

west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Monday, November 4, 2024 WELL WORK PERMIT Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC 5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re:

Permit approval for Van Wie 1221 S-8H

47-041-05767-00-00

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.

Operator's Well Number: Van Wie 1221 S-8H

Farm Name: HG Energy II Appalachia, LLC

U.S. WELL NUMBER: 47-041-05767-00-00

Horizontal 6A New Drill

Date Issued: 11/4/2024

API Number: 4704105767

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. 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 § 22-6A-5a (12), 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 one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 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. Also, 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
- 11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, 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.

4704105767

API NO. 47-____

OPERATOR WELL NO. Van Wie 1221 S-8H
Well Pad Name: Van Wie 1221

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

1) Well Opera	tor: HG Energ	y II Appala	chia, 🛔 494	519932	Lewis	Freeman Vadis 7.5'
			Оре	erator ID	County	District Quadrangle
2) Operator's	Well Number: V	an Wie 122	21 S-8H /	Well Pa	d Name: V	an Wie 1221
3) Farm Name	/Surface Owner:	HG Energy II	Appalachia, LLC	Public Ro	ad Access:	CR 11/3 aka Straight Run Road
	current ground:	1256'				uction: 1251.7'
5) Well Type	(a) Gas x		Oil		erground Sto	
	Other				•	
	(b)If Gas Sh	allow <u>x</u>		Deep		Office of Oil and Oss
0.5		rizontal <u>x</u>				
	d: Yes or No No				_	OCT 0 3 2024
7) Proposed Ta	arget Formation(s	s), Depth(s),	Anticipated	Thickness a	and Expected	l Pressure(s);
iviarcellus at	7002' / 7049' and	47' in thickr	iess. Anticipa	ted pressure	e at 4314#.	
8) Proposed To	otal Vertical Dept	th:7,0	035'			
9) Formation a	t Total Vertical I	Depth: Ma	rcellus			
10) Proposed T	otal Measured D	epth: 18	3,748'			
11) Proposed H	Iorizontal Leg Le	ength: 11	,200'			
12) Approxima	te Fresh Water S	trata Depth:	s: 150',	181', 826'	/	
13) Method to 1	Determine Fresh	Water Dept	hs: Neares	t offset wel	l data, (47-0	017-02906, 2480, 4233,)
	te Saltwater Dep					2000, 2100, 1200,)
15) Approxima	te Coal Seam De	pths: 220'-2	225', 428'-438', 49	95'-501' (Surfac	e casing is being	g extended to cover the coal in the DTI Field)
	te Depth to Possi					, , , , , , , , , , , , , , , , , , ,
17) Does Propo	sed well location ng or adjacent to	contain coa	al seams	es		10 X
(a) If Yes, pro	vide Mine Info:	Name:				
		Depth:				
		Seam:				
		Owner:				

WW-6B (04/15)

API NO. 47	-	
OPERATOR !	WELL NO.	Van Wie 1221 S-8H
Well Pad Na	ame: Van	Nie 1221

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	New	LS	157.5	120'	120'	CTS
Fresh Water/Coal	20"	NEW	J-55	94	1225'	1225' /	40% Excess, CTS
Intermediate 1	13 3/8"	NEW	J-55 BTC	68	2760'	2760'	40% Excess, CTS
Intermediate 2	9 5/8"	NEW	N/L-80 BTC	40	5700'	5700'	40% Excess Tail, CTS
Production	5 1/2"	NEW	P-110 HP	23	18748'	18748'	20% Excess Tail, CTS
Tubing						101110	Ze // ZAGGS Tall, GTG
Liners							

Kenneth Greynolds Digitally signed by: Kenneth Greynolds Menneth Greynolds DN: CN = Kenneth Greynolds email = Kenneth.L. Greynolds@wv.gov C = AD O = WVDEP OU = Oil and Gas Date: 2024.09.23 13:39:20 -04100

TYPE Wall Anticipated Wellbore Cement Burst Pressure Size (in) Cement Thickness Max. Internal Diameter (in) Yield (psi) Type (in) Pressure (psi) (cu. ft./k) Conductor 30" 30" .500 Drilled In 20" Fresh Water/Coal 26" .438 2110 1200 Type 1, Class A 40 % excess yield = 1.20, CTS Intermediate 1 13 3/8" 17 1/2" .480 3450 Type 1/Class A Intermediate 2 9 5/8" 12 1/4" .395 5750 Type 1/Class A Production 5 1/2" 8 1/2" .415 16240 12500 Type 1/ClassA Tubing Liners Office of Oil stal Gas

OCT 0 3 2024 WV Doggo William Environmental ovoluble

PACKERS

Kind:	- International
Sizes:	
Depths Set:	

WW-6B (10/14) 4704105767

API NO. 47-____OPERATOR WELL NO. Van Wie 1221 S-8H
Well Pad Name: Van Wie 1221

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 7035'. Drill horizontal leg to estimated 11,200' lateral length, 18,748' TMD. Hydraulically fracture, stimulate and be capable of producing from the Marcellus Formation. Should we encounter an unanticipated void in the coal, we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface. We plan to run an ACP above the Gantz/Dominion Storage interval to aid in sealing off and isolating the storage interval.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

The stimulation will be completed with multiple stages divided over the lateral length of the well. Stage spacing is dependent upon engineering design. Slickwater fracturing technique will be utilized on each stage using sand, water, and chemicals. See attached list. Maximum pressure not to exceed 12,500 psi.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 24.95 acres

22) Area to be disturbed for well pad only, less access road (acres): 9.53 acres

23) Describe centralizer placement for each casing string:

No centralizers will be used with conductor casing. Freshwater/Coal - centralized every 3 joints to surface

Intermediate 1 - Bow Spring on every joint, will also be running ACP for isolating storage zone

intermediate 2 - Bow Spring on first 2 joints then every third joint to 100' from surface.

Production - Vertical - Run 1 spiral contralizer every 5 joints from the top of the curve to surface, Curve - Run 1 spiral centralizer every 3 joints from the 1st 5.5 long joint to the top of the curve.

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24) Describe all cement additives associated with each cement type:

Conductor -N/A, Casing to be drilled in w/ Dual Rotary Rig

Fresh Water/Coal - "15.6 ppg PNE-1 + 3% bwoc CaCl40% ExcessYield=1,20 / CTS"

Intermediate 1 - **** Storage Skinig **** CTS ****** Storage Skinig ***** CTS ***** Storage Skinig ***** CTS **** Storage Skinig **** *** Storage Skinig **** Storage Skinig *** Skinig *** Storage Skinig *** Storage Skinig *** Skinig *

Intermediate 2 - "Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl40% Excess / Tall: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS*

Production - "Lead: "14.5 gag POZ-PNE-1 + 0.3% bwoc R3 + 1% 5woc EC1 + 0.75 galsk FP13L + 0.3% bwoc MPA170Tai: 14.8 pag FNE-1 + 0.35% bwoc R3 + 0.75 galsk FP13L + 50% bwoc ASCA1 ± 0.5% bwoc MPA17020% ExcessLoad Yield=1.19Tail Yield=1.94CTS"

25) Proposed borehole conditioning procedures:

Conductor - Ensure the hole is clean at TD.

Fresh Water/Coal - Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping coment

Intermediate 1 - Once casing is at setting cepth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cament.

Informediate 2 - Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole valume prior to pumping cement.

Production - Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement

*Note: Attach additional sheets as needed.

