

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: 47-4303469, 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: M.A. BAYS NO. 125

Farm Name: HG ENERGY, LLC

API Well Number: 47-4303469

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.

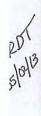
WW-3B 10/07



1) Date	April 24, 2013					
2) Operator's Well	ell No. M. A. Bay			s No. 125		
3) API Well No.	47	-	043	-		
	State		County		Permit	
4) UIC Permit No.		τ	JIC2R0430	DIAP		

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	3.	Gas Inject	ion (not stor	age)	Waste I	Disposal
6) LOCATION:		Elevation	985			V	Vatershed	Porte	r Fork	Va
	District		Duval		Co	ountyLi	ncoln		Quadrangle	Griffithsville 7.5'
7) WELL OPER	ATOR:	HG Ener	00.		494497	7948 8)	DESIGNATI	ED AGENT	: Mil	ce Kirsch
			pont Road							0 Dupont Road
		Parkersh	ourg, WV	26101					Par	kersburg, WV 26101
9) OIL & GAS I				ED:		10) DRILLING	CONTRA	CTOR:	
		Ralph Ti		7.0				Nam	-	
	Address		Clellan Hy and, WV 2	1100				Addres	s	
one Sacilitati establi				The same		 -			-	
11) PROPOSED	WELL WO	ORK:	Drill		1117	Drill Deep		Redri		imulate X
				0	old Forma	etion ge in Well (speci	The second secon	e New Form	nation	Convert
12) Geological ta	rget forma	ation	Other	Berea		· ·	epth	2,455	Ft. (Top) to	2,476 Ft. (Bottom)
13) Estimated de			ell (or actu				2576'	-,	Ft.	
14) Approximate				Fresh		355	Ft.		Salt	1,055 Ft.
14) Approximate15) Approximate				Fiesh	410	555	Ft.		San	1,055 Ft.
					-	Yes	X	NI-		
						ies	-		G	T 1
17) Virgin reserv	and a second	The same of		on:	-		1,250	psig.	Source	Estimated
18) Estimated re-	servoir fra	cture pre	ssure:				2,650	psig.		
19) MAXIMUM I	PROPOSE	D INJEC	TION OPI	ERATIO	ONS:	Volume per ho	our 25 BB	L	Bottom Hole Pr	ressure 2,400 psi
The state of the s						NJECTED, INc		DDITIVES	Fresh water	, produced water, bactericide
21) FILTERS (IF	ANY)		Cartridge	filters	and/or c	oal bed filters				
22) SPECIFICAT	ION FOR	CATHOL	DIC PROT	ECTIC	N AND	OTHER CORRO	OSION CON	TROL		
23) CASING ANI	TUBINO	PROGR	AM	711				200		
W. A. La Caracteria	20021					7007107	**********	6	CENTENT FILE	TAID DAGGETTING
CASING OR	a.		FICATION		177-1		INTERVAL		CEMENT FIL	
TUBING TYPE Conductor	Size	Grade	Weight	New	Used	For Drilling	Lett	in Well	OR SACKS (C	Kinds
Fresh Water	7"	L.S.	17#	X		510'	51	0'	Cement to Surf	
Coal		13.0.	2111			010		.0	Coment to Sur	Sizes
Intermediate										2.375" x 4.5"
Production	4 1/2"	J-55	10.5#	X		2576'	25	576'	150 sacks	Depths Set
Tubing	2 3/8"	J-55	4.6#	Χ.		2275'	22	75'		2175'
iners .										Perforations
										Top Bottom
						Letter III				Den
									7.0.3	TIELEIVAL
24) APPLICANTS	SOPERAT	ING RIG	HTS were	acqui	red from	Isaac and	Laura Bays			
by Deed		Lease	X	Of	ther Cont	tract	Dated	May 7	, 1904	of record in the
		Lincoln		Count	y Clerk's	Office in		Book	33 at P	Page MAY394 0 2013



Office of Oil and Gas WV Dept. of Environ 06.22 1012013 WW-3A 10/07

5) Surface Owner(s) To Be Served



1) Date:		April 24, 2	2013		
2) Operator's We	ll No.	M. A. Bay	s No. 12	25	
3) API Well No.	47	043	T.W.		
The second second	State	County		Permit	
4) IIIC Permit N	'n	TITC2R045	BOLAP		

