



west virginia department of environmental protection

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

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

Wednesday, November 20, 2019
WELL WORK PERMIT
Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD
PARKERSBURG, WV 26101

Re: Permit approval for NEEL 1207 N-3H
47-033-05970-00-00

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.

A blue ink signature of James A. Martin.

James A. Martin
Chief

Operator's Well Number: NEEL 1207 N-3H
Farm Name: HG ENERGY II APPALACHIA
U.S. WELL NUMBER: 47-033-05970-00-00
Horizontal 6A New Drill
Date Issued: 11/20/2019

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. 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.

API Number: _____

PERMIT CONDITIONS

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.

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

1) Well Operator: HG Energy II Appalachia, LLC 494519932 Harrison Union West Milford 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Neel 1207 N-3H Well Pad Name: Neel 1207

3) Farm Name/Surface Owner: HG Energy II Appalachia, LLC Public Road Access: Hidden Valley Rd @ SR 19

4) Elevation, current ground: 1354' Elevation, proposed post-construction: 1344'

5) Well Type (a) Gas Oil _____ Underground Storage _____
Other _____

(b) If Gas Shallow Deep _____
Horizontal _____

SDew
9/20/2019

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus at 7076'/7158' and 82' in thickness. Anticipated pressure at 4314#.

8) Proposed Total Vertical Depth: 7145'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 24,768'

11) Proposed Horizontal Leg Length: 16,955'

12) Approximate Fresh Water Strata Depths: 135', 245', 425', 630', 731'

13) Method to Determine Fresh Water Depths: Nearest offset well data

14) Approximate Saltwater Depths: 1782', 1848'

15) Approximate Coal Seam Depths: 290, 340, 592, 1004' to 1009'

16) Approximate Depth to Possible Void (coal mine, karst, other): None

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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Environmental Protection

The following information is being provided to you for your information only. It is not intended to be used as a substitute for professional advice. The information is based on the information provided to us and is subject to change without notice. We warrant that the information is true and correct as of the date of this report.

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 Office of the
 Director of
 Education
 10/15/2018

WW-6B
(04/15)

4703305970

API NO. 47- _____
 OPERATOR WELL NO. Neal 1207 N-3H
 Well Pad Name: Neal 1207

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	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' ✓	Drilled In
Fresh Water/Coal	20"	NEW	J-55	94	1100'	1100' ✓	40% excess yield = 1.20 CTS
Intermediate 1	13 3/8"	NEW	J-55	68	2200'	2200' ✓	40% excess yield = 1.20 CTS
Intermediate 2	9 5/8"	NEW	J-55	40	3000'	3000' ✓	40% excess yield Less 0% Excess Yield
Production	5 1/2"	NEW	P-110	23	24768'	24768' ✓	20% excess yield = 1.10, 20% yield = 1.00
Tubing							
Liners							

SDW
11/19/2019

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	30"	.500				Drilled In
Fresh Water/Coal	20"	24"	.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	Less 40% excess, Tail 0% excess
Intermediate 2	9 5/8"	12 1/4"	.395	3950		Type 1/Class A	Less 40% excess, for 0% Excess Yield
Production	5 1/2"	8 1/2"	.415	16240 ✓	12500	Type 1/Class A	20% excess yield = 1.10, 20% yield = 1.00
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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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 7145 feet. Drill horizontal leg to estimated 16,955 lateral length, 24,768 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 ECP 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): 28.278 acres

22) Area to be disturbed for well pad only, less access road (acres): 12.715 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 ECP for isolating storage zone
Intermediate 2 - Bow Spring on first 2 joints then every third joint to 100' from surface.
Production - Run 1 spiral centralizer every 5 joints from the top of the curve to surface. Run 1 spiral centralizer every 3 joints from the 1st 5.5' long joint to the top of the curve

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

Conductor -NA, Casing to be drilled in w/ Dual Rotary Rig.
Fresh Water/Coal - 15.8 ppg PNE-1 + 3% bwoc CaCl 40% Excess Yield = 1.20, CTS
Intermediate 1 - Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess, CTS
Intermediate 2 - Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess, Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess, CTS
Production - Lead: 14.5 ppg POZ.PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170, Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA170 20% Excess, Lead Yield=1.19, Tail Yield=1.94, CTS

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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 cement.
Intermediate 1 - Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.
Intermediate 2 - Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume 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.

Neel 1207 Well Pad (N-1H to N-6H, S-7H to S-12H)
Cement Additives

Material Name	Material Type	Material Description	CAS #																		
Premium NE-1	Portland Cement	Premium NE-1 is a portland cement with early compressive strength properties.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Portland cement</td> <td>90 - 100</td> <td>65997-15-1</td> </tr> <tr> <td>Calcium oxide</td> <td>1 - 5</td> <td>1305-78-8</td> </tr> <tr> <td>Magnesium oxide</td> <td>1 - 5</td> <td>1309-48-4</td> </tr> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>0.1 - 1</td> <td>14808-60-7</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Portland cement	90 - 100	65997-15-1	Calcium oxide	1 - 5	1305-78-8	Magnesium oxide	1 - 5	1309-48-4	Crystalline silica: Quartz (SiO2)	0.1 - 1	14808-60-7			
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Bentonite	Extender	Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>bentonite</td> <td>90 - 100</td> <td>1302-78-9</td> </tr> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>5 - 10</td> <td>14808-60-7</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	bentonite	90 - 100	1302-78-9	Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7									
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Calcium Chloride	Accelerator	A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Calcium chloride</td> <td>90 - 100</td> <td>10043-52-4</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Calcium chloride	90 - 100	10043-52-4												
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Cello Flake	Lost Circulation	Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>No hazardous ingredient</td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient name	%	CAS number	No hazardous ingredient														
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FP-13L	Foam Preventer	FP-13L is a clear liquid organic phosphate antifoaming agent used in cementing operations. It is very effective minimizing air entrapment and preventing foaming tendencies of latex systems.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Tributyl phosphate</td> <td>90 - 100</td> <td>126-73-8</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Tributyl phosphate	90 - 100	126-73-8												
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Granulated Sugar	Retarder	Used to retard cement returns at surface. A proprietary product that provides expansive properties and improves bonding at low to moderate temperatures.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Sucrose</td> <td>90 - 100</td> <td>57-50-1</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Sucrose	90 - 100	57-50-1												
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EC-1	Gas Migration	Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>No hazardous ingredient</td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient name	%	CAS number	No hazardous ingredient														
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Poz (Fly Ash)	Base	A synthetic pozzolan, (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.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>5 - 10</td> <td>14808-60-7</td> </tr> <tr> <td>Calcium oxide</td> <td>1 - 5</td> <td>1305-78-8</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7	Calcium oxide	1 - 5	1305-78-8									
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R-3	Retarder	A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Organic acid salt</td> <td>40 - 50</td> <td>Trade secret.</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Organic acid salt	40 - 50	Trade secret.												
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S-5	Surfactant	Used to water wet casing and formation to facilitate cement bonding.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>2-Butoxyethanol</td> <td>20 - 30</td> <td>111-76-2</td> </tr> <tr> <td>Proprietary surfactant</td> <td>10 - 20</td> <td>Trade secret.</td> </tr> <tr> <td>D-Glucopyranose, oligomeric, C10-16-alkyl glycosides</td> <td>5 - 10</td> <td>110615-47-9</td> </tr> <tr> <td>Alkylarylsulfonate amine salt</td> <td>1 - 5</td> <td>Trade secret.</td> </tr> <tr> <td>Polyoxyalkylenes</td> <td>0.1 - 1</td> <td>Trade secret.</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	2-Butoxyethanol	20 - 30	111-76-2	Proprietary surfactant	10 - 20	Trade secret.	D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	5 - 10	110615-47-9	Alkylarylsulfonate amine salt	1 - 5	Trade secret.	Polyoxyalkylenes	0.1 - 1	Trade secret.
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WV Department of Environmental Protection

4703305970

PROPOSAL TO DRILL WITHIN DOMINION TRANSMISSION STORAGE FIELD

FIELD/ZONES: **DOMINION FINK/KENNEDY/LOST CREEK -GANTZ SAND**

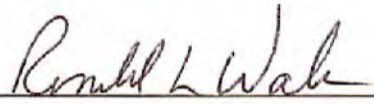
WELL NAME: **Neel 1207**

Well # **Neel 1207 N-3H**

DISTRICT/COUNTY/STATE: **Grant/Union, Harrison, WV**

Submitted 
JOSH HINTON
HG ENERGY, LLC

DATE 8-15-19

Approved 

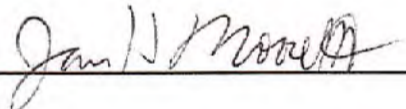
DATE 8/15/19

Dominion Energy Transmission

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Office of Oil and Gas

AUG 27 2019

WV Department of
Environmental Protection

Approved 
Dominion Energy Transmission

DATE 8/15/19

Comments:

HG Energy has submitted this Casing & Cementing diagram and Drilling Plan to Dominion Transmission for Review. This signed document acknowledges that Dominion has reviewed the proposed casing program and the well's location within the Fink/Kennedy/Lost Creek storage field. This acknowledgement also confirms the proposed casing program is accurate to the proper storage zone as provided by HG Energy, LLC



1207 N-3H
Marcellus Shale Horizontal
Harrison County, WV

Ground Elevation		1343'		1207 N-3H SHL				14218628.17N 1809764.61E			
Azm		340.538°		1207 N-3H LP				14218516.27N 1808369.15E			
WELLBORE DIAGRAM		340.538°		1207 N-3H BHL				14234497.24N 1802722.07E			
HOLE	CASING	GEOLOGY	TOP	BASE	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS		
30"	30" 157.5# LS	Conductor	0	120	AIR	N/A, Casing to be drilled in w/ Dual Rotary Rig	N/A	Ensure the hole is clean at TD.	Conductor casing = 0.5" wall thickness		
		Fresh Water	0	135,637, 731	AIR	15.6 ppg PNE-1 + 3% bwoc CaCl 40% Excess Yield=1.20 / CTS	Centralized every 3 joints to surface	Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.	Surface casing = 0.438" wall thickness Burst=2110 psi		
Coal	1004	1009									
Surface / FW	0	1100									
17.5"	13-3/8" 68# J-55 BTC	Little/Big Lime	1552 / 1594	1564 / 1644	AIR / KCL Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on every joint <i>"will also be running ACP for isolating storage zone"</i>	Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.480" wall thickness Burst=3450 psi		
		Injun / Gantz (Storage)	1652 / 1982	1762 / 2052							
		Intermediate 1	0	2200							
12.25"	9-5/8" 40# J-55 BTC	Fifty / Thirty Foot	2091 / 2182	2151 / 2192	AIR / KCL Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on first 2 joints then every third joint to 100' form surface	Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.395" wall thickness Burst=3950 psi		
		Gordon Stray / Gordon	2218 / 2278	2278 / 2465							
		5th Sand	2525	2537							
		Bayard / Warren	2591 / 2891	2601 / 2931							
8.5" Vertical	5-1/2" 23# P-110 HP CDC HTQ	Speechley	3211	3231	9.0ppg SOBM	Lead: 14.5 ppg POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170 Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA170 20% Excess Lead Yield=1.19 Tail Yield=1.94 CTS	Run 1 spiral centralizer every 5 joints from the top of the curve to surface.	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.	Production casing = 0.415" wall thickness Burst=16240 psi Note:Actual centralizer schedules may be changed due to hole conditions		
		Balltown	3438	3448							
		Benson	4529	4544							
8.5" Curve		Rhinestreet	6390	6646	11.5ppg-12.5ppg SOBM		Run 1 spiral centralizer every 3 joints from the 1st 5.5" long joint to the top of the curve.				
		Cashaqua	6646	6746							
		Middlesex	6746	6778							
		West River	6778	6849							
		Burkett	6849	6859							
		Tully Limestone	6859	6967							
		Hamilton	6967	7076							
8.5" Lateral	Marcellus	7076	7158	11.5ppg-12.5ppg SOBM	TD @ +7145' TVD +/-24788' MD						
	TMD / TVD (Production)	24768	7145								
Onondaga	7158										

LP @ 7145' TVD / 7813' MD

8.5" Hole - Cemented Long String
5-1/2" 23# P-110 HP CDC HTQ

+/-16955' ft Lateral

TD @ +7145' TVD
+/-24788' MD

X=centralizers

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List of Frac Additives by Chemical Name and CAS #**Neel 1207 Well Pad (N-1H to N-6H, S-7H to 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	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	25322-68-3 10222-01-2
SCALE CLEAR SI 112	107-21-1	
PROBREAK 4	Mixture	57-50-1 107-21-1
Sulfamic Acid	5329-14-6	
PRO - Flow - 102-N	Mixture	67-63-0 68439-45-2 2687-96-9
PROGEL - 4	9000-30-0	

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WW-9
(4/16)

4703-05970

API Number 47 - _____ - _____
Operator's Well No. Nael 1207 N-3H

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 494501907

Watershed (HUC 10) Middle West Fork Creek Quadrangle West Milford 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

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 _____)
- Reuse (at API Number TBD - At next anticipated well)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

*SDW
8/14/2019*

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. Vertical - Air, Air/KCl, SOBM Horizontal - SOBM

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

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 waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto 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 or imprisonment.

