

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

November 20, 2015

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-4303551, 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.

Operator's Well No: HAGER HEIRS 253

Farm Name: RANDY & KELLY ROBERTS & B.

API Well Number: 47-4303551
Permit Type: Vertical Well
Date Issued: 11/20/2015

Date Issued: 11/20/2015

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, drilling ceased, completion of any other permitted well work and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

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

1) Well Operator	r: HG E	nergy, l	LC	494497948	Lincoln	Duval	Griffithsville 7.5
,				Operator ID	County	District	Quadrangle
2) Operator's W	ell Numbe	er: Hag	er Heirs 253		3) Elevation: _	938'	_
4) Well Type: (a) Oil <u>X</u>	or Ga	s				
(b) If Gas:	Produ	ction/ Und	erground Sto	rage		
		Deep	/ Sł	nallow	<u>< </u>		
5) Proposed Tai 6) Proposed Toi 7) Approximate 8) Approximate	tal Depth: fresh wat	er strata	Berea Feet F depths: 318'	formation at F	Proposed Targ	get Depth:	Shale
9) Approximate	coal sear	n depths	s: <u>368'</u>				-
			al, Karst, other):	NA			
					No		
			s tributary to acti				
12) Describe pro Orill and stimul	posed wel	uction v	nd fracturing methon vell in the Bere	ea. Stimula	tion will be	small hydr	aulic fracture.
13)		CA	ASING AND TUE	SING PROGR	EAM		
•	PECIFIC	****		FOOTAGE		CEM	ENT
	<u>Size</u>	<u>Grade</u>	Weight per ft	For Drilling	Left in Well	Fill -up (C	u. Ft.)
Conductor						ROT 10	127/15
Fresh Water	7"	LS	17#	468'	468'	Cement 1	o Surfac
Coal							
Intermediate							
Production	4 1/2"	J-55	10.5#	3115'	3115'	150	sks
Tubing					F	ECEIVED	
Liners					Office	of Oil and	Gas
Packers: Kind	d :				N	OV 0 4 2015	
Size	es:				WV D	epartmen	120/2015
Dep	ths Set				Environm	ental Prot	ection

WW-2	2A
(Rev.	6-14)

1). Date:

October 13, 2015

2.) Operator's Well Number

Hager Heirs 253

State

County

Permit

3.) API Well No.:

47-

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

4)		ner(s) to be served:	5) (a) Coal Ope	
	(a) Name	Randy & Kelly Roberts	Name	NA
	Address	4597 Straight Fork	Address	
	4-1-4-1	Yawkey, WV 25573		O-12-12-2-1
	(b) Name	Billy Jarrell		wner(s) with Declaration
	Address	4700 Straight Fork	Name	NA
		Yawkey, WV 25573	Address	
	(c) Name		Name	
	Address		Address	
	nspector	Ralph Triplett		ssee with Declaration
	Address	5539 McClellan Highway	Name	NA
		Branchland, WV 25521	Address	
	Telephone	304-389-0350		
		TO THE PERSONS NA	AMED ABOVE TA	AKE NOTICE THAT:
	Included is th	e lease or leases or other continuing	g contract or contra	acts by which I hold the right to extract oil and gas
OR				
	Included is th	e information required by Chapter 2	2, Article 6, Section	n 8(d) of the Code of West Virginia (see page 2)
				nia Code I have served copies of this notice and
app	lication, a loca			igh on the above named parties by:
		Personal Service (Affidavit atta		
		Certified Mail (Postmarked pos		d)
		Publication (Notice of Publication		
1			id 35 CSR 4, and	agree to the terms and conditions of any permit
ISSU	ed under this		accellu evenined	and am familiar with the information submitted as
thie	application for	inder penalty of law that I have per	sonally examined a	and am familiar with the information submitted on y of those individuals immediately responsible for
		mation, I believe that the informatio		
0010				se information, including the possibility of fine and
imp	isonment.		3	3 Paraman,
1	WEST	OTARY PUBLIC Well Operator	r HG Energy, L	LC
13	A 3	OF WEST VIRGINIA By	: Diane White	Diane White
		Its	: Agent	PEGS Gigal selfer vicin t a re princi pare.
11		© Dupont Road © West Virginia 26101 Address	5260 Dupont	
£	Man	on Expires Oct. 4, 2016		WV 26101 Office of Oil and Gas
		Telephone		
		Email		
Sub	scribed and s	worn before me this 13 th day o	of October	, 2015
		Shani C	Dula.	Notary Public Notary Public
My	Commission E	expires (A. 1 3011a		Environmental Protection
	nd Gas Privacy I		J	
The C	Office of Oil and	Gas processes your personal information	, such as name, addre	ess and phone number, as a part of our regulatory duties.