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

7 (a) Coal Operator

(a) Name	Terry & Dawna Allen		Name	NA
Address	28 Russell Road		Address	3,0
_	Yawkey, WV 25573			
(b) Name	HG Energy, LLC	7 (b)	Coal Owner	(s) With Declaration Of Record
Address	5260 Dupont Road		Name	NA
94004437	Parkersburg, WV 26101	1	Address	
(c) Name				
Address			Name	
_			Address	
6) Inspector	Ralph Triplett	7(c) (Coal Lessee	With Declaration Of Record
Address	5539 McClellan Hwy	1 1		NA
-	Branchland, WV 25506			100
Telephone	389-0350		-	
				0 242 047 15 2
TO THE PERS	SON(S) NAMED ABOVE: You should have	e receiv	ved this	form and the following documents:
which sets The date propos THE REASON YOU WHICH ARE SU	ruction and Reclamation Plan on Form WW-9 (u out the plan for erosion and sediment control at sed for the first injection or waste disposal is OU RECEIVED THESE DOCUMENTS IS THAT YO MMARIZED IN THE "INSTRUCTIONS" ON FORM IRED TO TAKE ANY ACTION AT ALL.	nd for r To be OU HAVI	eclamatio determine RIGHTS	on for the site and access road. ned REGARDING THE APPLICATION
				Calmello di sal Palli.
Application and acc Environmental Prot WW-6. Copies of thi	der Chapter 22-6 of the West Virginia Code, the undersigne companying documents for a Well Work Permit with the Chi tection, with respect to a well at the location described on the is Notice, the Application, the plat, and the Construction and livered by hand to the person(s) named above (or by publicate to the Chief.	ief of the (ne attache nd Reclam	Office of Oil d Application ation Plan I	and Gas, West Virginia Department of on and depicted on the attached Form nave been mailed by registered or
	The person signing this document shall make the	following	ng certifica	tion:
Toortify under see	alty of law that I have personally examined and am	Well	Operator	HG Energy, LLC
	formation submitted in this document and all attachments	4 7 7		5260 Dupont Road
	my inquiry of those individuals immediately responsible			Parkersburg, WV 26101
	formation, I believe that the information is true, accurate			
Control of the second s	aware that there are significant penalties for submitting	By:		Diane C. White
alse information, is	ncluding the possibility of fine and imprisonment."	Its:		Accountant
				Diane C White

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

WW-3A 10/07 100



1) Date:		April 24, 2	2013		
2) Operator's We	ll No.	M. A. Bay	s No. 12	5	
3) API Well No.	47	043			
	State	County		Permit	
4) UIC Permit N	o.	UIC2R043	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) Si	urface Owner	(s) To Be Served	7 (a)	Coal Operator	
	n) Name	Terry & Dawna Allen		Name	NA
	Address	28 Russell Road		Address	
	414011	Yawkey, WV 25573			
(b) Name	HG Energy, LLC	7 (b)	Coal Owner(s) With Declaration Of Record
,	Address	5260 Dupont Road		Name	NA
	212020 102	Parkersburg, WV 26101		Address	
	(c) Name	2 (112222 128)		_	
	Address			Name	
				Address	
	-			900000	
6)	Inspector	Ralph Triplett	7(c)	Coal Lessee W	ith Declaration Of Record
	Address	5539 McClellan Hwy	7.9.0		NA
	- Accompany	Branchland, WV 25506			
	Telephone	389-0350		-	
	_	ON(S) NAMED ABOVE: You should have	-		1.1 0.11
he d	ate propose	out the plan for erosion and sediment control an	Tok	oe determin	ed
VHIC	H ARE SUN	OU RECEIVED THESE DOCUMENTS IS THAT YOU MARIZED IN THE "INSTRUCTIONS" ON FORM V RED TO TAKE ANY ACTION AT ALL.			
ake no	otice that und	ler Chapter 22-6 of the West Virginia Code, the undersigned	l well o	perator propos	es to file or has filed this Notice and
		ompanying 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			
	d mail or deli or delivery to	vered by hand to the person(s) named above (or by publicati	on in ce	ertain circumst	cances) on or before the day of the
lamng	or delivery to	the one.			
		The person signing this document shall make the	follow	ing certificati	on:
Covii	w under none	alty of law that I have personally examined and am	Wel	l Operator	HG Energy, LLC
		ormation submitted in this document and all attachments		lress	5260 Dupont Road
		ny inquiry of those individuals immediately responsible		A. M. C. A.	Parkersburg, WV 26101
		ormation, I believe that the information is true, accurate			
nd con	nplete. I am a	ware that there are significant penalties for submitting	By:		Diane C. White
alse in	formation, in	cluding the possibility of fine and imprisonment."	Its:		Accountant
			Sign	nature	Receive
400	TO 100 PM	23 AC			

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 gratuping 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

WW-2B1

Well No.	M. A. Bays No. 125	
----------	--------------------	--

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.

