

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

March 26, 2015

WELL WORK PERMIT

Rework-Secondary Recovery

This permit, API Well Number: 47-3304904, 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: HIRAM LYNCH 103

Farm Name: GASKINS, KENNETH & DEBORA

API Well Number: 47-3304904

Permit Type: Rework-Secondary Recovery

Date Issued: 03/26/2015

Promoting a healthy environment.

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.
- 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 with 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.
- 8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

FORM WW-3 (B) Oil and Gas

FEB 0 6 2015



1) Date: 01/14/2015
2) Operator's Well No. Hiram Lynch 103
3) API Well No.: 47 - 033 - 04904
State County Permit
4) UIC Permit No. UIC2R03301AP

WV Department of 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		iid Injecti		/	Gas Inje	ction (not stor	age)] / V	Vaste Disposal
6) LOCATION:		ion: 1286			W	atershed: W	/izardism Ru		
		t: Tenmi			Co	unty Harriso	n	Quadra	ngle Wolf Summit 7.5'
7) WELL OPER	ATOR: 1	G Energy	LLC			8) DESIGN.	ATED AGI		
Ad	dress 5	260 Dupo	nt Road				Addre		upont Road
	F	arkersbur	g, WV 2610	01				The same of the sa	sburg, WV 26101
9) OIL & GAS II	NSPECTO	OR TO B	E NOTIF	IED		10) DRILLI	NG CONT		2.3, 11. 20.01
Name Sam \	Nard								proval of Permit
Address P.O.	Box 2327				3	Address			
Buckh	annon, WV	26201				-			
11) PROPOSED 12) GEOLOGIC 13) Estimated De 14) Approximate 15) Approximate 16) Is coal being 17) Virgin reserve 18) Estimated res	TARGET epth of Co- water stra- coal seam mined in to oir pressur- ervoir frac	FORMA mpleted value depths: a depths: the area? re in targe	TION _F Well, (or :	old formohysical ifth Sandactual deesh 4:3	change in vepth of exis	well (specify) Depth ting well): _3 _ Feet	2903 3050 Salt	Feet (top	Feet SDW 12612
19) MAXIMUM	PROPOS	ED INJE	CTIONO	PERAT	IONS: V	Jolume per hor	ır 25 BBL	Bottom I	hole pressure 2400 psi
20) DETAILED I	DENTIFI	CATION	OF MA	TERIAI	S TO BE I	NIECTED IN	CLUDING	ADDITIVE	ES Fresh water, produced
water, bactericid	es and othe	er chemica	ls as need	ed to ma	intain water o	uality and impro	ve oil recove	rv	Tresh water, produced
21) FILTERS (IF	ANY) C	Cartridge fil	ters and/or	coal bed	filters			.,,.	
22) SPECIFICAT	IONS FO	R CATH	ODIC PR	ROTECT	TION AND	OTHER COR	ROSION (CONTROL	
23) CASING AND	TUBING I	PROGRAI	M						
CASING OR	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT	PACKERS		
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For Drilling	Left In Well	FILL -UP OR SACKS (CU. FT.)	
Conductor									Kinds
Fresh Water	7"	LS	17#			612'	612'	-	
Coal	la la			181					Sizes
Intermediate									
Production	4 1/2"	J-55	9.5#			3009'	3009'		Depths set
Tubing									
Liners									Perforations
									Top Bottom
A) A DDI TO ANTO	C OPER	TDICE	LOURG		1 10				
24) APPLICANT	5 OPERA	LINGR	IGHTS W	ere acq	uired from				
by deed Harrison	/ 1c	-				THE PERSON NAMED IN COLUMN TO SERVICE AND ADDRESS OF THE PERSON NAMED IN COLUMN TO SE	01/19/189		of record in the
Haifison			ounty Cle	rk's off	ice in lea	ise		Book 10	05 Page 143

California Car

State of West Virginia Division of Environmental Protection Section of Oil and Gas