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 normal 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

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.	Accor	oto
Granior.	Lessor.	eic.

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 () applicas, or nullifies the need for other permits/approvals that may be necessary and further at the application permits/approvals should be ac quired from the appropriate authority before the affected activity is initiated.

Well Operator: By:Its:

Diane White
HG Energy, LLC
Diane White, Agent
WV Department of
Environmental Protection

Operator's Well No.	Hager Heirs 253
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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
Hager Heirs	South Penn Oil Company	1/8	42/77

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.

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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

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Office of Oil and Gas

NOV **0 4** 2015

Well Operator:	HG Energy, LLC	WV Department of		
Ву:	Diane C. White	Diane Enthinanmental Protections		
Its:	Accountant	11/20/2010		

WW-2B1 (5-12) Well No. Hager Heirs 253

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 Services
Sturm Environmental Services

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 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 -

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Office of Oil and Gas

NOV **0 4** 2015

WV Department of Environmental Protection 11/20/2015

Hager Heirs 253 WW-2B1

West Virginia Department of Environmental Protection Office of Oil and Gas

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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:

- Randy & Kelly Roberts 4597 Straight Fork Yawkey, WV 25573
- Emmitt Life Breedlove 4689 Straight Fork Yawkey, WV 25573
- Brenda Fisher & Judy Thompson 71 Ranger Lane Charleston, WV 25309
- Deveta Wade 4633 Straight Fork Yawkey, WV 25573

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NOV **0 4** 2015

WV Department of Environmental Protection 2015

API	Number	47 -	
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Operator's Well No. Hager Heirs 253

