

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Tuesday, March 5, 2019 WELL WORK PERMIT Vertical / New Drill

HG ENERGY, LLC 5260 DUPONT ROAD

PARKERSBURG, WV 26101

Permit approval for HAGER HEIRS 252 Re:

47-043-03594-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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) 926-0450.

James A. Martin

Operator's Well Number: HAGER HEIRS 252

Farm Name: RANDY & KELLY ROBERTS

U.S. WELL NUMBER: 47-043-03594-00-00

Vertical New Drill Date Issued: 3/5/2019

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.

WW - 2B (Rev. 8/10)

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

) Well Operate	or: HGE	nergy, LL	.C	494497948	Lincoln	Duval	Griffithsville 7.5'
	-			Operator ID	County	District	Quadrangle
) Operator's V	Vell Numb	er:_Hage	r Heirs 252		3) Elevation:	940'	CILIT
) Well Type: (a) Oil_X_	or Ga	IS				CLUT 3981
(b) If Gas:	Produ	ction/ Un	derground Sto	rage	_	\$ 1020
			o/ S				
) Proposed Ta) Proposed To) Approximate) Approximate	e fresh wa	ter strata	depths: 300'		Proposed Tar Proposed Tota	al Depth: Berea	
) Approximate	e coal sea	m depths	s: <u>420'</u>				
0) Approxima	te void de	pths,(coa	al, Karst, other):	NA			
			s tributary to ac	A CONTRACTOR	IA		-
1) Does land	Comain Co	Jai Scaiii	s tributary to ac	uve miller			
2) Describe pro	oposed we	ll work ar	nd fracturing meth	nods in detail (a	attach additiona	al sheets if nee	ded)
rill and stimulate	production	well in the	Berea. Stimulatio	n will be small h	ydraulic fracture.		
3)		CI	ASING AND TU	PING PROCE	A B A		
	SPECIFIC			FOOTAGE	INTERVALS	S CEMEN	IT -
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu.	
Conductor							Q
Fresh Water	7"	LS	17#	475'	475'	CTS	0
Coal					1		
Intermediate							
Production	4 1/2"	J-55	10.5#	2640'	2640'	150 sk	(S
Tubing		7 1 1					
Liners							
Packers: Kin	d:						RECEIVED Office of Oil and
Siz	es:						
Det							IAN 1 8 21
50	oths Set						JAN 18 20 WV Departmental Pro

WW-2A (Rev. 6-14)