33049045W

Well Operator's Report of Well Work

Farm name:	GASKINS, I	KENNETH & DEBORA		or or vver			
LOCATION:	Elevation:	1,286'				AM LYNCH 1	03
Company:	District: Latitude: Longitude: EAST RESO	TEN MILE 1,700 Feet south of 9,950 Feet west of URCES, INC	Cot 39	adrangle: Inty: HA Deg 17 Deg 27 Casing/	RRISON Min 30 Min 30	Sec. Sec.	
	P.O. BOX 55 VIENNA, W	19 V 26105-5519		tubing		Left	Cement
Agent:	PHILIP S. ON			Size	Drilling	in Well	Fill Up Cu. Ft.
Inspector: Permit Issued: Well work Com Well work Com	TIM BENNE	07/25/07 01/28/08					
Verbal plugging		04/10/08				. 4	
permission grant Rotary X	ed on: Cable	Dia					
Total Depth (fee Fresh water dept	t) 31	Rig 050' NA		7,"	612'	612'	150 sks
Salt water depths	(ft)	NA		4 1/2"	3009.25'	3009.25'	150 sks
Is coal being min Coal Depths (ft): OPEN FLOW DA		NA NA WATERFLOOD INJECT	FOR				
Producin Gas: I Static roc Second pr Gas: Ir F Static rocl NOTE: ON BACK OF OR STIMULATING I JEOLOGICAL RECO Office	g formation nitial open flow final open flow fine of open k pressure roducing forma nitial open flow inal open flow ime of open flow ime of open flow the pressure THIS FORM, PL PHYSICAL CHA DRD OF ALL FOR	Fifth Sand w * MC * MC flow between initial and psig tion MCI Tow between initial and	F/d final (surf F/d final (surf AL EN	Oil: Initial Final of tests face pressor Pil: Initial Final of tests face pressor OF PERFORICH IS A SY COUNTERE	ay zone dep open flow open flow ure) af	Hours th (ft) Hours ter	Bbl/d Bbl/d Hours Bbl/d Bbl/d Bbl/d
Environ	meille r					03	3/27/2015

Well Log:	0	178	Sand and Shale
	178	194	Sand
	194	360	Shale
	360	430	Sand
	430	444	Shale
	444	452	Sand
	452	654	Shale
	654	678	Sand
	678	694	Shale
•	694	710	Sand
	710	888	Shale
	888	912	Sand
	912	1020	Shale .
	1020	1036	Sand
	1036	1092	Shale
•	1092	1104	Sand
	1104	1192	Shale
	1192	1218	Sand
	1218	1276	Shale
	1276	1340	Sand
	1340	1370	Shale
	1370	1392	Sand
	1392	1530	Shale
	1530	1548	Sand
	1548	1800	Shale
	1800	1810	Sand
	1810	1874	Shale
	1874	1994	Sand
•	1994	1928	Shale
	1928	1988	Big Lime
	1988	2064	Big Injun
	2064	2490	Shale
	2490	2512	Sand
	2512	2587	Shale
	2587	2610	Sand
	2610	2626	Shale
	2626	2692	Sand
	2692	2700	Shale
	2700	2744	Sand
	2744	2904	Shale
•	2904	2918	Fifth Sand
•	2918	3050	Shale
	3050		TD
•			

FORM WW-3 (A) 1/12



1) Date: January 1					
Operator's Well	No.	Hiram	Lynch 10)3	
3) API Well No.:	47	-	033	-	04904
	State		County	,	Permit

4) UIC Permit No. UIC2R03301AP

STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OF WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS,

