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**west virginia** department of environmental protection

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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

October 05, 2015

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-10302028, 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: MARY B. LONG 217  
Farm Name: LONG, HELEN L.

**API Well Number: 47-10302028**

**Permit Type: Plugging**

Date Issued: 10/05/2015

**Promoting a healthy environment.**

**10/09/2015**

## 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.

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### CONDITIONS

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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.

10320287

- 1) Date August 7, 2015
- 2) Operator's  
Well No. Mary B Long 217
- 3) API Well No. 47-103 - 2020

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 \_\_\_\_\_ or Underground storage \_\_\_\_\_) Deep \_\_\_\_\_ / Shallow
- 5) Location: Elevation 718'                          Watershed North Fork of Fishing Creek  
District Grant    County Wetzel                          Quadrangle Pine Grove 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 Derek Haught    Name To Be Determined Upon Approval of Permit  
Address P. O. Box 85    Address \_\_\_\_\_  
Ripley, WV 25271    \_\_\_\_\_

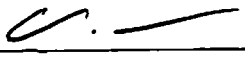
10) Work Order: The work order for the manner of plugging this well is as follows:

\*\* See Attached Sheet \*\*

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Office of Oil and Gas

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

AUG 27 2015  
WV Department of  
Environmental Protection

Work order approved by inspector                           Date 8-18-15

1) Date: August 7, 2015  
2) Operator's Well Number Mary B Long 217  
3) API Well No: 47 - 103 - 2028  
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: 718' Watershed: North Fork of Fishing Creek  
District: Grant County: Wetzel Quadrangle Pine Grove 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 Derek Haught Name To Be Determined Upon Approval of Permit  
Address P. O. Box 85 Address       
Smithfield, WV 26178

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

TD- 2,750'  
*SPOT GEL BEFORE SETTING PLUG # 1.*

Manners of plugging:

Plug #1 - 2525' - 2425'

Located above perforations (2556' - 2565')

Free point 4 1/2", part and pull at approx 1625'

Plug # 2 - 1890' - ~~1575'~~ *1390'* (*cover SW @ 1430'*) *JMM*

Located at ~~4~~ 1/2" casing stub (approx 1625') and through casing perforations (1714' - 1720' and 1834' - 1840')

Plug #3 - 770' - 560'

Located at elevation (718'), across 7" casing shoe and through coal (505')

Plug #4 - 300' - 200'

Freshwater plug

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

*PMH*  
*8-18-15*

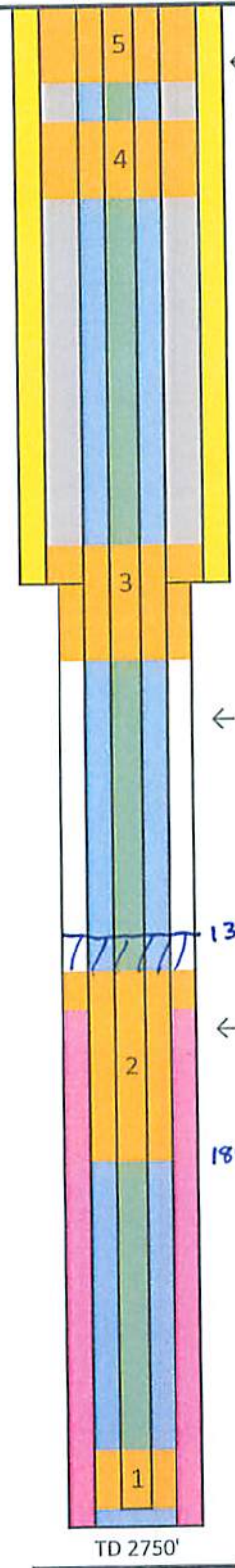
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Well: MB Long #217

Casing Information		
Size	Depth	Weight
7"	613	17#/ft.
4 1/2"	2649	10.5#/ft.
2 3/8"	2540	

Elevation: 718'

Hole Size 8 3/4" →



175 saks cement to surface

Freepoint Cut and Pull Casing	
Size	Approx. Depth
4 1/2"	1625'

Cement Plugs		
NO.	Bottom	Top
1	2525	2425
2	1890	<del>1575</del> 1390'
3	770	560
4	300	200
5	100	0

← 6 1/2" Hole Size

Bottom Hole Cement Level Calculations

# Sacks Used 145      Cement Depth 1654.914

Hole Size 6.5      Casing Size 4 1/2      Depth 2679

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

cubic ft. per vertical ft. depth 0.119991257

Sacks per vertical ft. depth 0.141589683

1390'

DMH  
8-18-15  
SW ≈ 1430'

← 145 Sks Cement T.O.C. 1654'

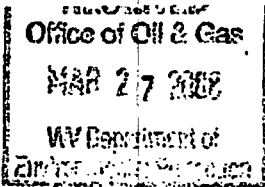
1890'

Perforations	
Top	Bottom
2556'	2565'
1834'	1840'
1714'	1720'

TD 2750'

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

Well Operator's Report of Well Work

Farm name: LONG, HELEN L.

