

### 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

June 17, 2013

### WELL WORK PERMIT Secondary Recovery Well

This permit, API Well Number: 47-4303457, 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin

Operator's Well No: J.A. FOWLER NO. 109

Farm Name: MCCLURE, ANDY J. & REBECCA

API Well Number: 47-4303457

Permit Type: Secondary Recovery Well

Date Issued: 06/17/2013

### 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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

### **CONDITIONS**

- 1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
- 3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
- 4. All pits must be lined with a minimum 20 mil thickness synthetic liner.
- 5. No land application of pit fluids.

WW-3B 10/07



1) Date		April 23, 2013				
2) Operator's We	Il No. J. A. Fowler No. 109					
3) API Well No.	47	-	043			
	State		County		Permit	
4) UIC Permit N	0.	τ	JIC2R043	01AP		

# STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

5) WEI	LL TYPE:	Liqu	id Injectio	n X	_	Gas I	njection (r	ot storag	ge)	Waste	Disposa	1
6) LOC	CATION:	Elevatio	n 95	6'			Water	shed	Porte	r Fork		
	Dist	rict	Duval		_ c	ounty	Lincoln	-		Quadrangle	Gr	iffithsville 7.5'
7) WEI	LL OPERATOR	HG Ene	ergy, LLC		49449	7948	8) DESI	GNATEI	AGEN	r· Mi	ike Kirs	ch
		5260 D	ipont Roa	d			7					ont Road
di .		Parkers	burg, WV	26101								urg, WV 26101
9) OIL	& GAS INSPE	TOR TO B	E NOTIFI	ED:			10) DRI	LLING (	CONTRA	CTOR:		
	Na	me Ralph T	riplett						Nam			
	Addr	ess 5539 M							Addres	s		L
		Branch	land, WV	25506								
11) PRO	POSED WELL	WORK:	Dri	l X		Drill	Deeper		Redri	II St	timulate	X
					Old Form		Pe	erforate l	New Fori	nation		Convert
			Other	Physic	cal Chan	ge in Well (	specify)					
12) Geole	ogical target for	mation		Berea	ı		_Depth_		2,426	Ft. (Top) to		2,447 Ft. (Botto
13) Estir	nated depth of o	completed w	ell (or act	ual dep	th of exis	sting well)	25	547'		Ft.		
14) Appr	oximate water	strata deptl	is:	Fresl	n	32	5 Ft			Salt	1,0	26 Ft.
15) Appr	oximate coal se	am depths:			390		Ft			_		
16) Is coa	al being mined i	n the area?				Yes		X	No			
17) Virgi	n reservoir pres	sure in tar	get format	ion:			1,250	)	psig.	Source		Estimated
18) Estin	nated reservoir	fracture pre	essure:				2,650	)	psig.	-		
19) MAX	IMUM PROPO	SED INJEC	TION OP	ERATI	ONS:	Volume pe	er hour	25 BBL		Bottom Hole P	Processes	2.400 psi
	AILED IDENTI					100	_					
and o	ther chemicals	as needed t	o maintair	MIALS water	quality :	and improve	, INCLUD e oil recove	ING ADI	DITIVES	Fresh water	r, produ	ced water, bacterici
and the same of	ERS (IF ANY)					coal bed filte						
		OD CIAMITO	Carlon and									
22) SPEC	CIFICATION FO	OR CATHO.	DIC PROT	ECTIC	ON AND	OTHER CO	RROSION	CONTE	ROL			
23) CASI	NG AND TUBI	NG PROGR	AM						-		-	
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CASING O		Grade	FICATION Weight	New	Used	For Drill	AGE INTE	Left in	XX7-11	CEMENT FII		PACKERS
Conductor	III Bize	Grade	Weight	IVEW	Osea	FOI DITI	ung	Leit in	wen	OR SACKS (C	U. FT.)	V: 1-
resh Wate	er 7"	L.S.	17#	X		490'		490'	_	Cement to Sur	faco	Kinds Tension
Coal						100		400		Cement to but	lace	Sizes
ntermedia	te											2.375" x 4.5"
roduction	4 1/2"	J-55	10.5#	X		2547'		2547		150 sacks		Depths Set
ubing	2 3/8"	J-55	4.6#	X		2250'		2250	r'			2150'
iners												Perforations
												Top Bottom
										Re	coivo	
										Office o	of Oil	Gan
CT. The second	ICANTS OPER	ATING RIC	HTS were	acqui	red from		Freehold	Compan	У			. 6.5.5
b	y Deed	Lease	X		her Con		Da	ted	Februa	ry 12, 1973		of record in the
		Lincoln		Count	y Clerk's	Office in			Book	35 at P	age	225