Company Official Signature Diane White

Company Official (Typed Name) Diane White

Company Official Title Agent

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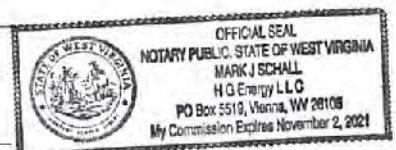
WV Department of
Environmental Protection

Subscribed and sworn before me this 16th day of July, 2019

[Handwritten Signature]

Notary Public

My commission expires 11/2/2021



HG Energy II Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 28.602 Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Hay 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

Maintain E&S controls through the drilling and completion process

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: S. L. Dewar

Comments: Pre-seed/mulch as soon as reasonably possible per regulation.

Upgrade E&S if needed per WV DEP E&S manual.

Title: Oil & Gas Inspector

Date: 8/14/2019

Field Reviewed? Yes No

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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)
 8287 US Highway 19
 Cochran, PA 16314
 814-425-7778

Disposal Locations:

Apex Environmental, LLC Permit # 06-08488
 11 County Road 78
 Amsterdam, OH 43903
 740-543-4889

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

Sycamore Landfill Inc. Permit #R80-079001 05-2010
 4301 Sycamore Ridge Road
 Hurricane, WV 25526
 304-562-2611

Max Environmental Technologies, Inc. Facility Permit # PAD004835146 / 901071
 233 Max Lane
 Yukon, PA 25968
 724-722-3500

Max Environmental Technologies, Inc. Facility Permit # PAD05087072 / 301359
 200 Max Drive
 Bulger, PA 15019
 724-796-1571

Waste Management Kelly Run Permit # 100663
 1901 Park Side Drive
 Elizabeth, PA 15037
 412-384-7569

Waste Management South Hills (Arnold) Permit # 100582
 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
 Bridgport, WV 26330

Brooke County Landfill Permit # SWP-103-87 / WV 0109029
 Rd 2 Box 410
 Colliers, WV 26035
 304-748-0014

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Wetzel County Landfill Permit # SWF-1021-97 / WV 0109186
 Rt 1, Box 156A
 New Martinsville, WV 26035
 304-455-3800

Energy Solutions, LLC Permit # UT 2300249
 428 West 800 South
 Suite 200
 Salt Lake City, UT 84101

Energy Solutions Services, Inc. Permit # R-73006-L24
 1560 Bear Creek Road
 Oak Ridge, TN 37830

Northern A-1 Environmental Services Permit ID MIP020906814
 3947 US 131 North, PO Box 1030
 Kalkaska, MI 49646
 231-258-9961

Water Haul off Companies:

Dynamic Structures, Clear Creek DOT # 720488
 3790 State Route 7
 New Waterford, OH 44445
 330-882-0184

Nabors Completion & Production Services Co.
 PO Box 878682
 Dallas, TX 75397-5682

Select Energy Services, LLC
 PO Box 203997
 Dallas, TX 75320-3997

Nuverra Environmental Solutions
 11942 Veterans Memorial Highway
 Masontown, WV 26542

Mustang Oilfield Services LLC
 PO Box 739
 St. Clairsville, OH 43950

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

Disposal Locations:

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

Solidification/Incineration
 Soil Remediation, Inc. Permit # 02-20753
 6065 Arrel-Smith Road
 Lowellville, OH 44435
 330-536-6825

Adams #1 (Buckeye Brine, LLC)
 Permit # 34-031-2-7177
 22986 Airport Road
 Coshocton, OH 43812
 740-575-4484
 512-478-6545

CMS of Delaware Inc. DBA CMS Oilfield Serv
 301 Commerca Drive
 Moorestown, NJ 08057

Force, Inc.
 1380 Rte. 288 Hwy. E, Suite 303
 Indiana, 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 15622

Burna Drilling & Excavating
 618 Crabapple Road P.O. Box
 Wind Ridge, PA 15880

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

Grosella (SWIW #34)
 Permit # 4096
 Rt. 88
 Garrettsville, OH
 718-275-4816

Kemble 1-D Well
 Permit # 8780
 7675 East Pike
 Norwich, Oh 43767
 614-648-8898
 740-786-6495

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4703 05970

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 Brine, LLC)
Permit #34-031-2-7241-00-00
2680 Exposition, Suite 117
Austin, TX 78703
512-478-6545

Mozena #1 Well (SWIW # 18)
Permit # 34-157-2-5511-00-00
5367 E. State Street
Newcomerstown, OH 43882
740-763-3966

Goff SWD #1 (SWIW # 27)
Permit # 34-119-2-8776-000
300 Cherrington Pkwy, Suite 200
Coraopolis, PA 15108
412-329-7276

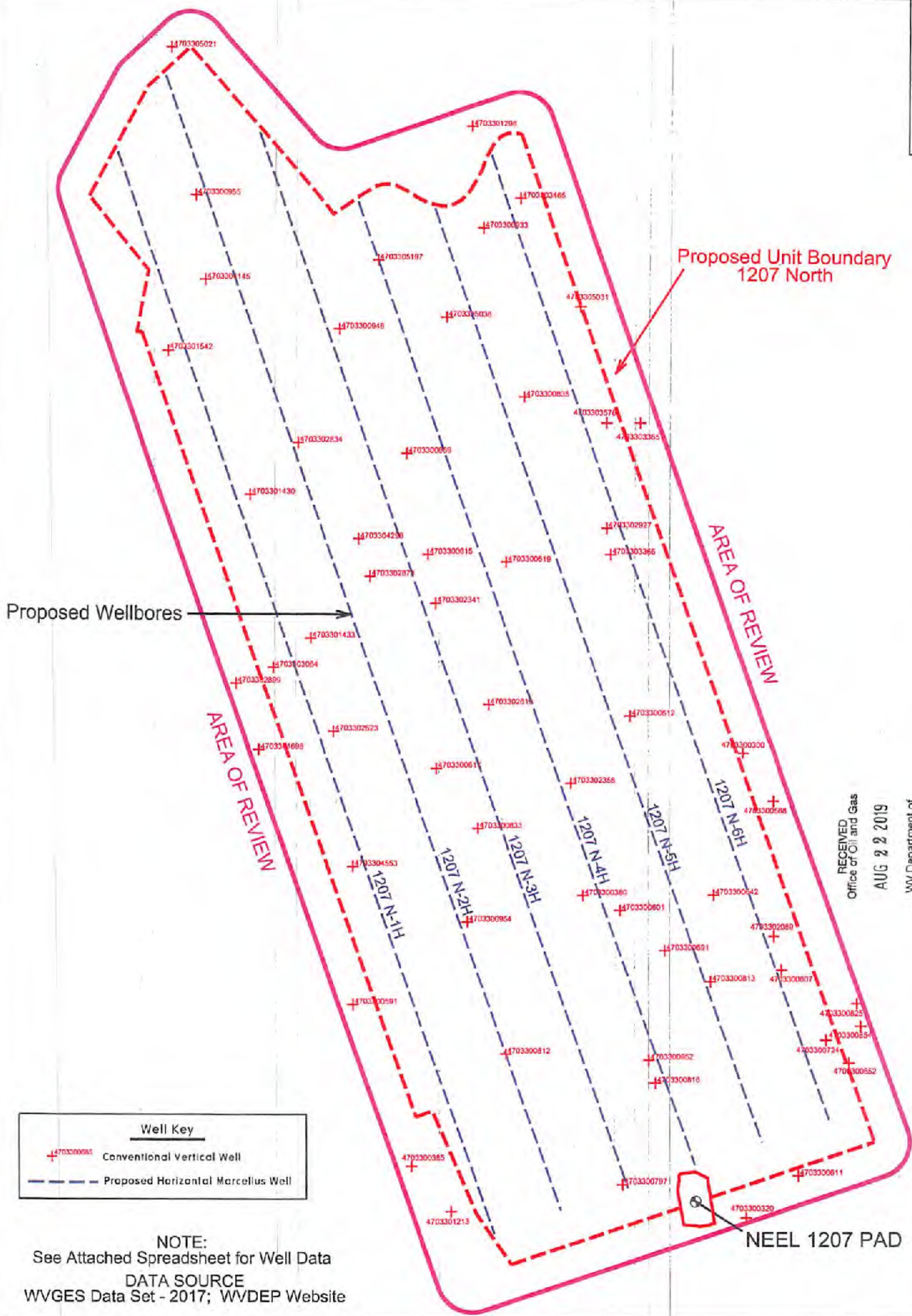
SOS D#1 (SWIW #12)
Permit # 34-059-2-4202-00-00
Silcor Oilfield Services, Inc.
2999 Hubbard Road
Youngstown, OH 44505

Dudley #1 UIC (SWIW #1)
Permit # 34-121-2-2459-00-00
Select Energy Services, LLC
7984 S. Pleasants Hwy
St. Marys, WV 26170
304-665-2652

OH UIC #1 Bu keya UIC Barnesville 1 & 2
CNX Gas Company, LLC
1000 Consol Energy Drive
Permit # 34-013-2-0609-00-00
Permit # 34-013-2-0614-00-00
804-323-6568

US Steale 1.1385
Permit # 47-001-00561
200 Evergreen Drive
Waynesburg, PA 15730
804-323-6568

Chapin #7 UIC (SWIW #7)
Permit # 34-083-2-4197-00-00
Elkhead Gas & Oil Company
12168 Marne Rd. NE
Newark, OH 43055
740-763-3966



Proposed Unit Boundary
1207 North

Proposed Wellbores

AREA OF REVIEW

AREA OF REVIEW

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Well Key	
	Conventional Vertical Well
	Proposed Horizontal Marcellus Well

NOTE:
See Attached Spreadsheet for Well Data
DATA SOURCE
WVGES Data Set - 2017; WVDEP Website

NEEL 1207 PAD

Area of Review for:

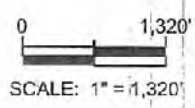
NEEL 1207 UNIT

- Proposed 1207 N-1H
- Proposed 1207 N-2H
- Proposed 1207 N-3H
- Proposed 1207 N-4H
- Proposed 1207 N-5H
- Proposed 1207 N-6H

HG ENERGY, II APPALACHIA, LLC
5260 DuPont Road, Parkersburg, WV 26101



Grant & Union Districts, Harrison County, W.Va.



4703305970

EXISTING WELLS LOCATED WITHIN THE AREA OF REVIEW FOR:

NUTTER 1207 NORTH UNIT AND PROPOSED WELLS N-1H, N-2H, N-3H, N-4H, N-5H & N-6H

CT	API	COUNTY	FARM	OPERATOR NAME	FORMATION NAME	WELL TYPE	TVD	STATUS	LATITUDE	LONGITUDE
1	4703300300	HARRISON	C H Gaston 2 CW136	Dominion Energy Transmission Inc.	Fifty-foot	Storage	2050	PLUGGED	39.169238	-80.399969
2	4703300320	HARRISON	Dora B McWhorter	Dominion Energy Transmission Inc.	Gordon	Storage	2039	PLUGGED	39.151229	-80.399968
3	4703300380	HARRISON	C H Gaston	Dominion Energy Transmission Inc.	Gordon (undiff)	Storage	2094	ACTIVE	39.16371	-80.407981
4	4703300385	HARRISON	Gusman	UNKNOWN	Hampshire Grp	Storage	2337	PLUGGED	39.153261	-80.416667
5	4703300588	HARRISON	Petitto Brothers Inc	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4461	ACTIVE	39.167359	-80.398441
6	4703300591	HARRISON	William W Brodwater III	Dominion Energy Transmission Inc.	Benson	Gas	4488	ACTIVE	39.159553	-80.419511
7	4703300601	HARRISON	James L/Mary A Sellers	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4300	ACTIVE	39.16313	-80.406118
8	4703300611	HARRISON	Willard B/B Westfall	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4430	ACTIVE	39.152826	-80.397359
9	4703300612	HARRISON	WV Department of Nat Res	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4397	ACTIVE	39.170689	-80.405559
10	4703300615	HARRISON	Hiram Burnside	Dominion Energy Transmission Inc.	Benson	Gas	4295	ACTIVE	39.17693	-80.415622
11	4703300617	HARRISON	Linda J Maxwell Trust	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4440	ACTIVE	39.168657	-80.415249
12	4703300619	HARRISON	Carl Smith 1	Antero Resources Corporation	Benson	Gas	4282	ACTIVE	39.176639	-80.411709
13	4703300642	HARRISON	Charles H Gaston	Dominion Energy Transmission Inc.	UNKNOWN	NA	-	PLUGGED	39.16371	-80.401459
14	4703300652	HARRISON	R Bartlett CW628	Dominion Energy Transmission Inc.	Fifty-foot	Storage	2140	PLUGGED	39.157187	-80.394798
15	4703300691	HARRISON	C H Gaston CW126	Dominion Energy Transmission Inc.	Fifty-foot	Storage	2074	PLUGGED	39.161574	-80.403918
16	4703300724	HARRISON	A C Thrash CW235	Dominion Energy Transmission Inc.	Fifty-foot	Storage	1910	PLUGGED	39.158092	-80.395928
17	4703300797	HARRISON	A J Smith CW121	Dominion Energy Transmission Inc.	Greenland Gap Fm	Storage	2200	ACTIVE	39.152535	-80.406118
18	4703300807	HARRISON	Mae Gaston CW127	Dominion Energy Transmission Inc.	Greenland Gap Fm	Storage	2056	ACTIVE	39.160808	-80.398105
19	4703300812	HARRISON	Linda Maxwell Trust	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4539	ACTIVE	39.157615	-80.411895
20	4703300813	HARRISON	Mae Gaston CW125	Dominion Energy Transmission Inc.	Fifty-foot	Storage	2125	ACTIVE	39.160373	-80.401646
21	4703300816	HARRISON	Mae Gaston CW124	Dominion Energy Transmission Inc.	Fifty-foot	Storage	2150	ACTIVE	39.156454	-80.40444
22	4703300825	HARRISON	H T Edwards CW236	Dominion Energy Transmission Inc.	Fifty-foot	Storage	1881	ACTIVE	39.159502	-80.394379
23	4703300833	HARRISON	Cnsrvtn Com CW132	Dominion Energy Transmission Inc.	Thirty-foot	Storage	2002	ACTIVE	39.166323	-80.413199
24	4703300835	HARRISON	Vance Ward	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4521	ACTIVE	39.183026	-80.410777
25	4703300854	HARRISON	Rhonda Koutsobabis	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4410	ACTIVE	39.158631	-80.394192
26	4703300869	HARRISON	James G McWhorter	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4341	ACTIVE	39.180849	-80.416666
27	4703300933	HARRISON	Hiram Munday 3	EQT Production Co.	Benson	Gas	4465	ACTIVE	39.189588	-80.41283
28	4703300948	HARRISON	M S Ward	EQT Production Co.	Benson	Gas	4475	ACTIVE	39.185637	-80.42002
29	4703300952	HARRISON	Joseph D/Marva Shepherd	Dominion Energy Transmission Inc.	Benson	Gas	4595	ACTIVE	39.157348	-80.404757
30	4703300954	HARRISON	Linda J Maxwell Revocable Trust	Dominion Energy Transmission Inc.	Benson	Gas	4473	ACTIVE	39.162695	-80.413758
31	4703300955	HARRISON	Zina M Davis	Dominion Energy Transmission Inc.	Benson	Dry w/ Gas Show	4446	PLUGGED	39.190792	-80.427201
32	4703301213	HARRISON	J B Gusman	Dominion Energy Transmission Inc.	Benson	Oil and Gas	4560	ACTIVE	39.151519	-80.414689
33	4703301298	HARRISON	W E Wease	Alliance Petroleum Corporation	Greenland Gap Fm	Gas	4394	ACTIVE	39.193487	-80.413389
34	4703301430	HARRISON	H Burnside	Dominion Energy Transmission Inc.	Hampshire Grp	Storage	2232	ACTIVE	39.179252	-80.424493

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EXISTING WELLS LOCATED WITHIN THE AREA OF REVIEW FOR:

NUTTER 1207 NORTH UNIT AND PROPOSED WELLS N-1H, N-2H, N-3H, N-4H, N-5H & N-6H

CT	API	COUNTY	FARM	OPERATOR NAME	FORMATION NAME	WELL TYPE	TVD	STATUS	LATITUDE	LONGITUDE
35	4703301433	HARRISON	James Maloney	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4648	ACTIVE	39.173737	-80.421512
36	4703301542	HARRISON	Stephen Hinkle	Ross & Wharton Gas Co.	Greenland Gap Fm	Gas	2799	ACTIVE	39.184786	-80.428592
37	4703301698	HARRISON	L Maxwell	Dominion Energy Transmission Inc.	Benson	Gas	4516	ACTIVE	39.169414	-80.424118
38	4703302089	HARRISON	Jeffrey O'Field	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4636	ACTIVE	39.162114	-80.398478
39	4703302341	HARRISON	WV Conservation CW-140	Dominion Energy Transmission Inc.	Thirty-foot	Observation	1768	ACTIVE	39.175043	-80.415248
40	4703302358	HARRISON	R S Hershey CW135	Dominion Energy Transmission Inc.	Thirty-foot	Observation	2000	ACTIVE	39.168076	-80.40854
41	4703302619	HARRISON	WV Con Com CW141	Dominion Energy Transmission Inc.	Gantz	Storage	1820	PLUGGED	39.171124	-80.41264
42	4703302623	HARRISON	R H Martin CW-133	Dominion Energy Transmission Inc.	Thirty-foot	Storage	1940	ACTIVE	39.170108	-80.420393
43	4703302834	HARRISON	McWhorter CW144	Dominion Energy Transmission Inc.	Fifty-foot	Storage	1797	ACTIVE	39.181255	-80.422103
44	4703302879	HARRISON	Burnside	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas w/ Oil Show	3041	PLUGGED	39.176085	-80.41853
45	4703302899	HARRISON	K M Patton/R Reed 1	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	3011	PLUGGED	39.171995	-80.425239
46	4703302927	HARRISON	Carl Smith (CW-143)	Dominion Energy Transmission Inc.	UNKNOWN	NA	-	PLUGGED	39.177945	-80.406677
47	4703303064	HARRISON	J Chevront (CW-154)	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	2933	PLUGGED	39.172605	-80.423373
48	4703303365	HARRISON	Carl V Smith Jr 4	Antero Resources Corporation	Benson	Gas	4575	ACTIVE	39.182031	-80.404998
49	4703303366	HARRISON	Carl V Smith Jr 5	Antero Resources Corporation	Benson	Gas	4605	ACTIVE	39.17693	-80.406491
50	4703303465	HARRISON	Rodney Combs	Dominion Energy Transmission Inc.	Hampshire Grp	Storage	2002	ACTIVE	39.190718	-80.410963
51	4703303576	HARRISON	Carl Smith (CW-151)	Dominion Energy Transmission Inc.	UNKNOWN	NA	3308	PLUGGED	39.182031	-80.406675
52	4703304145	HARRISON	Joseph H Workman 1	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4360	ACTIVE	39.187542	-80.426729
53	4703304296	HARRISON	Hiram Burnside	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	2942	PLUGGED	39.177535	-80.419089
54	4703304553	HARRISON	Linda J Maxwell	Dominion Energy Transmission Inc.	Misc Sands-BNSN/BRLR	Gas	4638	ACTIVE	39.164873	-80.419461
55	4703305021	HARRISON	Buffalo Lake Dev LLC	Alliance Petroleum Corporation	Greenland Gap Fm	Gas	4520	ACTIVE	39.196533	-80.428408
56	4703305031	HARRISON	Robert M Lewis	Dominion Energy Transmission Inc.	Greenland Gap Fm	Gas	4550	ACTIVE	39.186527	-80.407981
57	4703305036	HARRISON	Ward, Evelyn Marie	Dominion Energy Transmission Inc.	Benson	Gas	4460	ACTIVE	39.186108	-80.414657
58	4703305197	HARRISON	Evelyn Marie Ward	Dominion Energy Transmission Inc.	Huntersville Chert	Gas	6986	ACTIVE	39.188333	-80.418094

SOURCE: WVGES DATASET (2017) and WVDEP WEBSITE

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

4703305970

January 7, 2019

Dominion Energy Transmission
Attn: Charles Cunningham
2397 Davisson Run Road
Clarksburg, WV 26301

RE: Area of Review – Neel 1207 Well Pad (N-1H to N-6H)
Hydraulic Fracturing Notice

Dear Sir:

HG Energy II Appalachia, LLC, is developing a Marcellus pad (Neel 1207 pad) located in Harrison County, WV. As an owner or operator of a conventional natural gas well in this area, we are requesting your assistance in this matter.

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 7200' TVD) and existing conventional natural gas wells.

HG Energy anticipates conducting hydraulic fracturing of the Neel 1207 Pad during the fourth quarter of 2019. We have identified conventional natural gas wells operated by your company within 500' of one of the newly planned laterals (Neel 1207 N-1H). A plat for the well is attached.

We recommend conventional well operators conduct the following activities before, during and after the fracturing operation.

1. Inspect surface equipment prior to fracturing to establish integrity and well conditions.
2. Observe wells closely during and after fracturing and monitor for abnormal increases in gas, water or pressure.
3. Inspect or install master valves rated at 3,000 psi or other necessary equipment for wellhead integrity.
4. Notify the OOG and HG Energy if any changes in water, gas production, pressure or other anomalies are identified.

Should you have any questions or desire further information, please contact me at 304-420-1119 or dwhite@hgenergyllc.com. You may also contact the WV Office of Oil and Gas at 304-926-0444.

Sincerely,

Diane White

Diane White

Enclosure

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AUG 27 2019

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

4703305970

January 7, 2019

Antero Resources
535 White Oaks Blvd
Bridgeport, WV 26330

RE: Area of Review – Neel 1207 Well Pad (N-1H to N-6H)
Hydraulic Fracturing Notice

Dear Sir:

HG Energy II Appalachia, LLC, is developing a Marcellus pad (Neel 1207 pad) located in Harrison County, WV. As an owner or operator of a conventional natural gas well in this area, we are requesting your assistance in this matter.

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 7200' TVD) and existing conventional natural gas wells.

HG Energy anticipates conducting hydraulic fracturing of the Neel 1207 Pad during the fourth quarter of 2019. We have identified conventional natural gas wells operated by your company within 500' of one of the newly planned laterals (Neel 1207 N-1H). A plat for the well is attached.

We recommend conventional well operators conduct the following activities before, during and after the fracturing operation.

1. Inspect surface equipment prior to fracturing to establish integrity and well conditions.
2. Observe wells closely during and after fracturing and monitor for abnormal increases in gas, water or pressure.
3. Inspect or install master valves rated at 3,000 psi or other necessary equipment for wellhead integrity.
4. Notify the OOG and HG Energy if any changes in water, gas production, pressure or other anomalies are identified.

Should you have any questions or desire further information, please contact me at 304-420-1119 or dwhite@hgenergyllc.com. You may also contact the WV Office of Oil and Gas at 304-926-0444.