HG Energy II Appalachia, LLC Van Wie 1221 Well Pad (N-1H to S-12H) Cement Additives

	Material Type	Material Description	CAS#		
		Premium NE-1 is a	Ingredient name	100	
		portland cement with	Portland cement	%	CAS number
		early compressive	Calcium oxide	90 - 100	65997-15-1
		strength properties.	Magnesium oxide	1 - 5	1305-78-8
Premium NE-1	Portland Cement		Crystalline silica: Quartz (SiO2)	0.1 - 1	1309-48-4 14808-60-7
					11000 00 1
		Commonly called gel, it is			
		a clay material used as a	Ingredient name	%	CAR
		cement extender and to	bentonite		CAS number
		control excessive free	Crystalline silica: Quartz (SiO2)	90 - 100 5 - 10	1302-78-9
		water.		3-10	14808-60-7
Bentonite	Extender				
		A powdered, flaked or			
		pelletized material used	Ingredient name		
		to decrease thickening	Calcium chloride	%	CAS number
		time and increase the rate	Calcium chionde	90 - 100	10043-52-4
Calcium Chloride	Accelerator	of strength development			
-wiciani cinoride	Accelerator				
		COLDER OF STREET			
		Graded (3/8 to 3/4 inch)	Ingredient name	%	040
		cellophane flakes used as	No hazardous ingredient	/8	CAS number
C II 51.1		a lost circulation material.	3, 20, 21,		
Cello Flake	Lost Circulation				
		FP-13L is a clear liquid			
		organic phosphate			
		antifoaming agent used in			
		cementing operations. It			
		is very effective	Ingredient name		
		minimizing air	Tributyl phosphate	%	CAS number
		entrapment and	Thouly phosphate	90 - 100	126-73-8
		preventing foaming			
		tendencies of latex			
FP-13L	From Automotion	systems.			
17-136	Foam Preventer				
			No contract of the contract of		
		Used to retard cement	Ingredient name	%	CAS number
Granulated Sugar	Retarder	returns at surface.	Sucrose	90 - 100	57-50-1
	netaraci			372.78	07.30-1
		A proprietary product that			
		provides expansive			
		properties and improves			
		bonding at low to	Ingredient name	%	C15
		moderate	Calcium magnesium oxide	90 - 100	CAS number
20.4		temperatures.		90 - 100	37247-91-9
EC-1					
		Multi-purpose polymer			
		additive used to control	reserve and the second		
		free fluid, fluid loss,	Ingredient name	%	CAS number
		rheology, and gas	No hazardous ingredient		
MPA-170	Gas Migration	migration.			
		A synthetic pozzolan			
		A synthetic pozzolan,			
		(primarily Silicon Dioxide).			
		(primarily Silicon Dioxide). When blended with			
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be	Ingredient name		
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create	Ingredient name	%	CAS number
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement	Crystalline silica: Quartz (SiO2)	9F 5 - 10	CAS number 14808-60-7
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a	Crystalline silica: Quartz (SiO2)		
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement	Crystalline silica: Quartz (SiO2)	9F 5 - 10	14808-60-7 1305-78-8
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a	Crystalline silica: Quartz (SiO2) Calcium oxide	SE 5-10 1-5	14808-60-7 1305-78-8
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate	Crystalline silica: Quartz (SiO2) Calcium oxide	SE 5-10 1-5	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion	Crystalline silica: Quartz (SiO2) Calcium oxide	SE 5-10 1-5	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion	Crystalline silica: Quartz (SiO2) Calcium oxide	DCT 0 3 2074	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.	Crystalline silica: Quartz (SiO2) Calcium oxide	DCT 0 3 2024	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature	Crystalline silica: Quartz (SiO2) Calcium oxide	SE 5-10 1-5	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide	Crystalline silica: Quartz (SiO2) Calcium oxide Oli Ingredient name	DCT 0 3 2024	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry	Crystalline silica: Quartz (SiO2) Calcium oxide	DCT 0 3 2074	14808-60-7 1305-78-8
Poz (Fly Ash)	Base	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide Oli Ingredient name	DCT 0 3 2024	14808-60-7 1305-78-8
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry	Crystalline silica: Quartz (SiO2) Calcium oxide Oli Ingredient name	DCT 0 3 2074	14808-60-7 1305-78-8
	Base Retarder	(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide Oli Ingredient name	DCT 0 3 2074	14808-60-7 1305-78-8
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide Oli Ingredient name	DCT 0 3 2074	14808-60-7 1305-78-8
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide Oli Ingredient name	DCT 0 3 2074	14808-60-7 1305-78-8 CAS number Trade secret.
Poz (Fly Ash) R-3		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide Ul Ingredient name Organic acid salt Ingredient name	DCT 0 3 2074	14808-60-7 1305-78-8 CAS number Trade secret. CAS number
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide Ul Ingredient name Organic acid salt Ingredient name 2-Butoxyethanol Proprietary surfactant	96 10 3 2074 V Um 96 40 - 50	14808-60-7 1305-78-8 CAS number Trade secret.
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend	Crystalline silica: Quartz (SiO2) Calcium oxide U Ingredient name Organic acid salt Ingredient name 2-Butoxyethanol Proprietary surfactant D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	% 40-50	CAS number Trade secret. CAS number 111-76-2 Trade secret.
		(primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement. A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.	Crystalline silica: Quartz (SiO2) Calcium oxide Ulandria de Company de Compa	96 10 3 2074 V Um 96 40 - 50	14808-60-7 1305-78-8 CAS number Trade secret.

*** Storage String *** CTS ***

15.4 ppg Lead - Yield 1:24 - D896 Surface Set 100 lb / sack (Mix of Class A and Gypsum to meet Dominion Requirements)
B348 - 0,5% BWOB Fluid Loss / D013 - 0,75% BWOB Retarder / D47 - 0.02 gal / sack VBWOB Anti Foam / D202 - 0,15% BWOB Dispersant / D095 1.5 lb per BBL CemNET* - 60% Excess

15.9 ppg Tail - Yield 1.17 - D896 Surface Set 100 lb / sack (Mix of Class A and Gypsum to meet Dominion Requirements)

B160A - 0.15% BWOB Dispersant / B547 - 0.35% BWOB GasBLOK* / D013 - 0.3% BWOB Retarder / D047 - 0.02 gal / sack Anti Foam / D801 - 0.03 gal / sack Retarder - 0% Excess

1221 S-8H

Marcellus Shale Horizontal



Ground Ele						1221	S-8H SI	TL.		14197235N 17342	68 6F		
	evation		1251.	77'		1221	S-8H L	P	1	4196779.26N 17343			
Azm			160.835°			1221 S-8H BHL				14186224.1N 17381			
WELLBORE DI	IAGRAM	HOLE	CASING	GEOLOGY	TOP	BASE	MUD	CEMENT	CENTRALIZERS				
describes and section (for discussion on						1 1000	SEMENT	CLIVIRALIZERS	CONDITIONING	COMMENTS		
	×	30"	30" 157.5# LS	Conductor	0	120	AIR	N/A, Casing to be driller in w/ Dual Rotary Rig	d N/A	Ensure the hole is clean at TD.	Conductor casing = 0.5" v		
	×	26"	20" 94# J-55	Coal	740	746	AIR	15,6 ppg PNE-1 ± 3% bwoc CaCl 40% Excess	Centralized every 3 joints to surface	Once casing is at setting depth, circulate a minimum of one hole volume with	Surface casing = 0.438° y		
×			Fresh Water Protection	0	1225		Yield=1.20 / CTS	junta to surface	Fresh Water prior to pumping cement.	Burst=2110 psi			
				Little Lime	2167	2187		See above (LEFT) for	Day Posts	Once casing is at setting			
		17.5"	13-3/8" 68#	Big Lime	2216	2265	AIR / KCL	Storage String Cement	Bow Spring on every joint	depth, Circulate and	Intermediate		
XIIII		17.0	J-55 BTC	Injun / Gantz (Storage)	2265 / 2597	2361 / 2647	Salt Polymer	Blend to Meet DTI	ACF for isolating	condition at TD. Circulate a minimum of one hole volume prior to pumping	Intermediate casing = 0,48 Wall thickness Burst=3450 psi		
				Intermediate 1	0	2760		Storage Field Isolation					
×	X			Thirty Foot	2789	2799				Cement, Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hale volume prior to pumping cement.	Intermediate casing = 0.395' wall thickness Burst=5750 psi		
				Gordon	2837	2915	1		Bew Spring on first 2				
				5th Sand	3066	3102		Lead: 15.4 ppg PNE-1 +					
X	X	12.25"	9-5/8" 40#	Bayard	3161	3174	AIR / KCL Salt Polymer						
			N/L-80 BTC	Speechley	3634	3666							
				Benson	5038	5072							
				Alexander	5324	5444							
				Intermediate 2	Ó	TVD: 5675' MD: 5700' Inc: 10 dea							
X	X	8.75"			-				h 1000		Dus t point assurance		
							AIR / 9.0ppg	pg	Run 1 spiral centralizer every 5 joints from the top of the curve to surface.				
			-				SOBM						
				Rhinestreet	22.00					200			
			-	Cashaqua	6303	6591		EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170		Once on bottom/TD with			
l _x l	×		5-1/2"	Middlesex	6591	6.736	1. 1.	Tail: 14.8 ppg PNE-1 +		casing, circulate at max allowable pump rate for at	Production casing = 0.415		
		8:5" Curve	23# P-110 HP	West River	6736	6815	11.5ppg=	0.35% bwoc R3 + 0.75 gal/sk FP13L + 50%		least 2x bottoms up, or until	wall thickness Burst=15240 psi Note:Actual centralizer		
			TXP / W461	Burkett	6815	6884	12.5ppg SOBM	bwoc ASCA1 + 0.5%		returns and pump pressures indicate the hole is clean.			
			+	Tully Limestone	6884	6925	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	bwoc MPA170 20% Excess	Run 1 spiral centralizer every 3 joints from the	Circulate a minimum of one	schedules may be change due to hole conditions		
			+	Hamilton	6925	6952		Lead Yield=1.19	1st 5.5" long joint to the	hole volume prior to pumping cement.	due to hole corlollors		
		0.50 (-4		Marcellus	6952	7002		Tail Yield=1.94	lop of the curve.	F			
			-	TMD / TVD	7002	7049	11.5ppg-	CTS					
		8.5" Lateral	4	(Production)	18748	7035	12.5ppg SOBM						
×	X	Children Control	3876 3333 334	Onondaga	7049		JUBINI						
		X	X	×	84342413451341415451		Χ	×	×	X	×		
	LP @ 7035' M	TVD / 7548' D		5	.5" Hole - Cemente -1/2" 23# P-110 HP	d Long String TXP / W461				of fit Lateral	TD @ +/-7035' TVD +/-18748' MD		

