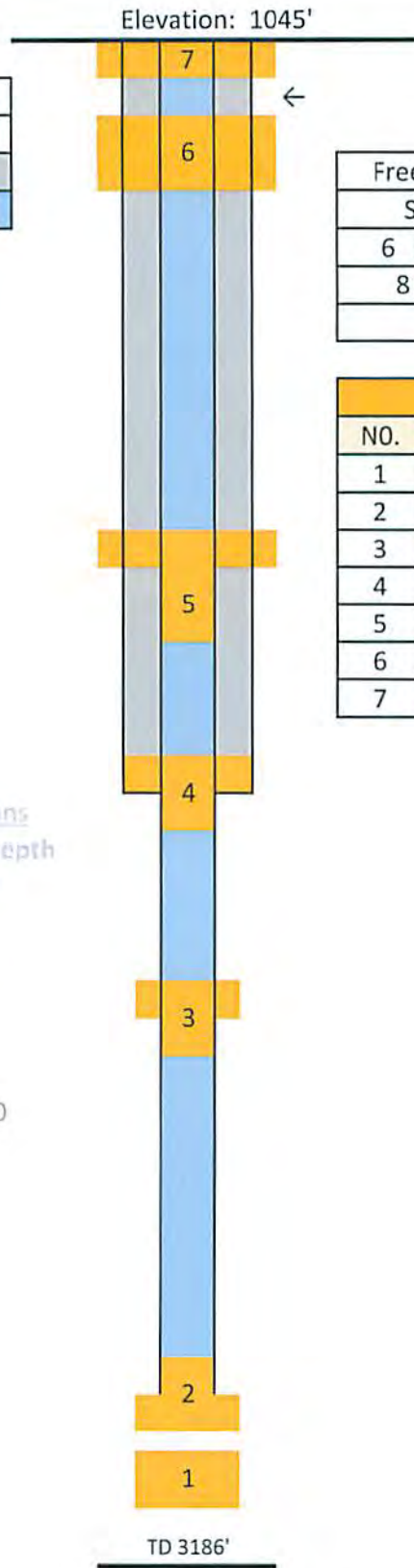
Reclaim site A.S.A.P.

Marjorie Knitowski 8/3/2015

9/18/2015

Well: Varner, A. #6

Casing Information		
Size	Depth	Weight
6 5/8	2575	#/ft.
8 1/4	1645	#/ft.



Freepoint Cut and Pull Casing	
Size	Approx. Depth
6 5/8	2250
8 1/4	1250

Cement Plugs		
NO.	Bottom	Top
1	2950	2850
2	2000	1900
3	2300	2200
4	1700	1600
5	1300	1000
6	350	250
7	100	0

Bottom Hole Cement Level Calculations

Sacks Used Cement Depth
0 #DIV/0!

Hole Size Casing Size Depth
0 0 0

diameter delta Conv. Factor bbls / ft.
0 1029.4 0

cubic ft. per vertical ft. depth
0

Sacks per vertical ft. depth
0

Received
Office of Oil & Gas
Aug 10 2015

Well No. **7706** *A. J. Varney* Farm.
 Lease No. *Truitt* Township *Hannan* County *W*
 Rig built by *E. H. Ross*
 Well drilled by *Joseph Koudally* Contractor.
 Began drilling *Jun 13* 190*4* Completed *July 28* 190*4*

Rock Formation Top Bottom Remarks

Conductor		16		<i>Steel Line</i>
Red Coal	1085	1090		1085
Big Mustard Sand	1625	1680		2575
Water "	2221	2290		3148
Little Linn	2305	2320		3186
Big Linn	2320	2440		
Big Iron Sand	2425	2515		
30 Foot "	3036	3050		
Stray "	3097	3120		
Garden "	3148	3161		
Day	3152			
Total Depth			3186	

6 1150 - 1150
 5 1150 - 1075
 3 1650 - 1550
 2 2400 - 2300
 1 2475 - 2375
 0 3100 - 3000