Sincerely,

Diane White

Diane White

Enclosure

RECEIVED
Office of Oil and Gas

AUG 27 2019

WV Department of
Environmental Protection



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

January 7, 2019

EQT Production Company
115 Professional Place
Bridgeport, WV 26330

RE: Area of Review – Neel 1207 Well Pad (N-1H to N-6H)
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Alliance Petroleum Company
214 Warner Street
Marietta, OH 45750

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AUG 27 2019

WV Department of
Environmental Protection



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

January 7, 2019

Ross & Wharton Gas Company
29 Morton Street
Buckhannon, WV 26201

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Office of Oil and Gas

AUG 27 2019

WV Department of
Environmental Protection

HG Energy, LLC
 Certified Mail Receipt
 Neel 1207 N-1H
 Area of Review - Notice to Well Owners

7018 0680 0001 1980 3736

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Certified Mail Fee
 \$ 3.45

Extra Services & Fees (check box, add fee as appropriate)

<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ <u>2.15</u>
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage
 \$ 1.21

Total Postage and Fees
 \$ 7.41

Postmark Here
 JAN 10 2019

Sent To
 Alliance Petroleum Company
 Street and Apt. No., or PO Box No.
 214 Warner Street
 City, State, ZIP+4®
 Marietta OH 45750

1207N1H AOR

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Certified Mail Fee
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Postage
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Total Postage and Fees
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Postmark Here
 JAN 10 2019

Sent To
 ERT Production Company
 Street and Apt. No., or PO Box No.
 115 Professional Place
 City, State, ZIP+4®
 Bridgeport WV 26330

1207N1H AOR

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

RECEIVED
 Office of Oil and Gas
 AUG 27 2019
 WV Department of
 Environmental Protection

HG Energy, LLC
 Certified Mail Receipt
 Neel 1207 N-1H
 Area of Review - Notice to Well Owners

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Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ 1.21

Total Postage and Fees
 \$ 7.41

Sent To Antero Resources
 Street and Apt. No., or PO Box No.
595 White Oaks Blvd
 City, State, ZIP+4®
Bridgeport WV 26330

1207 NIH AOR

PARKERSBURG, WV 26101
 JAN 10 2019
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PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage
 \$ 1.91

Total Postage and Fees
 \$ 7.41

Sent To Domionion Energy Transmission
 Street and Apt. No., or PO Box No.
2397 Davison Run Road
 City, State, ZIP+4®
Clarksburg WV 26301

1207 NIH AOR

PARKERSBURG, WV 26101
 JAN 10 2019
 Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Return Receipt (hardcopy) \$ 2.75

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Buckhannon WV 26201

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RECEIVED
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 AUG 27 2019
 WV Department of
 Environmental Protection

HG Energy II Appalachia, LLC

Site Safety Plan

**Neel 1207 Well Pad
104 Hidden Valley Rd Jane Lew
Harrison County, WV 26378**

December 2018: Version 1

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

*SDW
1/4/19*

HG Energy II Appalachia, LLC

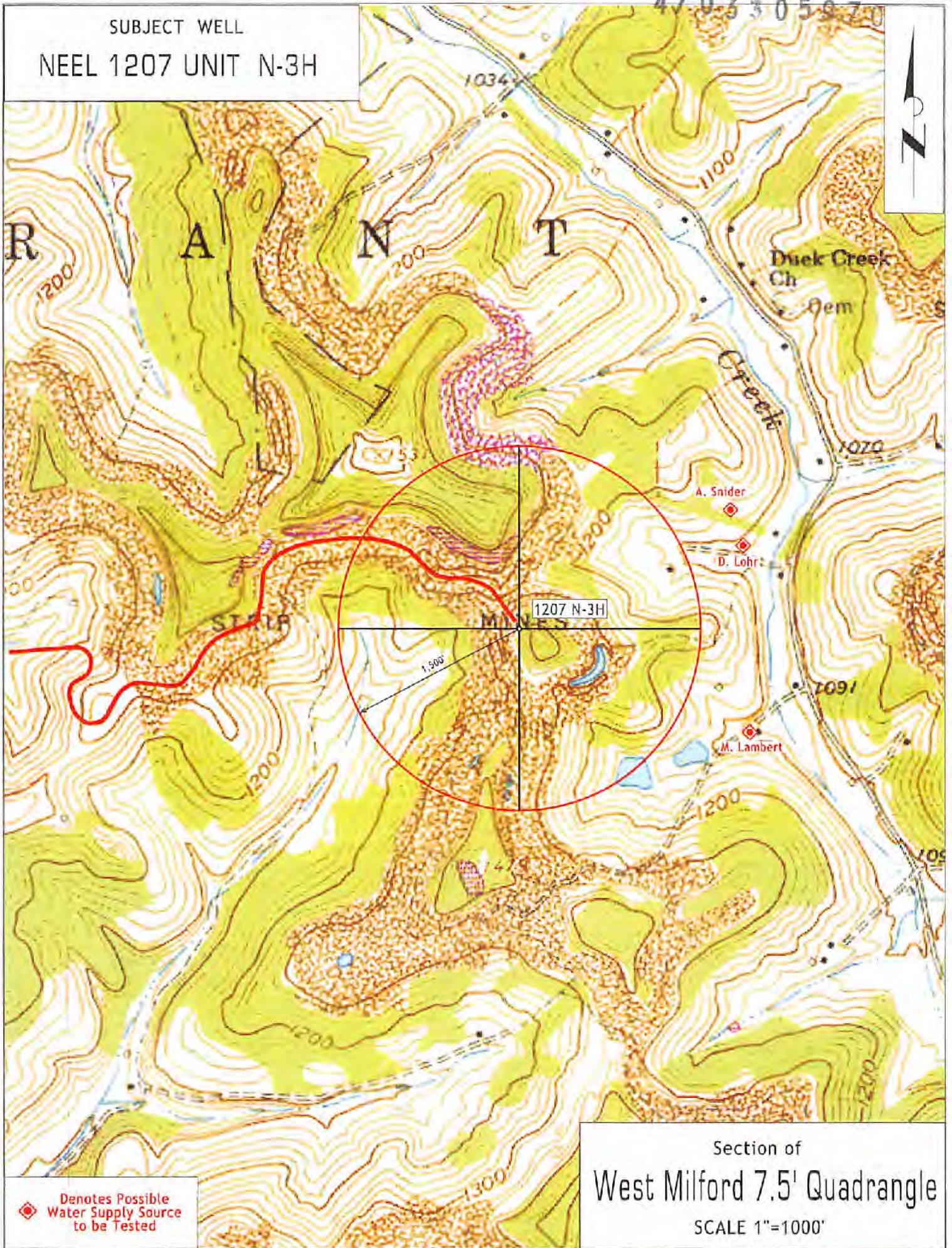
5260 Dupont Road

Parkersburg, WV 26101

RECEIVED
Office of Oil and Gas
JAN 15 2019
WV Department of
Environmental Protection

RECEIVED
Office of Oil and Gas
AUG 27 2019
WV Department of
Environmental Protection

SUBJECT WELL
NEEL 1207 UNIT N-3H



◆ Denotes Possible
Water Supply Source
to be Tested

Section of
West Milford 7.5' Quadrangle
SCALE 1"=1000'

7,883' to Top Hole

3,013' to Bottom Hole
 BTM LATITUDE 39 - 12 - 30
 TOP LATITUDE 39 - 10 - 00

TOP LONGITUDE 80 - 22 - 30
 BTM LONGITUDE 80 - 25 - 00

5,268' to Top Hole

HG Energy II Appalachia, LLC
Well No. 1207 N-3H MOD

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Dwayne D. Matheny
Dwayne D. Matheny, P.S. 2070

Notes: Well No. 1207 N-3H West Virginia Coordinates System of 1927, North Zone based upon Differential GPS Measurements.
 Top Hole coordinates
 Latitude: 39°09'07.91"
 Longitude: 80°24'10.10"
 Bottom Hole coordinates
 Latitude: 39°11'45.27"
 Longitude: 80°25'38.26"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates
 N: 4,333,846.534m
 E: 651,617.356m
 Bottom Hole Coordinates
 N: 4,338,683.436m
 E: 549,470.786m
 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. 1207 N-3H UTM NAD 1983 (USSF)
 Top Hole Coordinates
 N: 14,218,628.17"
 E: 1,809,784.61"
 Landing Point Coordinates
 N: 14,218,518.27"
 E: 1,808,369.15"
 Bottom Hole Coordinates
 N: 14,234,497.24"
 E: 1,802,722.07"

Page 1 of 2
 5"x9"x7" stone w/ 3 hack marks

- Legend**
- ⊙ Proposed gas well
 - ⊙ Well Reference, as noted
 - ⊙ Monument, as noted
 - ⊙ Existing Well, as noted
 - ⊙ Existing Plugged Well, as noted
 - ⊙ Digitized Well, as noted
 - Creek or Drain
 - Existing Road
 - Surface boundary (approx.)
 - Interior surface tracts (approx.)



ID	Lease
1	J.B. Gusman, et al
2	A.J. Smith, et ux
3	Dora B. McWhorter, et al
5	A.C. Thrash, et al
7	Mee Gaston, et al
8	Charles H. Gaston, et al
9	Leeman Maxwell, et al
10	Leeman Maxwell, et al
11	Camella Y. Morris, et al
12	WV Conservation Committee
13	Rachel S. Henshey, et al
14	Robert & Betty Stevenson, et al
15	Hiram J. Burnside
16	Joseph Chevront, et al
19	Charles H. Washburn
20	Union National Bank, et al
22	Vance Ward, et al
24	Zina M. Davis, et al
5S	Union National Bank, et al



FILE NO: 296-36-G-18
 DRAWING NO: 1207 N-3H Well Plat
 SCALE: 1" = 2000'
 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 26 20 19
 OPERATOR'S WELL NO. 1207 N-3H
API WELL NO
 47 - 033 - 05970
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,344' WATERSHED: Middle West Fork Creek QUADRANGLE: West Millford
 DISTRICT: Grant / Union COUNTY: Harrison
 SURFACE OWNER: HG Energy II Appalachia, LLC ACREAGE: 89.07
 ROYALTY OWNER: Dora B. McWhorter, et al LEASE NO: ACREAGE: 103.00
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) LP & BH MOD 7,145' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 24,769' MD

WELL OPERATOR: HG Energy II Appalachia, LLC DESIGNATED AGENT: Diane C. White
 ADDRESS: 5260 Dupont Road ADDRESS: 5260 Dupont Road
 Parkersburg, WV 26101 Parkersburg, WV 26101

7,883' to Top Hole

3,013' to Bottom Hole

HG Energy II Appalachia, LLC
Well No. 1207 N-3H MOD

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TOP LATITUDE 39 - 10 - 00

TOP LONGITUDE 80 - 22 - 30
BTM LONGITUDE 80 - 25 - 00

4,525' to Bottom Hole
5,268' to Top Hole



well #5021
1207 N-3H Bottom Hole

well #1096A

well #955

well #1028A

well #11455

well #1009A

well #2834

well #526A

well #4296

well #2879

well #1433

well #2308

well #817

well #813

well #no tag

well #816

well #725A

well #797

well #611

well #320

well #1191A

well #296

well #614

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w/ 3 hack marks

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- Monument, as noted
- Existing Well, as noted
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- Creek or Drain
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16	Joseph Chevront, et al
19	Charles H. Washburn
20	Union National Bank, et al
22	Vance Ward, et al
24	Zina M. Davis, et al
55	Union National Bank, et al

Tag	Bearing	Dist.
L1	S 00°19' E	1,179.3'
L2	S 23°17' W	1,312.3'
L3	S 83°35' W	2,154.1'
L4	N 59°39' W	1,165.0'
L5	S 85°25' W	1,399.9'

FILE NO: 296-36-G-18

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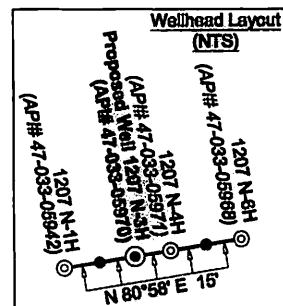
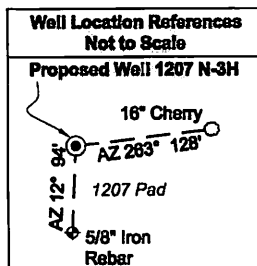
DESIGNATED AGENT: Diane C. White