WW-3A 10/07



1) Date:		April 23, 2	2013		
2) Operator's We	ell No.	J. A. Fowl	er No. 1	09	
3) API Well No.	47	043	b.#		
- 41.0	State	County		Permit	
4) IIIC Permit N	0	UIC2R043	RO1AP		

# STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

5) Surface Owner(s) To Be Served  (a) Name Andy & Rebecca McClure  Address 109 Coon Whistle Hollow  Yawkey, WV 25573  (b) Name  Address  (c) Name  Address	7 (a) Coal Operator Name Address  7 (b) Coal Owner(s) Name Address	NA With Declaration Of Record NA
6) Inspector Ralph Triplett  Address 5539 McClellan Hwy  Branchland, WV 25506  Telephone 389-0350	Address 7(c) Coal Lessee W	ith Declaration Of Record NA
(2) The plat (surveyor's map) showing the well location on Form		hod a show that the sales
(3) The Construction and Reclamation Plan on Form WW-9 (unwhich sets out the plan for erosion and sediment control and The date proposed for the first injection or waste disposal is  THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON FORM V	nless the well wor d for reclamation To be determine J HAVE RIGHTS R	for the site and access road.  d  EGARDING THE APPLICATION
(3) The Construction and Reclamation Plan on Form WW-9 (unwhich sets out the plan for erosion and sediment control and The date proposed for the first injection or waste disposal is  THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON FORM WASTED TO THE "INSTRU	To be determine  J HAVE RIGHTS R WW-3(A) DESIGNA  well operator propose f of the Office of Oil ar attached Application Reclamation Plan hav	for the site and access road.  d EGARDING THE APPLICATION FED TO YOU. HOWEVER YOU  s to file or has filed this Notice and ad Gas, West Virginia Department of and depicted on the attached Form be been mailed by registered or
(3) The Construction and Reclamation Plan on Form WW-9 (up which sets out the plan for erosion and sediment control and the thick sets out the plan for erosion and sediment control and the thick sets out the plan for erosion and sediment control and the thick sets out the plan for erosion and sediment control and the thick sets of the	To be determined I HAVE RIGHTS RAWW-3(A) DESIGNATION Well operator proposed for the Office of Oil are attached Application Reclamation Plan has on in certain circumstated following certification	for the site and access road.  d  EGARDING THE APPLICATION FED TO YOU. HOWEVER YOU  s to file or has filed this Notice and add Gas, West Virginia Department of and depicted on the attached Form the been mailed by registered or ances) on or before the day of the on:
(3) The Construction and Reclamation Plan on Form WW-9 (unwhich sets out the plan for erosion and sediment control and which sets out the plan for erosion and sediment control and The date proposed for the first injection or waste disposal is THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON FORM VARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.  Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned Application and accompanying documents for a Well Work Permit with the Chie Environmental Protection, with respect to a well at the location described on the WW-6. Copies of this Notice, the Application, the plat, and the Construction and certified mail or delivered by hand to the person(s) named above (or by publication mailing or delivery to the Chief.	To be determined HAVE RIGHTS RAWW-3(A) DESIGNATION Well operator proposed for the Office of Oil are attached Application Reclamation Plan has on in certain circumstant	for the site and access road.  d  EGARDING THE APPLICATION FED TO YOU. HOWEVER YOU  s to file or has filed this Notice and ad Gas, West Virginia Department of and depicted on the attached Form the been mailed by registered or ances) on or before the day of the