2nd guess

ABANDONED, DEC 22 1910

casing Record
Part in Pulled Left

107	380	380	
9 1/4	1645	1236	1645
6 5/8	2575	2575	2575

Received
 OFFICE
 AUG 10 1913

Big E. E. Shinn Supk

WW-4A
Revised 6-07

1) Date: July 20, 2015
2) Operator's Well Number
A Varner 6
3) API Well No.: 47 - 061 - 00548

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>Joseph & Leona Wolfe</u>	Name <u>NA</u>
Address <u>698 Thomas Run Road</u>	Address _____
<u>Blacksville, WV 26521</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>NA</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Gayne Knitowski</u>	(c) Coal Lessee with Declaration
Address <u>P. O. Box 108</u>	Name <u>NA</u>
<u>Gormanian, WV 26720</u>	Address _____
Telephone <u>304-546-8171</u>	_____

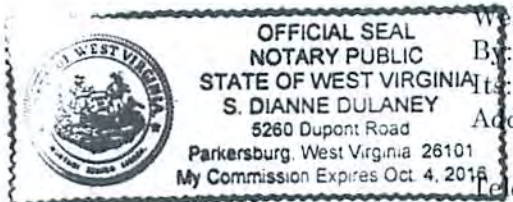
TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (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.

Received
Office of Oil & Gas
JUL 20 2015



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

Subscribed and sworn before me this 20th day of July 2015
[Signature] 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.

9/18/2015

6100548P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 081 - 00548
Operator's Well No. A Varner 6

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 Thomas Run Quadrangle Blacksville 7.5"

Elevation 1045' County Monongalia District Clay

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 _____)

Proposed Work For Which Pit Will Be Used:

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

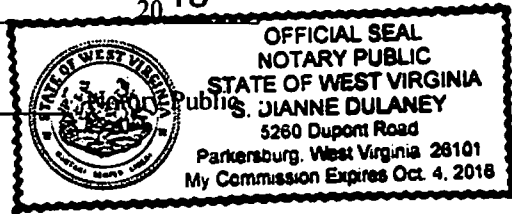
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations 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 20th day of July

Jeanne Dulaney



My commission expires Oct. 4, 2016

9/18/2015

Received
Office of Oil & Gas
9/18/15

LEGEND

- Property Boundary
- Road
- Existing Fence
- Planned Fence
- Stream
- Open Ditch
- Rock
- North
- Buildings
- Water wells
- Drill site

- Diversion
- Spring
- Wet Spot
- Drain Pipe with size in inches
- Waterway
- Cross Drain
- Artificial Filter Strip
- Pit: cut walls
- Pit: compacted fill walls
- Area for Land Application of Pit Waste

Proposed Revegetation Treatment: Acres Disturbed 0.6 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
Tall Fescue		40
Ladino Clover		5