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

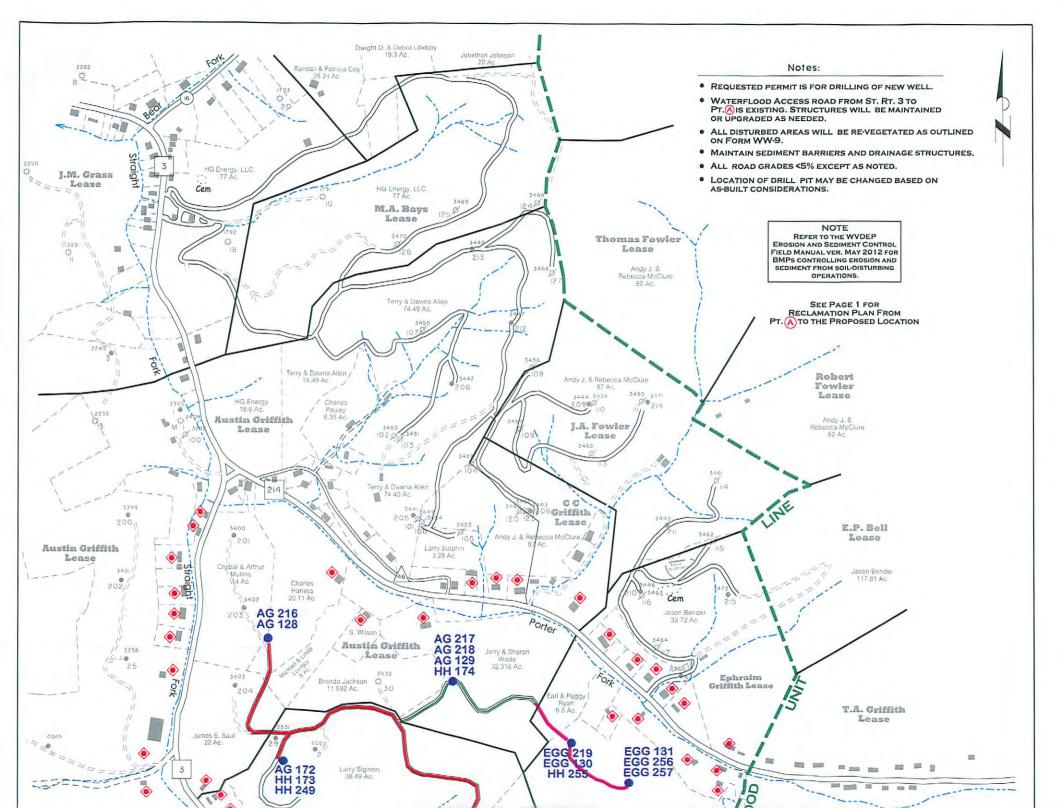
FLUIDS/ CUTTINGS I	DISPOSAL & RECLAMATION PLAN
Operator Name HG Energy, LLC	OP Code 494497948
Watershed (HUC 10) Straight Fork	Quadrangle Griffithsville 7.5'
Do you anticipate using more than 5,000 bbls of water to c Will a pit be used? Yes No No	complete the proposed well work? Yes No
If so, please describe anticipated pit waste: Flui	ds encountered while drilling subject well
Will a synthetic liner be used in the pit? Yes	
Proposed Disposal Method For Treated Pit Waste	s:
Land Application	
	ermit Number)
Reuse (at API Number)
Off Site Disposal (Supply form Other (Explain	WW-9 for disposal location)
Will closed loop system be used? If so, describe: No	
Drilling medium anticipated for this well (vertical and hori	izontal)? Air, freshwater, oil based, etc. Air, Fresh Water
-If oil based, what type? Synthetic, petroleum, etc	c. NA
Additives to be used in drilling medium? Water, soap, KC	CI CI
Drill cuttings disposal method? Leave in pit, landfill, remo	oved offsite, etc. Leave in pit
	Il be used? (cement, lime, sawdust) Native soil, cement, lime
-Landfill or offsite name/permit number?	
	and Gas of any load of drill cuttings or associated waste rejected at any rided within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the West provisions of the permit are enforceable by law. Violatio law or regulation can lead to enforcement action. I certify under penalty of law that I have person application form and all attachments thereto and that, I	and conditions of the GENERAL WATER POLLUTION PERMIT issued st Virginia Department of Environmental Protection. I understand that the ns of any term or condition of the general permit and/or other applicable nally examined and am familiar with the information submitted on this based on my inquiry of those individuals immediately responsible for is true, accurate, and complete. I am aware that there are significant assibility of fine or imprisonment
Company Official Signature Diane White	OFFICIAL SEAL NOTARY PUBLIC
Company Official (Typed Name) Diane White	S. DIANNE
Company Official Title Agent	Pa RECEIVED 36. Office of Oil and Gas:
Subscribed and sworn before me this 13 th day of	of October , 20 15 NOV 0 4 2015
Stringtulony	Notary MbVc Department of
My commission expires Oct. 4 2005	Environmental Protection

