

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 13, 2013

WELL WORK PERMIT

Secondary Recovery Well

This permit, API Well Number: 47-4303465, 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

Chief

Operator's Well No: AUSTIN GRIFFITH NO. 127

Farm Name: ALLEN, TERRY & DAWNA

API Well Number: 47-4303465

Permit Type: Secondary Recovery Well

Date Issued: 06/13/2013

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 Gr	. 127	
3) API Well No.	47	-	043	-	
_	State		County		Permit
4) UIC Permit No.		J	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)	WELL TYPE:		Liquid	d Injection	X	_	Gas Inject	ion (not stora	ige)	Waste	Disposal	1	
6)	LOCATION:		Elevation	1108			V	Vatershed	Porter	Fork			
		District	t	Duval		Coun	tyLi	ncoln		Quadrangle	Gri	ffithsville	7.5'
7)	WELL OPER.	ATOR:	HG Ener	rgy, LLC		49449794	8 8)	DESIGNATE	D AGENT	: M	like Kirso	ch	
				pont Road							260 Dupo		
			Parkersl	ourg, WV	26101					P	arkersbu	rg, WV 26	101
) (OIL & GAS II				ED:		10) DRILLING					
			Ralph Tr		POLICE STATE OF THE PARTY OF TH				Name				
		Address		and, WV 2			_		Address				
1)	DDODOGED I						— 						
1)	PROPOSED V	WELL WO	JRK:		X c Off C	old Formatio	Drill Deep		Redrill New Form		Stimulate	$\frac{X}{\text{Convert}}$	
							n Well (speci		New Form			_Convert_	-
2) (Geological tar	get forma	ation		Berea	k.	De	pth	2,578	Ft. (Top) to		2,599	Ft. (Botton
3)	Estimated de	pth of con	npleted we	ell (or actu	al dep	th of existin	g well)	2699'		F	t.		
1)	Approximate	water str	ata depth	s:	Fresh		480	Ft.		Salt	1,17	78]	Ft.
5)	Approximate	coal sean	depths:			535		Ft.					
6)]	Is coal being r	nined in	the area?			Yes		X	No				
) 1	Virgin reserve	oir pressu	ire in targ	et formati	on:			1,250	psig.	Source		Estimate	d
)]	Estimated res	ervoir fra	acture pre	ssure:				2,650	psig.				
9) I	MAXIMUM P	ROPOSE	D INJEC	TION OPI	ERATIO	ONS: V	olume per ho	our 25 BBI		Bottom Hole	Pressure	2.4	00 psi
	DETAILED II							-	_	Fresh wat		-	
	and other che								DITTYES		er, produ	iceu water,	bacterici
1) I	FILTERS (IF	ANY)		Cartridge	filters	and/or coal	bed filters						
2) 5	SPECIFICAT.	ION FOR	CATHOL	DIC PROT	ECTIO	N AND OT	HER CORRO	OSION CONT	ROL				
3) (CASING AND	TUBING	G PROGR	AM									
	NG OR			FICATION	TC		FOOTAGE	INTERNAL	,	CEMENTE	ITTID	DA	TEDE
	NG TYPE	Size	Grade	Weight	New	Used	For Drilling	INTERVALS Left in		OR SACKS (CKERS
1000	ctor	DIZC	Grade	· ·	11011	Osca	. or Diffing	Delt II	I Well	OH DHOILD (Kinds	
-	Water	7"	L.S.	17#	X		635'	638	5'	Cement to Su	rface	Tension	
al												Sizes	
tern	nediate											2.375" x 4	.5"
	ction	4 1/2"	J-55	10.5#	X		2699'	269		150 sacks		Depths S	et
bing		2 3/8"	J-55	4.6#	X		2400'	240	00'			2300'	
ners												Perforation	
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			1										
() A	APPLICANTS	OPERA'	TING RIG	HTS were	acqui	red from	Austin an	d Elizabeth G		Inner			
	by Deed		Lease	X	O	her Contra	ct	Dated	Decem	ber 19, 1906	COI	of record	in the
			Lincoln			y Clerk's Of		-	Book	11 11 11	Page	1 V333	1

MAY 1 0 2013

WW-3A 10/07



1) Date:		April 23, 2			
2) Operator's We	ll No.	Austin Gr	iffith N	lo. 127	
3) API Well No.	47	043	-		
	State	County		Permit	
4) THC Poumit N	0	THC2R043	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