Operator Well No.: MARY LONG 217

LOCATION: Elevation: 718.00

Quadrangle: PINE GROVE 7.5'

District: GRANT  
Latitude: 2,425 Feet south of  
Longitude: 11,075 Feet west of

County: WETZEL  
39 Deg 35 Min 30 Sec.  
80 Deg 37 Min 30 Sec.

Company: EAST RESOURCES, INC.  
P.O. BOX 5519  
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: MIKE UNDERWOOD

Permit Issued: 02/0608

Well work Commenced: 03/08/08

Well work Completed: 03/10/08

Verbal plugging permission granted on:

Rotary X Cable      Rig     

Total Depth (feet) 2,750

Fresh water depths (ft)     

     NA     

Salt water depths (ft) 1430

Is coal being mined in area (Y/N)      N     

Coal Depths (ft):      NA     

Casing/ tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
7"	613.00'	613.00'	175 sks
4 1/2"	2679.60'	2679.60'	145 sks
2 3/8"	2540'	2540'	PACKER

OPEN FLOW DATA

\* WATERFLOOD INJECTOR

Producing formation      Gordon      Pay zone depth (ft)      2552-2564

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.

For: EAST RESOURCES, INC.

By:       
Date:      2/25/08

WR-35

API # 47 103 2028 1-Jun-04

*APF*

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

Well Operator's Report of Well Work

Farm name: LONG, HELEN L.

Operator Well No.: MARY LONG 217

LOCATION: Elevation: 718.00

Quadrangle: PINE GROVE 7.5'

District: GRANT

County: WETZEL

Latitude: 2,425 Feet south of

39 Deg 35 Min 0 Sec.

Longitude: 11,075 Feet west of

80 Deg 37 Min 30 Sec.

Company: EAST RESOURCES, INC.  
P.O. BOX 5519  
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: MIKE UNDERWOOD

Permit Issued: 06/01/04

Well work Commenced: 06/16/04

Well work Completed: 10/19/04

Verbal plugging

permission granted on:

Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_

Total Depth (feet) 2750

Fresh water depths (ft) NA

Salt water depths (ft) 1430

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

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Office of Chief  
OCT 20 2004  
West WV Department of  
Environmental Protection

Casing & Tubing Size	Used in Drilling	in Well	Fill Up Cu. Ft.
7"	613.00'	613.00'	175 sks
4 1/2"	2679.6'	2679.6'	145 sks

OPEN FLOW DATA

\* WATERFLOOD PRODUCER

Producing formation	Gordon	Pay zone depth (ft)	2552-2564
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	Big Injun	Pay zone depth (ft)	1716-1722, 1830-1842
Gas: Initial open flow	50 MCF/d	Oil: Initial open flow	0 Bbl/d
Final open flow	60 MCF/d	Final open flow	0 Bbl/d
Time of open flow between initial and final tests		Hours	
Static rock pressure	250 psig (surface pressure)	after	16 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. 10/09/2015

Treated perforations 1714'-1720' and 1834'-1840' w/ 250 gals 15% HCl, 15  
3,500# 20/40 sand

<u>Well Log :</u>			
	0	316	Sand and Shale
	316	376	Sand
	376	460	Shale
	460	472	sand
	472	564	Shale
	564	582	sand
	582	956	Shale
	956	998	sand
	998	1080	Shale
	1080	1100	sand
	1100	1350	Shale
	1350	1390	sand
	1390	1439	Shale
	1439	1488	sand
	1488	1655	Shale
	1655	1696	Big Lime
	1696	1958	Big Injun
	1958	2520	Shale
	2520	2542	Gordon Stray
	2542	2552	Shale
	2552	2570	Gordon
	2570	2750	Shale
	2750		TD



