

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 21, 2015

WELL WORK PERMIT

Secondary Recovery Well

This permit, API Well Number: 47-4303512, 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: AUSTIN GRIFFITH # 129
Farm Name: WADE, JERRY & SHARON

API Well Number: 47-4303512

Permit Type: Secondary Recovery Well

Date Issued: 07/21/2015

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. <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.



1) Date:	05/26/20	15				
2) Operato	r's Well N	No.	Aus	tin Griffith 12	9	
3) API We	Il No.:	47	-	Lincoln	+	
		State	-	County	_	Permit
4) UIC Per	mit No.	UIC2	R043	B01AP		

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 6) LOCATION:		d Injectio	on v]_/		tion (not storag	ge) rter Fork	/ w	aste Disposal
o) Location.	District	_				inty Lincoln	14500 14000	Ouadran	gle Griffithsville 7.5'
7) WELL OPER		_	LLC			8) DESIGNA	TED AGE		
		60 Dupon				4,	Addres		ipont Road
			. WV 2610	1				Parkersh	burg, WV 26101
9) OIL & GAS I						10) DRILLIN	G CONTE	RACTOR	
	Triplett					Name To	Be Determin	ned Upon Appr	roval of Drilling Permit
Address 5539	McClellan H	wy				Address			
Branc	hland, WV 2	5506							
11) PROPOSED 12) GEOLOGIC 13) Estimated De 14) Approximate 15) Approximate 16) Is coal being 17) Virgin reserv 18) Estimated re 19) MAXIMUM 20) DETAILED water, bactericic 21) FILTERS (II 22) SPECIFICA	TARGET epth of Core water stra e coal seam mined in t voir pressur servoir frac PROPOSI IDENTIFI des and othe FANY) C	FORMA mpleted V ta depths: depths: he area? re in targe eture pres ED INJEC CATION r chemical	TION Be Vell, (or a : Fre 330' Yes et formatic sure 26 CTION O I OF MA s as neede ters and/or	hysical rea ctual dech 280 280 PERAT FERIAL d to main coal become 200 per a coal become	change in very property of exist the property of exist the property of the pro	/ Performed / Perf	2380 5 TVD Salt Estimated r 25 BBL CLUDING e oil recover	Feet (top Feet 1130 Bottom l	Feetpsig (BHFP)
23) CASING AND	TUBING I	PROGRAI	M						
CASING OR		SP	ECIFICATI	ONS		FOOTAGE IN	TERVALS	CEMENT	PACKERS
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For Drilling	Left In Well	FILL-UP OR SACKS (CU. FT.)	PACKERS RD Kinds os 121 15
Conductor									Kinds 051
Fresh Water	7"	LS	17#	X		430'	430'		
Coal				A 2					Sizes
Intermediate									2.375" x 4.5"
Production	4 1/2"	J-55	10.5#	X		2495'	2495		Depths set
Tubing	2 3/8"	J-55	4.6#	X		2180'	2180'		2080'
Liners									Perforations
									Top Bottom
24) APPLICAN' by deed	Γ'S OPERA / Id	ease		other co	ontract	Austin Griffith, / dated	-00/00/190	7 12/19/19 DBook 39	906 of record in the Page 333
						Office o	of Oil ar	nd Gas	

JUN 0 4 79:5

CK+ 3049,00

FORM WW-3 (A) 1/12



1)	Date:	05/26/201	15				
2)	Operate	or's Well	No.	Austin	Griffith 129	9	
3)	API W	ell No.:	47	-		9	
			State		County		Permit
4)	HIC Per	mit No	LIICO	D04301	AD.		

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,

5) Surface Ow	mer(S) To Be Served	7) (a) Coal Op	perator
(a) Name	Jerry & Sharon Wade	Name	N/A
Address	36 Wade Road	Address	
	Yawkey, WV 25573		
(b) Name		7) (b) Coal Ov	wner(S) With Declaration Of Record
Address		Name	N/A
		Address	
(c) Name		Name	4
Address		Address	
Address	-	Address	÷
6) Inspector	Ralph Triplett	7) (c) Coal Le	essee with Declaration Of Record
Address	5539 McClellan Hwy	Name	N/A
	Branchland, WV 25506	Address	
Telephone	304-389-0350		
(1) The Appl parties in (2) The plat (3) The Consplan for e	lication For A Liquid Injection or V volved in the drilling or other work; surveyor's map) showing the well lo	Waste Disposal Well V peation on Form WW-6 form WW-9 (unless the reclamation for the site	e well work is only to plug a well), which sets out the
APPLICATION	N WHICH ARE SUMMARIZED I ATION [(FORM WW-3(B)] DESIG	N THE "INSTRUCTION	S THAT YOU HAVE RIGHTS REGARDING THE IONS" ON THE REVERSE SIDE OF THE COPY OF HOWEVER YOU ARE NOT REQUIRED TO TAKE
Take notice tha	at under Chapter 22-6 of the West V	'irginia Code, the unde	ersigned well operator proposes to file or has filed this

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to a well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of the mailing or delivery to the Chief.