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 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:

deprivacyofficer@wv.gov

Signature

9056	U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
7 90	For delivery information visit our website at www.usps.com。	
2920 0003, 322	Postage \$ 1.52  Certified Fee 3.10  Return Receipt Fee (Endorsement Required)  Restricted Delivery Fee (Endorsement Required)  Total Postage & Fees \$ 7.17  TAF 109	1
7012	Street, Apt. No.; Street, Apt. No.; or PO Box No. 109 Coon Whistle Hellew City, State, ZIP+4 Yawkey WV Z5573 PS Form 3800, August 2006 See Reverse for Instructions	

Received Office of Oil & Gas

MAY - 8 2013

W	W.	2R	1

	Well No.	J. A. Fowler No. 109
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### West Virginia Department of Environmental Protection Office of Oil and Gas

#### NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing, The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

Be advised, you have the right to sample and analyze any water supply at your own expense.

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

X Contractor Nam	e Sturm Environmental Services	
Well operator's		
Well Operator	HG Energy, LLC	
Address	5260 Dupont Road	
	Parkersburg, WV 26101	
Telephone	304-420-1119	

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underlining which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site please indicate such.

Received
Office of Oil & Gas

### **Special Note:**

- Z013

Water sampling was completed through out the Griffithsville area for the UIC permit review late in 2012. Per Jamie Peterson, WVDEP, the timing of that large UIC sampling was sufficent for this Griffithsville project.

06/21/2013

Form WW-9 Rev. 10/94

	Page	3	of	3
API N	umber 47-	043		
Operator's Well No.	J. A. Fo	owler N	o. 109	

# 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	HG Energy	, LLC			O	P Code	494497	7948
Watershed	Porter For	k		Q	uadrangle	Griffith	sville 7.5	385
Elevation	956'	County	Lincoln	43	District		uval	02
Description of	f anticipated Pit Waste:	Fluids encount	tered in drilling sl	nallow well.			1	4
Do you antici	pate more than 5,000 bbls	of water to comple	ete the proposed we	ell worl Yes	3	No	X	
Will a synthe	tic liner be used in pit?	Yes	If so, what mil.?	-10 Mil	- 20M	14		
Proposed Disp	Reuse (at Al	ation d Injection (UIC F PI Number	Permit Number	l location)				)
- 10	Other	(Explain	m vv vi-5 ioi disposa	i location)		•		,
Additives to b Drill cuttings	um anticipated for this we. If oilbased, what type? Se used? Water, So disposal method? Leave in If left in pit and plan to se Landfill or offsite name/p	ul? Air, fresh wate ynthetic, petroleu ap, KCI a pit, landfill, rem blidify, what medi	m, etc. Noved offsite, etc.	Air, Fresh		ative soil,	, cement,	lime
I this applicatio for obtaining t penalties for s	or regulation can lead to of certify under penalty of land in form and all attachment the information, I believe the ubmitting false information in a cital Signature	w that I have per s thereto and that hat the informatio n, including the po	sonally examined a t, based on my inqui on is true, accurate	iry of those in and complete. imprisonment	dividuals im I am aware	mediately	responsibl	le
Company Off	icial (Typed Name)		Diane C. White					_
Company Off			Accountant					
Subscribed ar	nd sworn before me this	23 X PetTS	day of <u>Olpa</u>	120		Offi	Receive ce of Oil	ed & Gas
My commissio	on expires	12,2018				.M./	(y - 8	2013
Form WW-9			" " " " " " " " " " " " " " " " " " "	WEST OF STREET	STATE C	A L. PETH	BLIC VIRGINIA ITEL LC	1

