

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 06, 2015

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-4303501, 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: THOMAS FOWLER 251

Farm Name: MCCLURE, ANDY & REBECCA

API Well Number: 47-4303501

Permit Type: Vertical Well

Date Issued: 07/06/2015

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 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.

WW - 2B (Rev. 8/10)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator	: HG En	ergy, LL	С	494497948	Lincoln	Duval	Griffithsville 7.5	5'
				Operator ID	County	District	Quadrangle	<u></u> ;
2) Operator's We	ell Numbe	r: Thon	nas Fowler 251		3) Elevation: <u>{</u>	375'	,	
4) Well Type: (a)) OilX_	_ or Gas	s					
(b)) If Gas:	Produc	ction/ Und	erground Stor	age			
		Deep	/ S	hallow X	_			
5) Proposed Tar 6) Proposed Tot 7) Approximate 8) Approximate	fresh wat	er strata	depths: 255	Formation at F	Proposed Targ Proposed Tota	get Depth: 2 I Depth: Ber	520' TVD ea	
9) Approximate	coal sear	n depths	: 305'				•	
10) Approximate	e void dep	oths,(coa	al, Karst, other):	NA				
			s tributary to act		Α			
						Laborto if no	andad)	
12) Describe pro	posed wel	l work an	d fracturing meth	ods in detail (a). Locimulation (ttach additiona will be small b	vdraulic frac	eueu) cture.	
Drill and stimular	te produc	lion well	in the big injun.	Ottinulation	Will be dillain	, u.		
40)			SING AND TU	BING PROGR	AM			
13) TYPES	PECIFIC	-		FOOTAGE	INTERVALS	S CEME	NT	
	Size	<u>Grade</u>	Weight per ft	For Drilling	Left in Well	Fill -up (C	<u> J. Ft.)</u>	
Conductor								ر ا
Fresh Water	7"	LS	17#	405'	405'	СТ	S ROS	11112
Coal								
Intermediate								
Production	4 1/2"	J-55	10.5#	2470'	2470'	RECEIVE	gkgas	
Tubing					Offic	E of On S	-,4	
Liners						MAY		
Packers: Kind	 d:					MA Debar	tment of al Protection	n
Size	es:				· · · · · · · · · · · · · · · · · · ·	wironment	<u>ai </u>	
Dep	oths Set				Er	/A 1, _	07/1	10/20

WW-2A		1). Da	ate:	
(Rev. 6-14)			7.1. 1	
		2.) Op	perator's Well Number	
			State	County Permit
		3.) AF	PI Well No.: 47-	Lincoln -
		STATE OF WEST VI	PCINIA	
DEF	PARTMENT OF ENV	IRONMENTAL PROTEC		OIL AND GAS
17.71		APPLICATION FOR A		
4) Surface O	wner(s) to be served:	5) (a) Coal O	perator	
(a) Name	Andy & Rebecca I	McClure / Name	NA	
Address	109 Coon Whistle	Hollow Address		
	Yawkey, WV 2557			
(b) Name			Owner(s) with Declara	ition
Address		Name	NA	
		Address		
/ \ \ \ \		denie.		
(c) Name		Name		
Address	_	Address		
6) Inspector	Ralph Triplett	(c) Coal	Lessee with Declaration	n e
Address	5539 McClellan H		NA	,,,
Addiess	Branchland, WV 2			
Telephone		7 duress	-	
, s.op.io.io		RSONS NAMED ABOVE	TAKE NOTICE THAT	
Included is		ner continuing contract or con		
OR			al Phone to a substitute for	
		by Chapter 22, Article 6, Sect		
		Chapter 22-6 of the West Vi anying documents pages 1 the		
application, a lo		(Affidavit attached)	ough on the above	harned parties by.
-		stmarked postal receipt attacl	ned)	
-		e of Publication attached)		
I have r	ead and understand Cha	pter 22-6 and 35 CSR 4, an	d I agree to the terms	and conditions of any permit
issued under thi				
		at I have personally examine		
		s, and that based on my inquite information is true, accuration is true, accuration is true.		immediately responsible for
		cant penalties for submitting		ng the possibility of fine and
imprisonment.	vare that there are signin	can penalics for submitting	iaise information, includi	rig the possibility of line and
***************************************	OFFICIAL OFFI	Well Operator HG Energy.		
WEST D	OFFICIAL SEAL NOTARY PUBLIC	By: Diane White	e Diane Who	九
	TATE OF WEST VIRGINIA	Its: Agent		
A SECTION AND A	S. DIANNE DULANEY	Address: 5260 Dupor		RECEIVED Gas
Park	5260 Dupont Road kersburg West Virginia 26101		a. WV 26101	SECENT and Gas
	ommission Expires Oct. 4, 2016	Telephone: 304-420-11		HE Oil al.
Outrosite desail	sworn hofore me this	Email: dwhite@hqe	ETIETQYIIC.COM	1410001 2015

