

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: 47-4303462, 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

Operator's Well No: EPHRAIM GRIFFITH NO. 115 Farm Name: BENDER, JASON, ET UX

API Well Number: 47-4303462

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 24, 2013					
2) Operator's Well No.			Ephraim Griffith No. 115				
3) API Well No. 47		-	043	14			
	State		County		Permit		
4) UIC Permit No.		UIC2R04301AP					

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	E:	Liqui	id Injection	n X		Gas In	njection (n	ot stora	ge)	Waste	e Disposa	1	
6)	LOCATION:		Elevation	n 972	2'	_		Waters	hod	Porter	-	1		
		Distric		Duval	02	Co	ounty	Lincoln		Torter	Quadrangle	Gr	iffithsville 7.5'	381
7)	WELL OPE	RATOR:	HG Ene	rgy, LLC		49449	7948	8) DESIG	GNATE	D AGENT	<u>-</u>	Iike Kirs	ch	
			5260 Du	pont Road	1			36 37 22 37				260 Dupo		-
			Parkers	burg, WV	26101						P	arkersbu	urg, WV 26101	
9)	OIL & GAS I	INSPECT	OR TO BE	E NOTIFII	ED:			10) DRI	LLING (CONTRAC	CTOR:			
			e Ralph T							Name	e			
		Addres	s 5539 Mc							Address	s			
			Branchi	and, WV 2	25506									
11)	PROPOSED	WELL W	ORK:		1 X			Deeper		Redril		Stimulate	e X	
						old Form		Pe	rforate	New Forn	nation		Convert	
12)	Geological ta	wort form	ation	Other			ge in Well (s			water.				
					Berea	_		Depth_		2,442	_Ft. (Top) to		2,463 Ft. (Bo	ttom)
13)	Estimated de							-	63'		F	t.		
14)	Approximate			S:	Fresh	-	350				Salt_	1,0	42 Ft.	
15)	Approximate					400		Ft						
16)	Is coal being	mined in	the area?				Tes	-	X	No				
17)	Virgin reserv	oir pressu	ure in targ	et formati	ion:			1,250	4	psig.	Source		Estimated	
18)	Estimated re	servoir fr	acture pre	ssure:				2,650		psig.				
19)	MAXIMUM I	PROPOSE	ED INJEC	TION OPI	ERATIO	ONS:	Volume pe	r hour	25 BBL		Bottom Hole	Pressure	2,400 psi	
20)	DETAILED I	DENTIFI	CATION	OF MATE	RIALS	TO BE I	NJECTED.	INCLUDI	NG AD	DITIVES			ced water, bacte	
	and other che	emicals as	needed to	maintain	water	quality a	nd improve	oil recove	ry.	2227.20		cr, produ	ceu water, bacte	riciues
21)	FILTERS (IF	ANY)		Cartridge	filters	and/or c	oal bed filte	rs						•
22)	SPECIFICAT	ION FOR	CATHOL	DIC PROT	ECTIC	N AND (OTHER CO	RROSION	CONTI	ROL				
	237.297.299.000	.0360-86					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		001,11	.01				
23)	CASING ANI	D TUBIN	G PROGR	AM										
CASI	NG OR		SPECII	FICATION	JS		FOOTA	GE INTE	DVATC		CEMENT F.	TTTTD	PACKERS	
	ING TYPE	Size	Grade	Weight	New	Used	For Drilli		Left in	Well	OR SACKS (PACKERS	•
Cond	uctor					1 1	20.00,00.000			,, 022	· Caronara (00.11.)	Kinds	
	n Water	7"	L.S.	17#	X		500'		500'		Cement to Su	rface	Tension	
Coal													Sizes	
Inter	mediate												2.375" x 4.5"	
2000	uction	4 1/2"	J-55	10.5#	X		2563'		2563	3'	150 sacks		Depths Set	
Tubir		2 3/8"	J-55	4.6#	X		2250'		2250)'			2150'	
Liner	s												Perforations	
		-										-	Top Bottom	
- 15	Annexa			*****					1 2 7 7		freeze de de	00.		
24)	APPLICANTS	S OPERA'						m & Nano			110	CEL	ved	
	by Deed		Lease	X		her Cont	-	Dat	ted	June 18	- T		of record in the	
-			Lincoln		County	Clerk's	Office in			Book		Page	81	
											MAY	9	2013	