10302028P

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

- 1) Well Operator: East Resources, Inc. 308122
- 2) Operator's Well Number: Mary B. Long No. 217      3) Elevation 718'
- 4) Well Type: (a) Oil X or Gas \_\_\_\_\_  
 (b) If Gas: Production \_\_\_\_\_ Underground Storage \_\_\_\_\_
- 5) Proposed Target Formation(s): Gordon
- 6) Proposed Total Depth: 2,700' feet
- 7) Approximate fresh water strata depths: 50'
- 8) Approximate salt water depths: NA
- 9) Approximate coal seam depths: 505'
- 10) Does land contain coal seams tributary to active mine?      Yes \_\_\_\_\_ No X
- 11) Proposed Well Work: Drill and Stimulate Waterflood Production Well in Gordon Sand

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight Per Ft.	For Drilling	Left in Well	Fill-up (Cu. Ft.)
Conductor						
Fresh Water	7"	L.S.	17	580'	580'	Cement to Surface
Coal						
Intermediate						
Production	4 1/2"	J-55	10.5	2,700'	2,700'	Cement over Salt Sand
Tubing						
Liners						

Packers: Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

For Office of Oil and Gas Use Only

- Fee(s) Paid     
  Well Work Permit     
  Reclamation Fund     
  WPCP  
 Plat     
  WW-9     
  WW-2B     
  Bond \_\_\_\_\_     
  Agent  
(Type)

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10/09/2015

**DRILLING PROGNOSIS**  
**MARY B LONG NO. 217**  
 Grant Dist – Wetzel County, WV

LOCATION: Wileyville

PERMIT NO.: 47-103-02028

ELEVATION: 737' G.L..

DRILLING AND CASING PROGRAM: Drill at least an 8 3/4" hole to approx. 600', set approx. 580', 7" O D, 17 #/ft limited service casing on a casing shoe. Cement back to surface with 175 sks. reg. neat cement with 3% CaCl<sub>2</sub> and 1/4# Flocele/sk. W.O.C. 8 hrs.

Drill a 6 1/4" hole to approx. 2700' MD. Set 4 1/2", 10.5#/ft, J-55 casing. Cement with 75 sks 50/50 Pozmix w/ 2% CaCl<sub>2</sub> 6% gel, 1/8# flocele/sk, and 70 sks 50/50 Pozmix w/ 2% CaCl<sub>2</sub> 2% gel, 1/8# flocele/sk.

DRILLING FLUID: Fluid to total depth. Use freshwater to surface casing point, 2 1/2 - 3% KCL system below surface casing. Prior to drilling Gordon water loss to be reduced to 20 cc or less.

DRILLING TIME AND SAMPLES: One foot drilling time from surface to total depth. Ten-foot samples from 1650' to total depth.

LOGGING: To be determined at time of drilling

PIPE TALLY: Drill string will be strapped out on last trip at or before coring point or total depth is reached. If a correction of more than five feet (5') is necessary, then drill string is to be strapped going back in hole.

FORMATION TOPS:

Pittsburgh Coal	505' G.L.
Big Lime	1702' G.L.
Big Injun	1758' G.L.
Pocono Shale	2013' G.L.
Gordon Stray	2548' G.L.
Gordon	2578' G.L.
Shale	2590' G.L.
T.D.	2700' G.L.

SUPERVISION: A morning report will be called into the Parkersburg office by 8:00 a.m. each morning.

	Office	Cell	Home
Roger Heldman Mgr/ Drilling & Completion	1-800-579-7684	481-9061	(740) 678-8210
Rick Green	Foreman	782-2216	481-4939 (304) 782-4248

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AUG 27 2015

WV Department of  
Environmental Protection

10/09/2015

WW-4A  
Revised 6-07

1) Date: August 7, 2015  
2) Operator's Well Number  
Mary B Long 217

3) API Well No.: 47 - 103 - 2028

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

<b>4) Surface Owner(s) to be served:</b>	<b>5) (a) Coal Operator</b>
(a) Name <u>Steven &amp; Timothy Long</u>	Name <u>NA</u>
Address <u>P.O. Box 6</u>	Address _____
<u>Pine Grove, WV 26419</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Murray Energy Corporation</u>
_____	Address <u>46226 National Road</u>
_____	<u>St. Clairsville, OH 43950</u>
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
<b>6) Inspector</b> <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 <i>Diane White</i></u>
As:	<u>Agent</u>
Address	<u>5260 Dupont Road</u>
	<u>Parkersburg, WV 26101</u>
Telephone	<u>304-420-1119</u>

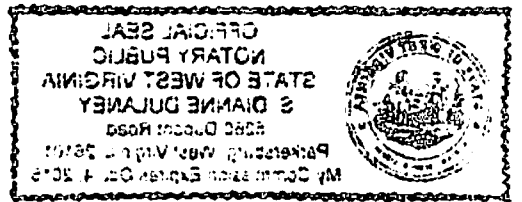
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Office of Oil and Gas

Subscribed and sworn before me this 7th day of August, 2015 AUG 27 2015  
*S. Dianne Dulaney* Notary Public  
 My Commission Expires Oct. 4, 2016 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](mailto:depprivacyofficer@wv.gov).