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

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Parkersburg, WV 26101

No.	TM / Par	Ac.	Owner	Bk / Pg
1	445 / 5	89.07	HG Energy II Appalachia, LLC	— / —
2	445 / 13	132.852	Mickey Pettito	WB175 / 1153
3	445 / 3	84.00		
4	445 / 12	84.50	Lisa M. Nuttner	WB887 / 445
5	445 / 5.1	3.38	David W. Lohr	1631 / 421
6	425 / 28	32.30	WV State Conservation Commission	WB33 / 148
7	445 / 2	84.57	Lisa M. Nuttner	WB887 / 445
8	445 / 25	184.90		
9	445 / 24	18.60	Linda J. Maxwell Revocable Trust	1302 / 793
10	425 / 5	173.80		
	425 / 7	5.50	WV State Conservation Commission	WB33 / 148
11	445 / 25.2	83.199	Laurinda R. Beckstead	1420 / 941
12	425 / 4	4.35	Robert W. & Jennifer L. Delaney	1501 / 21
13	425 / 4.4	1.99		1284 / 1121
14	425 / 25.1	5.45		
15	425 / 4.2	3.14	Paul R. & Linda R. Beatty	1288 / 489
16	425 / 4.1	2.02		
17	425 / 3	14.00		
18	405 / 76	57.68	WV State Conservation Commission	WB33 / 148
19	405 / 76	202.18	William Michael McDonald	1377 / 99
20	425 / 4.3	30.50	Laurinda R. Beckstead	1177 / 651
21	405 / 67	38.10	Terence L. Washburn, et al	1438 / 989
22	405 / 59	43.40	Terence L. Washburn	1284 / 433
23	405 / 69	62.35	James D. McWhorter	— / —
24	405 / 61	12.00		
25	405 / 60	18.12	Samuel S. Stark	1327 / 1048
26	406 / 68	2.47	James D. McWhorter	1505 / 1158
27	385 / 61	85.50	Buffalo Lake Development, LLC	1528 / 585
28	405 / 4	20.17	Betty Jo & Kyle Fridley	1233 / 244
29	405 / 69.3	4.0	Jeremy T. & Erin N. Bowers	1487 / 897
30	405 / 1.4	25.07		1377 / 1131
31	405 / 1.3	10.48	Joseph Workman	1178 / 739
32	405 / 69.1	0.72	Roberta K. Cottril	1373 / 505
33	405 / 6	21.93	James Ivan McDonald	1347 / 1133
34	405 / 4	20.17	Betty Jo & Kyle Fridley	1233 / 244
35	405 / 62	68.24	Evelyn M. Ward LE	— / —
36	405 / 5	6.05	James Ivan McDonald	1229 / 370
37	405 / 1	0.94	Brandon T. Leary	1498 / 749
38	405 / 8	10.19	Larry W. & Dorothy L. Detamore	1188 / 714
39	405 / 6.1	1.08		1379 / 1148
	405 / 6.2	0.52	George F. & Helen M. Peterson	1410 / 1080
40	405 / 26.1	0.88	William & Cynthia Marsh	1139 / 448
41	405 / 26.2	0.74	Eugene D. Wilson	957 / 247
42	405 / 26.4	0.405		980 / 697
	405 / 26.6	0.140	John & Linda Cathell	1101 / 779
43	405 / 26	3.769	Margaret L. Phillips	1177 / 635
44	405 / 62.1	74.30	John & Mary Stenger	1402 / 334
45	405 / 4.1	0.94	James Ivan McDonald	1229 / 370
46	405 / 70	3.452		
	405 / 70.1	3.452	Michael A. & Carleen	1527 / 649
47	405 / 71	2.97	Eugene & Violet A. Debarr	1109 / 97
48	405 / 71.1	1.485	Kathy D. Bennett	1109 / 97
49	405 / 62.10	2.08	Danny J. & Deborah J. Miller	1505 / 8
50	405 / 62.6	2.63	Michael T. Jr & Ramona J. Morris	1627 / 376
51	405 / 62.3	1.26	Wayne & Naomi McHenry	1637 / 488
52	405 / 72	4.32	Sandra W. & Willard Miller	1031 / 554
53	405 / 72.1	4.32	Melissa Barker	1403 / 68
54	405 / 62.4	0.99		1338 / 990
	405 / 62.7	0.48	Tricia A. & Jeremy L. Dobbins	1452 / 340
	405 / 62.9	0.74		1478 / 953
55	405 / 73	45.00		WB177 / 1179
	405 / 74	107.76	Mary Lou Smith	WB177 / 1179
	405 / 80	90.97		WB177 / 1179
56	405 / 61	42.00		
	425 / 6	105.55	WV Dept. of Natural Resources	WB85 / 624
	425 / 14	73.60		
	425 / 15	40.85		
57	425 / 13	9.00	Penny L. Hill	1481 / 53
58	425 / 5	61.50	WV State Conservation Comm.	WB33 / 148
59	425 / 8	151.09		
	425 / 8.1	13.481	James L. Sellers Family Revocable Trust	1480 / 728

No.	TM / Par	Ac.	Owner	Bk / Pg
60	425 / 27	26.40		
	425 / 28	19.92	Marva Shepard	WB166 / 413
61	425 / 12	42.30		
	425 / 16	122.25	Antonio P. LLC	1503 / 291
	425 / 17	48.00		
62	425 / 11	6.29		
	425 / 11.1	5.12	Linda Snyder	1124 / 768
63	425 / 10	9.60		
	425 / 10.1	3.10	Joy L. Jarrett	1272 / 348
64	425 / 10.1	3.10	Robert R. & Debbie A Partain	1308 / 553
65	425 / 9	3.88	Leslie S. Riggleman	WB127 / 680
66	425 / 8.3	1.408	Melanie S. & Jay A. Morris	1388 / 660
67	425 / 8.2	0.39	Linda & Mark Wilfong	1438 / 83
68	425 / 20	3.00	Jeffery L. & Parry S. Harvey	1394 / 607
69	425 / 21	15.26	Judith H. Russell	1212 / 1074
70	425 / 22	1.00	Duck Creek Mission Church Trust	1024 / 984
71	425 / 9.1	4.22	Sharon Campbell	1374 / 1083
72	425 / 9.2	4.66	Michael & Cecilia Daughtery	1543 / 1305
73	385 / 82.1	10.05	Lloyd W. Brake Jr. Trust	1427 / 141
74	405 / 8	21.93	James Ivan McDonald	1347 / 1133
75	405 / 83	1.01	Pamela M. Puddister	1277 / 279
76	405 / 63.2	42.47	Larry D. Meyers Revocable Trust	W191 / 279
77	405 / 63.6	42.47	John P. & Virginia R. Markley	1353 / 1084
78	405 / 63.7	1.00	Robert J. Jr. & Joyce B. Markley	1580 / 310
79	405 / 63.5	4.00	Charles F. & Dawn L. Grow	1495 / 523
80	405 / 63.10	4.00	Kimberly K. & John T. Lough	1518 / 822
81	425 / 23.3	0.54		
	425 / 29.1	0.27	Rhonda R. & George P. Koutsobaris	1420 / 93
82	405 / 28	2.60	David Allen Bunch	W173 / 1273
83	405 / 27	1.04	Betty Fridley	W160 / 268
	405 / 26.8	1.04		
84	405 / 89	3.50	Megan & Chad Fincham	1524 / 645



FILE NO: 296-38-G-18
DRAWING NO: 1207 N-3H Well Plat
SCALE: 1" = 2000'
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 26 20 19
OPERATOR'S WELL NO. 1207 N-3H
API WELL NO
47 — 033 — 05970
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,344' WATERSHED: Middle West Fork Creek QUADRANGLE: West Milford
DISTRICT: Grant / Union COUNTY: Harrison
SURFACE OWNER: HG Energy II Appalachia, LLC ACREAGE: 89.07
ROYALTY OWNER: Dora B. McWhorter, et al LEASE NO: _____ ACREAGE: 103.00
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ LP & BH MOD _____ 7,145' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 24,769' MD

WELL OPERATOR: HG Energy II Appalachia, LLC DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101

WW-6A1
(5/13)

Operator's Well No. Neel 1207 N-3H

Rev.

**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
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See Attached Sheets

**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

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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: Accountant

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HG Energy II Appalachia, LLC
1207 N - 3H LEASE CHAIN

TRACT #	LEGACY LEASE NUMBER	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE
3	LC068480	12-0445-0005-0000 12-0445-0005-0001	Q100813000	DORA B. MCWHORTER, WIDOW, EVERETT EDMONDS AND GLADYS EDMONDS, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	819	344
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	509
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				2	LC094208	12-0445-0003-0000 12-0445-0012-0000	Q101052000	A.J. SMITH AND L.F. SMITH, HIS WIFE
HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903					179
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136					250
CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51					795
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58					362
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522					33
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543					1235
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576					125
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584					942
NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600					692
DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	MEMORANDUM OF AMENDED AND RESTATED LEASE	1601					563
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601					581
7	LC098215; LC068632	12-0425-0009-0000; 12-0425-0010-0000; 12-0425-0010-0001; 12-0425-0011-0001; 12-0425-0018-0000; 12-0425-0019-0000; 12-0425-0020-0000; 12-0425-0027-0000; 12-0425-0028-0000; p/o 12-0425-0011-0000; 12-0425-0020-0000	Q100898000	MAE GASTON AND W. C. GASTON, HER HUSBAND; VANCE GASTON AND REVA GASTON, HIS WIFE; GARNET H. GRAY AND C. L. GRAY, HER HUSBAND; LENA V. JOHNSON AND EARL W. JOHNSON, HER HUSBAND; EDNA G. LACHAPELLE AND RAYMOND C. LACHAPELLE, HER HUSBAND; ADDIE M. GASTON, WIDOW; JAMES HARRY GASTON AND ETHEL D. GASTON, HIS WIFE; RACHEL POST WELLS AND M. E. WELLS, HER HUSBAND; CAMELLA Y. MORRIS, WIDOW; WILLIAM Y. MORRIS AND VIRGINIA MORRIS, HIS WIFE; ROBERT H. MORRIS AND LOIS T. MORRIS, HIS WIFE; RUTH E. WATSON, WIDOW; JEAN D. MORRIS; ALBERT GASTON AND BARBARA GASTON, HIS WIFE; HAROLD GASTON AND MILDRED GASTON, HIS WIFE; BETTY J. CAMARATA AND CARL P. CAMARATA, HER HUSBAND; NELLIE M. GASTON, WIDOW; PATRICIA A. VOGEL AND WILLIAM VOGEL, HER HUSBAND; LORETTA S. KARWICK AND HARRY W. KARWICK, HER HUSBAND; M. MARIE REED FOOSE AND VINCENT J. FOOSE, HER HUSBAND; OCIE RENSHAW AND O. M. RENSHAW, HER HUSBAND; AND ALPHA KOWALSKY AND PETER J. KOWALSKY, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	823	178
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362

		p/o 12-0425-0025-0000;		DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	MEMORANDUM OF LEASE	1551	969
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	MEMORANDUM OF AMENDED AND RESTATED LEASE	1601	563
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
9	LC014208	p/o 12-0425-0025-0000, p/o 12-0425-0025-0002	Q101116000	LEEMAN MAXWELL AND MARY C. MAXWELL, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	176	144
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
8	LC068585	12-0425-0026-0000; 12-0425-0008-0000; 12-0425-0008-0001; 12-0425-0008-0002; 12-0425-0008-0003; 12-0425-0014-0000; 12-0425-0013-0000; 12-0425-0012-0000	Q100867000	CHARLES H. GASTON AND NORA M. GASTON, HIS WIFE; NATHAN G. MCWHORTER AND DORA E. MCWHORTER, HIS WIFE; LILLIAN E. STOUT AND JESSE C. STOUT, HER HUSBAND; BERTHA STALNAKER, WIDOW; MARY MCWHORTER WEST AND CLINE WEST, HER HUSBAND; EVAN G. LAW AND ORA L. LAW, HER HUSBAND; FORD GASTON AND MILDRED E. GASTON, MILDRED G. TALLMAN AND KIRK C. TALLMAN, HER HUSBAND; FLORA JANE WOLVERTON AND J. MASON WOLVERTON, HER HUSBAND; THE PARKERSBURG NATIONAL BANK, GUARDIAN FOR JOSEPH WOOFER AND ANDREW C. WOOFER, JR.	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	822	99
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	509
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
12	LC069177	12-0425-0005-0000	Q101153000	CONSERVATION COMMISSION OF WEST VIRGINIA	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	831	446
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1656	1270

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11	LC068496	12-0422-0004-0000; 12-0425-0004-0001; 12-0425-0004-0002; 12-0425-0004-0003; 12-0425-0004-0004	Q100539000	CAMELLA Y. MORRIS, WIDOW; WILLIAM Y. MORRIS AND VIRGINIA E. MORRIS, HIS WIFE; ROBERT H. MORRIS AND LOIS T. MORRIS, HIS WIFE; RUTH E. WATSON, WIDOW; JEAN D. MORRIS, WIFE OF JOHN R. MORRIS, BY JOHN R. MORRIS, THEIR ATTORNEY IN FACT, JOHN R. MORRIS	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	820	513
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	89
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	127
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581				
15	LC002238	12-0405-0076-0000; 12-0405-0068-0000	Q101001000	HIRAM J. BURNSIDE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	113	417
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT (GAS)	240	210
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	113	417
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	WVSOS	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	33
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	571
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	PARTIAL ASSIGNMENT (32%)	1601	581
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692				
20	LC073354	12-0405-0069-0000; 12-0405-0077-0001; 12-0405-0078-0000	Q100714000	THE UNION NATIONAL BANK, TRUSTEE UNDER THE WILL OF GERTRUDE E. DAVIS; EVA G. LAW AND ORA L. LAW, HER HUSBAND; P. F. GASTON AND MILDRED E. GASTON, HIS WIFE; M. G. MCWHORTER AND DORA MCWHORTER, HIS WIFE; LILLIAN A. STOUT, WIDOW; WILLIS E. STALNAKER AND OPAL M. STALNAKER, HIS WIFE; FLORA JANE WELVERTON AND J. MASON WELVERTON, HER HUSBAND; MILDRED C. TALLMAN, WIDOW; NORA GASTON, BY MINER T. HALL, HER ATTORNEY IN FACT; AND MARY M. WEST AND CLIVE WEST, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	890	492
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581

