

#### 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: 47-4303453, 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.

Chief

James Martin

Operator's Well No: AUSTIN GRIFFITH NO. 105

Farm Name: MCCLURE, ANDY J. & REBECCA

API Well Number: 47-4303453

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. Failure to adhere to the specified permit conditions may result in enforcement action.

#### **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 Well	No.	A	ustin G	riffith No	. 105	
3) API Well No.	47	-	043	-		
	State	10	County		Permit	
4) UIC Permit No.		I	JIC2R04	301AP		

# 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)	WELL TYPE:		Liquid	l Injection	X		Gas Inje	ection (not sto	rage)	Waste 1	Disposa	
6)	LOCATION:		Elevation	840				Watershed	Porte	- Fork		
		District		Duval		Con	inty	Lincoln -		Quadrangle	Gri	ffithsville 7.5'
7)	WELL OPERA	ATOR:	HG Ener			494497	948	8) DESIGNAT	TED AGENT	: Mi	ke Kirse	eh .
				pont Road						520	30 Dupo	nt Road
			Parkersh	ourg, WV 2	26101					Pa	rkersbu	rg, WV 26101
9)	OIL & GAS IN				D:			10) DRILLIN		22556	.,	
			Ralph Tr	riplett Clellan Hv			_		Nam			
		Address		and, WV 2			-/-		Addres	8		
11)	PROPOSED W	WEST 1376		Drill			- n n		****			A.
11)	PROPOSED V	אא רורום א	JKK:			ld Forma	Drill De		Redril te New Forn		imulate	X Convert
							in Well (sp		oc Ivew Poll			Convert
12)	Geological targ	get forma	ation		Berea			Depth	2,310	Ft. (Top) to		2,331 Ft. (Bottom)
13)	Estimated dep	th of con	npleted we	ell (or actu	al dept	h of exist	ing well)	2431'		Ft.		
14)	Approximate v	vater str	ata depth	s:	Fresh		210	Ft.		Salt	91	Ft.
15)	Approximate o	coal seam	depths:			270		Ft.				
16)	Is coal being n	nined in t	the area?			Y	es		X No			
17)	Virgin reservo	ir pressu	re in targ	et formati	on:			1,250	psig.	Source		Estimated
18)	Estimated res	ervoir fra	acture pre	ssure:				2,650	psig.	_		
19)	MAXIMUM PI	ROPOSE	D INJEC	TION OPE	ERATIO	ONS:	Volume per	hour 25 B	BL	Bottom Hole P	ressure	2,400 psi
20)	DETAILED ID								ADDITIVES	Fresh water	r, produ	ced water, bactericides
21)	FILTERS (IF	ANY)		Cartridge	filters	and/or co	al bed filter	S				
22)	SPECIFICATI	ON FOR	CATHOI	DIC PROT	ECTIO	N AND C	THER COR	ROSION CO	NTROL			
23)	CASING AND	TURING	2 PROGR	ΔM							_	
		100111			22							- SWILLIAM
	ING OR BING TYPE				Used For Drilling Left in Well			CEMENT FILLUP		PACKERS		
	ductor	Size	Grade	Weight	New	Used	For Drillin	ig Leit	in Well	OR SACKS (C	U. FT.)	IZ: 1
	h Water	7"	L.S.	17#	X		370'	9	370'	Cement to Sur	face	Kinds Tension
Coal			1.0.	110	- 1		0.0		110	Cement to Sur	lace	Sizes
	rmediate										, et	2,375" x 4.5"
100000	luction	4 1/2"	J-55	10.5#	X		2431'		2431	150 sacks		Depths Set
Tubing		2 3/8"	J-55	4.6#	X		2130'		130'			2030'
Line												Perforations
											Rec	Top Bottom
15.										Off	ice of	Oil & Gas
								= 1				
24)	APPLICANTS	OPERA'	TING RIG	HTS were	acqui	ed from		Austin and El	izabeth Grif	£	10.	2
	by Deed		Lease	X	Ot	her Cont	ract	Dated	Decem	ber 19, 1906	721-7	of record in the
		Harrison County Clerk's Office				Office in		Book	39 at I	Page	333	



WW-3A 10/07



1) Date:		April 23,	2013		
2) Operator's We	ll No.	Austin Gr	iffith N	o. 105	
3) API Well No.	47	043	· (-)		
	State	County		Permit	
4) UIC Permit N	0.	UIC2R04	301AP		

