

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

July 03, 2013

WELL WORK PERMIT

Secondary Recovery Well

This permit, API Well Number: 47-3305756, 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 feet free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: W.F. WILLIAMS #131

Farm Name: HUFFMAN, BRIAN V.

API Well Number: 47-3305756

Permit Type: Secondary Recovery Well

Date Issued: 07/03/2013

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 of 20 mil thickness synthetic liner.
- 5. No land application of pit fluids.
- 6. A monitor well will be drilled near Mr. Huffman's house and fluid levels will be monitored at least quarterly and sampled at least yearly with the results provided to the WV DEP, Office of Oil and Gas. The well must be a minimum of 300 feet deep or 50 feet below the depth of Mr. Huffman's water well, whichever achieves the greatest depth.

WW-3B 10/07



1) Date		May 15, 2013				
2) Operator's Well	W. F. Williams No. 131					
3) API Well No.	47	÷	033			
4) UIC Permit No.	State	ι	County IIC2R033	01AP	Permit	

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

E) WEST COSTS	277								FFICE OF OIL	THE CITE
5) WELL TYP		Liqu	id Injectio	n_X	-	Gas Injectio	n (not storag	re)	Waste Dispos	sal
6) LOCATION		Elevation					tershed	Brancl	n of Lick Run	
	Distri	ct	Tenmil	e 00	Coun	ityHari	rison 33			Volf Summit 7.5
7) WELL OPE	ERATOR:		ergy, LLC		49449794	18 8) DI	ESIGNATEL	AGENT:	Mike Kir	rsch
			ipont Roa						2 (2)	pont Road
			burg, WV							ourg, WV 26101
OIL & GAS				ED:		10) I	ORILLING C	ONTRAC	TOR:	
		e Sam Wa						Name		
	Addres	P. O. Bo						Address		
			nnon, WV	26201						
11) PROPOSEI	WELL W	ORK:		1 X		Drill Deeper		Redrill	Stimula	te X
					old Formatio		Perforate N	lew Form	ation	Convert
0) 0			Other			n Well (specify)				
2) Geological t				Fifth		Dept	h	2,744	Ft. (Top) to	2,750 Ft. (Bott
3) Estimated d	epth of co	mpleted w	ell (or act	ual dep	th of existing	g well)	2875' TVD	3100' TM	ID Ft.	
4) Approximat	e water str	rata depth	s:	Fresh		80	Ft.			270 Ft.
5) Approximat	e coal sear	n depths:			425		Ft.			Pt.
6) Is coal being					Yes		- X	NI		
7) Virgin reser			et format	ion:	100		13 W. T.	$-\frac{N_0}{\cdot}$	0.000	4
B) Estimated re				on.	-		250	psig.	Source	Estimated
						2,	650	_ psig.		
9) MAXIMUM						lume per hour			Bottom Hole Pressur	e 2,400 psi
)) DETAILED	IDENTIFI	CATION	OF MATE	RIALS	TO BE INJ	ECTED, INCLU	JDING ADD	ITIVES	Fresh water, prod	uced water, bacteri
						improve oil rec	overy,	10000		
) FILTERS (II					and/or coal					
2) SPECIFICA	TION FOR	CATHOL	DIC PROT	ECTIO	N AND OTH	IER CORROSI	ON CONTR	OL		
	100									1-
) CASING AN	D TUBING	G PROGRA	AM							
ASING OR		SPECIE	FICATION	IS		FOOTAGE IN	TEDUALC		CEMENT FILLUP	
UBING TYPE	Size	Grade	Weight	New	Used F	or Drilling	Left in V	Vell	OR SACKS (CU. FT.)	PACKERS
onductor							DOLUM ,	, ch	OR BACKS (CO. F1.,	Kinds
resh Water	7"	L.S.	17#	X		500'	500'		Cement to Surface	Tension
oal					4,831				conent to burlace	Sizes
termediate										2.375" x 4.5"
oduction	4 1/2"	J-55	10.5#	X		3100'	3100'		150 sacks	Depths Set Gas
bing	2 3/8"	J-55	4.6#	X		2800'	2800'		211	27001 Oil
iers									Oli	Perforations
										Top Bottom
										IN I
) APPLICANT	CODEDA	TING DIG	rma	- 4	1.0					
APPLICANTS by Deed	OFERA!						ns, W. F. et	ux		
IIV I JEDI		Lease	X	Otl	er Contract	1	Dated	August 1	F 1000	of record in the

