

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

PERMIT MODIFICATION APPROVAL

March 11, 2014

13

HG ENERGY, LLC 5260 DUPONT ROAD PARKERSBURG, WV 26101

Re: Permit Modification Approval for API Number 3305530 , Well #: M. J. RATHBONE NO. 116
WELLSITE AND WELLBORE MOVED (SAME LEASE)

Oil and Gas Operator:

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

Gene Smith

Regulatory/Compliance Manager

Office of Oil and Gas

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. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
- 7. Well work activities shall not constitute a hazard to the safety of persons.



1) Date				January 15, 2013					
	2) Operator's Wel	l No.	M.J. Rathbone No.116 - Rev						
	3) API Well No.	47	-	033		055305			
		State		County		Permit			
	4) IIIC Permit No	0.	T	IIC2R0330	IAP				

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:		Liqui	d Injection	n X		Gas Injectio	n (not stora	age)	Waste Disposa	1	
6)	LOCATION:	District	Elevation	1,267		- c		itershed	Hall's		Salem 7.5'	596
7)	WELL OPER	ATOR:	5260 Du	rgy, LLC ipont Road burg, WV		49449		ESIGNATE	ED AGENT	Γ: Mike Kirs 5260 Dup	ch	
9)	OIL & GAS II	Name	The same of the sa	E NOTIFI ard			10) I	DRILLING	CONTRA Nam Addres	CTOR:	ug, W.V 20101	
			Buckhar	non, WV 2	26201					-		
11)	PROPOSED V	VELL W	ORK:		g Off C	X Old Form	Drill Deepe action e in Well (specify	Perforate	Redri New For		e X Convert	
12)	Geological tar	get form:	ation		Fifth	Sand	Dept	h	3,135	Ft. (Top) to	3,148 Ft. (Bottom)
(3)	Estimated dep	th of con	npleted w	ell (or act	ual dep	th of exi	isting well)		3315	Ft.		50
(4)	Approximate v	water str	ata depth	is:	Fresh		180	Ft.		Salt 1,3	76 Ft.	71
5)	Approximate o	coal seam	depths:				625	Ft.		-02		7/25
6)	Is coal being n	nined in t	the area?				Yes	X	No			
7)	Virgin reservo	ir pressu	re in targ	get format	ion:		1	,250	psig.	Source	Estimated	
3)	Estimated res	ervoir fra	icture pre	ssure:			2	.650	psig.			
9)	MAXIMUM PI				ERATIO	ONS:	Volume per hou	62 BBI		Bottom Hole Pressure	2,400 г	voi
0)	DETAILED II	ENTIFI	CATION	OF MATE	RIALS	TO BE		LUDING A	_	Fresh water, produce		
1)	FILTERS (IF	Te di estati		- 3 m - 1 m - 1 m			coal bed filters	-				
2)	SPECIFICATI	on For	CATHO	DIC PROT	ECTIC	N AND	OTHER CORRO	SION CON	TROL			
3)	CASING AND	TUBINO	G PROGR	AM								
ASI	NG OR	R SPECIFICATIONS			FOOTAGE INTERVALS			CEMENT FILLUP	PACKERS	De		
	ING TYPE	Size	Grade	Weight	New	Used	For Drilling	Left in		OR SACKS (CU. FT.)		no-
ond	uctor		1								Kinds	
esl	Water	7"	L.S.	17#	X		720'	720	0'	Cement To	Tension	
al				T Y						Surface	Sizes	
7.7.0	mediate			<u> </u>			I Torrest			7 77	2"X4"	
11 11	action	4 1/2"	J-55	10.5#	X		3315'	331	15'	150 Sacks	Depths Set	
bii		2 3/8"	J-55	4.6#	X		3115	31	15		3015	
nei	s										Perforations	
			1								Top Botto	m
_												
		onen i	DIATO ST	TTMC		1.5	203		_			
1)	APPLICANTS	OPERAT						Johnson				
	by Deed		Lease			her Con	-	Dated		er 16, 1919	of record in th	ie.
			Harrison		County	Clerk's	Office in		Book	304 at Page	221	