My Commission Expires

Notary Public

WW-2A1 (Rev. 1/11)

Operator's Well Number Thomas Fowler 251

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor.	Lessor, etc.
----------	--------------

Grantee, Lessee, etc.

Royalty

Book/Page

** See Attached Sheet **

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application he reby a cknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides Neplaces of nullifies the need for other permits/approvals that may be necessary and further affirms that an heeded permits/approvals should be ac quired from the appr opriate aut hority before the activity is initiated.

> Well Operator: By:Its:

Diane White HG Energy, LLC Diane White

Agent

Environmental Protection

Operator's Well No.	Thomas	Fow	ler i	25
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- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Thomas Fowler, et ux	South Penn Oil Company	1/8	36/07

Merger and Conveyance dated July 3, 1963, from South Penn Oil Company to Penzoil Company, Kanawha County, Book 153, Page 35,

Assignment, Conveyance and Bill of Sale dated December 28, 1998, from Pennzoil Company to Pennz Energy Exploration and Production, Wetzel County, Book 12, Page 177.

Certificate of Merger filed with the WV Secretary of State, December 31, 1999, whereby Pennz Energy Exploration and Production, successor in interest to; to Penzoil Company, merged with Devon Energy Production Company, LP, Wetzel County, Book 12, Page 278.

Deed, Assignment and Bill of Sale dated June 1, 2000, from Devon Energy Production Company, LP to East Resources, Inc., recorded in Wetzel County, Book 370, Page 580.

Assignment, Conveyance and Bill of Sale, dated January 1, 2011, from East Resources, Inc., to HG Energy, LLC, Wetzel County, Book 118A, Page 253.

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drillingerations for the subject well in the location shown on the plat, including the use of access roads, pipelines and utilities.

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby ackowledges the possibility of the need for permits and/or approvals from local, state or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

WV Division of Water and Waste Management WV Division of Natural Resources WV Division of Highways U.S. Army Corps of Engineers US Fish and Wildlife Service County Floodplain Coordinator Office of Oil and Gas

NIAY : 9:0:5

WV Department of Environmental Protection

Well Operator: HG Energy, LLC

By: Diane C. White Diane C. White

Its: Agent

07/10/2015

WW-2B1 (5-12) Well No. Thomas Fowler 251

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.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name
Sampling Contractor
Sturm Environmental Labs
Sturm Environmental Labs

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 underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

- See Attached Sheet -

Office of Oil and Gas

MAY 1.9 .1.5

WV Department of

Environmental Frotection

07/10/2015

WW-2B1 Well No. Thomas Fowler 251

Page 2 - Continued

West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

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Surface Owners Identified With Water Sources to be Sampled and Tested:

Andy & Rebecca McClure
 109 Coon Whistle Hollow
 Yawkey, WV 25573

WW-9
(5/13)