WW-3A 10/07



1) Date:		April 24,	2013		
2) Operator's We	ll No.	Ephraim	Griffith	No. 115	
3) API Well No.	47	043			
	State	County		Permit	
4) IIIC Pormit N	0	THC2RO	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) Surf	face Owner	(s) To Be Served	7 (a) Coal Operator	
(a)	Name	Jason & Ashley Bender	Name	NA
(4)	Address	Rt. 1, Box 92B	Address	
	- Indiress	Chapmanville, WV 25508		
(1-)	Name	Andy & Rebecca McClure	7 (b) Coal Owner(s)	With Declaration Of Record
(b)		109 Coon Whistle Hollow	The state of the second	
	Address	I SALE FILL THE SALE OF THE SA	Name	NA
	=	Yawkey, WV 25573	Address	
(c)				
	Address		Name	
	-		Address	
6) I	nspector	Ralph Triplett	7(c) Coal Lessee Wi	th Declaration Of Record
0, 1	Address	5539 McClellan Hwy	T(c) Cour Bellete TT	NA
	Address _	Branchland, WV 25506		1111
m	-	389-0350		
- 10	elephone _	363-0390		
who who have the date which are not continued application with the continued are the	e propose ASON YC ARE SUN T REQUI ce that und on and acco ental Prote opies of this mail or deli	action and Reclamation Plan on Form WW-9 (up to the plan for erosion and sediment control are ed for the first injection or waste disposal is DU RECEIVED THESE DOCUMENTS IS THAT YOU MARIZED IN THE "INSTRUCTIONS" ON FORM WED TO TAKE ANY ACTION AT ALL. Her Chapter 22-6 of the West Virginia Code, the undersigned empanying documents for a Well Work Permit with the Chiese control, with respect to a well at the location described on the solution, with respect to a well at the location described on the solution, the Application, the plat, and the Construction and evered by hand to the person(s) named above (or by publication the Chief. The person signing this document shall make the	To be determine To be determine U HAVE RIGHTS R. WW-3(A) DESIGNA' well operator propose of of the Office of Oil and elattached Application I Reclamation Plan hav on in certain circumsta	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 ances) on or before the day of the
		The person signing this document shan make the	ionowing certification	
"I certify	under pena	lty of law that I have personally examined and am	Well Operator	HG Energy, LLC
		ormation submitted in this document and all attachments	Address	5260 Dupont Road
		y inquiry of those individuals immediately responsible		Parkersburg, WV 26101
		ormation, I believe that the information is true, accurate		
		ware that there are significant penalties for submitting	By:	Diane C. White
false info	rmation, in	cluding the possibility of fine and imprisonment."	Its:	Accountant
		Re	eceived	Diane CWhite

Oil and Gas Privacy Notice

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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:
Office of Oil and Gas depprivacyofficer@wv.gov

Well No. Ephraim Griffith No. 115

WW-2B1

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.

Special Note:

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



Form WW-9 Rev. 10/94

	Page	3	of	3	
API	Number 47-	043	-		
Operator's Well No.	Ephraim	Griffitl	1 No. 115		T