WW-3A 10/07



1) Date:		January 1	5, 2013	
2) Operator's We	ll No.	M.J. Rath	bone No	o.116 - Rev 2
3) API Well No.	47	033	-	€5530 S M
4	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

5) Surface Owner	(s) To Be Served	7 (a) Coal Operator					
(a) Name	Hilary Heights Ltd Beth Arnold Taylor		Name	NA			
Address	142 Valley Street		Address				
10 IMMOUN_	Salem, WV 26426						
(b) Name	Stacy & Lori Bokey	7 (b)	Coal Owner(s)	With Declaration Of Record			
Address	RR 1, Box 299 - 46		Name	NA			
	Mount Clare, WV 26408		Address				
(c) Name	2120 1111 21111 11 21 11 11 11 11 11 11 11 1						
Address			Name				
			Address				
m Institution	Sam Ward	7(c)	Coal Lessee Wit	h Declaration Of Record			
6) Inspector	P. O. Box 2327		7,77	Wolf Run Mining Co.			
Address_	Buckhanon, WV 26201			2708 Cranberry Square			
Malanhaus -	304-389-7583		_	Morgantown, WV 26505			
Telephone_							
	ON(S) NAMED ABOVE: You should have ation for a Liquid Injection or Waste Disposal W						
THE REASON YOU WHICH ARE SUI ARE NOT REQUI Take notice that und Application and acceptation and acceptation and acceptation and acceptation and acceptation and acceptation ac	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. der Chapter 22-6 of the West Virginia Code, the undersigne ompanying documents for a Well Work Permit with the Chitection, with respect to a well at the location described on the	d well o	(A) DESIGNAT pperator proposes e Office of Oil an hed Application	s to file or has filed this Notice and d Gas, West Virginia Department of and depicted on the attached Form			
WW-6 Copies of thi	is Notice, the Application, the plat, and the Construction an	d Recla	mation Plan hav	e been mailed by registered or			
certified mail or del	ivered by hand to the person(s) named above (or by publicat	ion in o	ertain circumstr	inces) on or before the day of the			
mailing or delivery							
	The person signing this document shall make the	follow	ing certification	m:			
	The late of the control of the contr	***	II Owner to a	HG Energy, LLC			
"I certify under pen	alty of law that I have personally examined and am		ll Operator dress	5260 Dupont Road			
familiar with the in	formation submitted in this document and all attachments my inquiry of those individuals immediately responsible	Au	u1 035	Parkersburg, WV 26105			
and that, based on I	formation, I believe that the information is true, accurate						
and complete Lam	aware that there are significant penalties for submitting	By		Diane White			
false information, in	ncluding the possibility of fine and imprisonment."	Its		Accountant			
Oil and Gas Privac		Sig	nature	Diane CWhite			
	d Gas processes your personal information, such as name, a	ddroog	and phone numb	ber, as a part of our regulatory duties.			
The Office of Oil an	d Gas processes your personal information, such as name, a	iduress	and phone num	oer, as a part of our regularity waster			