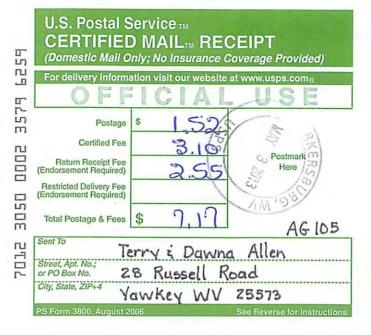
# STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

5) Surface Owner	(s) To Be Served	7 (a) Coal Operator	
(a) Name	Terry & Dawna Allen	Name	NA
Address	28 Russell Road	Address	
	Yawkey, WV 25573		
(b) Name	Andy & Rebecca McClure	7 (b) Coal Owner(s)	With Declaration Of Record
Address	109 Coon Whistle Hollow	Name	NA
Address	Yawkey, WV 25573	Address	****
(c) Name	Lawrence & Anna Mae Roberts	- Tuuress	
Address	10848 Sycamore Drive	Name	
Address	La Porte, TX 77571	Address	
<del>-</del>	La l'olte, 1X l'ioli	Address	
6) Inspector	Ralph Triplett	7(c) Coal Lessee W	ith Declaration Of Record
Address	5539 McClellan Hwy		NA
-	Branchland, WV 25506		
Telephone	389-0350		
which sets on the date proposed HE REASON YOU HICH ARE SUM RE NOT REQUIL when the control of the		To be determine  To be determine  HAVE RIGHTS R  WW-3(A) DESIGNA  well operator propose of of the Office of Oil ar electronic attached Application Reclamation Plan hav on in certain circumsta	for the site and access road.  d  EGARDING THE APPLICATION TED 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
	The person signing this document shall make the	following certification	on:
certify under pena	lty of law that I have personally examined and am	Well Operator	HG Energy, LLC
기사들은 하고 있는 것이 없다면 하다 하다.	ormation submitted in this document and all attachments		5260 Dupont Road
d that, based on m	y inquiry of those individuals immediately responsible		Parkersburg, WV 26101
the state of the s	ormation, I believe that the information is true, accurate	-	Office
	ware that there are significant penalties for submitting	By:	Diane C. White & Gas
se information, inc	cluding the possibility of fine and imprisonment."	Its:	Accountant
			MAY - 0
		C:	C20134: L
		Signature	Diane Clinice

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:

depprivacyofficer@ww.gov







WW-2B1

Well No. Austin Griffith No. 105

#### 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:

Contractor Nam	e Sturm Environmental Services
Well operator's	private laboratory
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.

Office of Oil & Gas

#### Special Note:

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

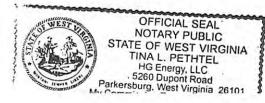
Form WW-9 Rev. 10/94

	Page	3	of ·	3
API N	Number 47-	043	-	
Operator's Well No.	Austin G	riffith	No. 105	

# 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	y, LLC			0	P Code	49449	7948
Watershed	Porter For	k		G	uadrangle	Griff	ithsville 7.5	385
Elevation	840'	County	Lincoln	43	District		Duval	02
Description of an	nticipated Pit Waste:	Fluids encoun	tered in drilling s	shallow well.	- 1 To 1			
Do you anticipate	e more than 5,000 bbls	of water to compl	ete the proposed w	rell worl Ye	S	No	X	
Will a synthetic l	liner be used in pit?	Yes	If so, what mil.?	-10 Mi	. 20 M	16.		
Proposed Disposa	al Method For Treated	Pit Wastes:						
	Land Applic	ation						
	Undergroun	d Injection (UIC	Permit Number					)
_	Reuse (at A							)
-	2.5 4 7 67		m WW-9 for dispos	sal location)				
	Other	(Explain			-			)
and the second second	anticipated for this we			Air, Fresh	Water			
	oilbased, what type? S		ım, etc	NA				
Additives to be u	sed? Water, So posal method? Leave i		1 - CC-'tt-					
	left in pit and plan to s			Comont lima	gamduat N	Totirro a	il samont	Time a
	andfill or offsite name/p		ium win be useu;	cement, iiiie,	sawdust I	auve so	л, сешень,	ште
issued on August that the provision applicable law or I ce this application fo for obtaining the	rtify that I understand 1, 2005, by the Office as of the permit are en- regulation can lead to rtify under penalty of l form and all attachmen information, I believe mitting false information	of Oil and Gas of the forceable by law. The enforcement action as that I have petts thereto and the that the information of the content of th	the West Virginia I Violations of any te on. rsonally examined at, based on my inq ion is true, accurate cossibility of fine or	Department of erm or condition and am famili- uiry of those in e and complet r imprisonment	Environment on of the general iar with the individuals in a. I am awar	tal Prote eral pern informat nmediate	ection. I undenit and/or other ion submitter ely responsib	erstand her ed on ole
Company Offici	al Signature		Diane Cl	white				
Company Offici	al (Typed Name)		Diane C. White					
Company Offici	al Title		Accountant				- nu/ed	
						Offic	e of Oil &	Gas
Subscribed and	sworn before me this	33	day of	Epril o	2013	-30	B- 14	2013
	/m	u L Ko			N	otary P	ublic	
My commission			V. 12. 2	018				: makes
Form WW-9								