4704105767

API Number 47 -

Operator's Well No. Van Wie 1221 S-8H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy II Appalachia, LLC OP Code 4945019	907
Watershed (HUC 10) Fink Creek Quadrangle Vadis 7.5'	····
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes	/ No
Will a pit be used? Yes No V	1,0
If so, please describe anticipated pit waste: NA	
Will a synthetic liner be used in the pit? Yes No If so, what ml.?	
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
Underground Injection (UIC Permit Number_	<u> </u>
Reuse (at API Number TBD - At next anticipated well site Off Site Disposal (Supply form WW-9 for disposal location)	
Other (ExplainOther (Explain	
Will closed loop system be used? If so, describe: Yes, cuttings and fluids will be collected in a closed loop system, re-used or hauled	to an approved disposal site or landfill
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	ai - All, All/ACE, All/SUBM, Horizontal - SUBM
Additives to be used in drilling medium? Water, Soap, KCl, Barite, Base Oil, Wetting Agents	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Approved Landfill	
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) NA	
-Landfill or offsite name/permit number? See Attached	
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permanent where it was properly disposed.	ated waste rejected at any mittee shall also disclose
I certify that I understand and agree to the terms and conditions of the GENERAL WATER Poor August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Properovisions of the permit are enforceable by law. Violations of any term or condition of the general polar or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the inapplication form and all attachments thereto and that, based on my inquiry of those individuals in obtaining the information, I believe that the information is true, accurate, and complete. I am away penalties for submitting false information, including the possibility of fine or imprisonment.	tection. I understand that the ermit and/or other applicable formation submitted on this
	Office History on
Company Official Signature Diane White	Office of Or and Con-
Company Official Signature Diane White Company Official (Typed Name) Diane White Company Official Title Agent	OCT 0 3 2024
Company Official Signature Diane White Company Official (Typed Name) Diane White Company Official Title Agent	Office No. 1 Con.
Company Official Signature Diane White Company Official (Typed Name) Diane White Company Official Title Agent	OCT O 3 2024
Company Official Signature Diane White Company Official (Typed Name) Diane White Company Official Title Agent	OFFICIAL SEAL NOT ARY PUBLIC STATE OF WEST VIRIGINIA

Cuttings Disposal/Site Water

Cuttings - Haul off Company:

Eap Industries, Inc. DOT # 0876278 1575 Smith Two State Rd. Atlasburg, PA 15004 1-888-294-5227

Waste Management 200 Rangos Lane Washington, PA 15301 724-222-3272

Environmental Coordination Services & Recycling (ECS&R) 2237 US Highway 19 Cochranton, PA 16314 814-425-7778

Disposal Locations:

Apex Environnemental, LLC Permit # 06-08498 11 County Road 78 Amsterdam, OH 48903 740-548-4889

Westmoreland Waste, LLC Permit # 100277 111 Conner Lane Belle Vernon, PA 15012 724-929-7694

Sycamore Landfill Inc., Permit #RSO-079001, 05-2010 4301 Sycamore Ridge Road Hurricane, WV 25526 304-562-2611

Max Environnemental Technologies, Inc. Facility Permit # PAD004835146 / 801071, 233 Max Lane
Yukon, PA 25968
724-722-8500

Max Environnemental Technologies, Inc. Facility Parmit # PADD5087072 / 301859 200 Max Drive Bulger, PA 15019 724-796-1571

Waste Management Kelly Run Permit # 100563 1901 Park Side Drive Elizabeth, PA 15037 412-384-7569

Waste Management South Hills (Arnoni) Permit # 100592 3100 Hill Road Library, PA 15129 724-348-7013 412-384-7569

Waste Management Arden Permit # 100172 200 Rangos Lane Washington, PA 15301 724-222-3272

Waste Management Meadowfill Permit # 1032 1488 Dawson Drive Bridgeport, WV 26330

Brooks County Landfill Permit # SWP-103-97 / WV 0109029 Rd 2 Box 410 Colliers, WV 26035 904-748-0014 Office of Oil and Gas

OCT 0 3 2024

WV Designers of Environmental Protection

11/08/2024

Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185 Rt 1 Box 156A New Martinsville, WV 26035 804-455-3800

Energy Solutions, LLC Permit # UT 2800249 428 West 800 South Suite 200 Salt Lake City, UT 8410L

Energy Solutions Services, Inc. Permit # R-78006-L24 1660 Bear Creek Road Oak Ridge, TN 37830

Northern A-1 Environnemental Services Permit ID MID020906814 8947 US 131 North, PO Box 1030 Kalkaska, MI 49646 281-258-9961

Water Haul off Companies:

Dynamic Structures, Clear Creek DOT #720488 3790 State Route 7 New Waterford, OH 44445 880-892-0164

Nabors Completion & Production Services Co. PO Box 975682 Dallas, TX 75397-5682

Select Energy Services, LLC PQ Bax 208997 Dallas, TX 75320-3997

Nuverra Environmental Solutions 11942 Veterans Memorial Highway Masontown, WV 26542

Mustang Olifield Services LLC PO Box 739 St. Clairaville, OH 43950

Wilson's Outdoor Services, LLC 456 Cracraft Road Washington, PA 15301

Disposal Locations:

Solidificațion Waste Management, Arden Landfill Permit # 100172 200 Rangos Lane Washington, PA 15301 724-225-1589

Solidification/Inclneration Soil Remediation, Inc. Permit # 02-20753 6065 Arrel-Smith Road Lowelville, OH 44436 880-536-6825

Adams #1 (Buckeye Brine, LLC) Permit #34-031-2-7177 28986 Airport Road Coshocton, OH 48812 740-575-4484 512-478-6545 CMS of Delaware Inc. DBA CMS Olifield Serv 301 Commerce Drive Moorestown, NJ 08057

Force, inc. 1380 Rte. 286 Hwy. E, Sulte 203 Indians, PA 15701

solo Construction P.O. Box 544 St. Mary's, WV 26170

Equipment Transport 1 Tyler Court Carlisle, PA 17015

Myers Well Service, ___ 2001 Ballpark Court Export, PA 15682

Burns Drilling & Excavating 618 Crabapple Road P.O. Box Wind Ridge, PA 16980

Nichios 1-A (SWIW #18) Permit # 3862 300 Cherrington Pkwy, Suite 200 Coraopolis, PA 15108 412-829-7275

Grosella (SWIW #34) Permit # 4096 Rt. 88 Garrattsvilla, OH 719-278-4818

Kerrible 1-D Well Permit # 8780 7675 East Pike Norwich, Oh 48767 614-648-8898 740-786-6495

11/08/2024

Adams #2 (Buckeye Brine, LLC) 2205 Westover Road Austin TX 78703 Permit # 34-031-2-7178 740-575-4484 512-478-6545

Adams #3 (Buckeye Brîne, LLC) Permit #34-031-2-7241-00-00 2680 Exposition, Suite 117 Austin, TX 78703 512-478-6545

Mozena #1 Well (SWIW # 18) Permit # 84-157-2-5511-00-00 5367 E. State Street Newcomerstown, OH 48832 740-763-3966

Goff SWD #1 (SWIW # 27) Permit # 84-119-2-8776-000 300 Cherrington Pkwy, Suite 200 Coraopolis, PA 15108 412-829-7275

SOS D#1 (SWIW #12) Permit # 84-059-2-4202-00-00 Silcor Olifield Services, Inc. 2939 Hubbard Road Youngstown, PH 44505