The person signing this document shall m	nake the followin	g certification:	
"I certify under penalty of law that I have personally examined and	Well Operator	HG Energy, LLC	
am familiar with the information submitted in this document and all	Address	5260 Dupont Road	
attachments and that, based on my inquiry of those individuals		Parkersburg, WV 26101	
immediately responsible for obtaining the information, I believe that	By:	Diane White	
the information is true, accurate and complete. I am aware that there	Its:	Agent	
are significant penalties for submitting false information, including the possibility of fine and imprisonment. RECE	EIVED Disignation as	Diane White	

JUN 0 4 2015

WW-2B	1
(5-12)	

Well No.	Austin	Griffith	129	_
			_	

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 Lab		
		Sturm Environmental Lab		
Well Operator	HG Energy, L	LC		
Address				
	Parkersburg,	WV 26101		
Telephone	304-420-1119	<u> </u>		

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 -

RECEIVED
Office of Oil and Gas

JUNE 4 3

Wiv Department of Environmental Protection

Austin Griffith 129

ge 2 - Continued

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.

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.

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

- * Charles Harless
 P. O. Box 10211
 Van Nuys, CA 91410
- Jerry Wade
 36 Wade Road
 Yawkey, WV 25573
- Roger McCallister
 4930 Midway Road
 Yawkey, WV 25573

- Steven Wilson75 Wade RoadYawkey, WV
- Larry Sutphin
 4956 Midway Road
 Yawkey, WV 25573
- Judy Miller Smith
 25 Pond Gap Road
 Yawkey, WV 25573

RECEIVED
Office of Oil and Gas

JUN 0 4 0015

WV Department of Environmental Protection WW-9 Rev. 5/10

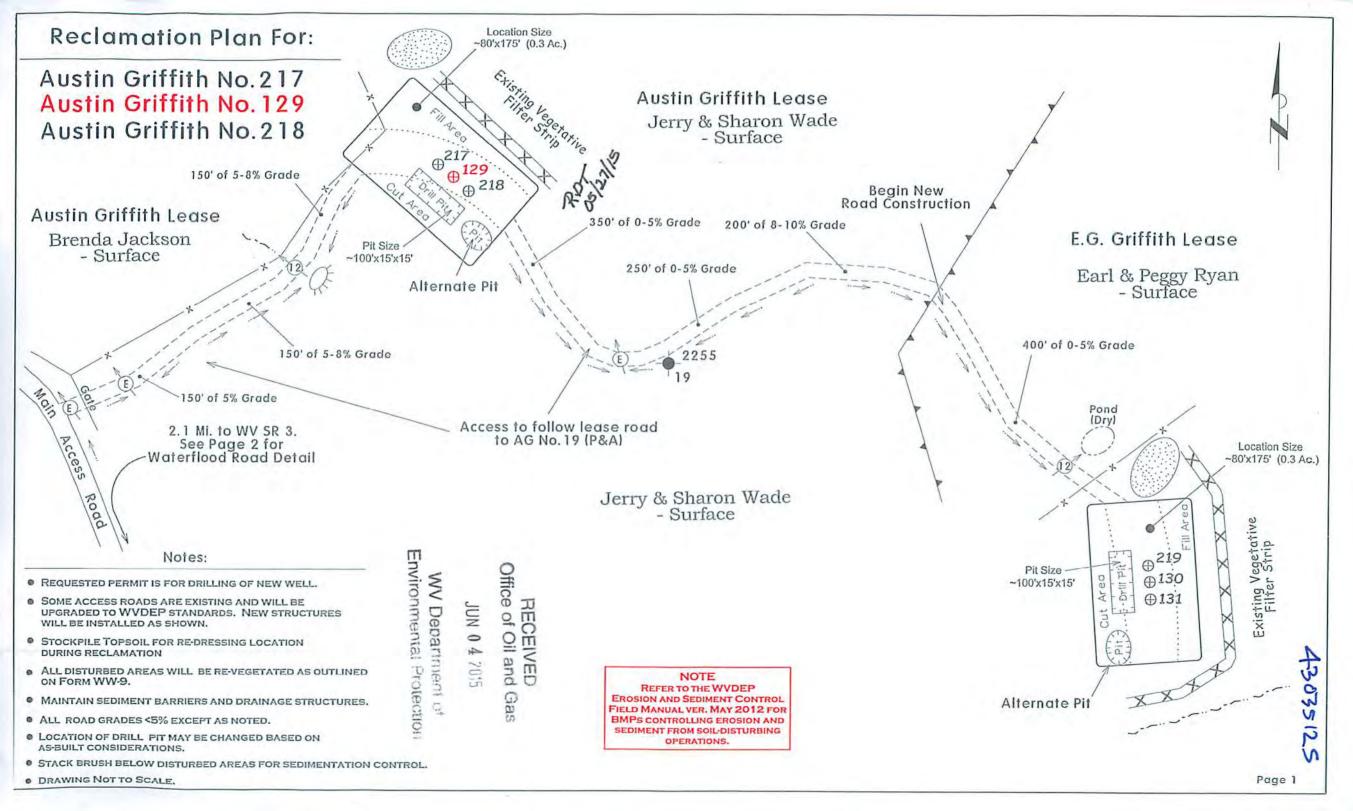
	Page 333	of	
API Number 47 -			
Operator's Well N	Jo. Austin Griffith 1	29	