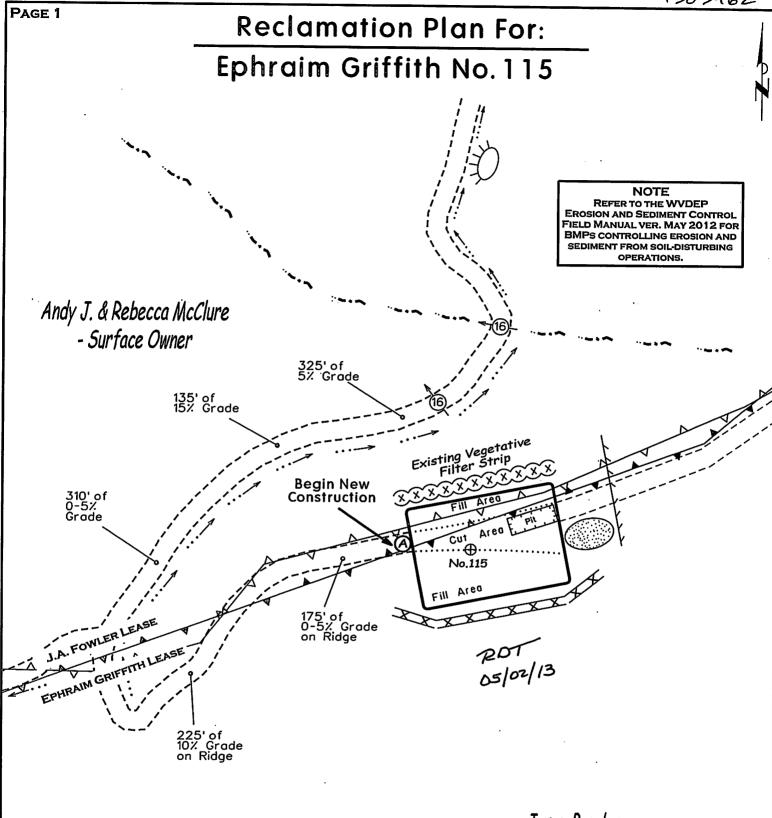
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Watershed		gy, LLC			OP	Code	494497948	
771	Porter Fo	rk		Quad	rangle		ville 7.5'	
Elevation	972'	County	Lincoln		istrict	Du		-
Description of an	ticipated Pit Waste:	Fluids encount	tered in drilling s				7002	7
Do you anticipate	e more than 5,000 bbls	s of water to comple	ete the proposed w	ell worl Yes		No 2	(_
	liner be used in pit?	Yes	If so, what mil.?	10 Mil.	20 M			
Proposed Dispose	al Method For Treated	Pit Wastes:			1011	-		
	X Land Appli							
	Undergrou	nd Injection (UIC I	Permit Number)
		PI Number)
-	Off Site Dis	sposal (Supply Form	n WW-9 for dispos	al location)				
2 m - 2 - 6 -		(Explain	towa .)
	anticipated for this we			Air, Fresh Wa	ter			
Additives to be us	oilbased, what type? Seed? Water, Se	and the second s	m, etc.	NA				_
	posal method? Leave		oved offsite etc	-		-		
	left in pit and plan to			Cement, lime, saw	dust Na	ive soil o	ement lime	_
	ndfill or offsite name/			,, 54.11	210	, c	cment, nine	_
that the provision applicable law or I cer	s of the permit are en regulation can lead to rtify under penalty of l	forceable by law. V enforcement action law that I have per	iolations of any ter n. sonally examined a	and am familiar w	the genera ith the inf	l permit a	nd/or other	
that the provision applicable law or I cer this application fo for obtaining the i penalties for subn	is of the permit are en regulation can lead to rtify under penalty of l rm and all attachmen information, I believe nitting false information	forceable by law. V enforcement action law that I have per its thereto and that that the information, including the per-	fiolations of any tents. sonally examined at the standard section is true, accurate to said the correction of the correction is true, accurate the said in the corrections in the correction is true, accurate the said in the correction is true, accurate the said in the correction in the correction is true, accurate the said in the correction in the correction is true, accurate the said in the correction in the correction is true to the correction in the correction in the correction is true to the correction in the correction in the correction is true to the correction in the correction in the correction is true to the correction in the	and am familiar wairy of those indivi- and complete. I as imprisonment.	the genera ith the inf duals imm	l permit a ormation s ediately re	nd/or other submitted on esponsible	
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Legend.