Dudley #1 UIC (SWIW #1)
Permit # 34-121-2-2458-00-00
Select Energy Services, LLC
7994 S. Pleasants Hwy
St. Marys, WV 26170
304-665-2652

OH UIC #1 Bu keya UIC Barnesville 1 & 2 CNX Gas Con...any, LLC 1000 Consol Energy Drive Permit # 84-013-2-0609-00-00 Permit # 84-013-2-0614-00-00 804-323-6568

US Steele 11386 Permit # 47-001-00561 200 Evergreen Drive Waynesburg, PA 15730 304-823-6568

- - 1677

Chapin #7 UIC (SWIW #7)
Permit # 34-083-2-4187-00-00
Elkhead Gas& Oil Company
12168 Marne Rd. NE
Newark, OH 48055
740-768-8966

Office of Oil and Gas

OCT 0 3 2024

WV Department of Environmental Projection

Operator's Well No. Van Wie 1221 S-8H

Proposed Revegetation Trea	pН		
Lime	3 Tons/acre or to co		•
Fertilizer type10	0-20-20		
Fertilizer amount_		500 lbs/acre	
Mulch_ Hay		2 Tons/acre	
		Seed Mixtures	
Te	emporary	Perr	nanent
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5
Attach: Maps(s) of road, location, pit rovided). If water from the p creage, of the land application	and proposed area for la pit will be land applied, i on area.	rilling and completion process and application (unless engineered plans include dimensions (L x W x D) of the pit, and the pit, and the pit, and the pit, and the pit include dimensions (L x W x D) of the pit, and	uding this info have beer ad dimensions (L x W), a
Attach: Maps(s) of road, location, pit provided). If water from the p creage, of the land application whotocopied section of involve	and proposed area for labit will be land applied, in area. yed 7.5' topographic sheet	and application (unless engineered plans inclined include dimensions (L \times W \times D) of the pit, an	uding this info have been ad dimensions (L x W), a
Attach: Maps(s) of road, location, pit provided). If water from the p creage, of the land application Chotocopied section of involve Keni lan Approved by:	and proposed area for laborated in the policy of the land applied, in area. yed 7.5' topographic sheeth Greynolds	and application (unless engineered plans inclinclude dimensions (L x W x D) of the pit, are t. One of the pit, are t. One of the pit, are t. One of the pit, are t.	d dimensions (L x W), ε
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinclude dimensions (L x W x D) of the pit, are t. One of the pit, are t. One of the pit, are t. One of the pit, are t.	er regulation.
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.
Attach: Maps(s) of road, location, pit rovided). If water from the poreage, of the land application of involving the posterior o	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, is on area. yed 7.5' topographic sheeth Greynolds.	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.
Attach: Maps(s) of road, location, pit provided). If water from the provided of the land application of the land approved by: Kenight	and proposed area for labit will be land applied, in on area. yed 7.5' topographic sheet and the second sec	and application (unless engineered plans inclinctude dimensions (L x W x D) of the pit, and the	er regulation.

HG Energy II Appalachia, LLC

Site Safety Plan

Van Wie 1221 Well Pad 2891 Straight Run Road, Alum Bridge Doddridge County, WV 26321

January 2024: Version 1

For Submission to
West Virginia Department of Environmental Protection,
Office of Oil and Gas

HG Energy II Appalachia, LLC

5260 Dupont Road

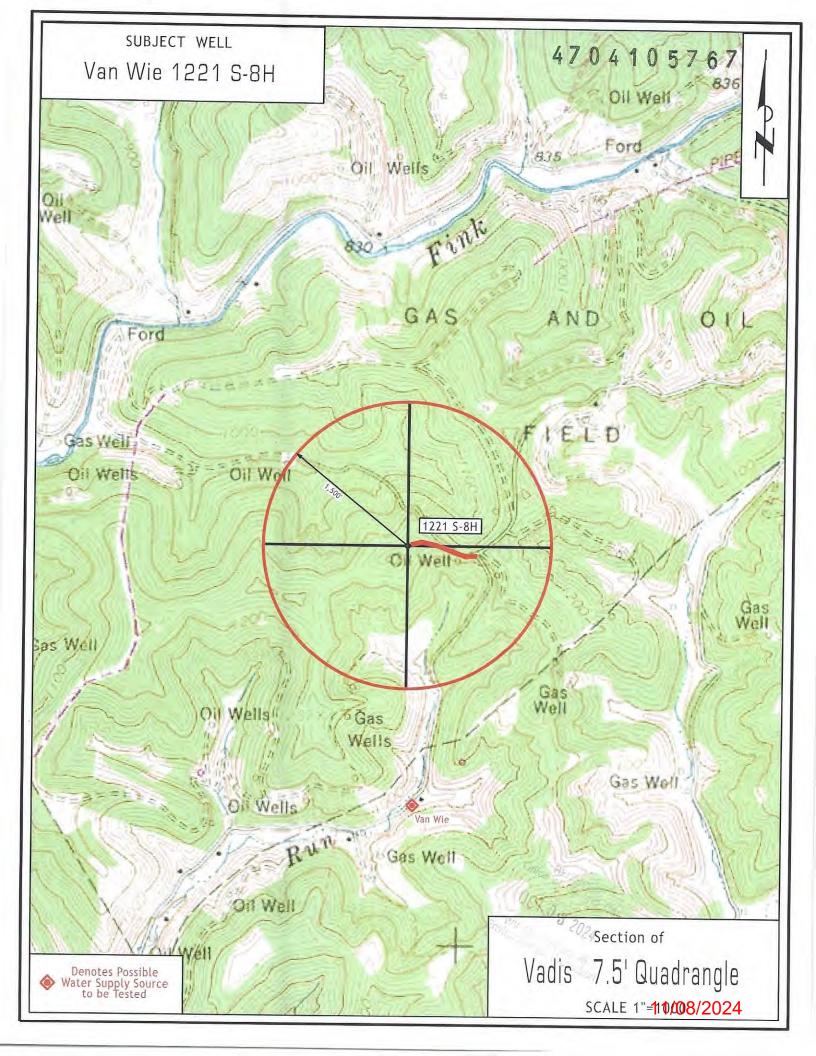
Parkersburg, WV 26101

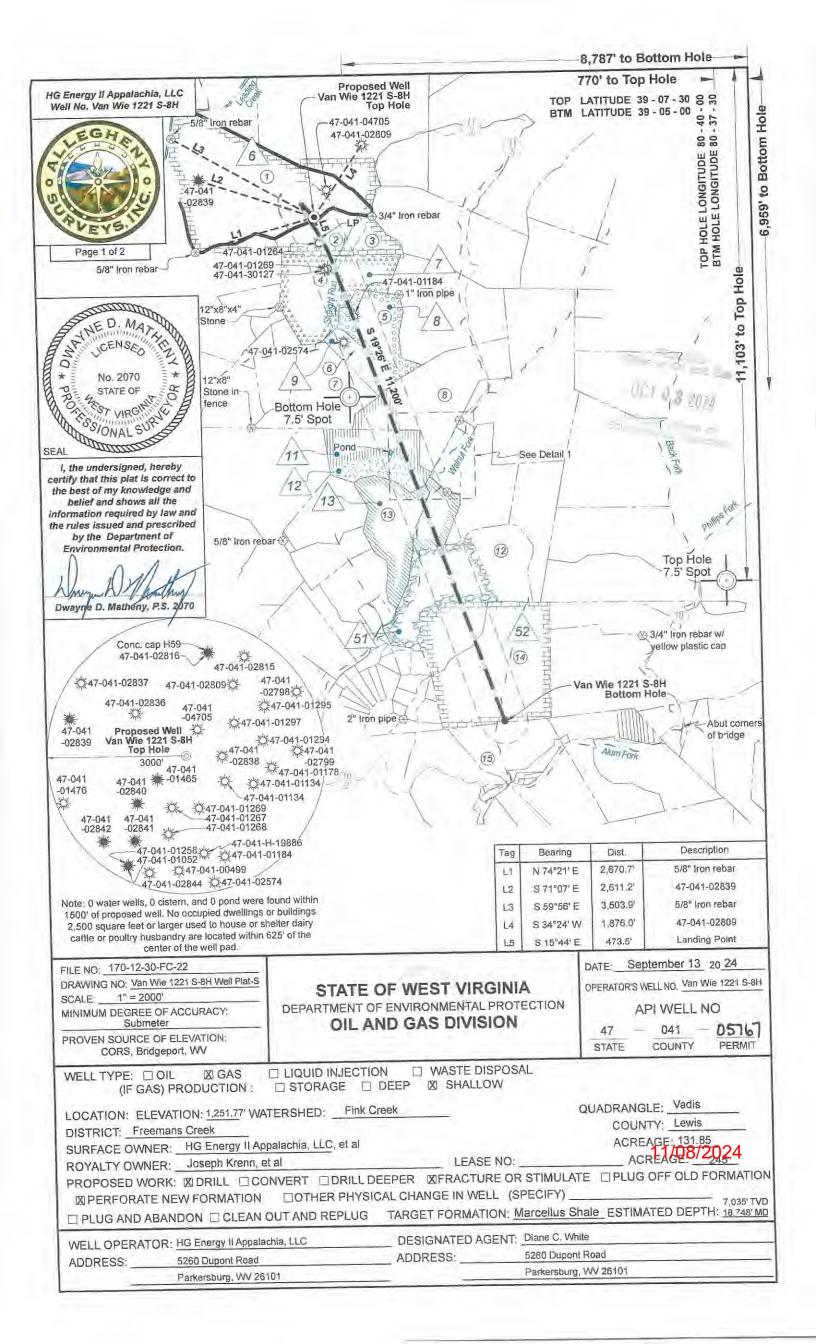
Kenneth Greynolds St. Or Horor Oryados Anna Kement Corpolas Greynolds Greyno

Office of Cil and Gas

OCT 0 3 2024

WV Deprement of Environmental protection







Page 2 of 2

West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.