3.) API Well No.: 47- Lincoln

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

4) Surface Ov	vner(s) to be served:		5) (a) Coal Op	perator		
(a) Name	Randy & Kelly R		Name	NA		
Address	4597 Straight Fo		Address	INA		
ridarcoo	Yawkev. WV 25		Addiess	-		
/h) Name		5/3	- //->		D. L. C.	
(b) Name	Billy Jarrell	1	_	Owner(s) with	Declaration	1
Address	4700 Straight Fo		_ Name	NA		
	Yawkev, WV 25	573	Address	1		
(c) Name			Name	-		
Address			Address			
6) Inspector	Jeffery L Smith		- (c) Coal I	essee with D	and a ration	
Address	5369 Big Tyler R	lood	Name		eciai allori	
Address				NA		
+Crespecte	Cross Lanes, W	V 25313	_ Address	_		
Telephone	681-313-6743				A CHARLES	
Province of the	TOTHER	PERSONS NAI	MED ABOVE T	AKE NOTIC	E THAT:	
Included is t	he lease or leases or o	other continuing	contract or conti	racts by which	I hold the rig	ht to extract oil and gas
<u>OR</u>						
Included is t	he information require	d by Chapter 22	, Article 6, Section	on 8(d) of the	Code of West	t Virginia (see page 2)
I certify	that as required unde	r Chapter 22-6	of the West Virg	ginia Code I h	ave served o	copies of this notice and
application, a loc	ation plat, and accom	panying docume	ents pages 1 thro	ough on th	ne above nam	ied parties by:
	Personal Service	e (Affidavit attac	thed)			C. C. Warren and C.
X		ostmarked post		ed)		
-		tice of Publicatio				
I have re				I agree to th	e terms and	conditions of any permit
issued under this	application.	improved to divide	do out i, and	i agree to th	io territo aria	conditions of any perimi
		hat I have ners	onally examined	and am famil	liar with the i	nformation submitted on
this application f	orm and all attachme	nts and that ha	sed on my inqui	ry of those in	dividuale imm	nediately responsible for
obtaining the info	ormation, I believe that	t the information	is true accurate	and complete	aividuais iiiii	rediately responsible for
I am awa	are that there are sign	ificant penalties	for submitting for	lee informatio	n including t	he possibility of fine and
imprisonment.	are trial triole are sign	meant penalties	ior submitting to	ise illiointatio	ii, iiiciddiiig t	the possibility of fine and
impridominoni.	OFFICIAL OFFI	Well Operator	HG Energy.	11.0		
WEST	OFFICIAL SEAL NOTARY PUBLIC		Diane White		White	
	TE OF WEST VIRGINIA		Accountant	Clave	unue	
JE/	NINE M. GAUTHIER HG Energy, LLC		5260 Dupon	Dood		
Parker	5260 Dupont Road sburg, West Virginia 26101	Addiess.	Parkersburg			
	nission Expires Aug. 30, 2022	Tolophono	204 420 444	0		
2-4-2-2-2-2-2-2-1-7-1	out of the second of the second		304-420-111			RECEIVED
Subscribed and	awarn bafara ma this	21st days	dwhite@hae			Office of Oil and Gas
oupscribed and	sworn before me this	day of	December		2018	14 A) T O 2010
panne	M. Jauth	tes		Nota	ary Public	JAN 1 8 2019
My Commission	Expires Oluva	ust 30	2022	7-11		WV Department of
Oil and Gas Privacy	Notice		1			Environmental Protection
The Office of Oil and	Gas processes your per	sonal information.	such as name, add	ress and phone	number, as a pa	art 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

WW-2A1 (Rev. 1/11)

Operator's Well Number Hager Heirs 252

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, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be ac quired from the appr opriate aut hority before the affected activity is initiated.

Well Operator: By: Its:

Diane White Accountant

RECEIVED Office of Oil and Gas

HG Energy, LLC

Diane White, Accountant

JAN 18 2019

WV Department of Environmental Protection

03/08/2019

leirs 252
L

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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 drilling operations for the subject well in the location shown on the plat, including the use of access roads, pipelines and utilities.

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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

JAN 18 2019

WV Department of Environmental Protection

Well Operator: I	HG Energy, LL
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By: Diane C. White Diane White Its: Accountant

WW-2B1 (5-12)

Well	No.	Hager	Heirs	252
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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

Sturm Environmental Labs

Sampling Contractor

Sturm Environment Labs

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*

Topa MAP

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JAN 18 2019

WV Department of Environmental Protection West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

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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

Tandy & Maybell Stephens 4640 Straight Fork Yawkey, WV 25573

William & Devela Wade 4633 Straight Fork Yawkey, WV 25573

Brenda & Judy Fisher 39 Laramie Drive Alkol, WV 25501

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Office of Oil and Gas

WW-9 (5/16)