		- ·	
Property Boundary	AAAA	Diversion	
Road		Spring	
Existing Fence	—x——x——x—	Wet Spot	と
Planned Fence	<u> </u>	Drain Pipe	
Stream -		Waterway	\Leftrightarrow \Leftrightarrow \Leftrightarrow
•	-7	Cross Drain	7/1////////
Open Ditch		Filter Strip	XXXXXXXXX
Rock	్డా క్రామ్మార్లు	Pit: Cut Walls	Current
374 1 -			
North	N	Pit: Compacted	2
Buildings		Fill Walls	Miller
Water Wells	₩ 	Area of Land Application	
Drill Site	.` ⊕	of Pit Waste	
			•
IV-	Area	7	
Ass			evegetation pH
oposed Revegetation Treatm	ent: Acres Disturbed Approx. Area		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Area Approx.	1.0 Ac.	•
	Approx.	1.0 Ao.	
Lime	· 2 Tons/Acre or Co	rrect to pH 6.5	
	zer (10-20-20 or Equivalent) 500	*	bs. Minimum)
	Straw 2 Tons/Ac		·
MINION			
•	SEED MD	TURES	
Aras	I (Location)		Area II (Road)
Seed Type	Lbs/Ac.	Seed Type	Lbs/Ac.
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5
			
5/2 Marke 1000			
Personal Control of the Control of t		·	
5,000			
ttach:	pit and proposed area for land application		
hotocopied section of involv	ed 7.5' topographic sheet.		
Diameter Da	and a Trus (AD)		
Plan approved by: 770	go n. Maguell		
Comments:			
Title:	struct Inspected		Date: May 2, 20/3
Field Reviewed?	($ u$) Yes	()	™ H&ceived
Liera Imatomer	. r stedaniore.		
**************************************	4° 4° 4° 4° 4° 4° 4° 4° 4° 4° 4° 4° 4° 4		MAY 9 2013



Notes:

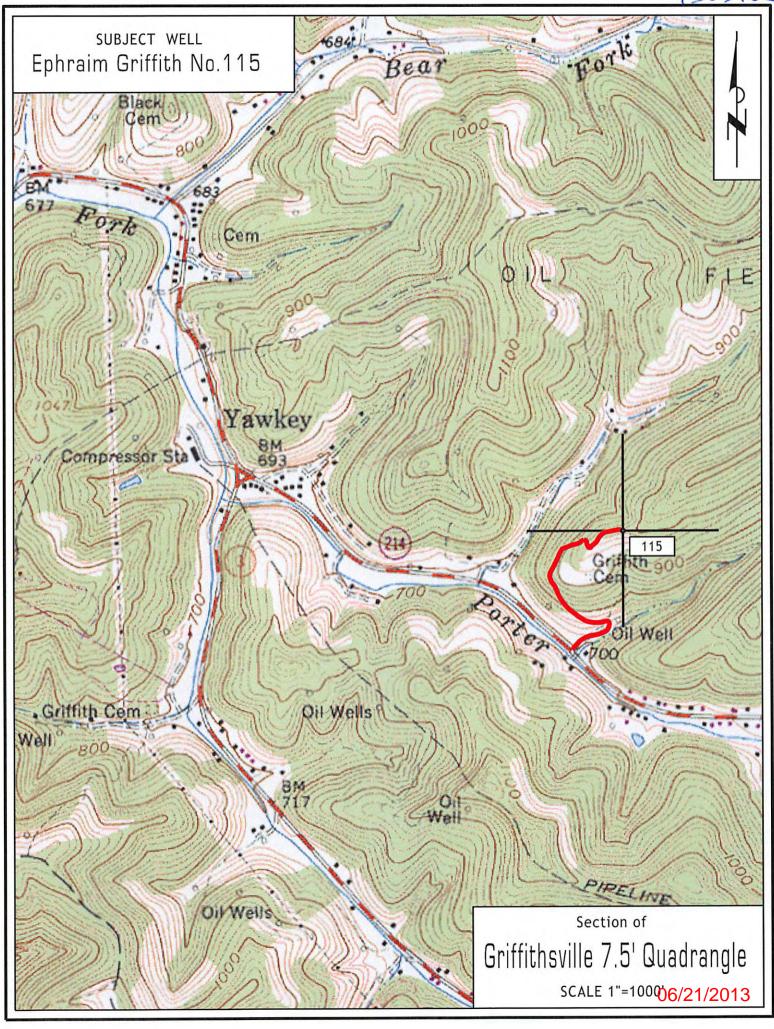
- Requested permit is for drilling of new well.
- Portions of Access road from St. Rt. 214 to Pt. Ais existing. Structures will be maintained or upgraded as needed.
- All disturbed areas will be re-vegetated as outlined on Form WW-9.
- Maintain sediment barriers and drainage structures.
- All road grades <5% except as noted.
- Location of drill pit may be changed based on as-built considerations.