Surface Ov	vner(S) To Be Served	7) (a) C	0		0.10,
(a) Name	Kenneth & Deborah Gaskins	7) (a) Coa Name	Operator		
Address	46 Chandler Drive	Address	-		
	Shinnston, WV 26431	Address	-		
(b) Name		7) (b) Cool	Over on (C) With	D 1 1 000	
Address		Name	Owner(S) With	Declaration Of Reco	rd
		Address			
		Address	-		
(c) Name		Name			
Address		Address	-		
		Address	-		
Inspector	Sam Ward	7) (c) Coal	Lagger with D	1	
Address	P. O. Box 2327	Name		claration Of Record	
	Buckhannon, WV 26201	Address	Wolf Run I		
Telephone	304-389-7583	Address		berry Square	
	PERSONS NAMED ABOVE: You she ication For A Liquid Injection or Waste D			n, WV 26505	
(2) The plat (s (3) The Const plan for er The date p THE REASON APPLICATION THE APPLICA ACTION AT Al Take notice that Notice and App West Virginia I Application and and Reclamation	ication For A Liquid Injection or Waste Dolved in the drilling or other work; surveyor's map) showing the well location of truction and Reclamation Plan on Form Wyosion and sediment control and for reclamate proposed for the first injection or waste YOU HAVE RECEIVED THESE DOC WHICH ARE SUMMARIZED IN THE TION [(FORM WW-3(B)] DESIGNATED LL. under Chapter 22-6 of the West Virginia Collication and accompanying documents for Department of Environmental Protection, depicted on the attached Form WW-6. Con Plan have been mailed by registered or certain circumstances) on or before the day	on Form WW V-9 (unless to tion for the s disposal is CUMENTS TINSTRUCT O TO YOU. Code, the unc a Well Wor with respect opies of this ertified mail	y-6; and the well work is ite and access re ite	only to plug a well), and. HAVE RIGHTS RE REVERSE SIDE COU ARE NOT REQUERATE TO THE COUNTY OF THE C	which sets out the 20 15 . EGARDING THE DF THE COPY OF UIRED TO TAKE de or has filed this e of Oil and Gas, on the attached
attachments and t	The person signing this documer tenalty of law that I have personally examine the information submitted in this document that, based on my inquiry of those individual consible for obtaining the TOO IN TOO	ed and A		HG Energy, LLC 5260 Dupont Road Parkersburg, WV 2610	1
the information is	onsible for obtaining the Horizalist, belist true, accurate and complete. On aware it	-26	y:	Diane White	
are significant ne	nalties for submitting hase information, inc	mainere I	s:	Agent	
the possibility of		luding			
(i).	FEB 0 6 2015	S	ignature:	Diane Whit	-
	1 20		(SE)		~
	1	t of			

WV Department of **Environmental Protection**



5293	U.S. Postal Service _{TM} CERTIFIED MAIL _{TM} RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)					
щ	For delivery information visit our website at www.usps.com					
7.	OFFICIAL USE					
4074	Postage \$ /.6					
	Certified Fee 3.30					
	Return Receipt Fee (Endorsement Required) Z.70 Postmark					
9	Restricted Delivery Fee (Endorsement Required)					
0270	Total Postage & Fees \$ 7.6					
7074	Sent To Wolf Run Mining					
70	or PO Box No. 2708 Cranberry Square					
	City, State, ZIP+4 Morgantown WV 26505					
	PS Form 3800, August 2006 See Reverse for Instructions					

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Office of Oil and Gas

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Environmente i resection

WW-9 Rev. 5/10

	Page	143	of	
API Number 47 -	033		04904	
Operator's Well No	o. Hiram	Lynch 10	3	

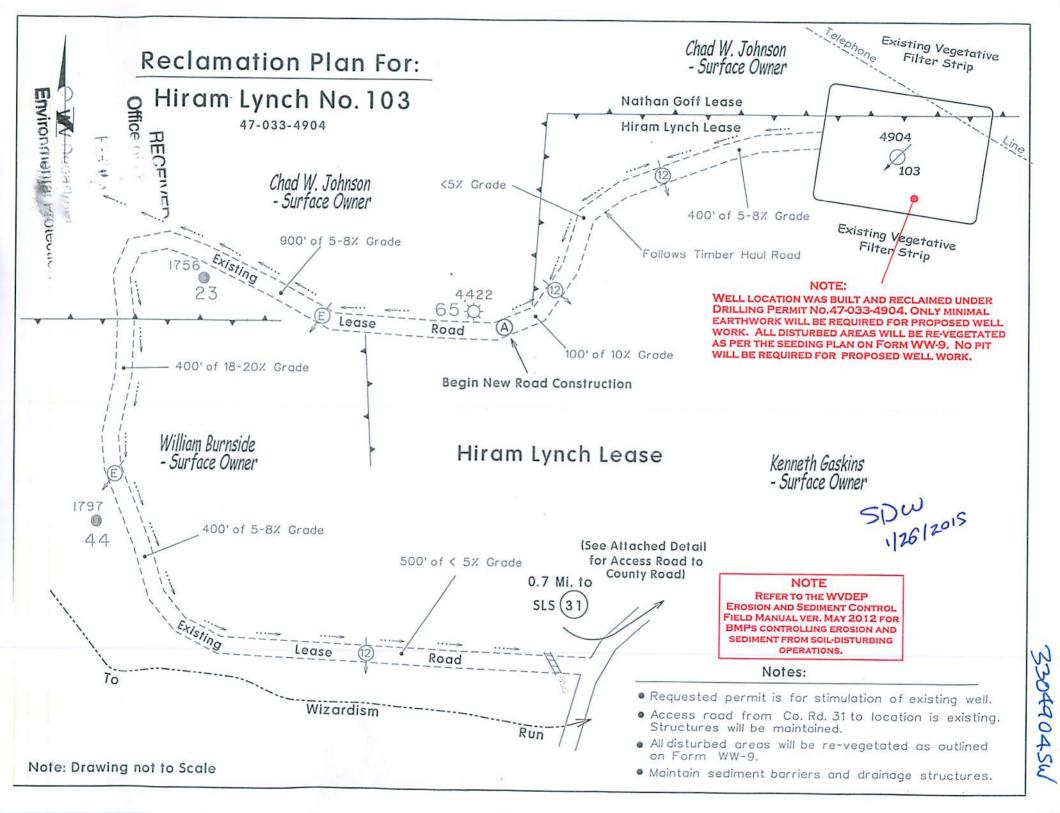
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