API Number 47 -		
Operator's Well N	lo. Hager Heirs	252

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

	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 co Will a pit be used? Yes V No	
If so, please describe anticipated pit waste: Fluid	ds encountered while drilling the production well
Will a synthetic liner be used in the pit? Yes	
Proposed Disposal Method For Treated Pit Waster	es:
Land Application (if selected pro	rovide a completed form WW-9-GPP)
Underground Injection (UIC Pe	ermit Number)
Reuse (at API Number Off Site Disposal (Supply form	WW 0 for disposal leastion)
Other (Explain_	w w -9 for disposariocation)
Will closed loop system be used? If so, describe: No	
Drilling medium anticipated for this well (vertical and horiz	izontal)? Air, freshwater, oil based, etc. Air, Freshwater
-If oil based, what type? Synthetic, petroleum, etc.	c. NA
Additives to be used in drilling medium? Water, KCl, Soap	
Drill cuttings disposal method? Leave in pit, landfill, remo-	oved offsite, etc Remove offsite
-If left in pit and plan to solidify what medium wil	Il be used? (cement, lime, sawdust) NA
-Landfill or offsite name/permit number? To Be De	etermined Upon Approval of the Permit, (DEP approved landfills only)
	and Gas of any load of drill cuttings or associated waste rejected at any vided within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Gas of the West provisions of the permit are enforceable by law. Violations 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, based	and conditions of the GENERAL WATER POLLUTION PERMIT issued at Virginia Department of Environmental Protection. I understand that the sof any term or condition of the general permit and/or other applicable law enally examined and am familiar with the information submitted on this don my inquiry of those individuals immediately responsible for obtaining curate, and complete. I am aware that there are significant penalties for me or imprisonment.
Company Official (Typed Name) Diane White	
Company Official Title Accountant	RECEIVED Office of Oil and G
	JAN- 18 2019
Subscribed and swom before me this 31st day of	of December , 20 18 WV Department of
General M. Southon	Notary Public OFFICIAL SEAL
My commission expires Queguet 30, 2	NOTARY PUBLIC STATE OF WEST VIRGINIA JEANINE M. GAUTHIER HG Energy, LLC 5260 Dupont Road Parkersburg, West Virginia 26101 My Commission Expires Aug. 30, 2022

47-043-03594

03/08/2019

1 OMIL WWW.		Operator's W	rell No. Hager Heirs 252
Proposed Revegetation Treatn	nent: Acres Disturbed 0.7 a	ecres Preveg etation p	Н
Lime	3 Tons/acre or to correct to p	_{pH} _6.5	
Fertilizer type 10-2	20-20	<u>1</u>	
Fertilizer amount	500	_lbs/acre	
Mulch Straw	2	ns/acre	
	<u>s</u>	eed Mixtures	
Ten	iporary	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5
provided). If water from the p (L, W), and area in acres, of the Photocopied section of involv	it will be land applied, provide ne land application area.	olication (unless engineered plans incluse water volume, include dimensions (L,	W,D) of the pit, and dimension
Comments: All	sediment cont	rol to be remove	ed prior to
Title: 0:/ + 6	is Inspector	Date: 12/31/2018	<u> </u>
Field Reviewed? ()Yes ()No	
			RECEIVED Office of Oil and G