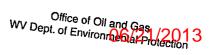
The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

X Contractor Name	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 Jar Peterson, WVDEP, the timing of that large UIC sampling was sufficent for this Griffithsville project. MAY 1 0 2013



Form WW-9 Rev. 10/94

	Page	3	of	3	
API N	umber 47-	043		•	
Operator's Well No.	M. A.]	Bays No	0. 125		

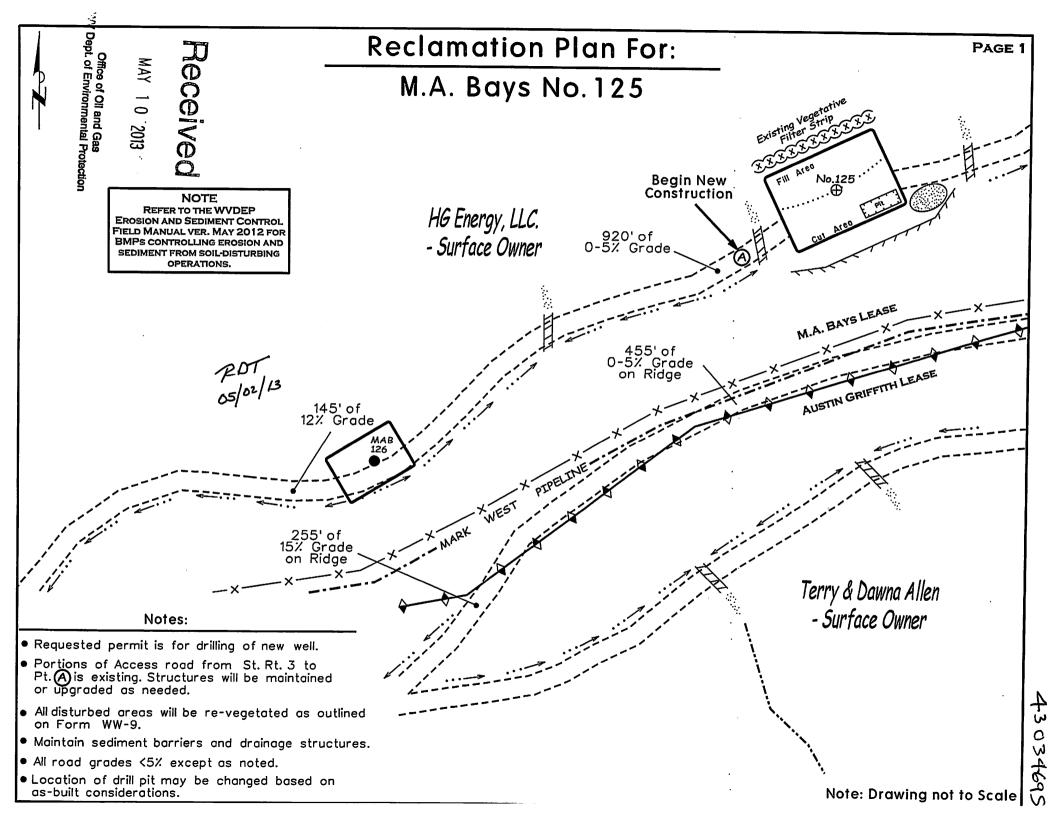
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

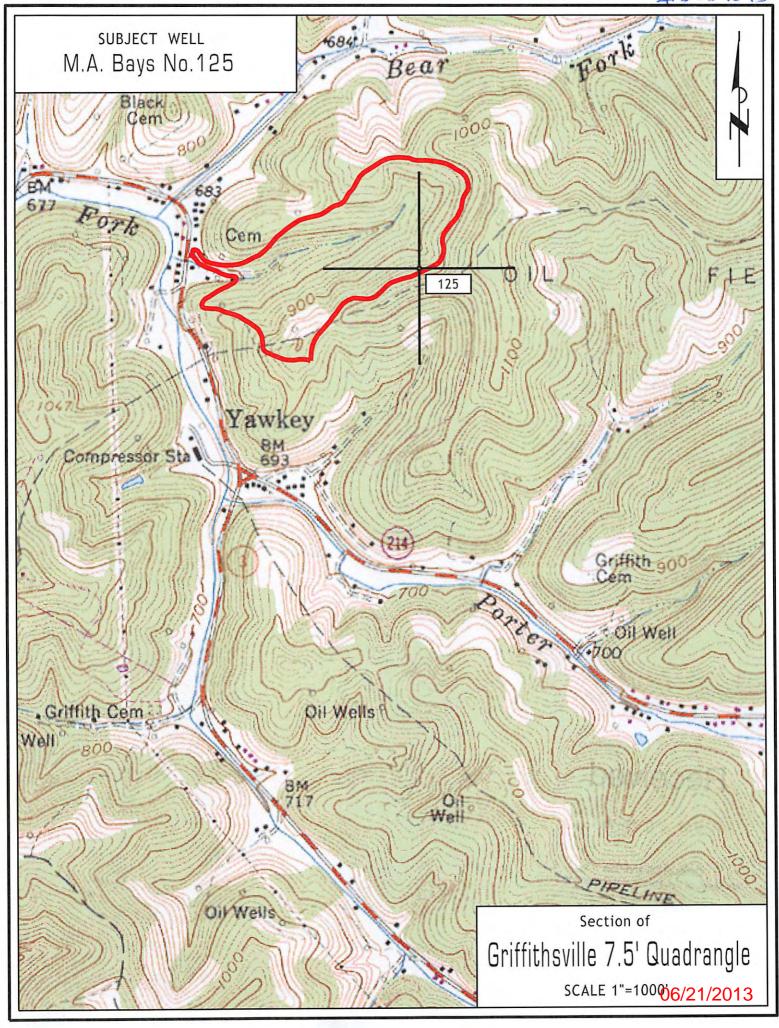
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