UTM Zone 17, NAD 1983 Plat orientation and corner and well references are based upon the grid north meridian. Well location references are based upon the magnetic meridian.

Notes: Well No. Van Wie 1221 S-8H WVCS 1927, North Zone

Top Hole Coordinates Lat: 39°05'40.21" Lon: 80°40'09.78" Landing Point Coordinates Lat: 39°05'35.70" Lon: 80°40'08.17" Bottom Hole Coordinates Lat: 39°03'51.20"

Lon: 80°39'21,45"

Notes: Well No. Van Wie 1221 S-8H UTM NAD 1983 (USSF) Top Hole Coordinates N: 14,197,235.00' E: 1,734,268.60' Landing Point Coordinates N: 14.196.779.26 E: 1,734,396.99 **Bottom Hole Coordinates**

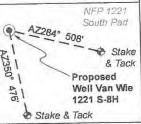
N: 14,186,224.10'

E: 1,738,119.47

Van Wie 1221 S-8H UTM NAD 1983 (Meters) Top Hole Coordinates N: 4,327,325.883m E: 528,606.126m Landing Point Coordinates N: 4,327,186.973m E: 528.645.260m **Bottom Hole Coordinates** N: 4,323,969.754m E: 529,779.874m

Notes: Well No

Well Location References Not to Scale

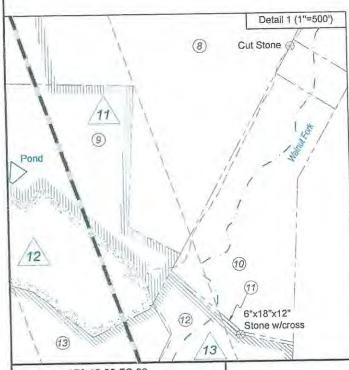


Legend (Proposed gas well 0 Well Reference, as noted O Monument, as noted Existing Well, as noted Existing Plugged Well, as noted Digitized Well, as noted - Creek or Drain Existing Road Surface boundary (approx.) floo of Gil and Ga

549°00 W 18 [149.0.C.] Wellhead Layout (NTS)

DCT 0 3 2024

WV La idministration Reviews to Polyuttan



ID I	Lease
6	Joseph Krenn, et ux
7	HG Energy II Appalachia, LLC
8	L.M.Reed, et ux
9	L.M.Reed, et ux
11	L.B. Gaston, et ux, et al
12	HG Energy II Appalachia, LLC
13	H.P. Queen, et ux, et al
51	Riverside Farm Livestock and Woodland, LLC
52	S.R. Harrison, Jr., et ux, et al
-	

	_	Lewis Co. (Freemans Creek Dist.)		
No.	TM / Par	Owner	Bk / Pg	Ac.
1	2D/3	HG Energy II Appalachia, LLC	800 / 637	131.85
2	2D/29	Anthony S. & Dawn H. VanWie	732 / 622	26.63
3	2D/30	Anthony S. & Dawn H. VanWie	732 / 622	19.00
4	2D/31	Anthony S. & Dawn H. VanWie	732 / 622	73.10
5	2D / 34	Anthony S. & Dawn H. VanWie	732 / 622	43.81
6	2D / 33	Anthony S. & Dawn H. VanWie	732 / 622	19.00
7	2D/32	Arthur A. Ruble	544 / 536	58.00
8	2D / 35	Eugene C. Groah, Jr.	705 / 777	80.00
9	2E / 41.1	David B. Lang	717 / 614	72.75
10	2E / 41	Charles M. & Katie D. Groah	575 / 205	15.50
11	2E / 43.1	David B. Lang	662 / 726	0.25
12	2E / 45	Paul J. Groah & James C. Empoules	723 / 719	173.00
13	2E / 42	Elana D. Burnett, et al	W21 / 187	50.00
14	2E / 46	Emily M. & Carlton E. Jones, II	734 / 928	130.00
15	2E / 54	Emily M. & Carlton E. Jones, II	734 / 928	47.44

FILE NO: 170-12-30-FC-22 DRAWING NO: Van Wie 1221 S-8H Weil Plat-S 1" = 2000" SCALE: MINIMUM DEGREE OF ACCURACY:

Submeter PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: September 13 20 24 OPERATOR'S WELL NO. Van Wie 1221 S-8H

API WELL NO

041 47 05767 COUNTY STATE

QUADRANGLE: Vadis

COUNTY: Lewis

☐ WASTE DISPOSAL ☐ LIQUID INJECTION WELL TYPE: OIL IXI GAS

☐ STORAGE ☐ DEEP ☒ SHALLOW (IF GAS) PRODUCTION:

LOCATION: ELEVATION: 1,251.77' WATERSHED: Fink Creek DISTRICT: Freemans Creek

SURFACE OWNER: HG Energy II Appalachia, LLC, et al

ROYALTY OWNER: __Joseph Krenn, et al LEASE NO: __

ACREAGE: 131.85 ACREA (08/2024 PROPOSED WORK: ☑ DRILL ☐ CONVERT ☐ DRILL DEEPER ☑ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION

□OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _ IXI PERFORATE NEW FORMATION

TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 18,748' MD ☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG

WELL OPERATOR: HG Energy II Appalachia, LLC ADDRESS:

5260 Dupont Road Parkersburg, WV 26101 DESIGNATED AGENT: Diane C. White

5260 Dupont Road ADDRESS: Parkersburg, WV 26101 WW-6A1 (5/13)

Operator's Well No. Van Wie 1221 S-8H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) 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:

Lease Name or				
Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page

See Attached Sheets

Co-Tenancy utilization - At least 75% of the royalty owners have consented to the lawful use or development of the natural gas mineral property on the tract. The interests of the remaining cotenants will be secured pursuant to the Co-Tenancy Act

Horizontal Well Unit Utilization - Subjet to unitilization filing with te WV Oil and Gas Conservation Commission

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 acknowledges 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 acquired from the appropriate authority before the affected activity is initiated.

Well Operator:	HG Energy II Appalachia, LLC					
By:	Diane White	Diane White				
Its:	Agent					

Page 1 of 4

HG Energy II Appalachia, LLC Van Wie 1221 S8H Lease Chain

1221S Tract	LEGACY LEASE NUMBER	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE
ZZIS Truct	NOMBER	VIOLUIA .		JOSEPH KRENN AND EMILY E. KRENN, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	33	23
				WILLIAM A. LOUWTHER	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	42	4(
				SOUTH PENN OIL COMPANY	SOUTH PENN NATURAL GAS CO	ASSIGNMENT	156	570+F64:I
				SOUTH PENN NATURAL GAS CO	HOPE NATURAL GAS COMPANY	ASSIGNMENT	166	4
	1			HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	1
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	WVSOS	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	9	6
		03-002D-0003-0000		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	1
	1000	03-002D-0003-0001		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
6	FK054825	03-002D-0003-0003	Q100903000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY INC	NOT LESS THAN 1/8	692	
, ,	FK079440 FEE	03-002D-0028-0000	3217012701	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	1
		03-002D-0029-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
		03-002D-0030-0000		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
				DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
						SECOND AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	723	
						THIRD AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	734	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	MINERAL DEED	740	
1,	FK051151 FEE	Ye (2010) 1000 1000	FK051151 FEE			Lacron en care la	1	
7	FK080009 FEE	03-002D-0031-0000	FK080009 FEE	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	MINERAL DEED	740	
				L. M. REED AND ADALINE REED, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	153	
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	9	
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	
1				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
/	FK051063	07 0075 0074 0000	255455000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	
8	FK079964 FEE	03-002D-0034-0000	266165000	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
	A			NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
				DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
						SECOND AMENDMENT TO MEMORANDUM OF	322	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	723	
					The same of the sa	THIRD AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	734	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	
				L. M. REED AND ADALINE REED, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	39	
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	85	
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	WVSOS	