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@wv.gov



Received

FEB 26 2014

Office of Oil and Gas

WV Dept. of Environmental Protection

U.S. Postal Servicera CERTIFIED MAIL RECEIPT 217 (Domestic Mail Only; No Insurance Coverage Provided) FO 9028 1.52 Postage 1000 Certified Fee 3.10 Postmark // Return Receipt Fee (Endorsement Required) 2.55 1010 Restricted Delivery Fee (Endorsement Required) 2630 RKERSB Total Postage & Fees \$ 7.17 MJR 116 R m Sent To Wolf Run Mining Company 707 Street, Apt. No.; or PO Box No. 2709 Cranberry Square City, State, ZIP+4 Morgantown WV 26506 ee Reverse for Instructions U.S. Postal Service. CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided) 958 For delivery information visit our website at www.usps.com 27 1,52 Postage П m Certified Fee 3.10 0001 Return Receipt Fee (Endorsement Required) Postmark Here Restricted Delivery Fee (Endorsement Required) 2920 Total Postage & Fees MIR ILL R Sent To Street, Apt. No.; Heights LTD- Beth Taylor 7012 or PO Box No. 142 Valley Street City, State, ZIP+4 Salem WV 26426 PS Form 3800, August 2006 See Reverse for Instructions U.S. Postal Service TM CERTIFIED MAIL RECEIPT П (Domestic Mail Only; No Insurance Coverage Provided) 유민 902 1.61 Postage 3.30 Certified Fee 1000 Postmark Here,

Return Receipt Fee (Endorsement Required) 2.70 Restricted Delivery Fee (Endorsement Required) 30 Total Postage & Fees \$ 7.6 되 MJR IIL R Sent To m Stacy and Lori Bokey 707 Street, Apt. No.; RRI, BOX 299-46 or PO Box No. City, State, ZIP+4 Mount Clare, WV 2640B PS Form 3800, August 2006

03/14/2014

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	Sturm Environmental Services	
Well operator's	private laboratory	
W. II O.,tor.	UC Energy II C	
Well Operator Address	HG Energy, LLC 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.

No known Water Supply Sources are located within 2000' of proposed well.

Testing will be completed on surface tracts owned by the Nardella's, the Bokey's and Hilary Heights LTD if there are water sources on the surface property.

Page 1of 1

Water Supply Source Testing Request for: Wolf Summit - 2013

Contact Information

Date: 12/18/2013

Well	Reference: Sarah E. Adan Name	ns 146, 146, 24 Phone	Comment	
10.			1	
1	Micheal & Lori Nardella	624-8844	Map 302, parcel 81	
	309 John Street			
	Clarksburg, WV 26301			
			11. 000	
2	Hilary Heights Ltd		Map 302, parcel 81	
	Attn: Beth Arnold Taylor	782-2222		
	142 Valley Drive			
===1	Salem, WV 26426	201 1000	Mar. 202 marcal 91	
3	Stacy & Lori Bokey	624-1038	Map 302, parcel 81	
	Rt. 1, Box 299-46			
	Mount Clare, WV 26408			
4				
5				
Well	Reference:			
			101	
	Ten Mile District in Harrison Co	ounty, Tax Map 302,	, Parcel 81	_
			y and the second	

Form WW-9 Rev. 10/94

	Page	8	of	8
	I Number 47-	033	-	
Operator's Well No.	M.J. Rathbo	ne No.	116 - H	lev 2

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

		•		22 DISCHARGE		
Operator _	HG Energy	, LLC			P Code 4	94497948
Watershed	Hall's Run			Quadrangle	Salem 7	7.5'
Elevation _	1,267'	County	Harrison	District	Tenmi	
	anticipated Pit Waste:	Fluids encour	ntered in drilling and s	timulating new inj		
Do you anticip	ate more than 5,000 bbls	of water to comp	olete the proposed well wo	ork Yes	No X	
Will a syntheti	c liner be used in pit?	Yes	If so, what mil.?	20 Mil.		_
Proposed Dispo	sal Method For Treated 1	Pit Wastes:				·
_	X Land Applica					SDW
_			Permit Number			50W 2/25/201
_	Reuse (at AP					
	Other	osal (Supply For (Explain	rm WW-9 for disposal loca	ation)		
Drilling modius		_		_		<u> </u>
	n anticipated for this well If oilbased, what type? Sy	? Air, fresh wat	er, oil based, etc.	Air		
Additives to be		Water, soap, I				
	isposal method? Leave in	pit, landfill, ren		eave in Pit		
•1	f left in pit and plan to so	lidify, what med	lium will be used? Cemer		latina asil	
-1	andfill or offsite name/pe	rmit number?	DO MANUEL COMMON	re mue, sawqust 1/	ative soil, cem	ent, lime
for obtaining the penalties for sub Company Office	form and all attachments information, I believe the mitting false information ial Signature ial (Typed Name)	thereto and the at the informati, including the p	resonally examined and are at, based on my inquiry of on is true, accurate and cossibility of fine or imprince C. White Accountant	those individuals im	madiataly was	mail.
Subscribed and	sworn before me this	21 Ima 7	day of JAN		otary Public	
My commission	expires		2.2018	·	wary I ubit	ı
Form WW-9					STATE OF	FICIAL SEAL ARY PUBLIC F WEST VIRGINIA L. PETHTEL Energy, LLC Pupont Road West Virginia 28101 Excites No. 12 2014