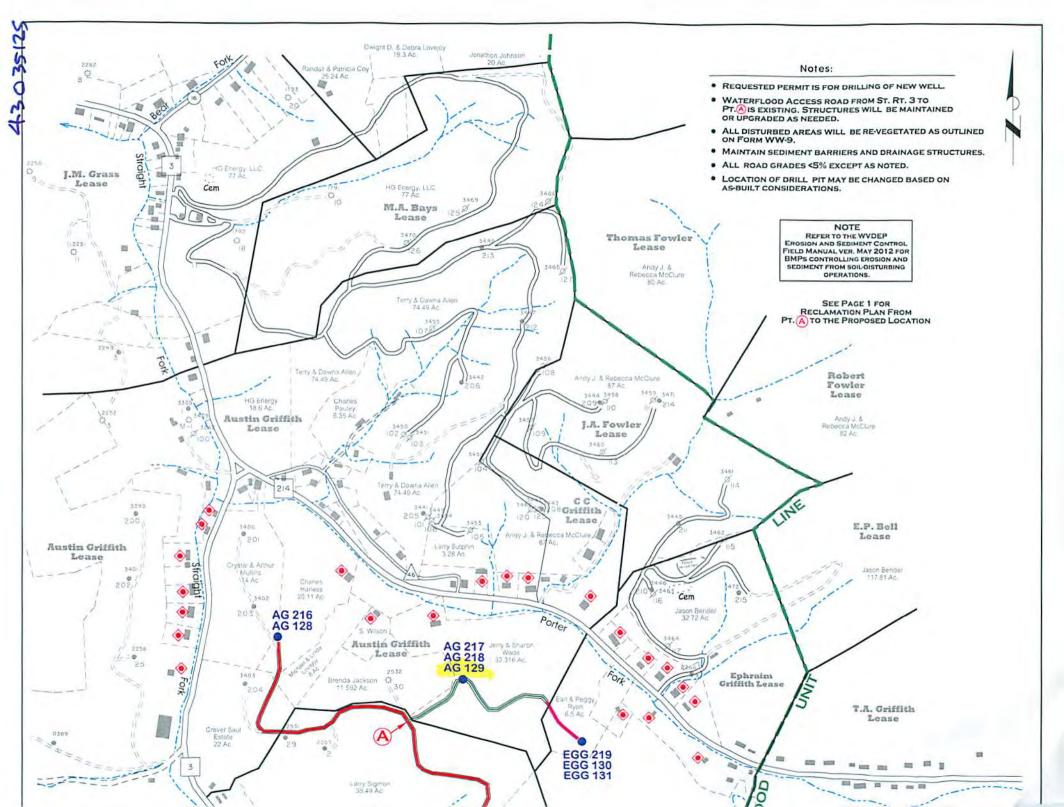
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