WW-9- GPP Rev. 5/16

Page	of 2
API Number 47 -	- 2018
Operator's Well No. Hager	Heirs 252

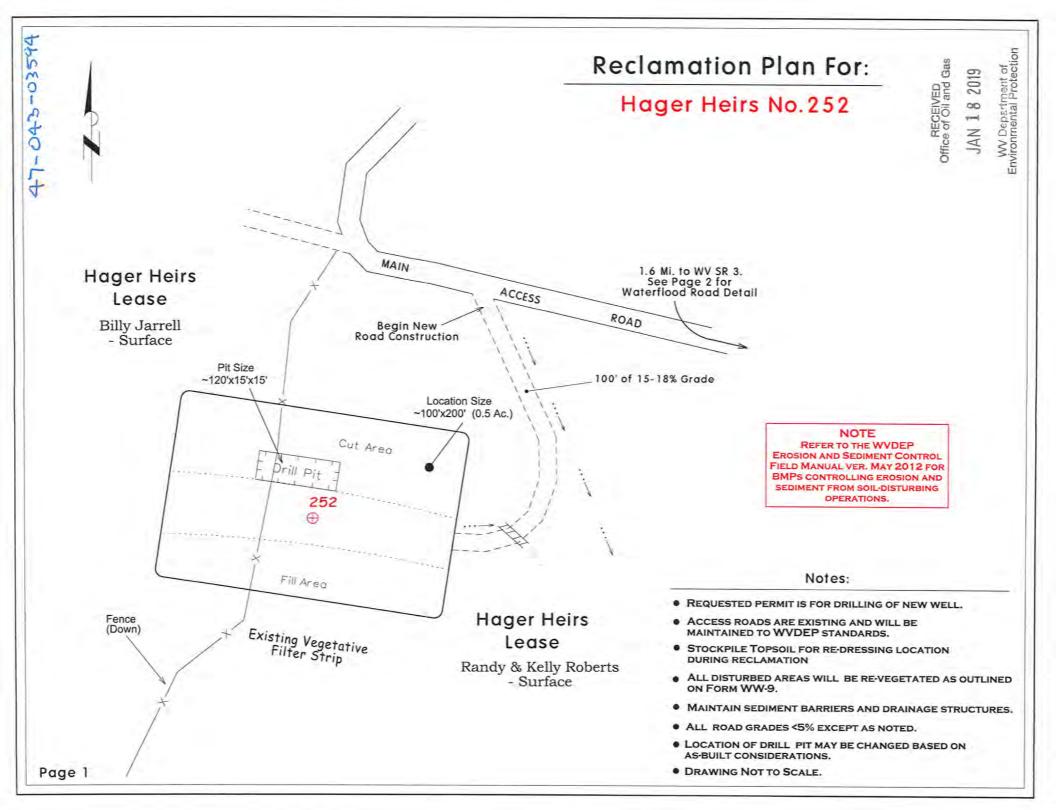
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS GROUNDWATER PROTECTION PLAN

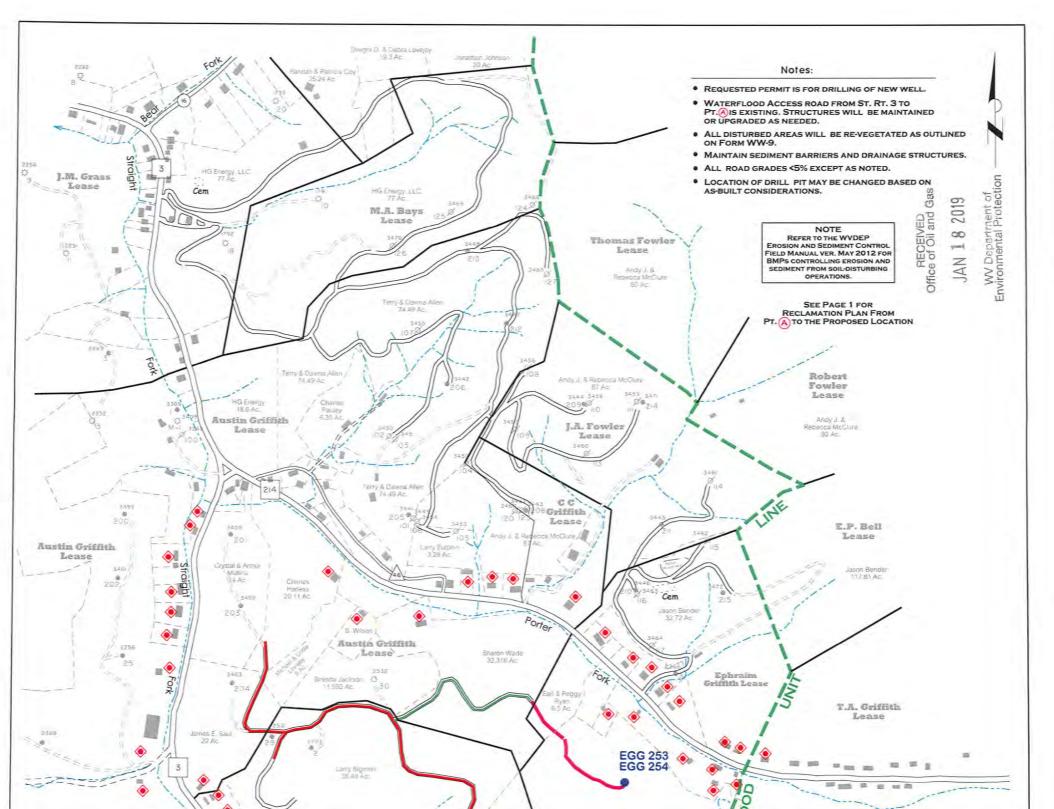
/atershed (HUC 10); Straight Fork	Quad: Griffithsville 7.5'
ırm Name: Hager Heirs	
List the procedures used for the treatment and dischar groundwater.	rge of fluids. Include a list of all operations that could contaminate the
NA	
Describe procedures and equipment used to protect gro	oundwater quality from the list of potential contaminant sources above.
NA	
List the closest water body, distance to closest water discharge area.	r body, and distance from closest Well Head Protection Area to the
NA	
Summarize all activities at your facility that are already	y regulated for groundwater protection.
NA	