	1 1	e P		CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	9	
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
X		02 0025 0022 0000		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	
/9	.1	03-002D-0033-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
1				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
				DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
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				DOMINION ENERGY TRANSMISSION, INC.	The Effect Walt County 200			
				L.B. GASTON AND RETTA GASTON, HIS WIFE; MANDA J. HALL, WIDOW, R. V. HALL AND R.H. HALL, HER HUSBAND; IDA M. GASTON, SINGLE; W. H. GASTON AND IDA MAY GASTON, HIS WIFE; MARY E. GASTON, WIDOW; E.G. MUNDELL AND MARTHA MUNDELL, HIS WIFE; OCIE ANDRICK AND B. M. ANDRICK, HER HUSBAND; EDNA ALFRED AND J. T. ALFRED, HER HUSBAND; DALE YOUNG AND J. P. YOUNG, HER HUSBAND; NORA M. NORMAN AND M. B. NORMAN, HER HUSBAND; GRACE MUNDELL, SINGLE; DOVE W. GASTON, WIDOW; EDNA M. GASTON, WIDOW; FRANCES LOUISE GASTON, SINGLE; GERALDINE GASTON MANN AND ROBERT H. MANN, HER HUSBAND; AND LLOYD				
				H. GASTON AND EDIS L. GASTON, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	144	
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	
	20000000	p/o 03-002D-0035-0000	0100135000	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	
11	FK047305	p/o 03-002E-0041-0001	Q100425000	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
					DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	9	
		N. Control of the con		CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
		1 1			CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	
				DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	
		l I		93.371, - 1927, - 2030, - 31, - 32, -	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	
				NOBLE ENERGY, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINON TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	
		8		DOMINION ENERGY TRANSPOSION, INC.	THE ENERGY WITH THE PERSON VEHICLE	THIRD AMENDMENT TO MEMORANDUM OF		
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	734	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	
	-	03-002E-0041-0000						
12	FK079441 FEE	03-002E-0041-0002 p/o 03-002E-0041-0001	FK079441 FEE	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	MINERAL DEED	740	
	4 1000			H.P. QUEEN AND MRS. MARTHA L. QUEEN, HIS WIFE; MRS. RADIE J.				
				STUMP AND G.C. STUMP, HER HUSBAND; AND THEO QUEEN AND		Control of the Contro	405	
				MOLLIE QUEEN, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	195	_
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	_
			VI O	CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	9	
		10. 310. 310. 310.		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	672	
1		03-002E-0042-0000	3,000,03,000,00	CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	
13	FK059898	03-002E-0042-0001	Q100783000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	
		p/o 03-002E-0045-0000		CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	

	1	-1		NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
				DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
		y 9/1		DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	49
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	55
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	22
				Riverside Farm Livestock & Woodland LLC	HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8	796	82
<i>)</i> 51	HGII03018	p/o 03-002E-0045-0000	HGII03018	T&B Natural Resource Ventures, LLC	HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8	814	50
/ 52	CNX140250000	03-002E-0046-0000 p/o 03-002E-0045-0000	CNX140250000	S.R. HARRISON, JR., HUSBAND OF BLANCH M. HARRISON; HAYMOND MAXWELL, JR., A MARRIED MAN; HARRIET M. JARVIS, WIDOW, BLANCHE M. HARRISON, A MARRIED WOMAN, CHRISTINE M. THOMPSON AND CHARLES H. THOMPSON, HER HUSBAND, ISAAC H. MAXWELL AND ELLA LOUISE MAXWELL, HIS WIFE, JOLUMBIA M. BLACK, WIDOW, PORTER MAXWELL, JR., VIRGINIA M. PILLUP AND JOHN D. PHILLIPS, HER HUSBAND, EMILY M. LITTLEPAGE AND CHARLES F. LITTLEPAGE, HER HUSBAND, TAWANA M. BUTCHER AND B.B. BUTCHER, HER HUSBAND, CLAY MAXWELL, JR. AND ELLABETH B. MAXWELL, HIS WIFE, AND ALICE JOAN MAXWELL, SINGLE, BY S.B. HARRISON, JR. AND HAYMOND MAXWELL, JR., THE ATTORNEYS IN FACT; FRANK J. MAXWELL, HIDOWER; SUSAN MAXWELL TUTENBURG, WIDOW, RUTH MAXWELL JOHNSON AND LOUIS A. JOHNSON, HER HUSBAND, WILLIAM BRENT MAXWELL, JR. AND MARGUERITE W. MAXWELL, HIS WIFE, JOHN B. MAXWELL AND MARTHA H. MAXWELL, JR. SWIFE, WINIFRED M. SAWYER AND L. EVERTETT SAWYER HER HUSBAND, JEAN M. FOWLER AND L. BAKER FOWLER, HER HUSBAND, JAMES HORNOR DAVIS AND OUIDA C. DAVIS, HIS WIFE, WILLIAM MAXWELL DAVIS, SINGLE, BY FRANK J. MAXWELL, THE ATTORNEY IN FACT; LEEMAN MAXWELL HIS AND ENAE CAND GEORGE ALLEN PIERCE, JR., HER HUSBAND, SUSIE P. RIGER AND LE. KIGER, HER HUSBAND, RUSEY F. MAXWELL, WIDOW, MARY M. HARPER AND WILLIAM J. HARPER, HER HUSBAND, GRACE M. GAYLORD, WIDOW, J. HOWARD MAXWELL AND VIRGINIA MAXWELL, HIS WIFE, AND N.M. WELCH AND LORENCE WELCH, HIS WIFE, BY FRANK J. MAXWELL, HIS WIFE, AND N.M. WELCH AND LORENCE WELCH, HIS WIFE, BY FRANK J. MAXWELL, HIS WIFE, AND N.M. WELCH AND LORENCE WELCH, HIS WIFE, BY FRANK J. MAXWELL, HIS WIFE, AND N.M. WELCH AND LORENCE WELCH, HIS WIFE, BY FRANK J. MAXWELL, HIS WIFE, AND N.M. WELCH AND LORENCE WELCH, HIS WIFE, BY FRANK J. MAXWELL, WIDOW, STALOUISE BELL AND EUGENE JULIAN BELL, JR., HER HUSBAND, LENORA PHILLIPS MAXWELL, WIDOW ESTALOUISE BELL AND EUGENE JULIAN BELL, JR., HER HUSBAND, LENORA PHILLIPS MAXWELL, WIDOW ESTALOUISE BELL AND EUGENE JULIAN BELL, JR., HER HUSBAND, LENORA PHILLIPS MAXWELL, WIDOW ESTALOUISE BELL AND EUGENE JULIAN BELL AND HUBBAND OF MA		NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT	292 294 425 51 9 651 9 809	1 7 6 3 4



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

September 29, 2024

Cragin Blevins WV DEP Division of Oil & Gas 601 57th Street Charleston, WV 25304

RE:

Drilling Under Roads – Van Wie 1221 S-8H Freemans Creek District, Lewis County West Virginia

Dear Mr. Blevins:

HG Energy II Appalachia, LLC, is submitting the attached application for a new well work permit for the Van Wie 1221 well pad. As an authorized representative, I certify HG Energy II Appalachia, LLC, has the right to drill, stimulate, extract, produce and market the oil, gas or condensate for all leases through which the Van Wie 1221 laterals will drill through, including, all roads crossed under as identified on the attached survey plat.

Should you have any questions or desire further information, please contact me at dwhite@hgenergyllc.com or 304-420-1119.