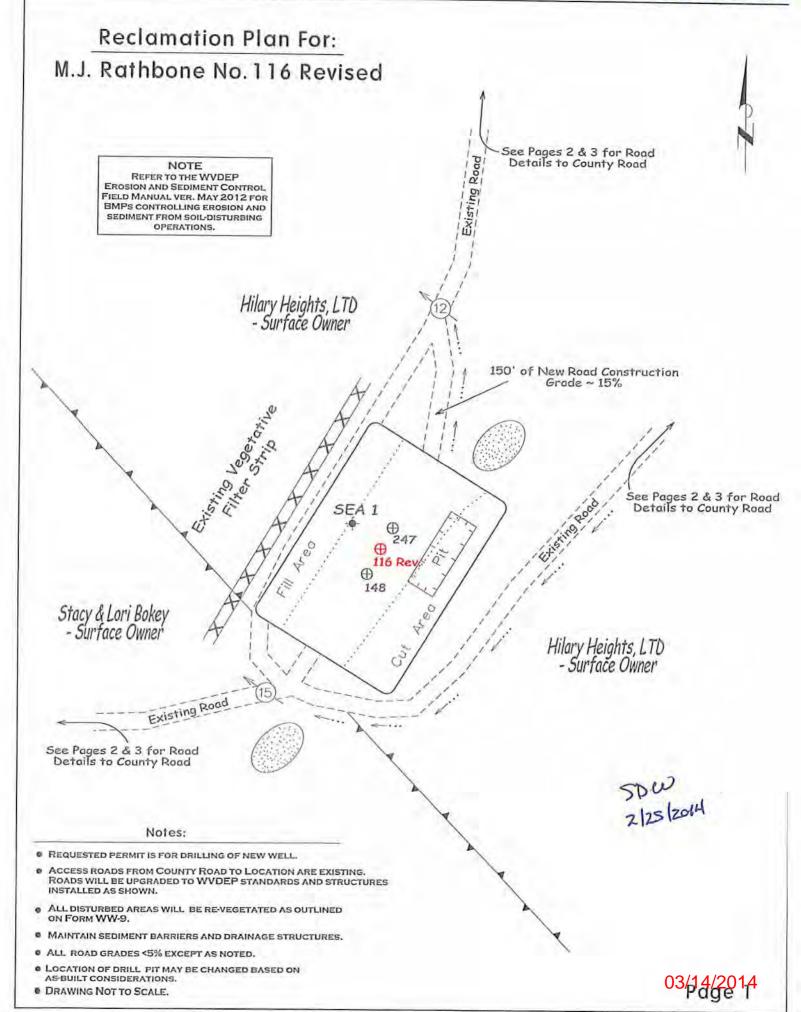
Legend

		Diversion	11111111	111
Property Boundary				_
Road	=========	Spring		
Existing Fence	_xx	Wet Spot	Ö	
Planned Fence	//_	Drain Pipe		→
		Waterway	$\longleftrightarrow \longleftrightarrow \hookleftarrow$	- (->
Stream	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cross Drain	7///////	777
Open Ditch	——> ——>			XXX
Rock	8999898	Filter Strip	XXXXXXX	
	_	Pit: Cut Walls	Cumus	
North	N-		will.	
1,	14	Pit: Compacted Fill Walls		
Buildings		rm watis	THIT	
Water Wells	(W)	Area of Land	13520535	3)