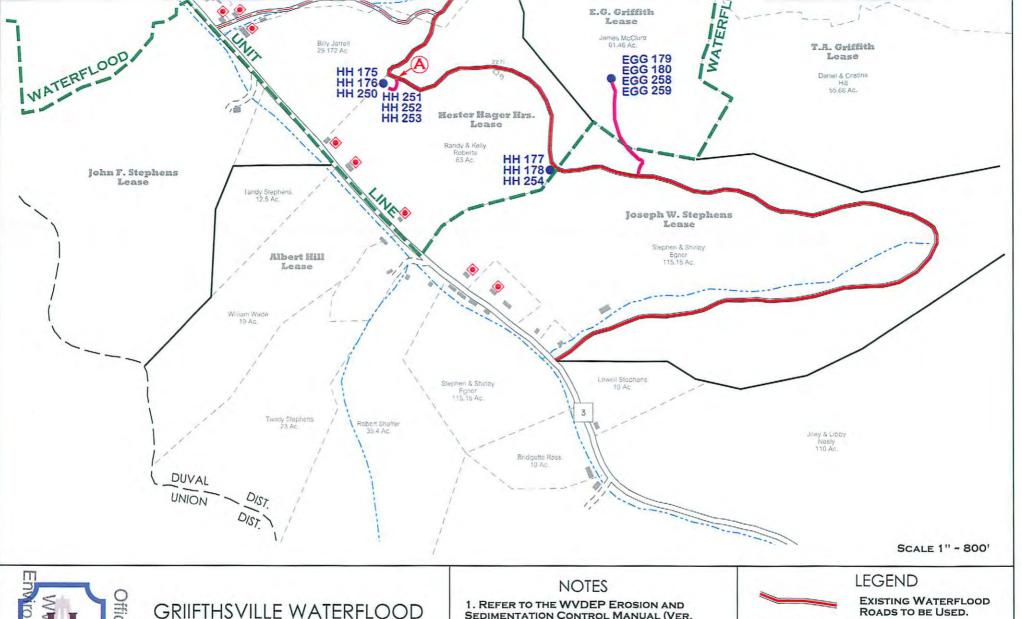
HG Energy, LLC

	430	35	5	1
Operator's Well No. Hager He	eirs 25	3		
	 _	=		
Prevegetation pH		_		

roposed Revegetation Treatn	nent: Acres Disturbed	1.1 acres	Prevegeta	ation pH
	Tons/acre or to cor			
Fertilizer type10-	20-20			
Fertilizer amount_		500 _{lbs/ac}	re	
Mulch Straw	2	Tons/acre		
Mulch				
		Seed M	ixtures	
Tei	mporary			Permanent
Seed Type	lbs/acre		Seed Type	
Tall Fescue	40		Tall Fescue	40
_adino Clover	5		Ladino Clover	5
* Sediment Contro	ol Will Be in Pis	 ace At All	Times **	
Photocopied section of involution of involut				
Title: District Sr	smetrs)		Date: October	27, 20/5
Field Reviewed?	Yes) No	RECEIVED Office of Oil and Gas
				NOV A 4 2045

NOV **0 4** 2015







Lincoln County, W.Va.

RECLAMATION PLAN SHOWING ROAD SYSTEMS TO BE USED FOR 2015-16 DRILLING PROGRAM (SOUTH)

- 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 ATO 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.

OTHER EXISTING MAIN WATERFLOOD ROADS (Possible Access).

EXISTING LEASE OR FARM ROADS TO BE UPGRADED.

NEW ROADS TO BE

CONSTRUCTED.