10/09/2015



10/09/2015

**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 North Fork of Fishing Creek Quadrangle Pine Grove 7.5'

Elevation 718' County Wetzel District Grant

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

Will a synthetic liner be used in the pit? Yes *pit must be lined with a minimum of 20 mil thickness synthetic liner. TFW*

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 \_\_\_\_\_)

*DMH  
8-18-15*

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

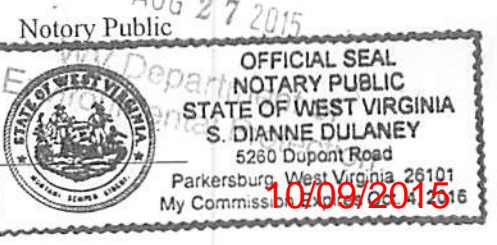
Company Official (Typed Name) Diane White

Company Official Title Agent

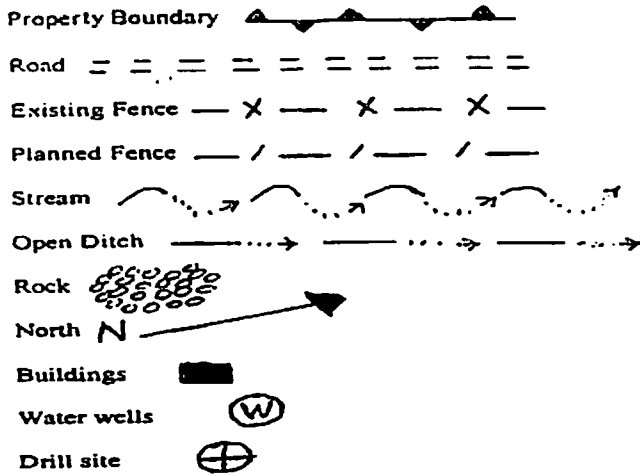
Subscribed and sworn before me this 7th day of August, 2015

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Office of Oil and Gas  
AUG 27 2015

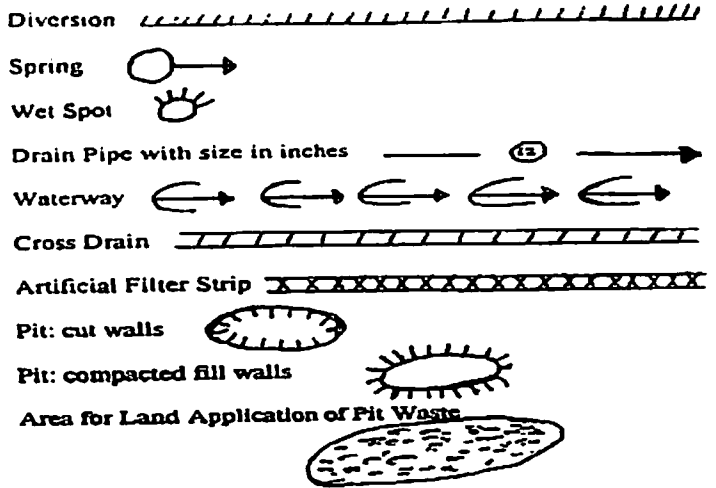
S. Dianne Dulaney



My commission expires Oct 4, 2016



**LEGEND**



Proposed Revegetation Treatment: Acres Disturbed .06 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