Drill Site	(A)	Application of Pit Waste	(2.1.4.1.2.2)	
		1000		
	C	Area I Approx. 1.0 Ac.	Prevegetation pH	
Proposed Revegetation	n Treatment: Acres Disturbed	Area II		
		Approx. 0.5 Ac.		
	-	*-PF	1.68	
	Lime 2_T	ons/Acre or Correct to pH	6.5	
	Fertilizer (10-20-20 or Equivalen	-	cre (500 lbs. Minimum)	
	Mulch Straw	2 Tons/Acre		
		SEED MIXTURES		
	-		Area II (Road)	i e
	Area I (Location)	Seed '		Lbs/Ac.
Seed Type	Lbs/Ac.		Deer Forage Mix	50
Hall's Deer F	orage Mix 50		-	

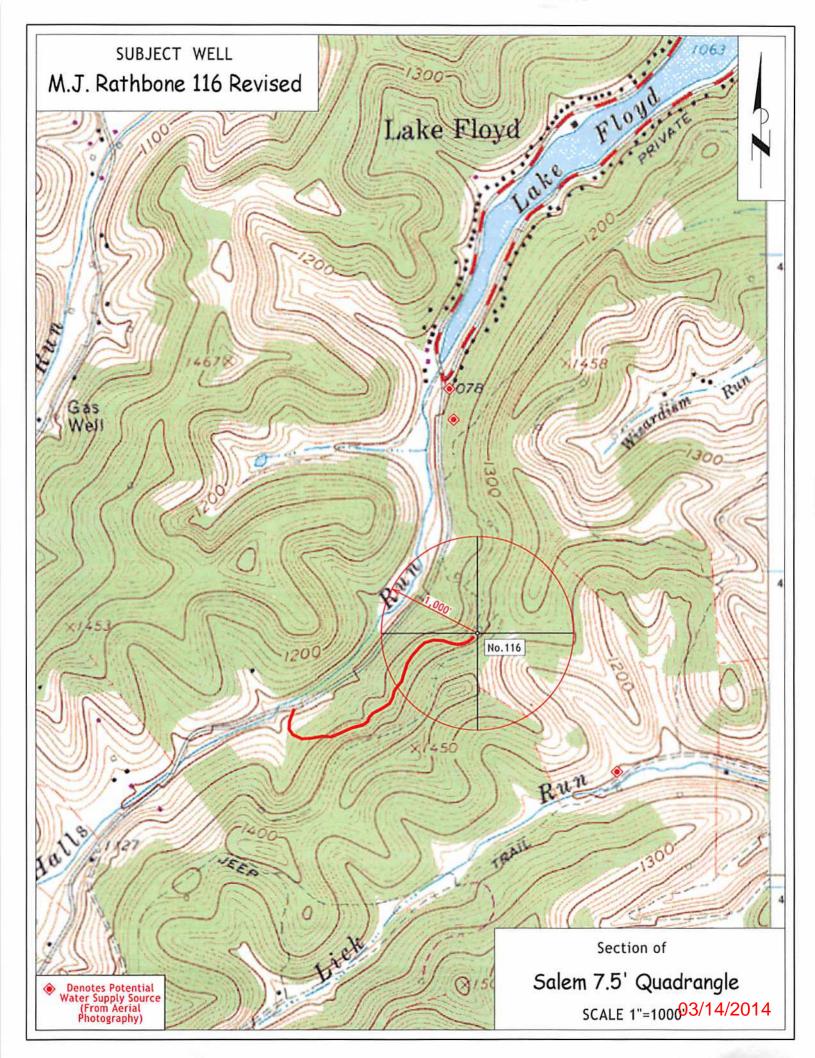
Attach:

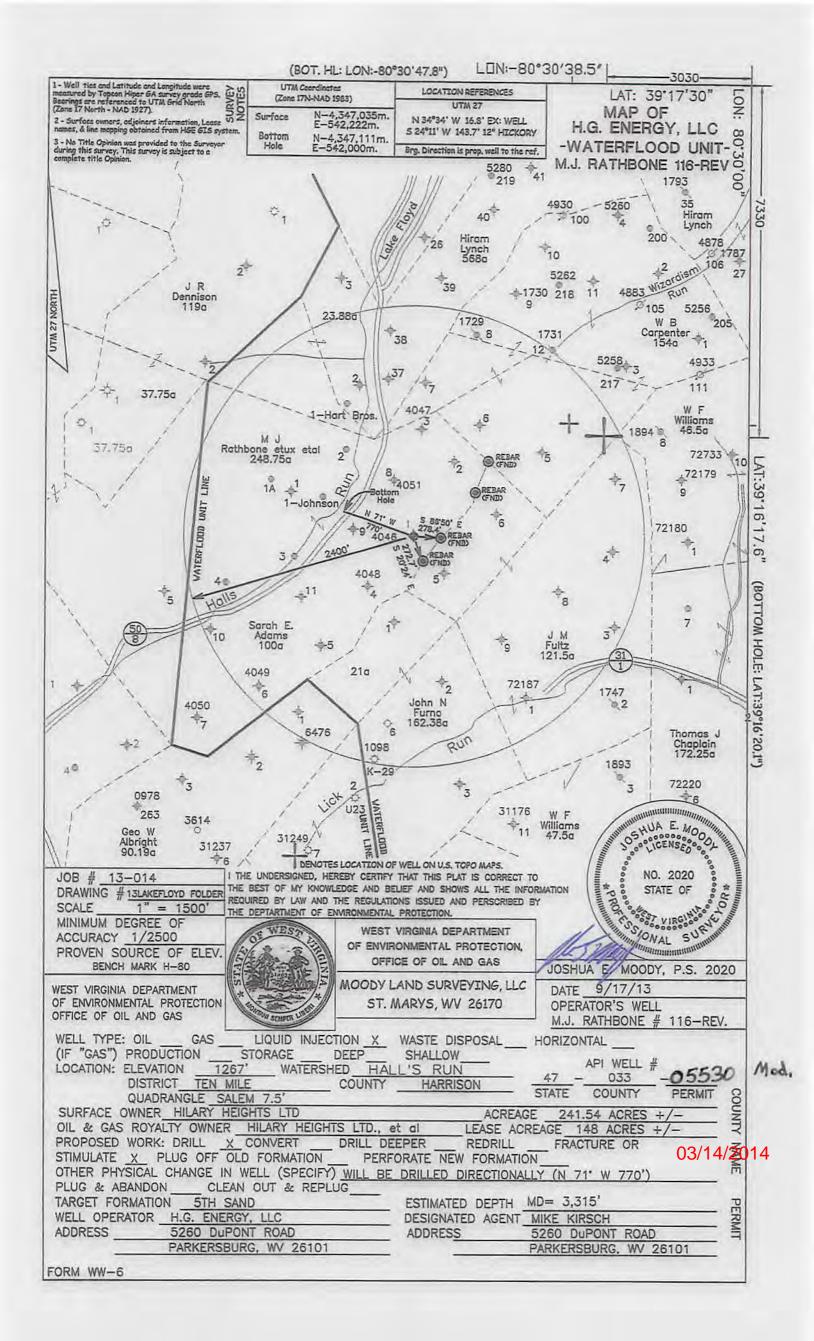
Drawing(s) of road, location, pit and proposed area for land application Photocopied section of involved 7.5' topographic sheet.