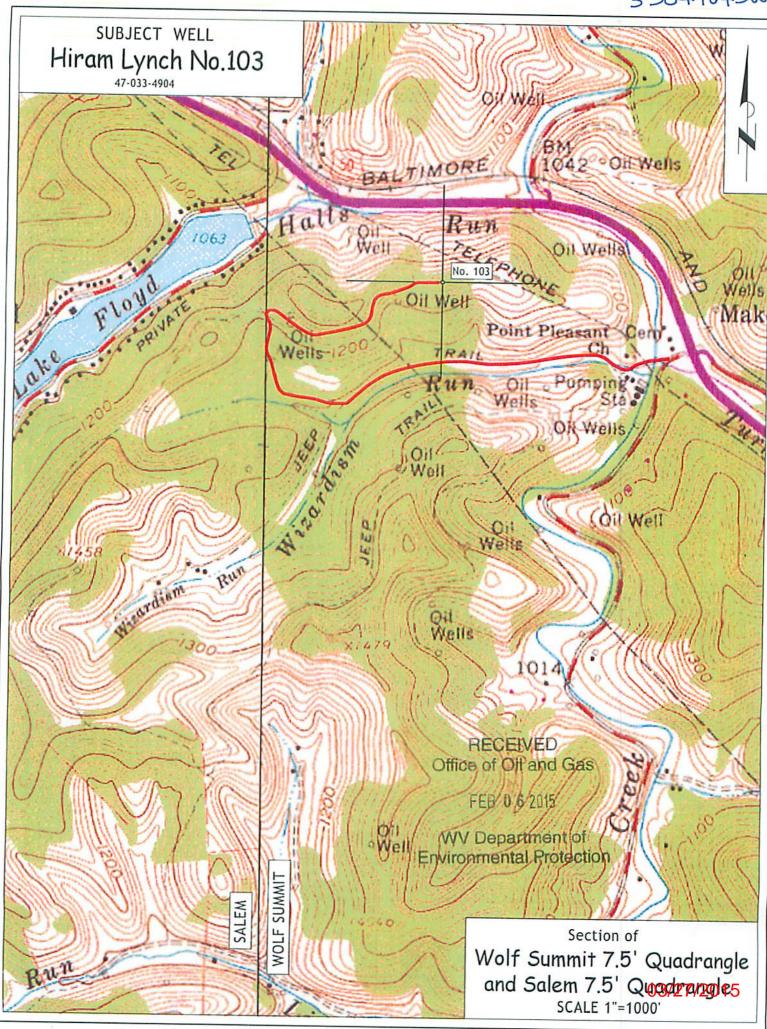
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