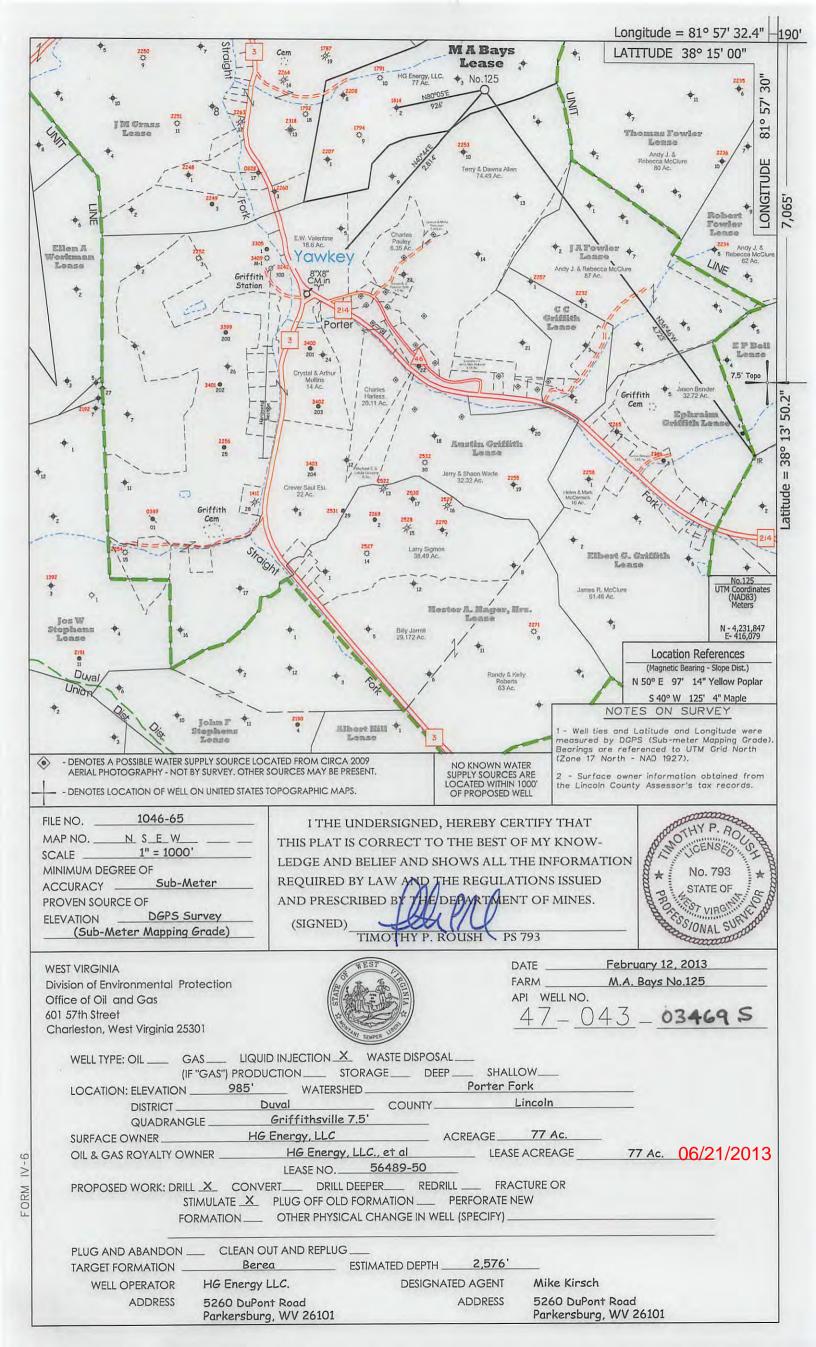
Operator _	HG Energ	y, LLC		01	P Code 494497	7948
Watershed	Porter For	rk		Quadrangle	Griffithsville 7.5	385
Elevation	985'	County	Lincoln 43	District	Duval	02
Description of a	nticipated Pit Waste:	Fluids encou	ntered in drilling shallov	v well.		
Do you anticipa	te more than 5,000 bbls	of water to comp	plete the proposed well wor	Yes	No X	
Will a synthetic	liner be used in pit?	Yes	If so, what mil.?	10 Mil. 20 Mu		
Proposed Dispo	Reuse (at A Off Site Dis	cation nd Injection (UIC PI Number sposal (Supply Fo	Permit Number	tion))
— Duilling modium	Other	(Explain		73 1 777 (<u> </u>
	n anticipated for this we f oilbased, what type? S			, Fresh Water		
Additives to be				State of the		
- I:	sposal method? Leave : f left in pit and plan to andfill or offsite name/	solidify, what me	edium will be used? Cemen	t, lime, sawdust N	ative soil, cement,	lime
this application for obtaining the penalties for sub	form and all attachmen e information, I believe emitting false informati	its thereto and th that the informa	ersonally examined and an att, based on my inquiry of tion is true, accurate and corpossibility of fine or imprise the contract of the contrac	those individuals im omplete. I am aware sonment.	mediately responsib	le
Company Offic						
	ial (Typed Name)	-	Diane C. White		tale to the same	
Company Offic	iai litie		Accountant	T. GEL		
Subscribed and	l sworn before me thi	s 25	day of APR	201 201	3_ otary Public C (Pivoc
My commission	ı expires	No	IV. 12,20	118	. 1000	ivec
Form WW-9		1		OFFICIA NOTARY STATE OF WE TINA L. PE	PUBLIC &	0 2013 and Gas
noiteatos	Office of Chi and Chil			HG Energy 5260 Dupo Parkersburg, West My Commission Expi	y, LLC	nental Protect 06/21/