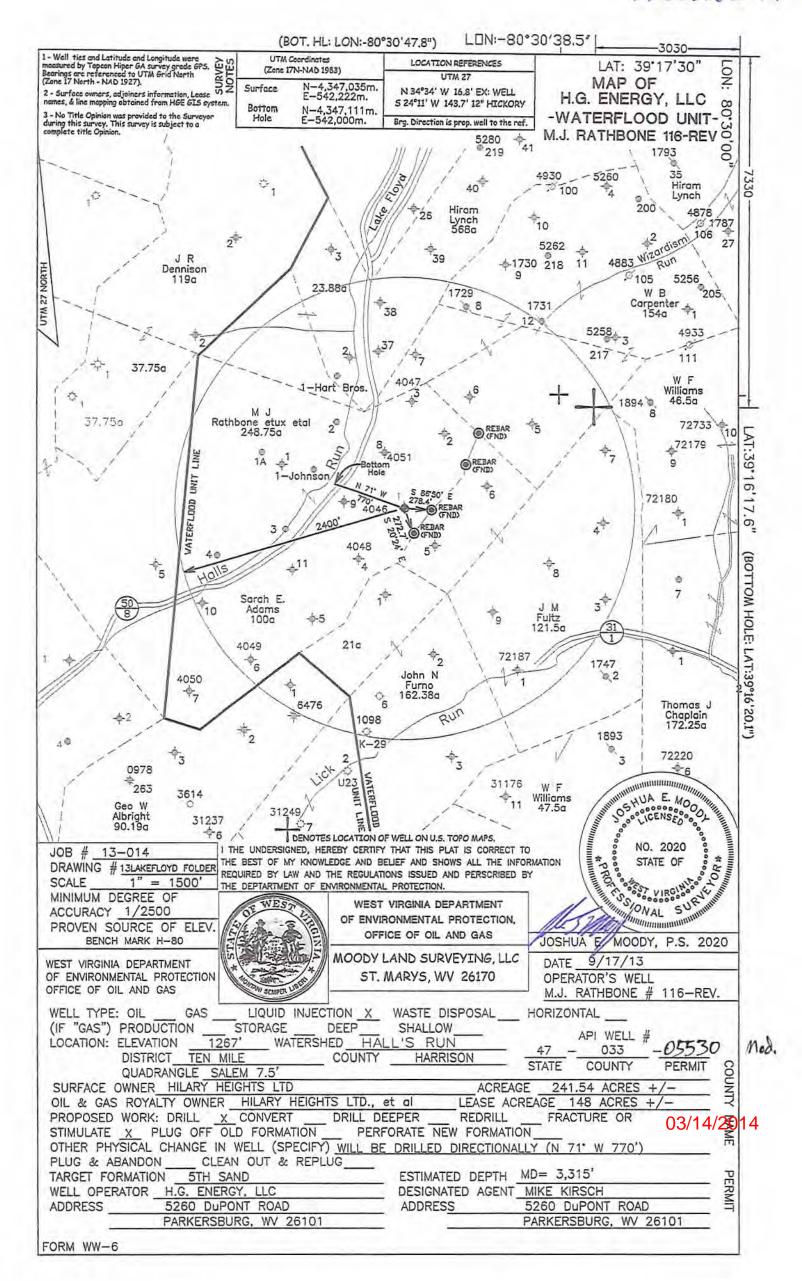
Plan approved by:	Dre-Sled	Occounted	listurbed areas	95	Sten as	reasonably possible
Upgrade Title:	Eds as	necessar	ry •		Date: 2/25	
Field Reviewed?	Walter T	X) Yes		() No	