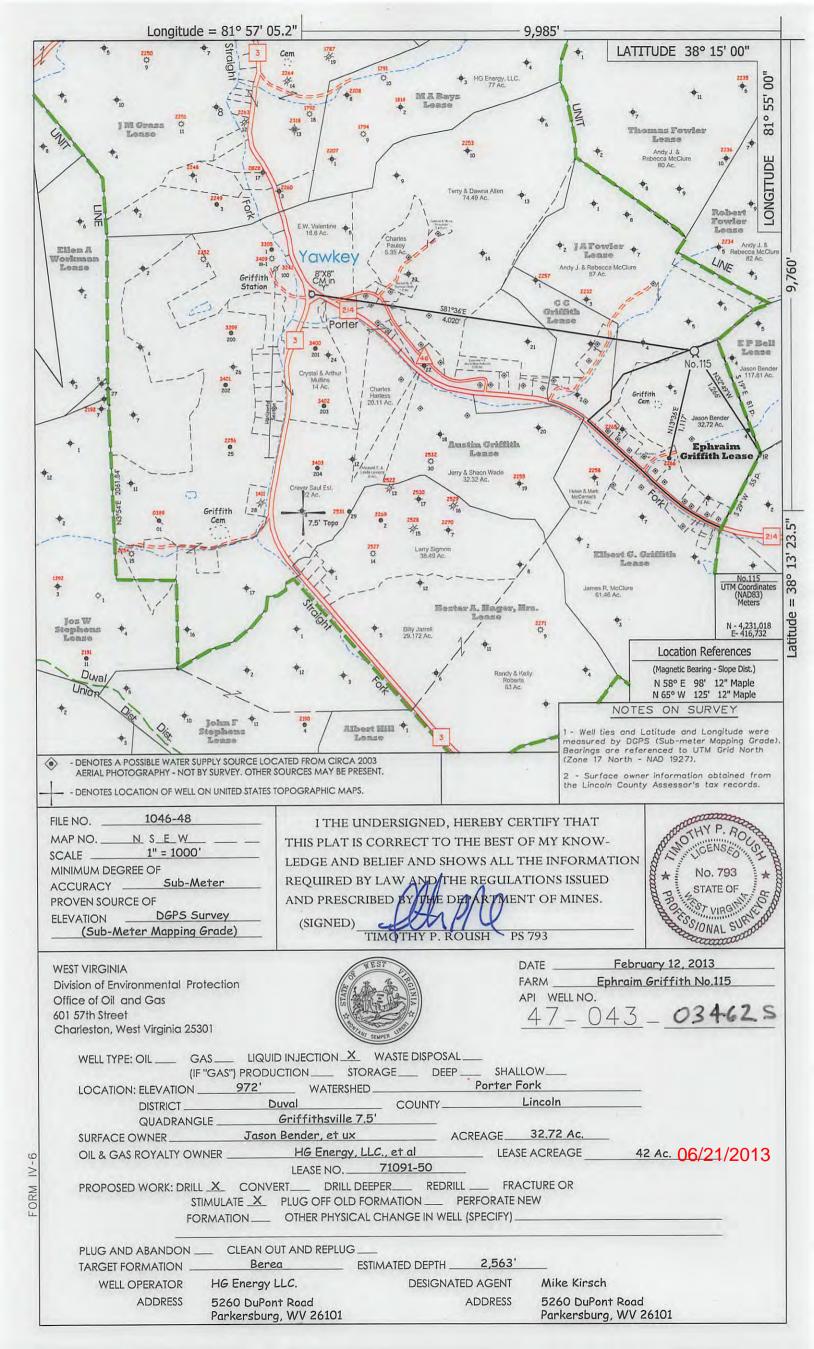
Jason Bender - Surface Owner VEO

MAY 9 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

Note: Drawing not to Scale







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

9650000

April 24, 2013

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

RE:

Ephraim Griffith No. 115 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: Jason & Ashley Bender - Certified Andy & Rebecca McClure - Certified Ralph Triplett - Inspector Received

MAY 9 2013

Office of Oil and Gas WV Dept. of Environmental Protection