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 \*\***

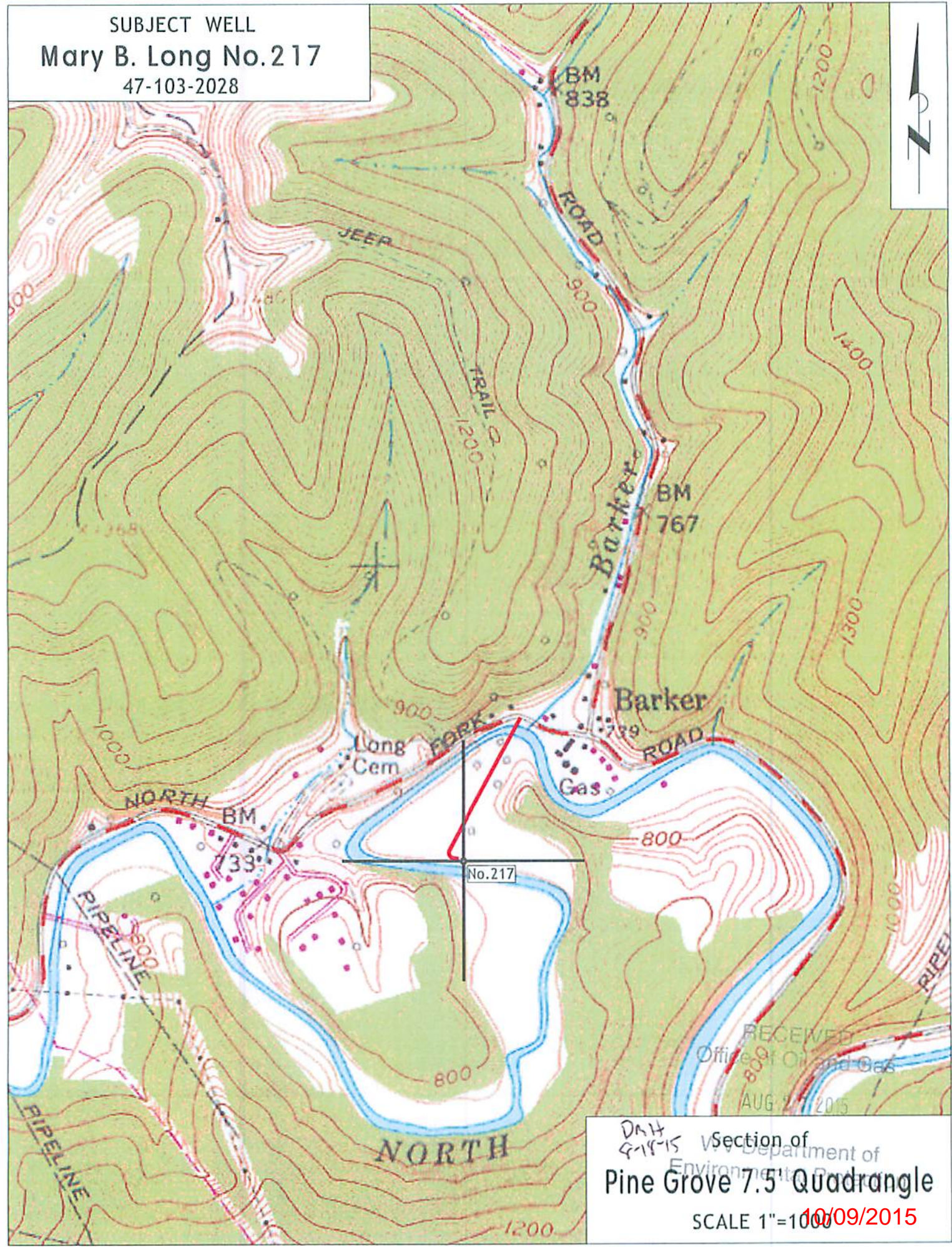
Plan Approved by: [Signature] RECEIVED  
Office of Oil and Gas

Comments: \_\_\_\_\_ AUG 27 2015

Title: Oil + Gas Inspector Date: 8-18-15 WV Department of  
Environmental Protection

Field Reviewed?  Yes  No

SUBJECT WELL  
Mary B. Long No.217  
47-103-2028



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AUG 27 2015

DNH  
8-15-15  
Section of  
Department of  
Environmental Protection  
Pine Grove 7.5' Quadrangle  
SCALE 1"=1000' 10/09/2015

WW-7  
8-30-06

West Virginia Department of Environmental Protection  
Office of Oil & Gas

**WELL LOCATION FORM: GPS**

API: 47- 103 - 2028 WELL NO: No.217

FARM NAME: Mary B. Long

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Wetzel DISTRICT: Grant

QUADRANGLE: Pine Grove 7.5'

SURFACE OWNER: Steven & Timothy Long

ROYALTY OWNER: American Energy Partners et al.

UTM GPS NORTHING: 4,380,834 (NAD 83)

UTM GPS EASTING: 528,854 (NAD 83) GPS ELEVATION: 219 m. (718')

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

March 23, 2015  
Date

Designated Agent RECEIVED  
Title Office of Oil and Gas

AUG 27 2015