	AND GAS PIT WASTE DISCHARGE
Operator Name HG Energy, LLC	OP Code 494497948
Watershed Wizardism Run	Quadrangle Wolf Summit 7.5'
Elevation 1286' County Harrison	
Description of anticipated Pit Waste: Fluids encountered while s	stimulating subject well
Do you anticipate using more than 5,000 bbls of water to comple Will a synthetic liner be used in the pit? Yes If	ete the proposed well work? Ves No X
	Number
Drilling medium anticipated for this well? Air, freshwater, oil ba -If oil based, what type? Synthetic, petroleum, etc. NA Additives to be used? Water, Soap, KCI Will closed loop system be used? No	sed, etc. Air, Fresh Water
Drill cuttings disposal method? Leave in pit, landfill, removed of -If left in pit and plan to solidify what medium will be us -Landfill or offsite name/permit number?	sed? Coment lime - 1 Notice seil servert lime
provisions of the permit are enforceable by law. Violations of a law or regulation can lead to enforcement action. I certify under penalty of law that I have personally enablication form and all attackment that I have personally enablication form and all attackment that I	nditions of the GENERAL WATER POLLUTION PERMIT issued inia Department of Environmental Protection. I understand that the my term or condition of the general permit and/or other applicable examined and am familiar with the information submitted on this on my inquiry of those individuals immediately responsible for exaccurate, and complete. I am aware the protective inficant y of fine or imprisonment. Office of Oil and Gas
Company Official (Typed Name) Diane White	FEB 0 6 2015
Company Official Title Agent	
7 - 7	WV Department of Environmental Protection
Subscribed and sworn before me this 14th day of January Duline Duline	OFFICIAL SEAL NOTARY PUBLIC
My commission expires Och. 4. 3:016	STATE OF WEST VIRGINIA S. DIANNE DULANEY P. O. Box 5519 Vienna, West Virgin 3/207/2015 My Commission Expires Oct. 4, 2016

Operator's Well No. Hiram Lynch 103

		LEGEND	
Property Boundary		Diversion (1211111111	
	======	Spring O	
	- × - × -	Wet Spot	
Planned Fence /	-1-1-	Drain Pipe with size in inch	nes (2)
Stream	J	Waterway C	
Open Ditch	.>	Cross Drain	The second secon
Rock 885886		Artificial Filter Strip	*****
North N		Pit: cut walls	•
Buildings	2	Pit: compacted fill walls	muy
Water wells)	Area for Land Application of	of Pit Waste
Drill site 💮		6	
Proposed Revegetation Trea	atment: Acres Disturbed .5	Prevegetation	pH
Lime	2 Tons/acre or to correct to pF		
T	F00		
	bo equivalent)ibs	s/acre (500 lbs minimum)	
Mulch_Straw	2	acre /	
	See	ed Mixtures	
	rea I		Area II
Seed Type Tall Fescue	lbs/acre	Seed Type	lbs/acre
	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5
Proper sediment C	Control should be in pla	ace at all times.	
Attach:	pit and proposed area for land app		RECEIVED
		lication.	ice of Oil and Gas
hotocopied section of invol-	ved 7.5' topographic sheet.	Oli	
			FEB 0 6 2015
an Approved by:	I Oward I		
		V	VV Department of
omments:		Env	ironmental Protection
itle: OOG Inspe	otar	Date: 1/26/2015	
		12 33	
eld Reviewed? (Harrison) Yes (X) No	





WEST VIRGINIA

Division of Environmental Protection Office of Oil and Gas 601 57th Street

TY SELECT	
ELL TYPE: OIL GAS LIQUID INJECTION X WASTE DISPOSAL CORE (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW LOCATION: ELEVATION 1,286' WATERSHED Wizardism Run	
DISTRICT Ten Mile COUNTY Harrison	
QUADRANGLE Wolf Summit 7.5'	-2-7
URFACE OWNER Kenneth & Deborah Gaskins ACREAGE 83.5 Ac.	
DIL & GAS ROYALTY OWNER Anne Farr et al LEASE ACREAGE	568
LEASE NO31378-50	REG
PROPOSED WORK PRILL COLLEGE	LIEC

EIVED ONVERT __ DRILL DEEPER __ REDRILL __ FRACTURE OF Office of Oil and Gas STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW

OTHER PHYSICAL CHANGE IN WELL (SPECIFY) -FEB 0 6 2015

PLUG AND ABANDON. CLEAN OUT AND REPLUG. Fifth Sand TARGET FORMATION _ ESTIMATED DEPTH_ WELL OPERATOR HG Energy, LLC

5260 DuPont Road

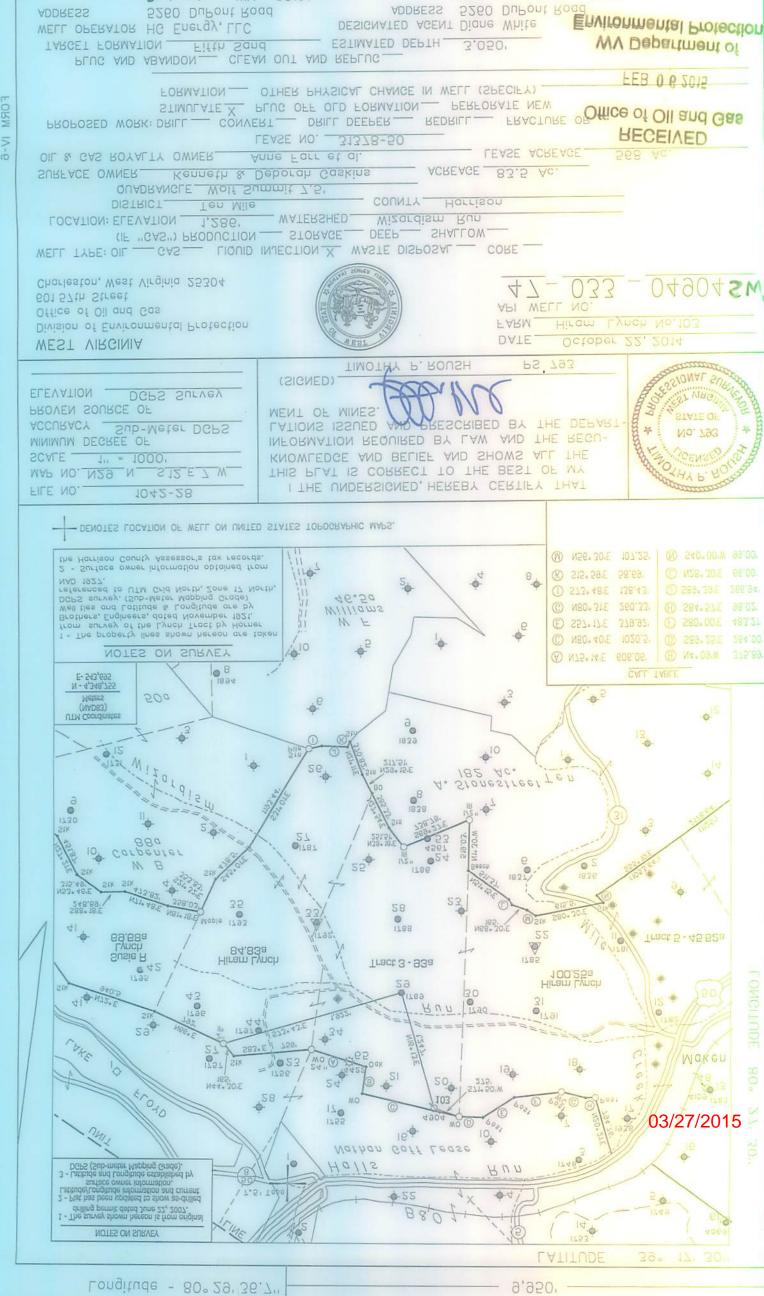
3,050 DESIGNATED AGENT Diane White **ADDRESS**

WV Department of 5260 DuPont Road

Parkersburg, WV 26101

Parkersburg, WV 26101

ADDRESS



Parkersburg, WV

Parkersburg, WV



HG Energy, LLC 5260 Dupont Road Parkersburg, WV 26101 (304) 420-1100 - Office (304) 863-3172 - Fax 3304904,SW

January 14, 2015

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

RE:

Hiram Lynch No. 103 (API 47-033-04904)

Tenmile District, Harrison County

West Virginia

Dear Mr. McLaughlin:

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 stimulate an 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

cc:

Kenneth & Deborah Gaskins – Certified Wolf Run Mining Company – Certified Sam Ward – Inspector

> Office of Oil and Gas FEB 0 6 2015

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WV Department of Environmental Protection