WW-3A 10/07



1) Date:		May 15, 20	013	
2) Operator's We	ll No.	W. F. Will	iams N	o. 131
3) API Well No.	47	033		
	State	County		Permit
4) UIC Permit N	0.	UIC2R033	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

Trace Owner(s) To Be Served

5) Surface Owner	(s) To Be Served	7 (a)	Coal Operator		
(a) Name	Brian V. Huffman		Name	NA	
Address	RR4, Box 530		Address		
	Salem, WV 26426				
(b) Name	Orville Myers	7 (b)	Coal Owner(s) W	ith Declaration Of Record	
Address	RR 4, Box 531		Name	NA	
3 120 120 2	Salem, WV 26426		Address		
(c) Name					
Address			Name		
_			Address		
-					
6) Inspector	Sam Ward	7(c)	Coal Lessee With	Declaration Of Record	
Address	P. O. Box 2327			Wolf Run Mining Co.	
	Buckhannon, WV 26201		2708 Cranberry Square		
Telephone	389-7583			Morgantown, WV 26505	
	ON(S) NAMED ABOVE: You should have	70. CTa	1 11:- 6	n and the following documents:	
WHICH ARE SUM ARE NOT REQUITHE NOT REQUITHE INTERPOLICE THE NOTICE THE NOTICE TO SUMPLY WHICH ARE SUMPLY WHOUS AND SUMPLY WHOUS ARE SUMPLY WHOUS AND SUMPLY WHOUS ARE SUMPLY WHOUS AND SUMPLY WHO	OU RECEIVED THESE DOCUMENTS IS THAT YOU MARIZED IN THE "INSTRUCTIONS" ON FORM VERED TO TAKE ANY ACTION AT ALL. Her Chapter 22-6 of the West Virginia Code, the undersigned companying documents for a Well Work Permit with the Chie ection, with respect to a well at the location described on the s Notice, the Application, the plat, and the Construction and evered by hand to the person(s) named above (or by publication).	WW-3(I well o of of the attacl	(A) DESIGNATE operator proposes to e Office of Oil and hed Application armation Plan have	co file or has filed this Notice and Gas, West Virginia Department of d depicted on the attached Form been mailed by registered or	
mailing or delivery t				7.15%	
			i - ancie	5/00 = 5	
	The person signing this document shall make the	follow	ing certification		
familiar with the inf and that, based on n	alty of law that I have personally examined and am formation submitted in this document and all attachments by inquiry of those individuals immediately responsible formation, I believe that the information is true, accurate		ll Operator dress	HG Energy, LLC SEO W 110 10 801110 5260 Dupont Road DANISORU Parkersburg, WV 26101	
and complete. I am a	aware that there are significant penalties for submitting	By:		Diane C. White	
	cluding the possibility of fine and imprisonment."	Its:		Accountant	
		Sign	nature	Diane CWhite	
Oil and Gas Privacy					
The Office of Oil and Your personal infor	d Gas processes your personal information, such as name, ac mation may be disclosed to other State agencies or third par	ties in	the course of busi	r, as a part of our regulatory duties. ness 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

WW-2B1

Well No. W. F. Williams No. 131

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	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.

Requests for Water Sampling were initiated 4/19/13 with the first permit applications of this group of 30 applications.

Water testing/analysis was requested for: Brian Huffman Susan Junkins Gary Winters & Ruth Kennedy Claude & Jean Tetrick Earl & Belva Junkins RR 4, Box 530 RR 2, Box 119A RR 2, Box 119 RR 2. Box 40 RR 5, Box 1226 Bristol, WV 26426 Bristol, WV 26426 Salem, WV 26426 Salem, WV 26426 Bristol, WV 26426

John & Brenda Scotchie

RR 2, Box 42

Linda Smith

Dennis McAvey

RR 2, Box 41

RR 2, Box 80

RR 2, Box 80

Received

Office of Oil & Gas

RR 2, Box 80

Salem, WV 26426 Camden Wyoming, DE 19934 Bristol, WV 26332 Bristol, WV 26332

Additional testing authorized on 5/13/2013:

Oville Myers Daniel Southern Edgar Lee Myers Edith Jean Myers RR 4, Box 531 RR 4, Box 540 RR 4, Box 532 RR 4, Box 534 Salem, WV 26426 Salem, WV 26426 Salem, WV 26426

MAY 2 1 7003

Form WW-9 Rev. 10/94

	Page	3	of	3
API I	Number 47-	033	-	
Operator's Well No.	W. F. Wi	lliams	No. 131	

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	494497948
Watershed	Branch of L	ick Run	Quadrangle Wolf Sun	nmit 7.5
Elevation	1173'	County Harrison	District Tenn	nile
Description o	of anticipated Pit Waste:	Fluids encountered in drilling shallo	w well.	
Do you antic	pate more than 5,000 bbls o	of water to complete the proposed well wo	rl Yes No X	
Will a synthe	etic liner be used in pit?	Yes If so, what mil.?	40-Mil. 20 Mil	- DW
Proposed Dis	Reuse (at AP) Off Site Dispe	Injection (UIC Permit Number	ation)	5000 5/23/20 5/23/20
	- If oilbased, what type? Sy	vnthetic, petroleum, etc. NA	r, Fresh Water	
Additives to l		np, KCI n pit, landfill, removed offsite, etc.		
		olidify, what medium will be used? Ceme	nt, lime, sawdust Native soil, c	ement, lime
applicable lar this applicati for obtaining penalties for	w or regulation can lead to e I certify under penalty of la ion form and all attachments the information, I believe tl	orceable by law. Violations of any term or enforcement action. In that I have personally examined and a sthereto and that, based on my inquiry of the information is true, accurate and n, including the possibility of fine or imparts.	am familiar with the information s of those individuals immediately r complete. I am aware that there a	submitted on esponsible
Company C	fficial Signature	Diane CWh		have
The same of the	fficial Signature fficial (Typed Name)	Diane C. White		Received Received Gas
Company O	fficial (Typed Name)			Received Office of Oil & Gas
The same of the	fficial (Typed Name)	Diane C. White		Received Office of Oil & Gas
Company O	fficial (Typed Name)	Diane C. White Accountant	ite	MAY 2 7 2013
Company O	fficial (Typed Name) fficial Title and sworn before me this	Diane C. White Accountant	1 2013 Notary Publi	MAY 2 7 2013

Legend

		_					
D Doundary	A A A	Diversion	1111111111				
Property Boundary Road	=======	Spring	<u></u> →				
Existing Fence	xxx	Wet Spot	∀ :				
Planned Fence	//_	Drain Pipe	———————— —————————————————————————————				
Stream		Waterway	\leftarrow				
		Cross Drain					
Open Ditch Rock	A. C.	Filter Strip	XXXXXXXXXX				
ROCK	929 Ap	Pit: Cut Walls					
North	N						
Buildings		Pit: Compacted Fill Walls					
Water Wells	Ŵ	Area of Land					
		Application					
Drill Site		of Pit Waste					
		ea I	evegetation pH				
Proposed Revegetation Treatm	ent: Acres Disturbed Approx.		evegetation pri				
		ea II 1.0 Ac.					
	Approx.	1.0 Ac.					
Lime	2 Tons/Acre or C	Correct to pH 6.5					
	C1 (10-20-20 of 25-factor	00 Lbs./Acre (500	lbs. Minimun)				
Mulch	Straw 2 Tons/A	cre					
	SEED M	IXTURES	·				
			1 77 (D 3)				
Area	I (Location)	Cood Tune	Area II (Road) Lbs/Ac.				
Seed Type	Lbs/Ac.	Seed Type Tall Fescue	40				
Tall Fescue Ladino Clover	<u>40</u> 5	Ladino Clover	5				
Lading Clover							
		•					
Attach:							
Drawing(s) of road, location,	pit and proposed area for land application	on.					
Photocopied section of involv	ed 7.5 topographic sheet.						
	101						
Plan approved by:	Plan approved by: DCJa with Comments: Pre-Seed + mulch. Upgrade Ets as necessary per WU DEP Ets manuals.						
Comments: <u>Fre-</u>	Seed + mulch. Upgrode Es	J OS NECECSARY					
Title: ():	14 Gas Inspector		Date: <u>5/23/2013</u>				
11110.	IN CHARLES ARCIES						

) No

Yes

Field Reviewed?

O DRAWING NOT TO SCALE.