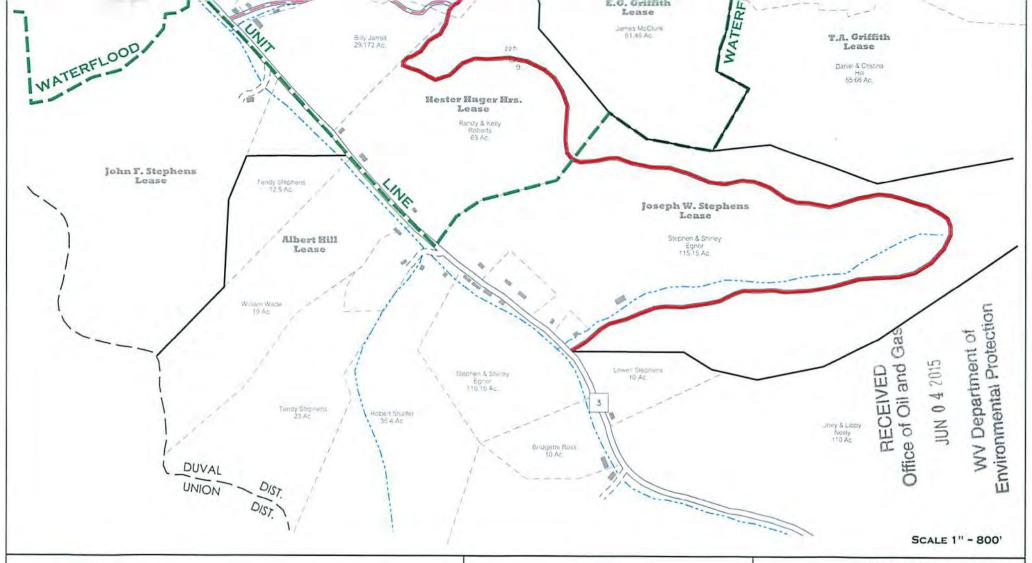
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name HG Energy, LLC		OP Code 494497948			
Watershed Porter Fork	Qua	Quadrangle Griffithsville 7.5'			
Elevation 895'	County Lincoln	District Duval			
Description of anticipated Pit Was	te: Fluids encountered while drilling	subject well.	_		
		proposed well work? Yes No X			
	e pit? Yes If so, wh				
X Off Site	pplication	disposal location)	_ _		
-If oil based, what type? Additives to be used? Water, Soa Will closed loop system be used? Drill cuttings disposal method? Le -If left in pit and plan to s	p, KCl No eave in pit, landfill, removed offsite, solidify what medium will be used?				
on August 1, 2005, by the Office of provisions of the permit are enfor law or regulation can lead to enfor I certify under penalty of application form and all attachmobtaining the information, I beliepenalties for submitting false information (Company Official Signature	of Oil and Gas of the West Virginia I ceable by law. Violations of any te cement action. If law that I have personally examinents thereto and that, based on move that the information is true, accommation, including the possibility of the po	ons of the GENERAL WATER POLLUTION PERM Department of Environmental Protection. I understate the perm or condition of the general permit and/or other sined and am familiar with the information submitted inquiry of those individuals immediately respondentate, and complete. I am aware that there are signed or imprisonment. RECEIVED Office of Oil and	nd that the applicable ed on this nsible for significant		
Company Official (Typed Name)	Diane vynite	JUN 0 4 2015			
Company Official Title Agent		WV Departmen Environmentai Pro			
Subscribed and sworn before me t	his 26 day of May	20 <u>15</u>			
X 9 Diami	<i>,</i> , , ,				

	LEGEND				
Property Boundary	Diversion (Lilling)	· · · · · · · · · · · · · · · · · · ·			
Read = = = = = = = =	□ Spring ○ → → → → → → → → → → → → → → → →	Spring O			
Existing Fence — X — X — X	11.	Wet Spot B Drain Pipe with size in inches Waterway Waterway			
Planned Fence///	Drain Pipe with size in inc				
Stream	→ d Waterway ← ←				
Table 1 (April 19)	Cross Drain				
Rock 835885	Artificial Filter Strip	CXXXXXXXXXXXXXXX			
North N	Pit: cut walls	3			
Buildings	Pit: compacted fill walls				
Water wells	Area for Land Application	of Pit Waste			
Drill site					
Proposed Revegetation Treatment: Acres Distu	thed 1.00 acres	on pH			
	o correct to pH 6.5	<i></i>			
	500 lbs/acre (500 lbs minimum)				
Fertilizer (10-20-20 or equivalent)					
Mulch_ Straw	2 Tons/acre				
	Seed Mixtures				
Area I		Area II			
Seed Type lbs/acre	Seed Type	lbs/acre			
Tall Fescue 40	Tall Fescue	40			
Ladino Clover 5	Ladino Clover	5			
Attach: Drawing(s) of road, location,pit and proposed an Photocopied section of involved 7.5' topographi		RECEIVED Office of Oil and Gas			
Plan Approved by: Ralph D. Thip	SH)	JUN 0 4 2015			
1 /		WV Department of			
Comments:	E	Environmental Protection			
Title: District Inspector	Date: May 27,	2015			









GRIIFTHSVILLE WATERFLOOD

Lincoln County, W.Va.

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

PAGE 2

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 **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. AG 216

LOCATION FOR PROPOSED WELLS

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

MARCH 3, 2015