Reclamation Plan For: W.B.Carpenter Lease M.J. Rathbone No. 116 Revised Earl & Belva Junkins - Surface Owner Showing Road System to County Road Location for 2014 Wells No.145 & 146 Existing Stoned Highway Approach, (See Page 1 for Location Detail) NOTE REFER TO THE WVDEP **EROSION AND SEDIMENT CONTROL** FIELD MANUAL VER. MAY 2012 FOR BMPs CONTROLLING EROSION AND 650' of 0-5% Grade SEDIMENT FROM SOIL-DISTURBING OPERATIONS. Stacy & Lori Bokey - Surface Owner Location for 2014 Wells No.116 Rev. 148 & 247 MJ Rathbone 450' of 0-5% Grade (See Page 1 for Location Detail) Lease Hilary Heights, LTD - Surface Owner 150' of New Road Construction LEGEND 200' of 0-5% Grade EXISTING WATERFLOOD 200 of 0-5% Grade EXISTING LEASE OR FARM ROADS TO BE 250' of 12-18% Grade Install Gate NEW ROADS TO BE CONSTRUCTED 250' of New Road Construction 200' of 10-15% Grade 500' of 5-8% Grade Michael Nardella et ux - Surface Owner J.M. Fultz Lease S.E. Adams Lease 200' of New Edgar Lee Myers Jr. - Surface Owner Hilary Heights, LTD - Surface Owner **Road Construction Existing Stoned Highway Approach** 300' of <5% Grade Location for 2014 Wells No.150, 151 & 249 50W 2125/2014 (See Page 1 for Location Detail) Notes: REQUESTED PERMIT IS FOR DRILLING OF NEW WELL. ACCESS ROAD FROM CO. Rd. 50/8 TO LOCATION IS EXISTING. 600' of <8%, Grade ROAD WILL BE UPGRADED TO WYDEP STANDARDS AND STRUCTURES INSTALLED AS SHOWN. 150' of 12-15% Grade J.N. Furno Lease ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9. Access Road to Follow Clarence & Mary Mutschelknaus - Surface Owners **Existing Lease Road** MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES. 6 ALL ROAD GRADES <5% EXCEPT AS NOTED. 350' of 15-20% Grade @ LOCATION OF DRILL PIT MAY BE CHANGED BASED ON AS-BUILT CONSIDERATIONS. 03/14/2014 Page 2 O DRAWING NOT TO SCALE.









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

Check # 2527

650.

MODIFIED

January 20, 2014

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

RECEIVED Office of Oil and Gas

FEB 24 114

RE:

M. J. Rathbone No. 116 - Revised 2 (47-033-5530)

Ten Mile District, Harrison County

West Virginia

WV Department of Environmental Projection

Dear Mr. McLaughlin:

Enclosed are Forms WW-3A, WW-3A(1), WW-3B, WW-9, WW-3(B1), mylar of plat, reclamation plan, topo map and copies of the certified mailing receipts for a request to revise 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

Hilary Heights, LTD - Beth Arnold Taylor - Certified cc: Stacy & Lori Bokey - Certified Wolf Run Mining Company - Certified Sam Ward - Inspector

Nottingham, Justin E

From: Diane White <dwhite@hgenergyllc.com>
Sent: Wednesday, February 26, 2014 8:52 AM

To: Nottingham, Justin E

Subject: RE: Returning Check for 47-033-05530 "M.J. Rathbone 116"

Justin,

Ok, thanks for letting me know. I called Jeff about it a few months back and misunderstood. I thought since the location and methodology had changed the review process had to be like a new application. I'm sorry for the confusion and inconvenience.

Thanks for letting me know,

Diane

From: Nottingham, Justin E [mailto:Justin.E.Nottingham@wv.gov]

Sent: Tuesday, February 25, 2014 9:52 AM

To: Diane White

Cc: McLaughlin, Jeffrey W; Smith, Gene C; Chestnut, B.J

Subject: Returning Check for 47-033-05530 "M.J. Rathbone 116"

Diane,

The (\$650.00) check (#2527) ,that was for the well work application for well 47-033-05530 "M.J. RATHBONE 116" , is being returned to you by mail. This well has a current well work permit that's active until 3/28/15, meaning that you will only need to send in a modification for the well work changes, which has no fee. If you have any questions then feel free to contact me.

Thanks, Justin

Justin E. Rottingham

West Virginia Department of Environmental Protection Office of Oil and Gas Environmental Technician 601 57th Street, S.E. Charleston, WV 25304 (304)-926-0499 (Ext. 1650) (304)-926-0452 (fax)

Justin.E.Nottingham@wv.gov