Very truly yours,

Diane White

Diane C. White

Enclosures

Horizontal Natural Gas Well Work Permit Application Notice By Publication

Notice is hereby given:

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

Paper: The Weston Democrat Newspaper				
Public Notice Date: Wednesday, June 5th & Wednesday	, June 12th, 2024			
The following applicant intends to apply for a surface excluding pipelines, gathering lines are any thirty day period.	a horizontal na nd roads or uti	tural well wor lizes more than	k permit which dis n two hundred ten	sturbs three acres or more of thousand gallons of water in
Applicant: HG Energy II Appalachia, LLC		Well Nun	nber: Van Wie 12	21 S-8H
Address: 5260 Dupont Road				
Parkersburg, WV 26101				
Business Conducted: Natural gas production	n.			
Location -				
State: West Virginia		County:	Lewis	
District: Freemans Creek		Quadrangle:	Vadis 7.5'	Office Pro-
UTM Coordinate NAD83 Northing:	4327325.9			A POUT
UTM coordinate NAD83 Easting:	528606.1			001000
Watershed: Fink Creek				Gris 2028

Coordinate Conversion:

To convert the coordinates above into longitude and latitude, visit: http://tagis.dep.wv.gov/convert/llutm_conus.php

Electronic notification:

To receive an email when applications have been received or issued by the Office of Oil and Gas, visit http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx to sign up.

Reviewing Applications:

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to <u>DEP.comments@wv.gov</u>.

Submitting Comments:

Comments may be submitted online at https://apps.dep.wv.gov/oog/comments/comments.cfm, or by letter to Permit Review, Office of Oil and Gas, 601 57th Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: www.dep.wv.gov/oil-and-gas/pages/default.aspx

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

Date of Noti	ce Certification: 09/29/2024	API No.	47	
		Operator	's Well No. Var	1 Wie 1221 S-8H
40.00			Name: Van W	
Notice has l	been given:			
Pursuant to the	ne provisions in West Virginia Code	§ 22-6A, the Operator has provided the r	equired parties	with the Notice Forms listed
State:	tract of land as follows:			
County:	Lewis	UTM NAD 83 Easting:	528606.1	
District:	Freemans Creek	Northing		
Quadrangle:	Vadis WV 7.5's	Public Road Access: Generally used farm name:	CR 11 / 3 via St	raight Run Road
Watershed:	Fink Creek	Generally used farm name:	Van Wie	
it has provide information re of giving the requirements Virginia Code of this article	ed the owners of the surface described and seed the owners of the surface described and (c), so surface owner notice of entry to so of subsection (b), section sixteen to be \$22-6A-11(b), the applicant shall have been completed by the applicant		14) A certificat bsection (b), se requirement was ten of this art the surface or y that the notice	ion from the operator that (i) ction ten of this article, the deemed satisfied as a result icle six-a; or (iii) the notice
Pursuant to V that the Oper	West Virginia Code § 22-6A, the Operator has properly served the require	perator has attached proof to this Notice and parties with the following:	Certification	
*PLEASE CHE	ECK ALL THAT APPLY			OOG OFFICE USE ONLY
∐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BECA SEISMIC ACTIVITY WAS CONDUC		RECEIVED/ NOT REQUIRED
■ 2. NOT	TICE OF ENTRY FOR PLAT SURV	YEY or ☐ NO PLAT SURVEY WAS C	CONDUCTED	☐ RECEIVED
■ 3. NOT	TICE OF INTENT TO DRILL OF	NOTICE NOT REQUIRED BECANOTICE OF ENTRY FOR PLAT SUR WAS CONDUCTED or		☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SURFA (PLEASE ATTACH)	CE OWNER	
■ 4. NOT	TCE OF PLANNED OPERATION	Office Of OT ACC		RECEIVED
■ 5. PUB	LIC NOTICE	Art o		☐ RECEIVED
■ 6. NOT	TCE OF APPLICATION	Smy - 3 2024		☐ RECEIVED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

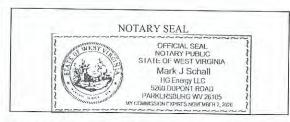
THEREFORE, I Diane White , have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Address:

Email:

Well Operator: HG II Appalachia, LLC By: Diane White Diane White Its: Agent Telephone: 304-420-1119

5260 Dupont Road Parkersburg, WV 26101 Facsimile: 304-863-3172 dwhite@hgenergyllc.com



Subscribed and sworn before me this 29th day of September, 2024 Notary Public

My Commission Expires

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WW-6A (9-13) API NO. 474 7 0 4 1 0 5 7 6 7 OPERATOR WELL NO. VALVOI BEILL NO. TA VOI BE

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION

Not	tice Time Requirer	nent: notice shall be prov	ided no later	than the fili	ng date of permit application.		
	te of Notice: 12/10/23	Date Permit Applica	ation Filed:	12/13/23			
V	PERMIT FOR AI	. c	ICATE OF A		FOR THE DUNDMENT OR PIT		
Deli	ivery method purs	uant to West Virginia C	ode § 22-6A	-10(b)			
	PERSONAL SERVICE	☐ REGISTERED MAIL	☑ ME	THOD OF D	ELIVERY THAT REQUIRES A IGNATURE CONFIRMATION		,
regis sedin the solid addessed open more well important proving properties.	stered mail or by any ment control plan recontrol p	rmethod of delivery that re- quired by section seven of the which the well is or is pro- ing developed by the propose and sediment control plans and sediment control plans are control plans of the control plans of the control plans of the prescribed in section nine of the or water supply source location by humans or domes ity is to take place. (c)(1) It is to the maintained pursuited to be maintained pursuited to a life contrary, notice to a life of the property of the contrary, notice to a life.	quires a receiphis article, an apposed to be I sed well work submitted purwhich the well arface tract or lacement, contact and article; (5 ated within ortic animals; af more than thads, the applicuant to section holder is nator shall also	ot or signatured the well place ocated; (2) The surface suant to subset proposed to tracts overly struction, end) Any surface ne thousand fund (6) The our of the country are the suant may serve neight, artical of notice to a provide the	ed by this article shall deliver, by perse confirmation, copies of the applicat at to each of the following persons: (I he owners of record of the surface trace tract is to be used for roads or other action (c), section seven of this article be drilled is located [sic] is known to fing the oil and gas leasehold being de argement, alteration, repair, removal owner or water purveyor who is known to have a common or other co-owners of interest the documents required upon the person of control of the conduction of the conduction of the conduction of the conduction of the code. I and owner, unless the lien holder is twell Site Safety Plan ("WSSP") to the lien section 15 of this rule.	ion, the erosion and) The owners of record of ct or tracts overlying the land disturbance as ;; (3) The coal owner, be underlain by one or veloped by the proposed or abandonment of any wn to the applicant to vell pad which is used to d within which the ests described in the (2) Notwithstanding any the landowner. W. Va	4
Nam	ess: 5260 Dupont Road	ilachia, LLC **	S Plan Notic Ppalachia	ce		: e the Operator,	of the
Vamo	Parkersburg, WV: Anthony and Daw		-	- COAT	Open two		
Addr				Name: N	OPERATOR A		
	Dunkirk, MD 2075			Address:			
JSU	RFACE OWNER(s	(Road and/or Other Dis	turbance)	radicos.			
Vamo				TI SURFA	CE OWNER OF WATER WELL		
Addr	ess:			AND/OR	WATER PURVEYOR(s)	On R	2
				Name:	NA	-///02 6	200
Jame				Address:		77-	1707
Addr	ess:					UCTO	h .
CIT	DEACE OURIERA) (Impoundments or Pits)			TOR OF ANY NATURAL GAS S		d 2000
Jau. Jame				Name:	BHE GT&S - Attn: Jamie Moore	Envaciant	-01.A
	ess:	1		Address:	925 White Oaks Blvd Bridgeport, WV 26330	-117/11/21/	
Luul	0001			*Dlagge of	tach additional forms if necessary		111
			<	T JC920 SI	raon additional forms it necessary		

NO. 47 - 47 0 4 1 0 5 7 6 7

WW-6A (8-13) API NO. 47OPERATOR WELL NO. Varies 1221 VIII la 512H
Well Pad Name: Van Wie 1221

Notice is hereby given;

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods:

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifly feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items



WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. VONWE 1221 NIH 10 SIZH Well Pad Name: Van Wie 1221

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.



WW-6A (8-13) API NO. 47-OPERATOR WELL NO. Von Wie 1221 NUH be S1221 Well Pad Name: Van Wie 1221

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.



WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. Van Wie 1221 NIH to \$12H Well Pad-Name: Van Wie 1221

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Notice is hereby given by: Well Operator: HG Energy II Appalachia, LLC

Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com

Diane White

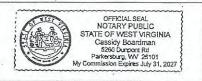
Address: 5260 Dupont Road

Parkersburg, WV 26101

Facsimile: 304-863-3172

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information; please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



Subscribed and sworn before me this 11th day of December , 2023 Notary Public My Commission Expires



January 4, 2024

Anthony and Dawn Van Wie 2700 Jones Road Dunkirk, MD 20754

RE: Van Wie 1221 N-1H thru S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Mr. and Mrs. Van Wie -

Enclosed are copies of various application papers that we will be filing with the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas. A well work permit is being requested for the above-referenced wells.