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24	FK076735	20-0405-0001-0000	Q100999000	ZINA M. DAVIS AND WILLIAM L. DAVIS, HER HUSBAND; RALPH R. SOMMERVILLE AND GOLDIE A. SOMMERVILLE, HIS WIFE; WILLIAM H. SIMPSON AND JACQUELINE W. SIMPSON, HIS WIFE; ZELLA W. SOMMERVILLE, WIDOW, MILDRED L. SOMMERVILLE, BY ROBERT L. SOMMERVILLE, GUARDIAN; ROBERT L. SOMMERVILLE AND JANET W. SOMMERVILLE, HIS WIFE	CONSOLIDATED GAS SUPPLY COMPANY	NOT LESS THAN 1/8	934	33
		20-0405-0001-0001			CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT	1136	250
		20-0405-0001-0002			CONSOLIDATED GAS TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
		20-0405-0001-0003			CNG TRANSMISSION CORPORATION	CONFIRMATORY ASSIGNMENT	1285	313
		20-0405-0001-0004			GAS EXPLORATION AND DEVELOPMENT COMPANY	MERGER/NAME CHANGE	WVSOS	
		20-0405-0002-0000			CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	58	362
		20-0405-0003-0000			DOMINION APPALACHIAN DEVELOPMENT, INC.	MERGER/NAME CHANGE	WVSOS	
		20-0405-0004-0000			DOMINION APPALACHIAN DEVELOPMENT, LLC	ASSIGNMENT	1457	1086
		20-0405-0004-0001			DOMINION TRANSMISSION, INC.	MEMORANDUM FARMOUT AGREEMENT	1522	33
		20-0405-0005-0000			CNX GAS COMPANY LLC	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
		20-0405-0006-0000			DOMINION TRANSMISSION, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
		20-0405-0006-0001			CNX GAS COMPANY LLC	ASSIGNMENT	1584	942
		20-0405-0006-0002			NOBLE ENERGY, INC.	ASSIGNMENT	1600	692
		20-0405-0006-0003			DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
		20-0405-0006-0004			DOMINION TRANSMISSION, INC.	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
		20-0405-0006-0005			DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC		
		20-0405-0006-0006			CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	981	561
		20-0405-0006-0007			CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT	1136	250
		20-0405-0006-0008			CONSOLIDATED GAS TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
		20-0405-0006-0009			CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	58	362
		20-0405-0006-0010			DOMINION TRANSMISSION, INC.	CONFIRMATORY ASSIGNMENT	1442	356
		20-0405-0006-0011			DOMINION EXPLORATION & PRODUCTION, INC.	ASSIGNMENT	1457	978
		20-0405-0006-0012			DOMINION TRANSMISSION, INC.	MEMORANDUM FARMOUT AGREEMENT	1522	33
		20-0405-0006-0013			DOMINION TRANSMISSION, INC.	MEMORANDUM OF LEASE	1551	969
20-0405-0006-0014	DOMINION TRANSMISSION, INC.	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491				
20-0405-0006-0015	CNX GAS COMPANY LLC	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
20-0405-0006-0016	DOMINION TRANSMISSION, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				
20-0405-0006-0017	CNX GAS COMPANY LLC	ASSIGNMENT	1584	942				
20-0405-0006-0018	NOBLE ENERGY, INC.	ASSIGNMENT	1600	692				
20-0405-0006-0019	DOMINION TRANSMISSION, INC.	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581				
20-0405-0006-0020	DOMINION TRANSMISSION, INC.	MEMORANDUM OF AMENDED AND RESTATED LEASE	1601	563				

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

4703305970

July 19, 2019

Laura Adkins
WV DEP
Division of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Drilling Under Roads – Neel 1207 N-3H
Union District, Harrison County
West Virginia

Dear Ms. Adkins:

HG Energy II Appalachia, LLC, has the right to drill, stimulate and produce wells that are drilled under the County and State Roads as designated on the plats.

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

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

Date of Notice Certification: 07/15/2019

API No. 47- _____ - _____
Operator's Well No. Neel 1207 N-3H
Well Pad Name: Neel 1207

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>551617.4</u>
County:	<u>Harrison</u>		Northing:	<u>4333846.5</u>
District:	<u>Union</u>	Public Road Access:	<u>SR19/Hidden Valley Road</u>	
Quadrangle:	<u>West Milford</u>	Generally used farm name:	<u>Hubert E & Sandra K Neel</u>	
Watershed:	<u>Middle West Fork Creek</u>			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

*PLEASE CHECK ALL THAT APPLY

- 1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- 2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED
- 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or
 WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- 4. NOTICE OF PLANNED OPERATION
- 5. PUBLIC NOTICE
- 6. NOTICE OF APPLICATION

OOG OFFICE USE ONLY

- RECEIVED/
NOT REQUIRED
- RECEIVED
- RECEIVED/
NOT REQUIRED
- RECEIVED
- RECEIVED
- RECEIVED

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Required Attachments:

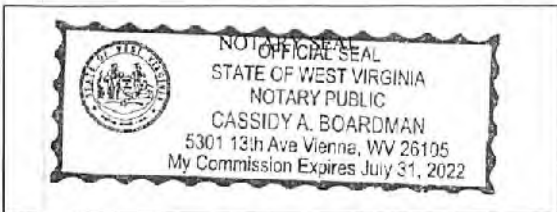
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication 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.

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

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



Subscribed and sworn before me this 15th day of July, 2019.

Cassidy Boardman Notary Public

My Commission Expires 7/31/2022

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 deprivacvofficer@wv.gov.

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 07/29/2019 Date Permit Application Filed: 08/05/2019

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") 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.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)
Name: HG Energy II Appalachia, LLC
Address: 5260 Dupont Road
Parkersburg, WV 26101

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: Lisa M. Nutter
Address: 132 Praise Lane
Jane Lew, WV 26378

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)
Name: HG Energy II Appalachia, LLC
Address: 5260 Dupont Road
Parkersburg, WV 26101

COAL OWNER OR LESSEE
Name: NA
Address: _____

COAL OPERATOR
Name: NA
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: NA
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: Dominion Energy Transmission - Attn: Ronald Waldren
Address: 925 White Oaks Blvd
Bridgeport, WV 26330

*Please attach additional forms if necessary

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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 fifty 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

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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

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AUG 27 2019

WV Department of
Environmental Protection

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.**

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.

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WW-6A
(8-13)

API NO. 47-03-05070
OPERATOR WELL NO. Neel 1207 N3H
Well Pad Name: Neel 1207

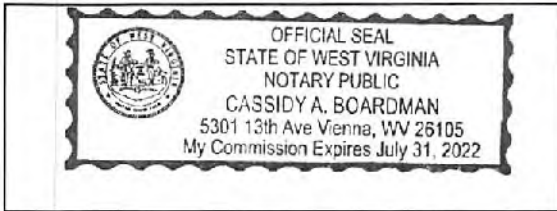
Notice is hereby given by:

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 29th day of July, 2019.

Cassidy Boardman Notary Public

My Commission Expires 7/31/2022

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

4703 * 05970

July 23, 2019

Dominion Energy Transmission
Attn: Ronald Waldren
925 White Oaks Blvd
Bridgeport, WV 26330

RE: Neel 1207 N-3H Well Work Permit Application - Notification
Union District, Harrison County
West Virginia

Dear Mr. Waldren:

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 well.

Pursuant to WV Code Chapter 22B, Article 6, you are receiving copies of this correspondence because the well or other anticipated disturbance is located through your gas storage field property. Your rights as an owner of the (field) 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.

Very truly yours,

Diane White

Diane C. White

Enclosures

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

4703705970

July 23, 2019

Lisa M. Nutter
132 Praise Lane
Jane Lew, WV 26378

RE: Neel 1207 N-3H Well Work Permit Application - Notification
Union District, Harrison County
West Virginia

Dear Mrs. Nutter:

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 well.

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.

Very truly yours,

Diane White

Diane C. White

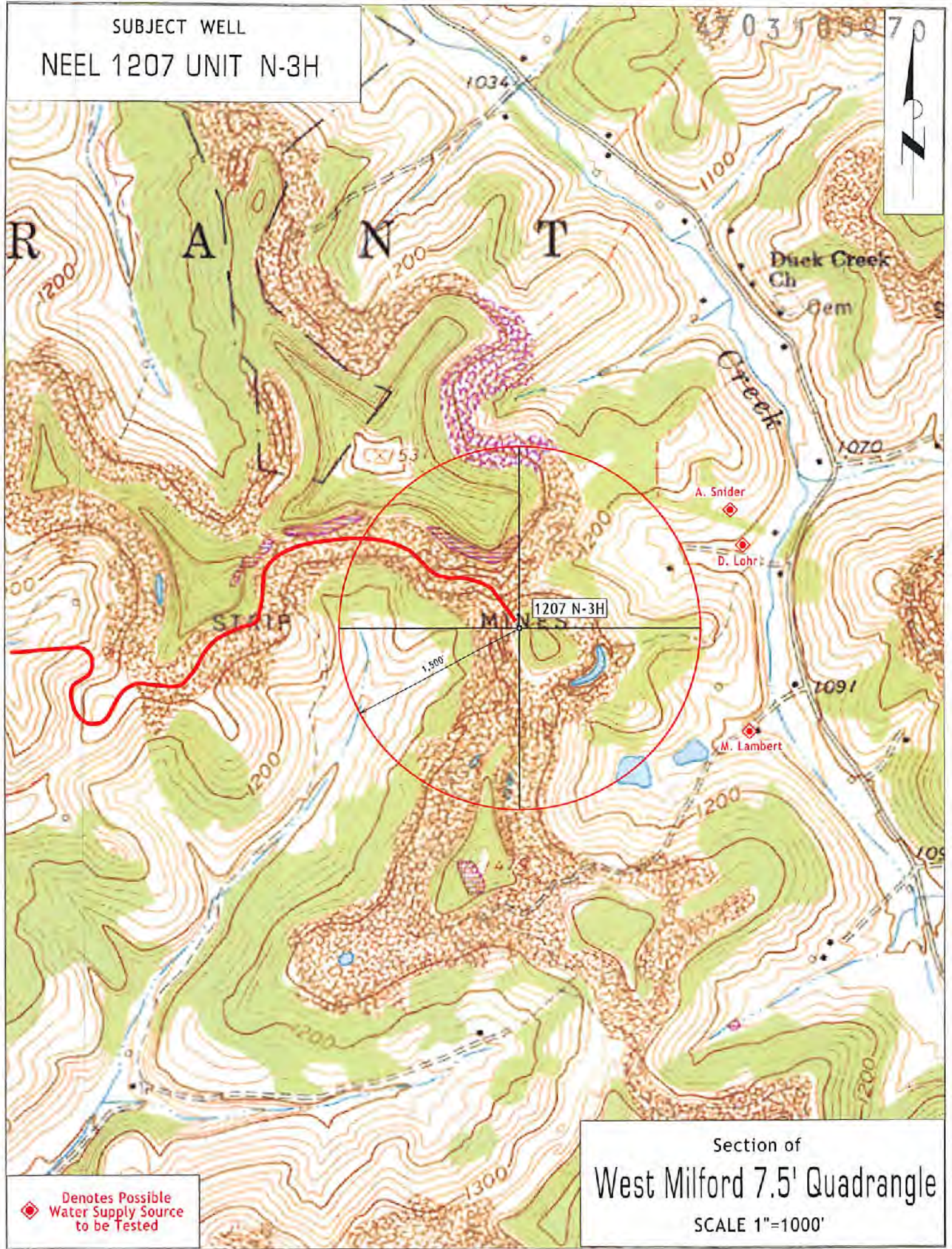
Enclosures

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AUG 27 2019

WV Department of
Environmental Protection

SUBJECT WELL
NEEL 1207 UNIT N-3H



035970

R A N T

Duck Creek
Ch
Gem

A. Snider

D. Lohr

1207 N-3H

M. Lambert

Denotes Possible
Water Supply Source
to be Tested

Section of
West Milford 7.5' Quadrangle

SCALE 1"=1000'

Diane White

From: Diane White
Sent: Wednesday, December 19, 2018 5:07 PM
To: Vickie Hoops (vhoops@sturmenvironmental.com)
Subject: 1207 Well Pad WSW Owners to be Tested
Attachments: NEEL 1207 TOPO AND REC PLAN.pdf

Vicki,

Good afternoon. Listed below are three people who we believe have water at about 2000' from the Neel 1207 well pad. Could you please have their water sampled and a pre-drill analysis run? Please have the paperwork identified as the Neel 1207 Well Pad.

This is in Harrison county, Grant district, the West Milford quadrangle. I've attached a topo and rec plan which should help identify the area. If you need more information please let me know.