FAVOR	OF R. C.	7 (a) Coal Operator	
5) Surface Owner		Name	NA
(a) Name_	Terry & Dawna Allen	Address	NA
Address_	28 Russell Road	Address	
	Yawkey, WV 25573	7 (h) Caal Ownania	With Declaration Of Record
(b) Name	Andy & Rebecca McClure		NA
Address	109 Coon Whitstle Hollow	Name	NA
	Yawkey, WV 25573	Address	
(c) Name	no Energy, EEC	N	
Address	5260 Dupont Road	Name	
	Parkersburg, WV 26101	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		
The date propose THE REASON YOUNG WHICH ARE SULARE NOT REQU Take notice that un Application and acc Environmental Prof WW-6. Copies of this	out the plan for erosion and sediment control are sed for the first injection or waste disposal is OU RECEIVED THESE DOCUMENTS IS THAT YOU MMARIZED IN THE "INSTRUCTIONS" ON FORM INFED TO TAKE ANY ACTION AT ALL. Ider Chapter 22-6 of the West Virginia Code, the undersigned companying documents for a Well Work Permit with the Chicection, with respect to a well at the location described on the s Notice, the Application, the plat, and the Construction and ivered by hand to the person(s) named above (or by publicat	To be determine U HAVE RIGHTS R WW-3(A) DESIGNA d well operator propose of of the Office of Oil ar e attached Application Reclamation Plan hav	EGARDING THE APPLICATION TED TO YOU. HOWEVER YOU es to file or has filed this Notice and and Gas, West Virginia Department of and depicted on the attached Form we been mailed by registered or
mailing or delivery			
	The person signing this document shall make the	following certification	on:
"I certify under nen	alty of law that I have personally examined and am	Well Operator	HG Energy, LLC
familiar with the in	formation submitted in this document and all attachments		5260 Dupont Road
and that, based on	ny inquiry of those individuals immediately responsible		Parkersburg, WV 26101
for obtaining the in	formation, I believe that the information is true, accurate	2.	
and complete. I am	aware that there are significant penalties for submitting	By:	Diane C. White
false information, in	acluding the possibility of fine and imprisonment."	Its:	Accountant
		Signature	a Received

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:

WW-2B1

Well No. Austin Griffith No. 127

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.

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. MAY 10 2013

Office of Oil and Gas
WY Dopt. 5. Environmental Protection/2013

Received

Form WW-9 Rev. 10/94

	Page	3	of	3	
API 1	Number 47-	043			
Operator's Well No.	Austin G	riffith	No. 127		

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

	HG Energy, LLC			OP Code 4944979	48
Vatershed	Porter Fork		Quadrangle	Griffithsville 7.5'	385
Elevation	1108' Cou	nty Lincoln	43 Distric	Duval	02
Description of antic	ripated Pit Waste: Fluids	encountered in drilling s	hallow well.		
Do you anticipate m	nore than 5,000 bbls of water	to complete the proposed we	ell worl Yes	No X	
Vill a synthetic line	er be used in pit?	Yes If so, what mil.?	10 Mil. 201	MIC	
	Method For Treated Pit Waste	es:			
	Land Application	on (UIC Permit Number			
	Reuse (at API Number	-)
		pply Form WW-9 for disposa	al location)		
-	Other (Explai	in)
	ticipated for this well? Air, fr		Air, Fresh Water		
- If oil dditives to be used.	based, what type? Synthetic, I? Water, Soap, KCI	petroleum, etc.	NA		-
	sal method? Leave in pit, land	dfill, removed offsite, etc.			
	t in pit and plan to solidify, w		Cement, lime, sawdust	Native soil, cement, lin	ne
- Land	fill or offsite name/permit nu	mber?			
nat the provisions on pplicable law or reg I certifusion forn The prication forn	of the permit are enforceable l gulation can lead to enforceme fy under penalty of law that I n and all attachments thereto	by law. Violations of any tenent action. have personally examined a pand that, based on my inqu	rm or condition of the go and am familiar with th airy of those individuals	e information submitted o immediately responsible	n
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WW9_Rack

		Legend	
Property Boundary Road Existing Fence Planned Fence Stream Open Ditch Rock North Buildings Water Wells Drill Site	A A A A A = = = = = = = = = = = = = = =	Diversion Spring Wet Spot Drain Pipe Waterway Cross Drain Filter Strip Pit: Cut Walls Pit: Compacted Fill Walls Area of Land Application of Pit Waste	
Proposed Revegetation Treatm Lime Fertiliz Mulch	Approx. 2 Tons/Acre or Cover (10-20-20 or Equivalent) 5 Straw 2 Tons/A	1.0 Ac. Properties II 1.0 Ac. Correct to pH 6.5 00 Lbs./Acre (500	evegetation pH
Seed Type Tall Fescue Ladino Clover Attach:	Lbs/Ac. 40 5 pit and proposed area for land applicatived 7.5' tonographic sheet.	Seed Type Tall Fescue Ladino Clover	MAY 1 0 2013 Office of Oll and Gas
Photocopied section of invol Plan approved by: Comments: Title	of of of		Date: May 2, 20/3

Field Reviewed?