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

received
Office of Oil & Gas
Aug 10 2015

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Haym J. Kuntz*

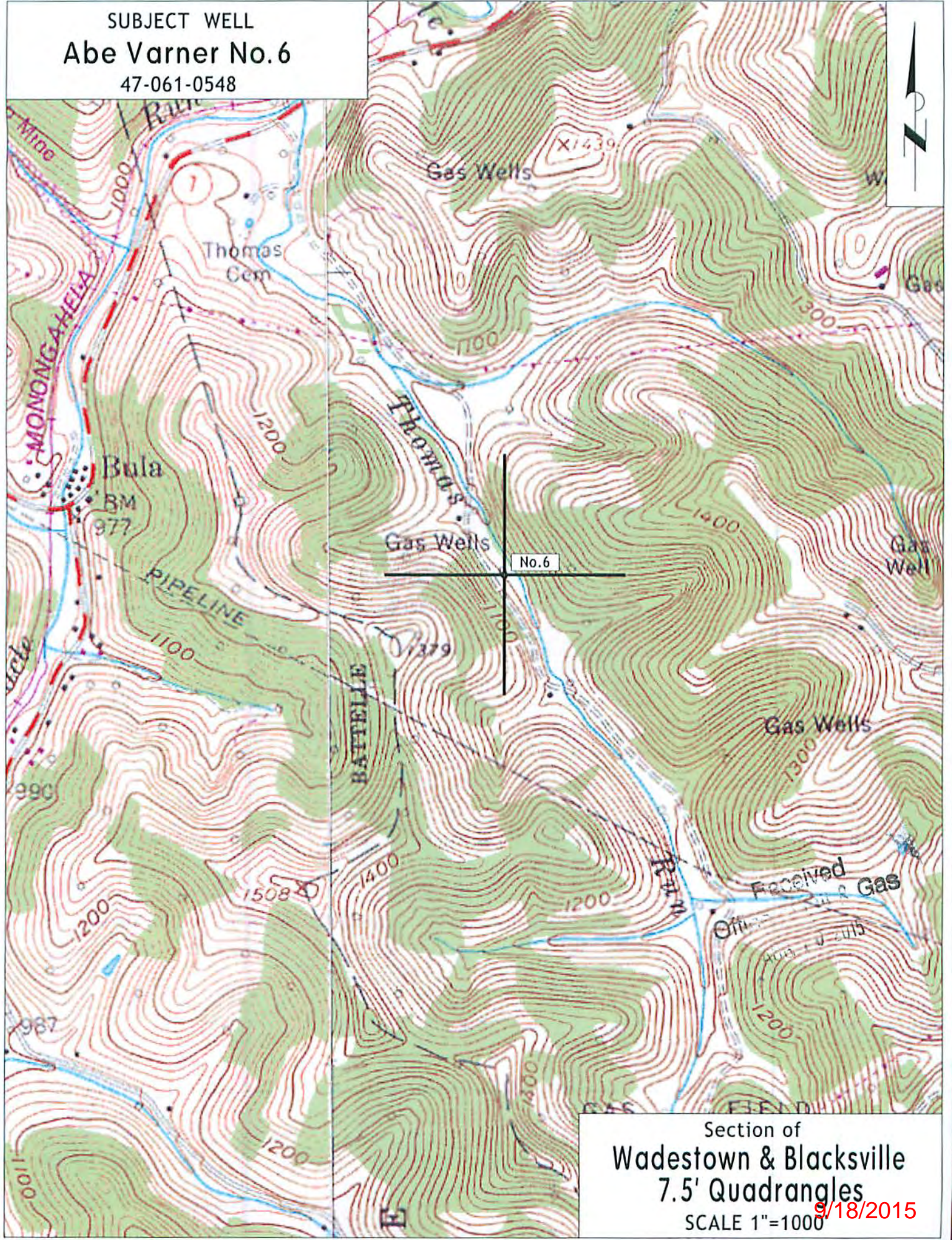
Comments: Reclaim site A.S.A.P.

Title: INSPECT

Date: 8/3/2015

Field Reviewed? Yes No

SUBJECT WELL
Abe Varner No.6
47-061-0548



Section of
Wadestown & Blackville
7.5' Quadrangles
SCALE 1"=1000
9/18/2015

West Virginia Department of Environmental Protection
Office of Oil & Gas

WELL LOCATION FORM: GPS

API: 47- 061- 0548 WELL NO: No.6

FARM NAME: Abe Varner

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Monongalia DISTRICT: Clay

QUADRANGLE: Blacksville 7.5'

SURFACE OWNER: Richard & Nancy Allen

ROYALTY OWNER: American Energy Partners et al.

UTM GPS NORTHING: 4,394,900 (NAD 83)

UTM GPS EASTING: 564,765 (NAD 83) GPS ELEVATION: 319 m. (1046')

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
March 10 2015

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

March 23, 2015
Date