06/21/2013

### WW9-Rack

Property Boundary

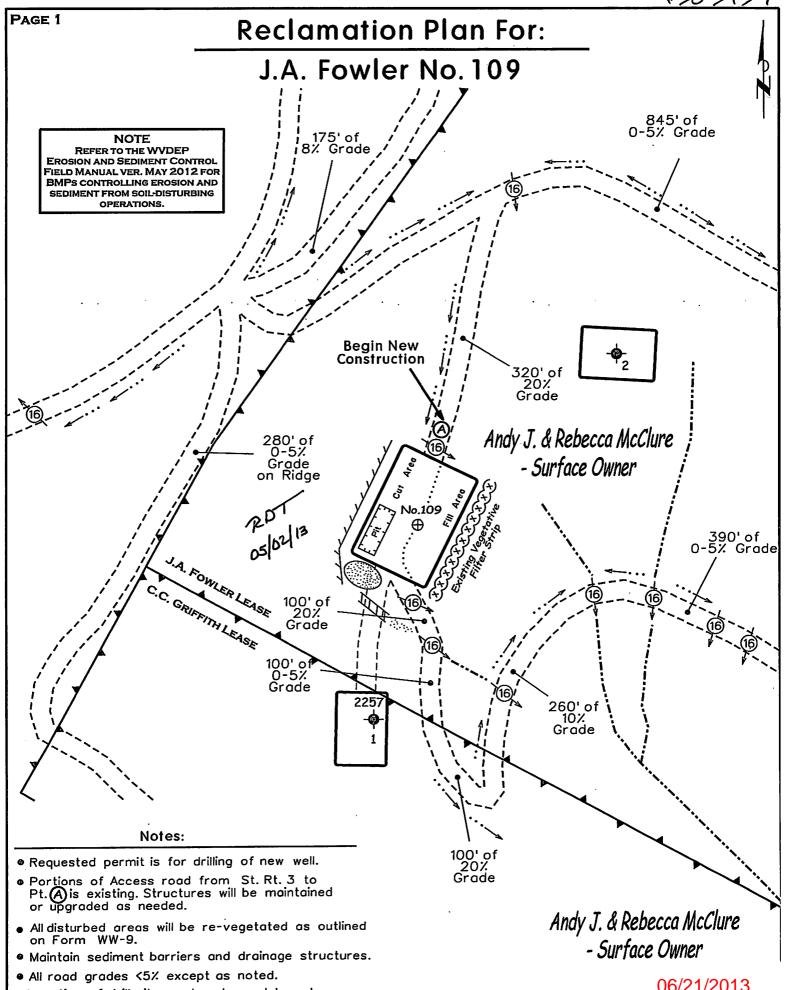
Ŗoad

### Legend

Diversion

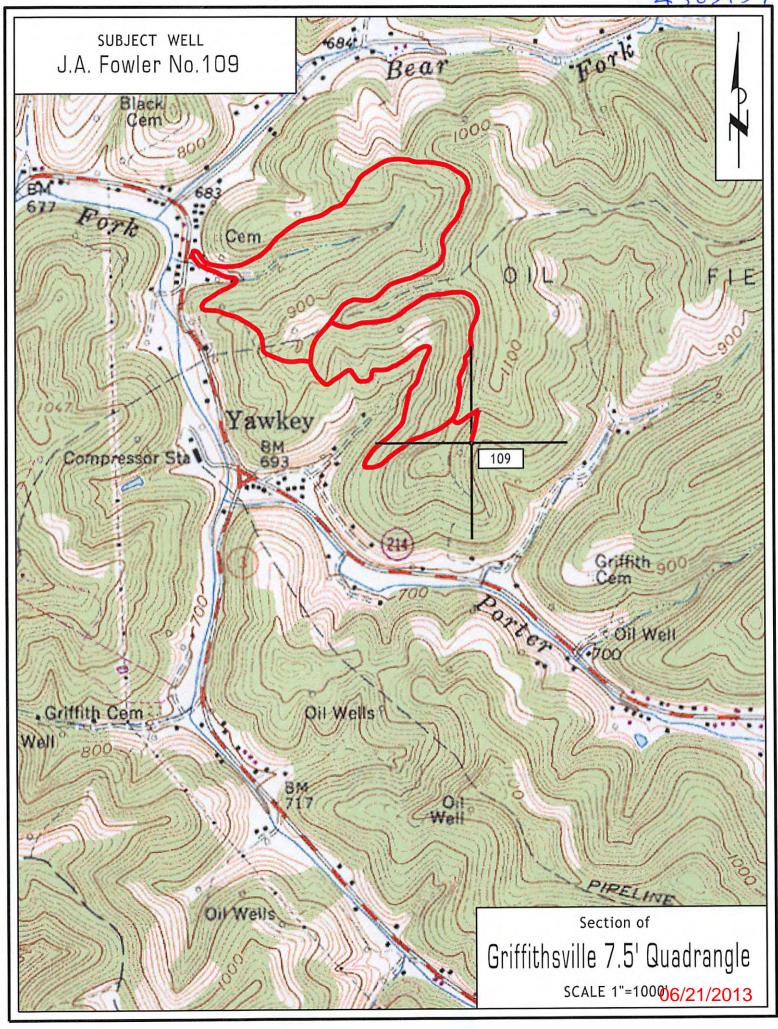
Spring

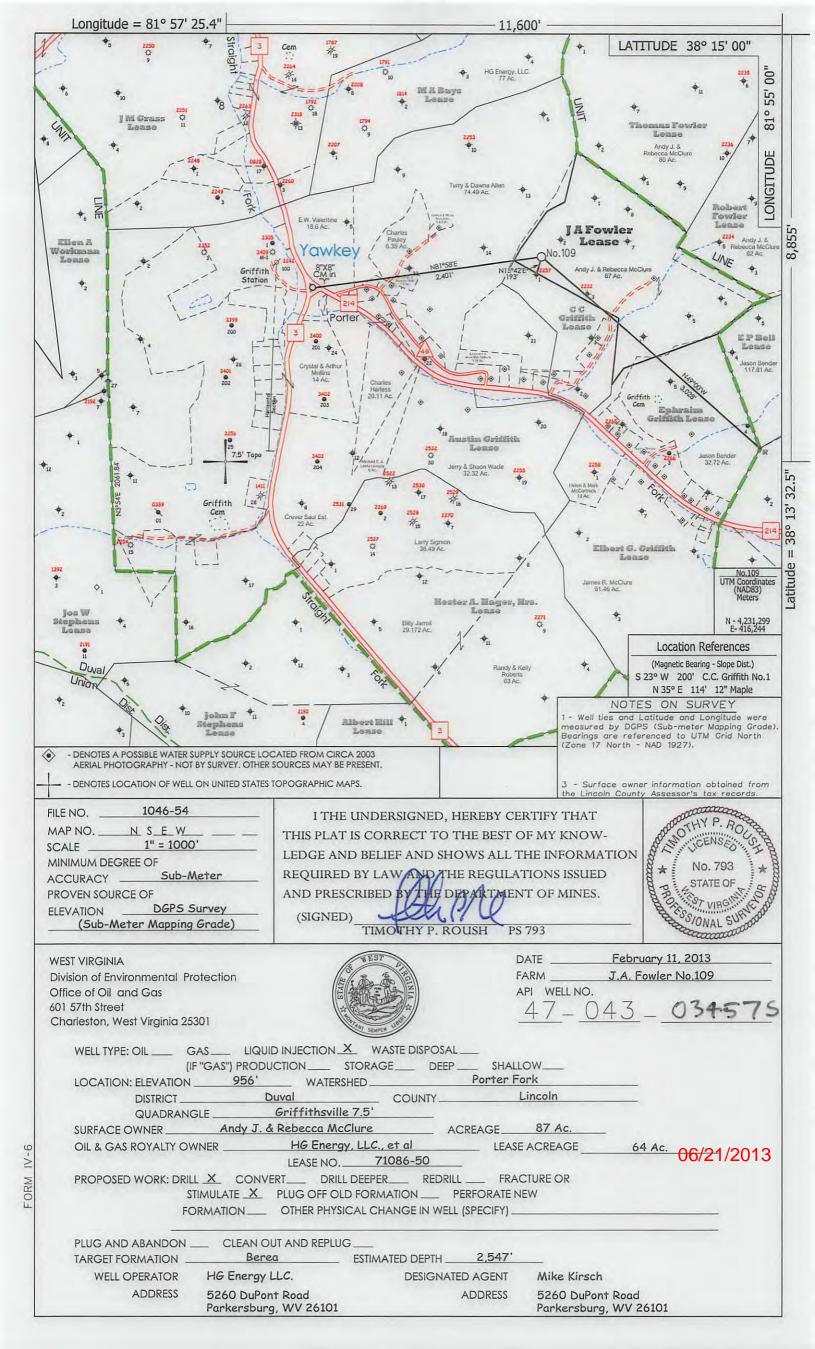
Existing Fence	xxx	Wet Spot	· ~ ~				
Planned Fence	_//_	Drain Pipe	<u> </u>				
Siream .		Waterway	$\longleftrightarrow$				
Open Ditch	>	Cross Drain					
Rock	2000 S	Filter Strip	XXXXXXXXX				
	200 de	Pit: Cut Walls	Current				
North	N-		11111				
• •		Pit: Compacted Fill Walls	7				
Buildings		FIII. Walls	mille				
Water Wells	<b>®</b>	Area of Land Application					
Drill Site	$\oplus$	of Pit Waste	(				
		_ <del></del>					
	A	Area I	•				
Proposed Revegetation Treatme	•	<del></del>	evegetation pH				
	A	area II					
	Appro	x. 1.0 Ac.					
Lime	2 Tons/Acre or	Correct to pH 6.5					
	· · · · · · · · · · · · · · · · · · ·	500 Lbs./Acre (500	lbs. Minimum)				
Mulch		Acre	•				
	SEED	MIXTURES					
Area	I (Location)	•	Area II (Road)				
Seed Type	Lbs/Ac.	Seed Type	Lbs/Ac.				
Tall Fescue	40	Tall Fescue	. 40				
Ladino Clover	5	Ladino Clover	· · · · · · · · · · · · · · · · · · ·				
Received							
Office of Oil & Gas							
Attach: Drawing(s) of road, location, pit and proposed area for land application Photocopied section of involved 7.5' topographic sheet.							
Plan approved by: <u>Pay</u> Comments:	& D. Trupiall		•				
Title: Wist	red Inspectors.		Date: May 02, 2013				
Field Reviewed?	THE RESIDENCE OF THE PROPERTY	. ( )	No T				