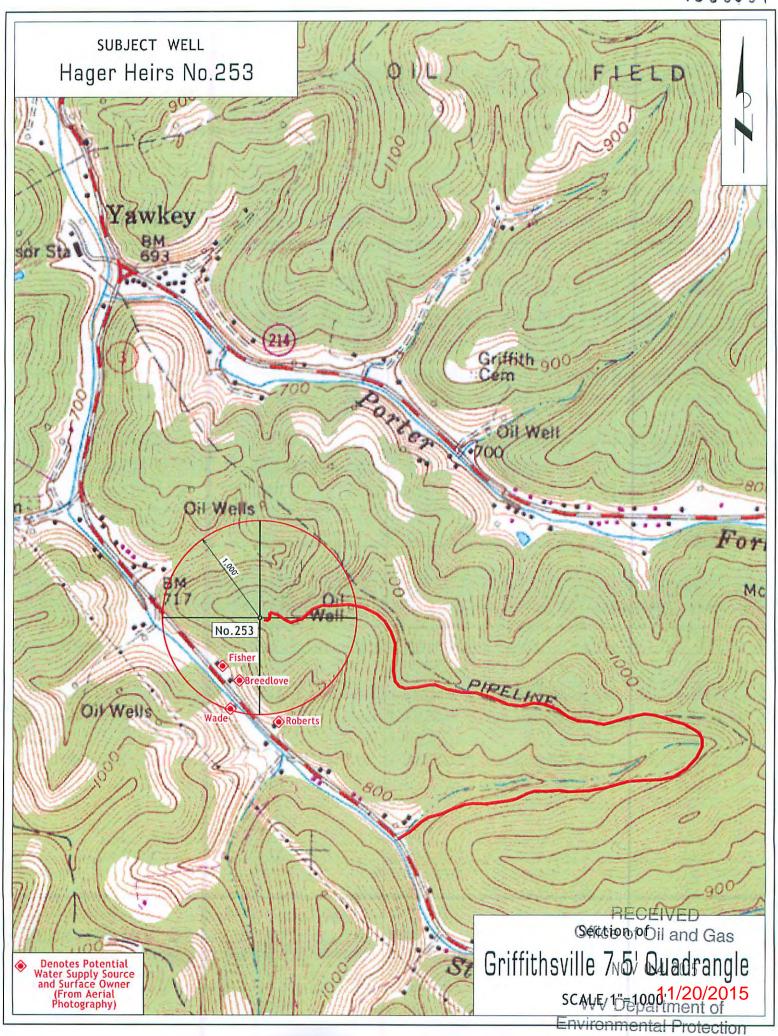
AG 172

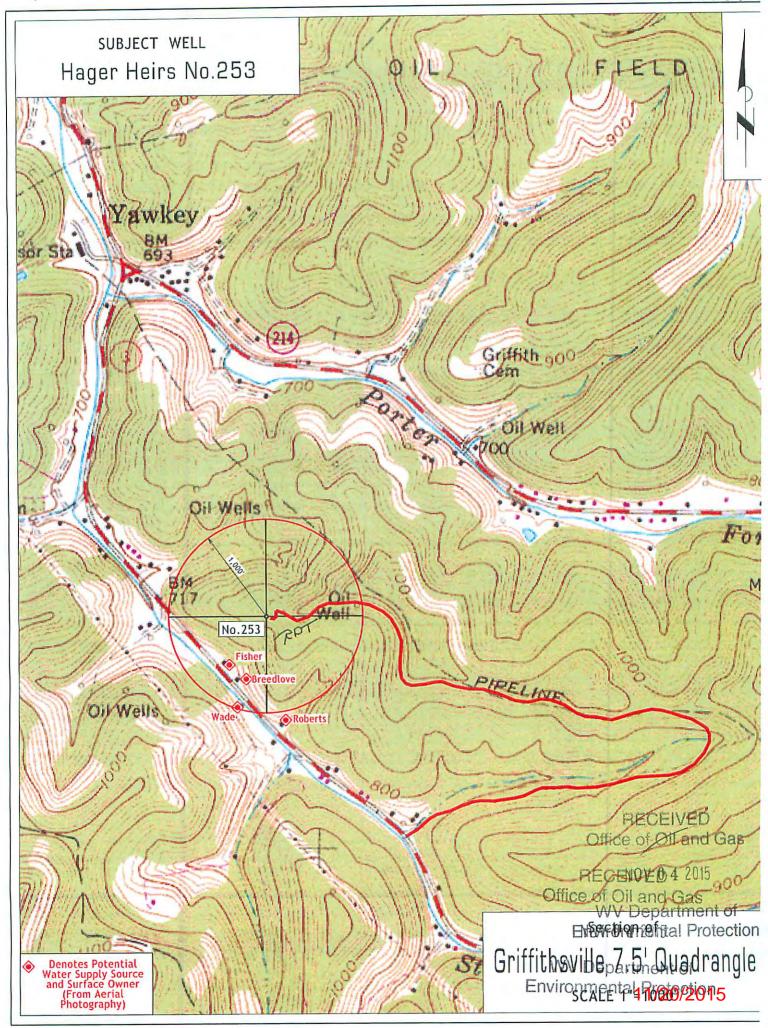
LOCATION FOR PROPOSED WELLS