	Page	of	
API Number 47 -			
Operator's Well	No. Thomas F	owler 251	

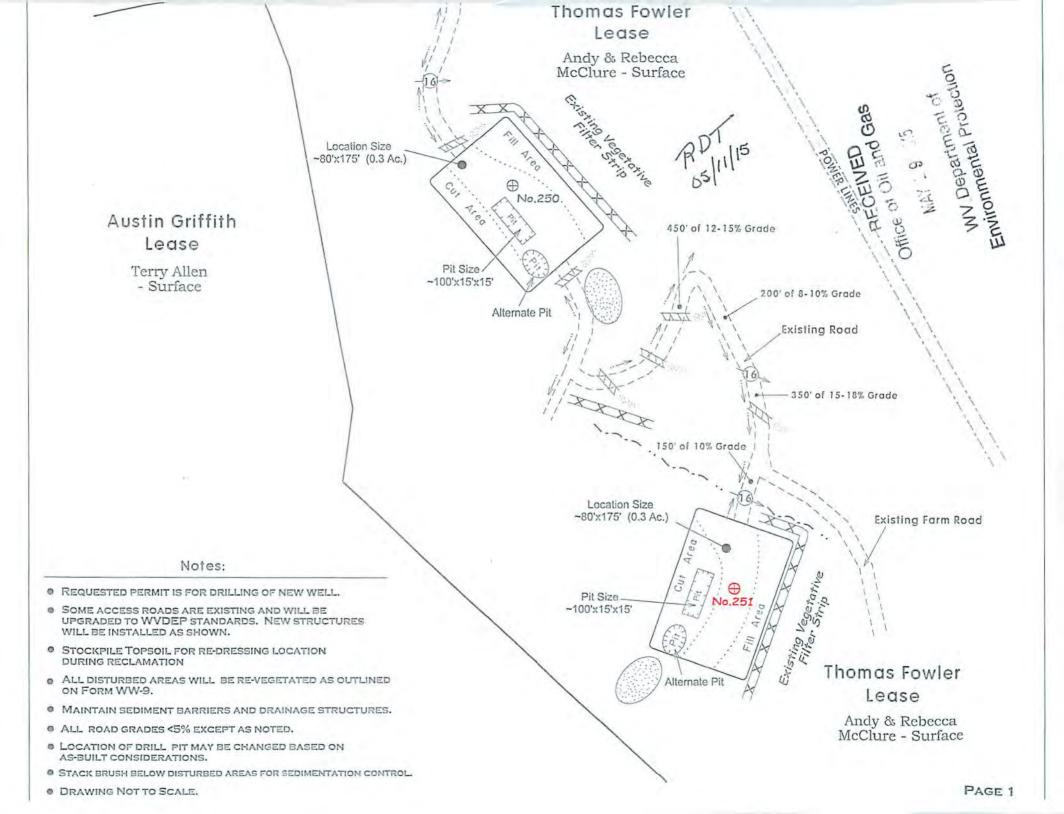
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

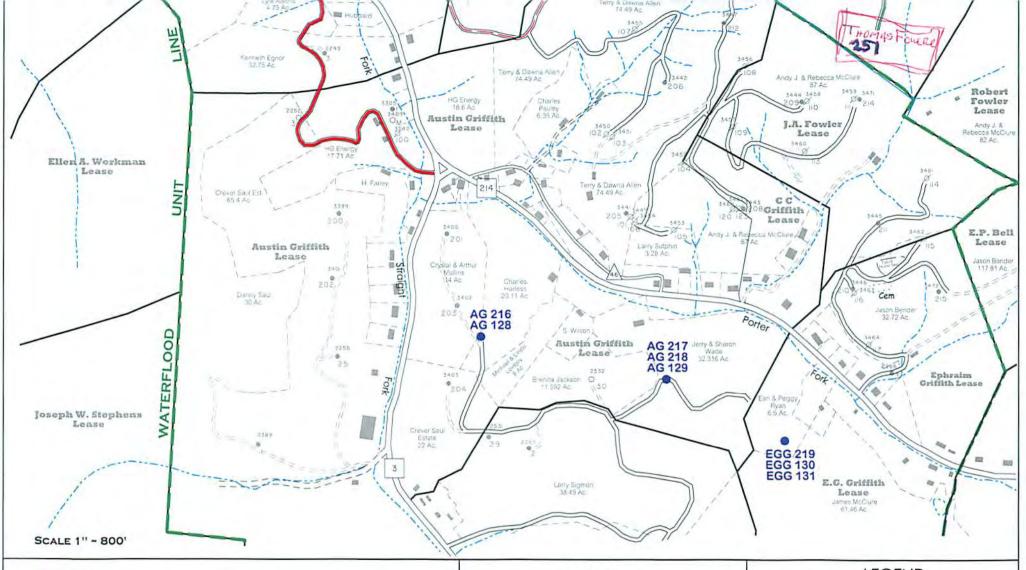
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy, LLC	OP Code
Watershed (HUC 10) Porter Fork Quadrangle	Griffithsville 7.5'
Elevation 875' County Lincoln	District Duval
Do you anticipate using more than 5,000 bbls of water to complete the proposed we will a pit be used for drill cuttings? Yes X No No Will a synthetic liner be used in the pit? Yes X No If so Proposed Disposal Method For Treated Pit Wastes:	drilling subject well
Land Application Underground Injection (UIC Permit Number Reuse (at API Number Off Site Disposal (Supply form WW-9 for disposal loc Other (Explain	ation)
Will closed loop system be used? No	
Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air, Freshwater, oil based, etc.	sh Water
-If oil based, what type? Synthetic, petroleum, etc. NA	<u> </u>
Additives to be used in drilling medium? Water, Soap, KCI	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave	in pit
-If left in pit and plan to solidify what medium will be used? (cement, lin	nc, sawdust) Native soil, cement, lime
-Landfill or offsite name/permit number?	
I certify that I understand and agree to the terms and conditions of the G on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department provisions of the permit are enforceable by law. Violations of any term or cond law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and an application form and all attachments thereto and that, based on my inquiry obtaining the information, I believe that the information is true, accurate, and penalties for submitting false information, including the possibility of fine or impressibility of fine or impressibility.	of Environmental Protection. I understand that the ition of the general permit and/or other applicable in familiar with the information submitted on this of those individuals immediately responsible for complete. I am aware that there are significant
Company Official Signature Dieve White	
Company Official (Typed Name) Diane White	
Company Official Title Agent	
Subscribed and sworn before me this 3 day of May Subscribed and sworn before me this 3 day of May 10/4/16	STATE MEST VIRGINIA 2010 STATE MEST VIRGINIA 2010 MEST VIRGINIA 2
My commission expires [0]4[10	