Pursuant to WV Code Chapter 22B, Article 6, you are receiving copies of this correspondence because the well or other anticipated disturbance is located on your surface property. Your rights as a surface owner (road) are detailed in the enclosed permit application papers.

No action on your part is required. If you have any questions or comments regarding this application, you may call this office at (304) 420-1119 or email at dwhite@hgenergyllc.com.

Very truly yours,

Diane White

Diane C. White

Enclosures



January 4, 2024

James Moore BHE – GT&S 925 White Oaks Blvd Bridgeport, WV 26330

RE: Van Wie 1221 N-1H thru S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Mr. Moore -

Enclosed are copies of various application papers that we will be filing with the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas. A well work permit is being requested for the above-referenced wells.

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Very truly yours,

Diane White

Diane C. White

Enclosures

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STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

Notice Time Rentry	equirement: Notice s	hall be provided at l	east SEVEN (7) da	ys but no more than	FORTY-FIVE (45) days prior to
Date of Notice:	January 5, 2024	Date of Planned En	try: January 12, 2024			
Delivery metho	od pursuant to West	Virginia Code § 22	-6A-10a			
☐ PERSONA	or Pegg	TERED 🔳	METHOD OF DEL	IVERY THAT RE	OUTRES A	-
SERVICE	MAIL		RECEIPT OR SIGN			
			350 ACOUNT (40 A D 4 A P	The state of the s		
on to the surface but no more that beneath such tra- owner of miner and Sediment C Secretary, whice	st Virginia Code § 22: e tract to conduct any n forty-five days prio act that has filed a dec als underlying such tr control Manual and th h statement shall inch ce owner to obtain co	plat surveys require r to such entry to: (1 laration pursuant to act in the county tax e statutes and rules r ade contact informat	of pursuant to this are The surface owner Section thirty-six, arecords. The notice related to oil and gastion, including the a	ticle. Such notice s r of such tract; (2) to rticle six, chapter to e shall include a sta s exploration and pr ddress for a web pa	hall be provided at le o any owner or lesses wenty-two of this cod tement that copies of roduction may be obt	ast seven days e of coal seams le; and (3) any 'the state Brosion ained from the web site, to
Notice is hereb	y provided to: 米	Notice was r	not sent to th	ecord		-
E		are the Op	0101	LOWNER OR LES		
	OWNER(s)		Name: N/		3022	
11001101	ny and Dawn Van Wie ones Road		Address:			
Addition.	rk, MD 20754		110010001			
Name: HGE	nergy II Appalachia, LLC		N=2 (1.5 = 5.	on to University April		
	Dupont Road .		I MINE	ERAL OWNER(s)		
Parke	ersburg, WV 26101 .	4	Name:	Same as Surface Owners		
Name:			Address:			
Address:			*-1	h additional forms if nec	*	
Notice is here Pursuant to We	by given: st Virginia Code § 22 the tract of land as fo	-6A-10(a), notice is	hereby given that th	e undersigned well	operator is planning	entry to conduct
	West Virginia		Approx. Latit	ude & Longitude:	39.094844 / 80.568480	
County:	Lewis ,		Public Road A	Access:	CR11 / 3 via Straight Run R	paq
	Freemans Creek		Watershed:	A POST OF THE PARTY OF THE PART	Fink Creek	
Quadrangle:	Vadis -		Generally use	d farm name:	Van Wie	
may be obtained Charleston, WV obtained from t Notice is here Well Operator:	HG Appalachia, LLC	at the WV Departme 50). Copies of such	ent of Environmenta documents or addit	l Protection headquionalion re	larters, located at 601	of offer, or,
Telephone:	304-420-1119	Diane Whi	te. Facsimile:	304-863-2752		
The Office of C duties. Your pe needed to com appropriately so	Privacy Notice: Dil and Gas processes ersonal information mapply with statutory of course your personal injury of course your personal injury of the process of the privacy	your personal informate to be disclosed to be regulatory require formation. If you he	nation, such as nam other State agencie ements, including ave any questions a	e, address and telep s or third parties it Freedom of Inform	n the normal course mation Act requests	Our office will

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STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Date of Not	ice: 01/05/2024 Date F	Permit Application Filed: 0	01/15/2024	
Delivery me	ethod pursuant to West Virginia Code	§ 22-6A-16(b)		
☐ HAND	■ CERTIFIED MAIL			
DELIV		EOUESTED		
		A 100 CO		
receipt reque drilling a ho of this subse subsection m	W. Va. Code § 22-6A-16(b), at least tendested or hand delivery, give the surface of rizontal well: <i>Provided</i> , That notice give ction as of the date the notice was providing be waived in writing by the surface of ble, facsimile number and electronic main	wher notice of its intent to e en pursuant to subsection (a ded to the surface owner: <i>Pr</i> owner. The notice, if require	enter upon that), section to rovided, how ed, shall incl	he surface owner's land for the purpose of this article satisfies the requirement wever, That the notice requirements of the fude the name, address, telephone number
	ereby provided to the SURFACE O		000000000000000000000000000000000000000	(Cur - 274-)
	IG Energy II Appalachia, LLC *		nthony and Dav	
	260 Dupont Road arkersburg, WV 26101		700 Jones Road	
	arkersburg, vvv 20101		Dunkirk, MD 2075	00~
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The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

STATE OF WEST VIRGINIA 4704105767 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

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Deliv	ery met	hod pursuant to West	Virginia Co	de § 2	22-6A-16(c)		
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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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Office of the District Engineer/Manager
District Four

Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

Alanna J. Keller, P.E. Deputy Secretary of Transportation Deputy Commissioner of Highways

Jimmy Wriston, P. E. Secretary of Transportation Commissioner of Highways

December 04, 2023

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57th Street, SE Charleston, WV 25304

Subject: DOH Permit for the Van Wie 1221, Lewis County S-8H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit 07-2023-0352 which has been issued to HG Energy II Appalachia, LLC for access to the State Road for a well site located off Lewis County Route 11/3 SLS MP 2.941.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Stephen G. Johnson

Director of Operations

Cc:

Diane White

HG Energy II Appalachia, LLC

CH, OM, D-7

File

HG Energy II Appalachia, LLC List of Frac Additives by Chemical Name and CAS # Van Wie 1221 Well Pad (N-1H thru S-12H)

Chemical Name	CAS#	Multiple CAS #'s
Pro Shale Slik 405	Mixture	68551-12-2
		7647-14-5
		12125-02-9
		64742-47-8
Pro Hib II	1	
ון מוח וו	Mixture	68412-54-4
		68607-28-3
		107-21-1
		111-76-2
		67-56-1
		107-19-7
Silica Sand and Ground Sand	Mixture	14808-60-7
		1344-28-1
		1309-37-1
		13463-67-7
Hydrochloric Acid 22 DEG BE	7647-01-0	
PROGEL - 4.5	64742-96-7	
BIO CLEAR 2000	Mixture	25222 60 2
510 CEE/ III 2000	IVIIXture	25322-68-3 10222-01-2
SCALE CLEAR SI 112	107-21-1	
DDODDEAU.		
PROBREAK 4	Mixture	57-50-1
		107-21-1
ulfamic Acid	5329-14-6	
PRO - Flow - 102-N	Mixture	67-63-0
		68439-45-2
		2687-96-9



OPERATOR: HG Energy II Appalachia PAD NAME: Van Wie 1221		
REVIEWED BY: Diane White	SIGNATURE: _	Diane White
WELL RESTR	ICTIONS CHECKLIS	ST Office MECCALLO OF DIVISION GA
HORIZO	ONTAL 6A WELL	OCT 0 3 2024
Well Restrictions		CONTROL OF CONTROL
Perennial Stream, Lake, Pond, Re DEP Waiver and Permit C At Least 300 Feet from Pad and I Naturally Producing Trout Stream DEP Waiver and Permit C At Least 1000 Feet from Pad and Groundwater Intake or Public Wa	Conditions LOD (including any E&S Con; OR onditions LOD (including any E&S (
DEP Waiver and Permit C At Least 250 Feet from an Existir Drilled; OR		d Spring to Well Being
	d Recorded with County Cl	erk, OR
DEP Variance and Permit At Least 625 Fact from an Occupa		
At Least 625 Feet from an Occupi	d Recorded with County Cl	
DEP Variance and Permit	Conditions	
At Least 625 Feet from Agricultur of the Pad; OR	al Buildings Larger than 25	500 Square Feet to the Center
Surface Owner Waiver and	d Recorded with County Cle	erk, OR
DEP Variance and Permit	Conditions	