#### WW9-Back

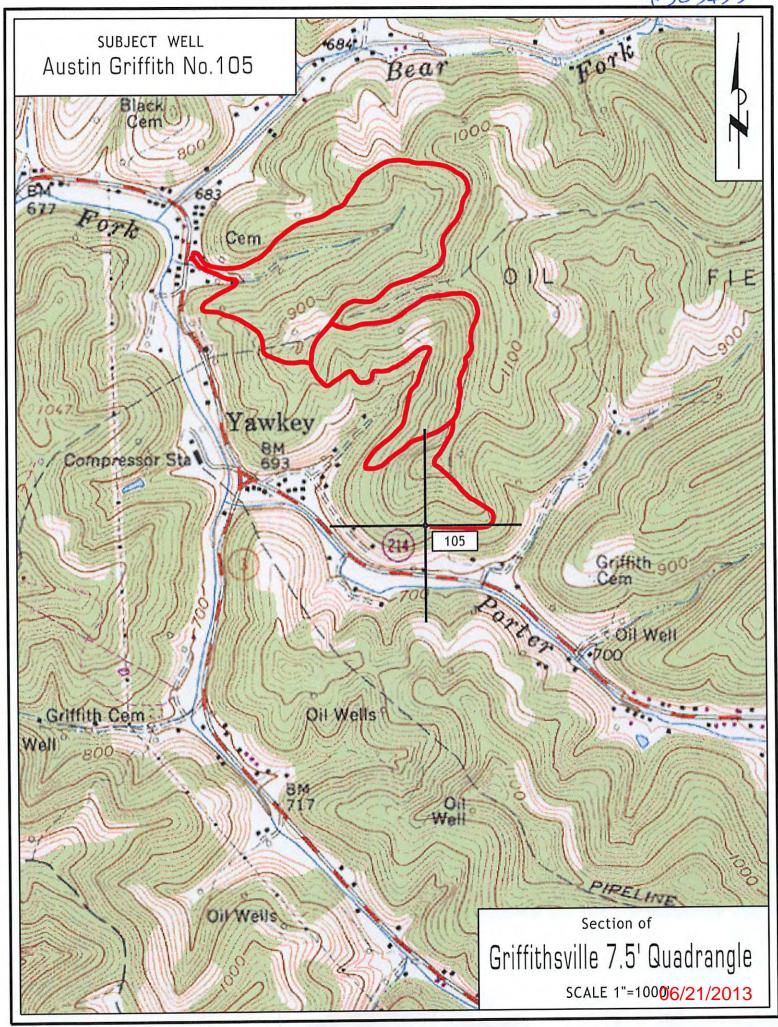
Property Boundary

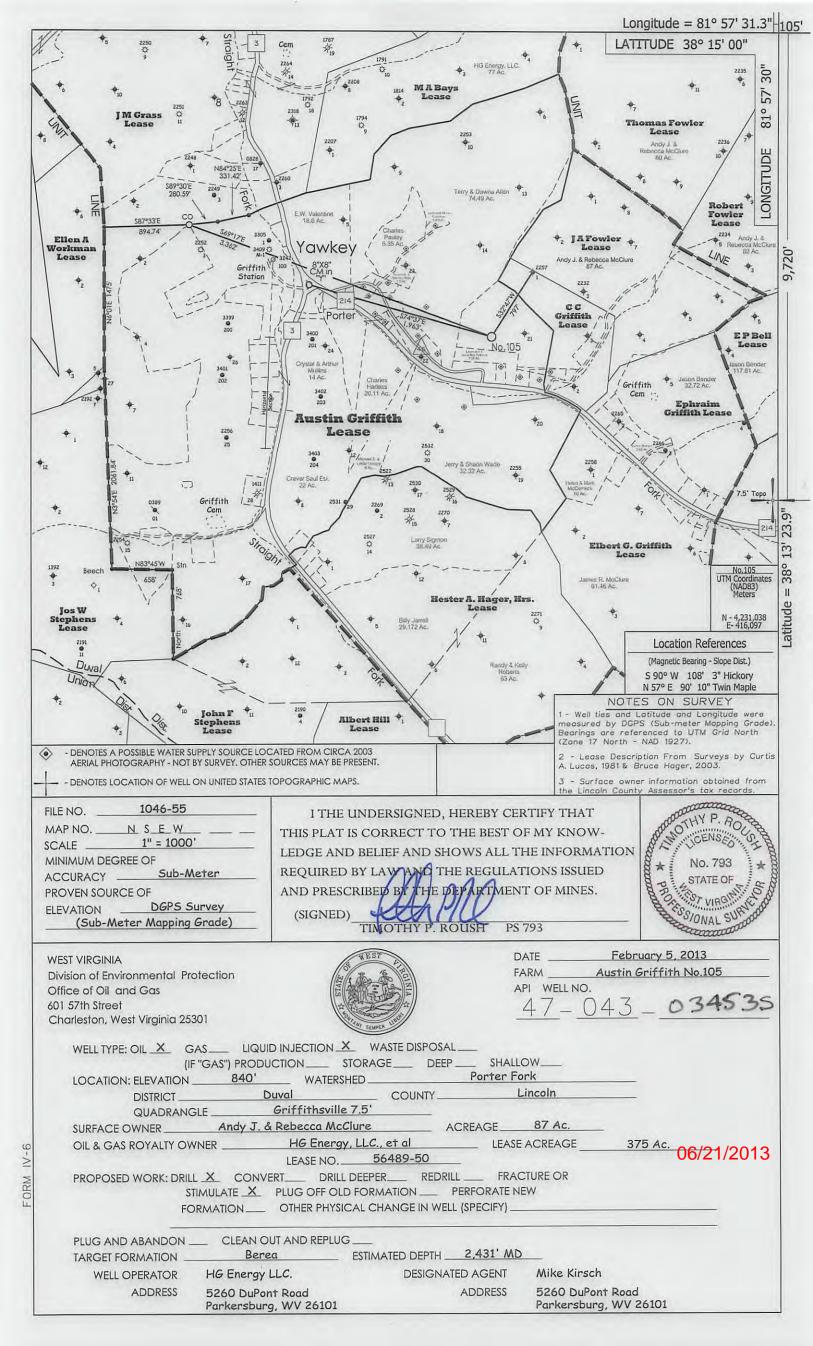
### Legend

Diversion

	Road		Spring	<b>○&gt;</b>  .
•	Existing Fence	_xx-	Wet Spot	74
	Planned Fence	—/——/—	Drain Pipe	
daše daše	Stream		Waterway	$\leftarrow$
	Open Ditch	>	Cross Drain	
	Rock		Filter Strip	XXXXXXXXX
		50 V	Pit: Cut Walls	
	North	N		
	Buildings	<b>5.50</b>	Pit: Compacted Fill Walls	
	Water Wells	. W	Area of Land	
	Drill Site	$\bigoplus$	Application of Pit Waste	
		•	]	·
	·	Arca	ĭ	
ropos	sed Revegetation Treatme			vegetation pH
184 127	-	Area	n	
,		Approx.	1.0 Ac.	
: .				
	Lime	2 Tons/Acre or Cor	· · · · · · · · · · · · · · · · · · ·	ha Batinianum)
	Fertilize Mulch	er (10-20-20 or Equivalent) 500 Straw 2 Tons/Acr		os. winimum)
	tarmon.	SEED MIX		
		אווו טפוט		
	Area	I (Location)	_	Area II (Road)
	Seed Type	Lbs/Ac.	Seed Type	Lbs/Ac.
	Tall Fescue	<u>40</u> 5	Tall Fescue Ladino Clover	<u>40</u> 5
	Ladino Clover		Laurio Ciovoi	
Gus	•			Receives Gas
				Office of Oil & Gas
Attach	·•			
		it and proposed area for land application		MAY - 8 2013
	copied section of involve			*
		D 1 6 (M)		31.
P	lan approved by: Mal	ok D. "Irupially		
	Comments:			
	Title: A LÅE	ruet Inspector		Date: 10 04 2 20/3
•	Field Reviewed?	( V) Yes	( )	No /
		<b>*</b> * <b>*</b>	• •	•

as-built considerations.







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

> CK# 2163 \$65000

April 23, 2013

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

RE:

Austin Griffith No. 105

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 C White

Diane C. White

Enclosures

cc:

Terry & Dawna Allen – Certified Andy & Rebecca McClure – Certified Lawrence & Anna Mae Roberts - 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 Diffice of Oil & Gas

JUN 11 2013

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.

i i jours,

Roger Heldman

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