07/10/2015

Form WW-9		·	Operator's W	ell NoThomas Fowler
Proposed Revegetation Treatment:	Acres Disturbed1.0	00 _{pH} 6.5	Prevegetation pH	[
Fertilizer (10-20-20 or eq Mulch Straw	2	lbs/acre (500 lbs n ns/acre	ninimum)	
	S	leed Mixtures		
Area I Seed Typc Tall Fescue	lbs/acre 40	Tall Fe	Are Seed Type SCU C	a II Ibs/acre 40
Ladino Clover	5	Ladino	Clover	5
Plan Approved by: Racel &	Truplett)			
Comments:				
			· · · · · · · · · · · · · · · · · · ·	
Title: District Insper	ctest)	Date: 1	Jay 11, 201	5
Field Reviewed?	/) Yes () No	·	







GRIIFTHSVILLE WATERFLOOD

Lincoln County, W.Va.

RECLAMATION PLAN SHOWING ROAD SYSTEMS TO BE USED FOR 2015 DRILLING PROGRAM (NORTH)

NOTES

- 1. REFER TO THE WVDEP EROSION AND SEDIMENTATION CONTROL MANUAL (VER. MAY 20, 2013) FOR BMP'S CONTROLLING EROSION AND SEDIMENTATION FROM ALL SOIL-DISTURBING OPERATIONS.
- 2. SEE PAGE ONE OF RECLAMATION PLAN FOR DETAILS OF NEW ROAD CONSTRUCTION AND ROAD UPGRADES FROM POINT A TO DRILL SITE LOCATION.
- 3. EXISTING WATERFLOOD ACCESS ROADS WILL BE MAINTAINED IN PRESENT CONDITION. THESE ROADS WERE CONSTRUCTED UNDER CONDITIONS SET FORTH IN VARIOUS DRILLING PERMITS ISSUED BY WVDEP-OOG PRIOR TO 2015 (AS SHOWN). SEE PERMITS ON FILE FOR MORE DETAIL.

LEGEND

AG 216

EXISTING WATERFLOOD ROADS TO BE USED.

OTHER EXISTING MAIN WATERFLOOD ROADS (POSSIBLE ACCESS).

EXISTING LEASE OR FARM ROADS TO BE UPGRADED.

NEW ROADS TO BE CONSTRUCTED.

LOCATION FOR PROPOSED WELLS

POTENTIAL WATER SUPPLY SOURCE TO BE SAMPLED (LOC. APPROX.)

PAGE 2

APRIL 6, 2015