Legend

Property Boundary	AAAA	Diversion	
Road	1	Spring	○ →
Existing Fence	_xx_	Wet Spot	♂
Planned Fence		Drain Pipe	
Stream		Waterway	\longleftrightarrow
		Cross Drain	7//////////////////////////////////////
Open Ditch	980,00° 5	Filter Strip	XXXXXXXXX
Rock	604000	Pit: Cut Wails	Current
• ,	NI-		
North		Pit: Compacted	
Buildings		Fill Walls	, more
Water Wells	W	Area of Land Application	
Drill Site	\oplus	of Pit Waste	(
		J	
	Area	Ī	
Proposed Revegetation Treat			evegetation pH
•	Area		
	Approx.	1.0 Ac.	
Lime	2 Tons/Acre or Con	rect to pH . 6.5	<u> </u>
	izer (10-20-20 or Equivalent) 500	Lbs./Acre (500)	lbs. Minimum)
Mulc	h Straw 2 Tons/Acr	e	
	SEED MIX	TURES	
	× 6	·	Area II (Road)
Seed Type	ea I (Location) Lbs/Ac.	Seed Type	Lbs/Ac.
Tall Fescue	40	Tall Fescue	<u>40</u> 5
Ladino Clover	5	Ladino Clover	3
Attach: Drawing(s) of road, location Photocopied section of invo	, pit and proposed area for land application lved 7.5' topographic sheet.		·
	1. 10 7 · (M)		•
Plan approved by:	DEPK N. Truplate		
Comments:			
Title:	stort Inspectal		Date: May 2, 2013
Field Reviewed?	(V) Yes	()	Nate: May 2, 20/3 Nate: May 2, 20/3
\$	Of their state of the state of		
	AMIDE 1833		MAY 1 0 2013
	te filosos	•	. 06/21/2013
• • • • • • • • • • • • • • • • • • •	FIG. of the factory of the second of the second		Office of Oil and Gas 06/21/2013 -WV Dept. of Environmental Protection
A			-MA Dahra









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

\$65000

April 24, 2013

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

RE: M. A. Bays No. 125

Duval District, Lincoln County

West Virginia

Diane C White

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

Enclosures

Received

cc: Terry & Dawna Allen - Certified

HG Energy, LLC - Certified Ralph Triplett – Inspector MAY 1 0 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