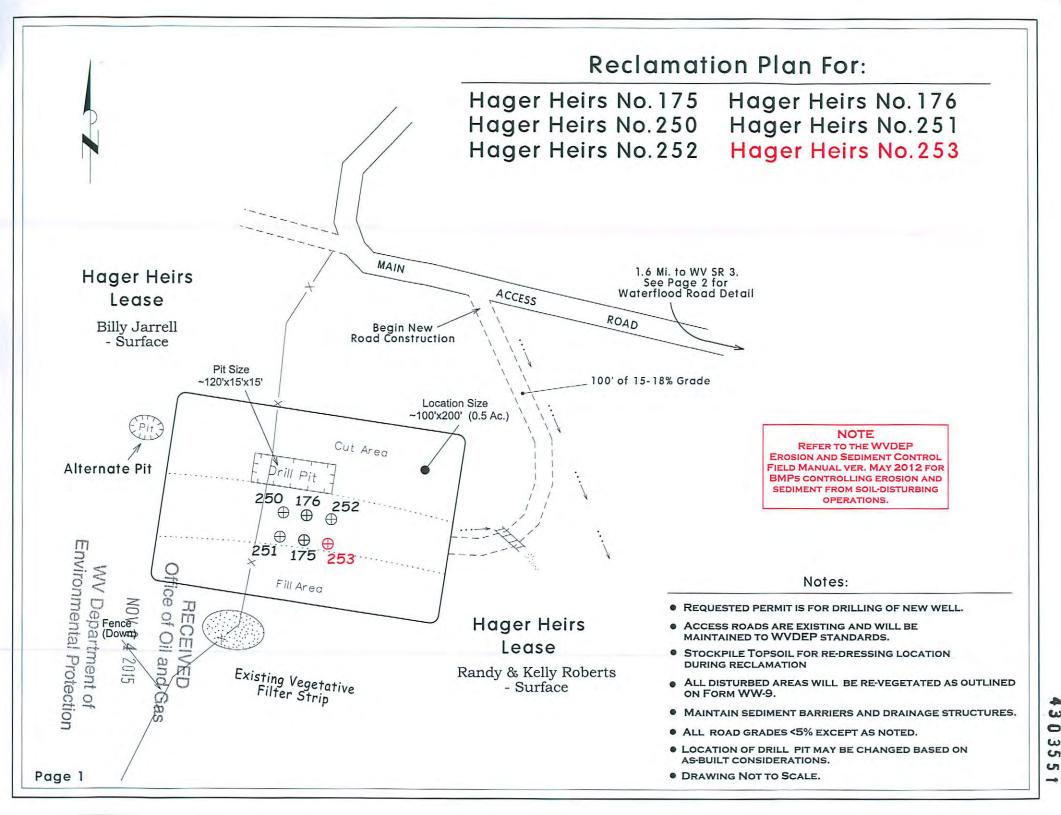
POTENTIAL WATER SUPPLY SOURCE TO BE SAMPLED (LOC. APPROX.)

SEPTEMBER 16, 2015

PAGE 2







DRAWING NOT TO SCALE.