Location of drill pit may be changed based on as-built considerations.

06/21/2013 Note: Drawing not to Scale







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

> CK#2172 \$65000

April 23, 2013

Mr. James Peterson WVDEP Division of Oil & Gas 601 57<sup>th</sup> Street Charleston, West Virginia 25304

RE:

J. A. Fowler No. 109

Duval District, Lincoln County

West Virginia

Dear Mr. Peterson:

Enclosed are Forms WW-3A, WW-3B, WW-9, WW-3(B1), Mylar of plat, reclamation plan, topo map and copies of the certified mailing receipts for a permit to drill a liquid injection well. Also enclosed is our check in the amount of \$650.00 to cover the associated permit fees.

Very truly yours,

Diane CWhite

Diane C. White

Enclosures

cc:

Andy & Rebecca McClure - Certified

Ralph Triplett - Inspector

Received Office of Oil & Gas

MAY - 8 2013



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

Roger Heldman General Manager, WV Operations

6/11/13

Jeff McLaughlin WV DEP Office of Oil & Gas 601 57<sup>th</sup> Street, SE Charleston, WV 25304-2345

Received -Office of Oil & Gas

JUN 11 2833

RE: Griffithsville Unit No. 1 pit fluid disposal

Dear Jeff,

As a follow up of our meeting of June 6<sup>th</sup> please consider this letter as reaffirmation of H G Energy's intent to dispose of fluids encountered while drilling the planned Berea wells in our Griffithsville Unit No. 1 offsite. A portion of the fluids will be reused in the drilling of subsequent wells and the remainder hauled to a UIC approved disposal well. H G Energy trusts that this method of fluid disposal will alleviate any concerns the WV DEP may have concerning the disposal of these fluids. The drill cutting would be disposed of on site.

If you should have any other questions or concerns please feel free to call.

very truly yours,

Roger Heldman

Cc: Andy & Rebecca McClure 109 Coon Whistle Hollow Yawkey, WV 25573