Thanks,
Diane

From: Timothy Roush
Sent: Wednesday, December 19, 2018 11:53 AM
To: Diane White <dwhite@hgenergyllc.com>
Subject: 1207 WSW Owners

The WSW Owners for 1207 are:

SNIDER, ANTHONY D
29 POST OFFICE DR.
LOST CREEK, WV 26385

LOHR, DAVID W
74 JUNE BUG DR.
LOST CREEK, WV 26385

LAMBERT, MARTHA E
4062 DUCK CREEK RD.
LOST CREEK, WV 26385

Timothy P. Roush, PS
HG Energy, LLC
5260 Dupont Road
Parkersburg, WV 26101
troush@hgenergyllc.com
304-420-1120

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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 Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry

Date of Notice: 7/19/19 **Date of Planned Entry:** 7/17/19

Delivery method pursuant to West Virginia Code § 22-6A-10a

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

SURFACE OWNER(s)
 Name: HG Energy II Appalachia, LLC
 Address: 5260 Dupont Road
 Parkersburg, WV 26101
 Name: _____
 Address: _____
 Name: _____
 Address: _____

COAL OWNER OR LESSEE
 Name: NA
 Address: _____

MINERAL OWNER(s)
 Name: See Attached List
 Address: _____

*please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: West Virginia	Approx. Latitude & Longitude: 39.152290 / -80.402619
County: Harrison	Public Road Access: SR 19
District: Grant/Union	Watershed: Middle West Fork Creek
Quadrangle: West Millford WV 7.5'	Generally used farm name: Neal

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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: 304-883-3172

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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-6A3
(1-12)

Page 1 Continued

Mineral Owners

Amber McWhorter Ortoll
714 SW 27th Terrace
Boynton Beach, FL 33435

Argent Trust Company
Agent for Charles L Maxwell
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for David Maxwell Gray
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Deborah Bell Meyer
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Donna Frumento
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Elizabeth A Beveridge
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Jane M Hardin
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent JR Gray Koubek & TD Koubek
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Joseph L Maxwell
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Karen M Henderson
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Kimberlee K Holland
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Mary V. Gray Trust 1983,
c/o David M. Gray
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Pamela Voigt
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Piala Living Trust
c/o Vanessa Jo Piala
621 N. Robinson, Suite 100
Oklahoma, OK 73102

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WW-6A3
(1-12)

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Mineral Owners

Argent Trust Company
Agent for Robert Nimorwicz
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Steven L Maxwell
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Argent Trust Company
Agent for Susan Brown Yunker
621 N. Robinson, Suite 100
Oklahoma, OK 73102

Arthur Ward
49 Coleman Dr.
Waterford, MI 48328

Bernard B McWhorter
P.O. Box 547
Jane Lew, WV 26378

Betty J. Gaston
1320 Williams Ave
Clarksburg, WV 26301

Betty Jo & Kyle Fridley
7450 Good Hope Pike
Lost Creek, WV 26385

Billie Sue Simmons
110 S Avalon Road
Winston-Salem, NC 27104-4110

Black Gold Group Limited
PO Box 85
Strasburg, OH 44680

Brenda Sue Cross
143 Lilac Ln
Philippi, WV 26416

Bruce L. Bennett & Kathy D. Bennett
RR 3 Box 729
Lost Creek, WV 26385

Carleen W. Nutter & Michael Nutter
RR 3 Box 808
Lost Creek, WV 26385

Caroyln L. Gelinas
4798 Thurston Place
San Diego, CA 92130

Catherine D. Weber
RR1 Box 60-1
Belington, WV 26250

Celia Linn Ferrell Baiker
5958 Chestnut CT
Virginia Beach, VA 45424

Charles K Saeler
P.O. Box 121
Ellerslie, MD 21529

Charles K Saeler
14008 S Gardner Ave
Ellerslie, MD 21529

Charles L. Gray and Goldie Gray
170 Goldie Lane
Lost Creek, WV 26385

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(1-12)

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Page 1 Continued

Mineral Owners

Christina L Workman
2803 McDermott Ridge Rd ()
Buckhannon, WV 26201

Clara A. Gaston
1638 1/2 Gould Ave
Clarksburg, WV 26301-1614

Cora A. Mearns
3915 Cloud Park Dr Apt A-a-1
Huber Heights, OH 45424

Cora May Sands Hartzell
129 Huckleberry Branch Ct
Daytona, FL 32124

Cynthia K Barnes
2104 1/2 Prive Ave
Clarksburg, WV 26301

Cynthia Kay Randolph Barnes
2104 1/2 Pride Ave
Clarksburg, WV 26301

Cynthia McWhorter Berry
1880 Loon Court
Myrtle Beach, SC, 29575

Dana Lee Bassell
173 Water Oak Dr
Madison, AL 35758

Dani A. Smith
3260 Knobview Drive ()
Nashville, TN 37214

Danny Joe & Deborah Jean Miller
PO Box 426
West Milford, WV 26451

Darlene G. Riggs ()
312 Duff Rd
Penn Hills, PA 15235

David E. Bowyer
12088 Middle Island Rd
Alma, WV, 26320

Debra Kay Kittle
908 Point Pleasant Rd
Belington, WV 26250

Delores Jean Moats
90 Kincaidville Road
Walkersville, WV 26447

Delores June Orr
3915 Cloud Park Dr Apt A-a-1
Huber Heights, OH 45424

Denise Wright
P.O. Box 371
West Milford, WV 26451

Donald Allen
541 Union Street
Carlstad, NJ 07075-1838

Donald and Louella Gaston Family Trust
Donald B. Gatson, II, Trustee
1613 Gould Ave
Clarksburg, WV 26301-1614

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Mineral Owners

Donald H. Smith
516 Osborne Lane
Sewickley, PA 15143

Donald R. Reynolds
PO Box 607
Jane Lew, WV 26378

Dorothy O'Hanlon
235 W 102 Street Apt 7-0
New York City, NY 10025

Elizabeth A. Fultineer
1925 Goff Ave
Clarksburg, WV26301

Evelyn M. Ward and Richard L. Ward
1383 Duck Creek
Lost Creek, WV 26385

First United Methodist Church
of Lubbock Texas
James Rotramel and Mary Francis Baucum, Trustees
1411 Broadway Street
Lubbock, TX 79424

Gary S. Winters
1112 Lake Floyd Circle
Salem, WV 26426

Geneva Bruffey
500 Henrie Lane
Williamstown, WV 26187

Genevieve P Saeler
4798 US Highway 19N
Jane Lew, wv 26378

Gore Corporation
PO Box 2101
Clarksburg, WV 26302

Helen M. Burton
8086 Powell Ave
Stonewood, WV 26301

Helen M. Burton
PO Box 8179
Nutterfort, WV 26301

Helen R. Corder
132 Morningside Circle
Parkersburg, WV 26101

Herbert D. Washburn
419 Armstrong Way
Evans, GA 30809

Iden Scott McWhorter
1661 La France St., Unit 314
Atlanta, GA 30307

James K. McWhorter
RR 2 Box 39
Wellsburg, WV 26070

Jane Lewis
P.O. Box 504
Lost Creek, WV 26385

Jerry Stein
2008 Linkside Lane
Woodstock, GA 30187

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(1-12)

1207N 3H

Page 1 Continued

Mineral Owners

Jill Lambert
219 Ballantrae St
Valparaiso, IN 46385

Jimmy Ward
288 Coleman Dr.
Waterford, MI 48328

John E. Washburn
186 KY Highway 90 West
Albany, KY 42602

John G. Sommerville
101 Coventry Ct
Bridgeport, WV 26330

John Henry McWhorter
5392 Duck Creek Rd
Alma, WV 26320

John M. Walmsley
2768 La Paz Ave
Hemet, CA, 92545

John W McWhorter
7704 Enterprise Rd, #1
Myrtle Beach, SC 29588

Jonnene Kay Goglin
187 Blackwater Drive
Harvest, AL, 35749

Joseph M Sands
866 Valencia Rd
S Daytona, FL 32119

Joyce K Smith
358 Mill Hill Rd
Williamsburg, PA 16693

JP Morgan Chase Bank
Trustee, Will E. Morris Trust
P.O. Box 659
Wichita Falls, TX 76307

Kathy Haller Day Revocable Living Trust
P.O. Box 1308
Young Harris, GA 30582

L&D Investments, Inc.
363 Washington Avenue
Clarksburg, WV 26301-2911

Leslie Smith Frank
74 Village Hill Road, Apt 1s
Northampton, MA 01060

Leslie Smith Frank
516 Osborne Lane
Sewickley, PA 15143

Lewis Wayne Davis
P.O. Box 371
West Milford, WV 26451

Lonnie Kincaid
28 Bablin Ingo Road
Ireland, WV 26376

Margaret Short
RR 2 Box 763
Clarksburg, WV 26301

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(1-12)

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Mineral Owners

Margaret Smith Brackett
4304 W Laurel Oak Ln
Muncie, In 47304

Margaret Smith Brackett
516 Osborne Lane
Sewickley, PA 15143

Margaret V Saeler Burkett
2522 Carrington Way
Frederick, MD 21702

Mari-Lisa McWhorter Marlowe
9980 Lake Side Drive
Tuscaloosa, AL 35406

Martha Jean Moss
227 Bonnie Brook Dr
Charlotte, MI 48813

Mary Ann Shawhan
2854 Poplar Dr
Kempner, TX 76539-6834

Mary Anne Kowalsky
7863 Birchwood RD
Chesterland, OH 44026

Mary Beth Bonington
22 Conifer Lane
South Dennis, MA 02660

Mary H. Balmer
619 Ohio Blvd
Eustis, FL 32726

Mary Jane McWhorter
795 W 2nd Ave
Weston, WV 26452

Mary Jean Carroll
8305 Farrand Rd
Montrose, MI 48457

Mary L. Reel
580 Deer Haven Drive
Lost Creek, WV 26385

Maurice M Sands
6272 NE 62nd St
Silver Springs, FL 34488

Melissa Barker
216 Hidden Meadows Ln.
Jane Lew, WV 26378

Michael A. Haller
9605 Tinsmith Lane
Burke, VA, 22015

Michael Ross
P.O. Box 219
Coalton, WV 26257-0219

Mildred L Brooks
c/o Dan Spengler
217 Bridgeside Ct
Roseville, CA 95747

Mildred L. Brooks
3800 W Wilson St 243
Banning, CA, 92220

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WW-6A3(1-12)Page 1 ContinuedMineral Owners

Minnie S. Lee LLC
Rebecca Waggoner Glass, Mng Mbr
P.O. Box 5034
Cary, NC 27512

NAJ, LLC c/o Robert L. Johns
216 Brooks St, Suite 200
Charleston, WV 25301

Nancy C Harvey
4408 Lorraine Dr
Monroeville, PA 15146

Oren Justice
1715 Locust Ave
Ashland, KY 41101

Page Harmer Thomas
714 Shamrock Lane
Charleston, SC 29412

Pamela Faith Schwarz
541 Union Street
Carlstad, NJ 07072-1838

Patricia Ann Vogel Heirs
7 Dancer Road
Budd Lake, NJ 07828-1919

Patricia Randolph
189 Randolph Hollow Road
Clarksburg, WV 26301

Paul R. Stein
505 Manor Rd.
Cinnaminson, NJ 08077

Paula Denise Mosier
2102 Covert Rd
Burton, MI, 48509

Peggy Shuman
304 Nathans St, Apt H
Elkins, WV 26241

Peggy Ward
49 Coleman Dr.
Waterford, MI 48328

Perenia Gray
14090 Collins Ranch Pl
San Diego, CA 92130

Phillip Simon
373 Parker Dr
Pittsburgh, PA 15216

Randolph Starr
322 W 6th Ave
Tarentum, PA 15084

Rhonda Koutsobaris
3478 Duck Creek Rd
Lost Creek, WV 26385

Robert Dean Davis
P.O. Box 371
West Milford, WV 26451

Robin Thorne
1839 Snowflake Dr
Colorado Springs, CO 80921-4001

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Mineral Owners

Roger Justice
877 Plymouth Rd NE
Atlanta, GA 30306

Ryan C. Radtka
205 Mystic Drive
Morgantown, WV 26508

Salvation Army
P.O. Box 366
Clarksburg, WV 26301

Sandra Childers
228 Liberty Ave
Clarksburg, WV 26301

Sandra Simon Faulkner
582 Jackson Blvd
Freedom, PA 15042

Sandra Ward Miller & Willard Miller
1383 Duck Creek Road
Lost Creek, WV 26385

Sandy Chamberlain
3805 W Elgin St
Broken Arrow, OK 74012

Sara Ella Burden
1800 Chapel Road
Havre De Grace, MD 21078

Seneca-Upshur Petroleum LLC
PO Box 2048
Buckhannon, WV 26201

Shelley J. Simon
2222 N Robert Bruce Dr
Richmond, VA 23235

Sheri L. Martz
139 Witt Road
Hyndman, PA 15545

Sherri L. Gaston
PO Box 302
Anmoore, WV 26323

Sherry Simon Kauff
430 N Hiddenbrooke Dr
Advance, NC 27006

Stephen Simon
4503 Heartland Way
Fredericksburg, VA 22408

Steven Keith Reed
P.O. Box 544
Slater, IA, 50244

Steven P. Washburn
927 Hillview Dr
Cary, NC 27511

Susan B. Woods
4807 Sunrise Blvd
Fort Pierce, FL 34982

Suzanne D. Simmons
624 Court Ave
Weston, WV 26452

Terence L. Washburn
1408 Riverbend Road
Lost Creek, WV 26385

Thomas Cannon
11539 Wellman Drive
Riverview, FL 33578

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Mineral Owners

Timothy Ward
49 Coleman Dr.
Waterford, MI 48328

Timothy Wayne Reed
208 West Harrison Rd
Zearing, IA, 50278

Velma I. Steif
174 Wise Acres Rd
Ellijay, GA 30536

Victor M. Pappas
16271 SW 83 LN
Miami, FL 33193

Waco Oil and Gas
PO Box 880
Glennville, WV 26351

Walter B. Smith
413 Poplar Ave
Port Saint Lucie, FL 34952

Waymon Kincaid
18063 US HWY 19 S
Walkersville, WV 26447

Wells Fargo Bank N.A.
Trustee, James A Harmer Testamentary Trust
PO Box 5383
Denver, CO 80217-5383