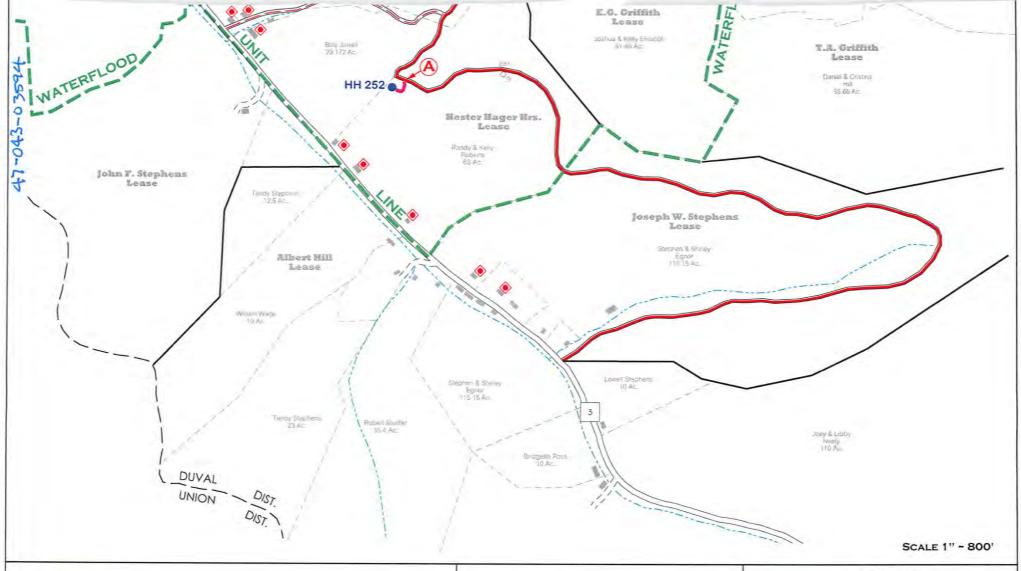
5. Discuss any existing groundwater quality data for your facility or an adjacent property.

03/08/2019

/W-9- GPP	Page 2 012
ev. 5/16	API Number 47 Operator's Well No. Hager Heirs 252
NA	
Provide a statement that no waste material will be used	d for deicing or fill material on the property.
NA	
Describe the groundwater protection instruction and provide direction on how to prevent groundwater cont	training to be provided to the employees. Job procedures shall tamination.
NA	
Provide provisions and frequency for inspections of al	Il CPP elements and equipment.
NA	
ignature: Diane White	
Date: 12/31/2018	RECEIVED Office of Oil and









GRIIFTHSVILLE WATERFLOOD

Lincoln County, W.Va.

RECLAMATION PLAN SHOWING ROAD SYSTEMS TO BE USED FOR 2019 DRILLING PROGRAM (SOUTH)

DECEMBER 5, 2018 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.

HH 252

LOCATION FOR PROPOSED WELLS

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

47-043-03594