WV Division of Natural Resources
324 Fourth Ave
South Charleston, WV 25303

WV State Conservation Comm.
1900 Kanawha Blvd.
E. Charleston, WV 25305

Will E. Morris Heirs Trust
PO Box 659
Wichita Falls, TX 76307

William B. Washburn
RR2 Box 191
Jane Lew, WV 26378

William L. Thompson
240 Hite Hollow Rd
Hyndman, PA 15545

William Michael Davis
P.O. Box 371
West Milford, WV 26451

Zane Anthony Justice
2706 Algonquin Ave
Ashland, KY 41102

Zhen Wang
1845 Oakland Dr
Mount Pleasant, MI 48858

*HG Energy II Appalachia, LLC
5260 Dupont Road
Parkersburg, WV 26101

* Not noticed by certified mail

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HG Energy II Appalachia, LLC

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

4703305970

July 11, 2019

RE: Neel 1207N (2H – 6H)
Grant/Union District, Harrison County
West Virginia

Dear :

Enclosed is a copy of a Department of Environmental Protection “Notice of Entry For Plat Survey” form WW-6A3. This notice is provided to you as a royalty owner to advise you that HG Energy II Appalachia, LLC, is beginning the process of applying for permits to drill a well(s) where you are identified as an owner of minerals underlying such tract in the county tax records. A well work permit application will be filed with the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas.

Pursuant to WV Code Chapter 22B, Article 6, you are receiving copies of this correspondence because you are an owner of mineral rights on one or more of the underlying leases impacted by this well (s). Your rights as a royalty owner can be obtained from the Secretary at the WVDEP at 304-926-0450.

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.

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 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.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

Date of Notice: 07/16/2019 **Date Permit Application Filed:** 08/05/2019

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: HG Energy II Appalachia, LLC * Notice Not Sent Name: _____
Address: 5260 Dupont Road Address: _____
Parkersburg, WV 26101

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 551617.4
County: Harrison Northing: 4333846.5
District: Grant/Union Public Road Access: SR 19/Hackers Creek Road
Quadrangle: West Milford Generally used farm name: Hubert E & Sandra K Neel
Watershed: Middle West Fork Creek

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. 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.

Notice is hereby given by:

Well Operator: HG Energy II Appalachia, LLC Authorized Representative: Diane White
Address: 5260 Dupont Road Address: 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101
Telephone: 304-420-1119 Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com Email: dwhite@hgenergyllc.com
Facsimile: 304-863-3172 Facsimile: 304-863-3172

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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.

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

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 07/18/2019 **Date Permit Application Filed:** 08/05/2019

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

- | | |
|--|-------------------------------|
| <input checked="" type="checkbox"/> CERTIFIED MAIL | <input type="checkbox"/> HAND |
| RETURN RECEIPT REQUESTED | DELIVERY |

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: <u>HG Energy II Appalachia, LLC * Notice Not Sent</u>	Name: _____
Address: <u>5260 Dupont Road</u> <u>Parkersburg, WV 26101</u>	Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>4333848.5</u>
County: <u>Harrison</u>		Northing: <u>551617.4</u>
District: <u>Union</u>	Public Road Access: <u>SR19/Hackers Creek Road</u>	
Quadrangle: <u>West Milford</u>	Generally used farm name: <u>Hubert E & Sandra K Neel</u>	
Watershed: <u>Middle West Fork Creek</u>		

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. 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 Operator: <u>HG Energy II Appalachia, LLC</u>	Address: <u>5260 Dupont Road</u>
Telephone: <u>304-420-1119</u>	<u>Parkersburg, WV 26101</u>
Email: <u>dwhite@hgenergyllc.com</u> <i>Dianna White</i>	Facsimile: <u>304-863-3172</u>

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.

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Byrd E. White, III
Secretary of Transportation

July 11, 2019

Jimmy Wriston, P. E.
Deputy Secretary/
Acting Commissioner

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 Neel 1207 Pad, Harrison County
1207 N-3H Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2018-1374 issued to HG Energy II Appalachia for access to the State Road for a well site located off Harrison County Route 19/20 SLS.

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 October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

Cc: Diane White
HG Energy II, LLC
CH, OM, D-4
File

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List of Frac Additives by Chemical Name and CAS #**Neel 1207 Well Pad (N-1H to N-6H, S-7H to 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	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	25322-68-3 10222-01-2
SCALE CLEAR SI 112	107-21-1	
PROBREAK 4	Mixture	57-50-1 107-21-1
Sulfamic Acid	5329-14-6	
PRO - Flow - 102-N	Mixture	67-63-0 68439-45-2 2687-96-9
PROGEL - 4	9000-30-0	

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Office of Oil and Gas

West Virginia Department of
Environmental Protection
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304-2345

33-05968
33-05969
33-05970
33-05971
33-05972

DEP Office Use only	
Date Received by Oil & Gas:	8/22/19
Assigned Impoundment ID #:	033-FWA-00107

Permit Associated Impoundment / Pit Registration

Instruction: This form is to be used to register impoundments or waste pits, greater than 5,000 bbls, that are associated with a WVDEP, Office of Oil and Gas, well drilling permit. An **associated impoundment or pit** means it has been designed and included in the well drilling permit application, will follow the reclamation time frame of well work permit, and will be approved in conjunction with the well work permit. An impoundment ID number will be assigned by WVDEP, Office of Oil and Gas, to all impoundments and pits. This impoundment ID number will be sent to the applicant following receipt of this form by WVDEP. Please reference this impoundment ID number with all future correspondence and reference to this impoundment. Conditions as described in W.Va. State Rule §35-4-21 will be followed as it relates to impoundments and pits.

Section 1 – Operator Information

Operator Name:	HG Energy II Appalachia, LLC.		
Operator ID:	494519932		
Address: Street	5260 Dupont Road		
City:	Parkersburg	State:	WV Zip: 26101
Contact Name:	Diane White	Contact Title:	Accountant
Contact Phone:	304-420-1119	Contact Email:	dwhite@hgenergyllc.com

Section 2 – Engineering / Design Contractor Information

Design will be contracted	<input checked="" type="checkbox"/>	Designed in-house	<input type="checkbox"/>
Company Name:	Penn Environmental & Remediation, Inc.		
Address: Street	111 Ryan Court		
City:	Pittsburgh	State:	PA Zip: 15205
Contact Name:	Matthew E. Pierce	Contact Title:	Senior Project Manager
Contact Phone:	412-722-1222	Contact Email:	mpierce@penn-er.com
Certifying Professional Engineer:	Matthew E. Pierce		
Professional Engineer Registration Number:	20458		

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Office of Oil and Gas

Section 3 - Impoundment / Pit InformationType of Structure. Check one of two choices below: Freshwater Impoundment Waste Pit**Note:** Any waste in a pit will make it a waste pit.Name of Structure (Company Name :) HG Energy II Appalachia, LLC.County: Harrison District: GrantUSGS 7.5' Quad Map Name: West Milford, WVFarm Name: HG Energy II Appalachia, LLC.Pad Name: Neel 1207Surface Owner Name: HG Energy II Appalachia, LLCPhysical Description of Location: Less than 2 miles East of the intersection of SR 19 (Milford Street) and Hackers Creek.
Site access East off of Hackers Creek.

(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22, left on Buffalo Creek)

Watershed (nearest perennial): West Fork RiverDistance (Drainage Distance) to nearest perennial stream: 3.15 Miles

Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxxx))

Latitude: 39.1519 Longitude (Use negative sign): -80.4012UTM Coordinates : 1810167.923 E 14218488.684 N

Access Road Coordinates (junction of state highway access)

Latitude: 39.1478 Longitude (Use negative sign): -80.4297UTM Coordinates : 1802083.571 E 14216963.591 N

Approximate Dimensions

Length: 608' Width: 239' Height: 15'

Note: If irregularly shaped, give approximate dimensions of long axis.

Total Capacity – Provide all units of measure below:

Barrels: 243,644 Gallons: 10,232,903 Acre-Feet: 31.404

Capacity with 2' Freeboard – Provide all units of measure below:

Barrels: 201,091 Gallons: 8,445,709 Acre-Feet: 25.919

Incised volume:

Barrels: 59,469 Gallons: 2,497,645 Acre-Feet: 7.665

Net impounded volume: (Total volume less incised volume.)

Barrels: 184,175 Gallons: 7,735,258 Acre-Feet: 23.739Anticipated Construction Start Date (estimation, non-binding): April, 2019**Note:** No construction may begin on **Associated** impoundment until WVDEP issues the drilling permit. At least 7 calendar days prior to confirmed construction start date, notify the Office of Oil & Gas, and the local Oil and Gas inspector of construction start date. Use form IMP-2, "Notification of Impoundment / Pit Construction."RECEIVED
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Section 4 - Associated Well Numbers and API Numbers. List associated well numbers and API number. API numbers may not be assigned at time of registering this impoundment, if so list as pending.

Well Number(s):	API Number(s) – If issued:
Neel 1207 N-1H	47-033-05942
Neel 1207 N-2H	
Neel 1207 N-3H	
Neel 1207 N-4H	
Neel 1207 N-5H	
Neel 1207 N-6H	

Section 5 - Required Information Checklist To Register Permit Associated Impoundments or Pits. Include the following information and plans with application.

- Engineered Construction Plans, certified by WV Registered P.E.
- Erosion and Sediment Control Plan, certified by WV Registered P.E.
- Reclamation Plan, certified by WV Registered P.E.

Section 6 – Dam Standard Qualifying Evaluation

- The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be defined as a dam, under W.Va Rule §47-34. If the design of this structure qualifies it to be defined as a dam, all permits regulating dams will be required prior to registering the structure with the Office of Oil and Gas. The dam standard, from the WVDEP, Div. Of Water and Waste, is available for review at: <http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx>

Section 7 –Comments – Provide any additional comments concerning this project

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Section 8 - Application Certification

I hereby certify that the information listed above is true and accurate. I understand that this pit/impoundment is to be constructed only in a location appropriate for the storage of water, including wastewater, and will be constructed in accordance with plans designed and certified by a West Virginia registered professional engineer. I further recognize that all required plans have been submitted to the Office of Oil and Gas. I understand that after construction, and prior to any fluid being placed in the pit/impoundment, it shall be inspected by a West Virginia registered professional engineer to ensure compliance with the certified design and construction plan, and that the professional engineer shall certify that this structure was constructed in accordance with design and construction plans. I understand that such certification shall be in writing to the Chief and that no fluids may be placed in the pit/impoundment until the certification has been filed with the chief. I agree that this pit/impoundment shall be constructed, maintained, operated and closed in accordance with all applicable laws and rules, including the requirements of W. Va. Code R § 35-4-2.

Name: Diane White

Title: Accountant

Signature: Diane White

Taken, subscribed and sworn to before me this, 19th Day of July 20 19

Notary Public: Cassidy Boardman

My commission expires: 7/31/2022

Notary Seal:



Section 9. Submittal Instructions

Submit original paper copy of application to:
West Virginia Department of Environmental Protection
Office of Oil and Gas
Impoundment Registration
601 57th Street, SE
Charleston WV 25304

Email PDF file format of this application and all related engineering Plans to :
Depimpoundments@wv.gov

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CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS

HG 1207 WELL PAD & IMPOUNDMENT

GRANT DISTRICT
HARRISON COUNTY
WEST VIRGINIA



Estimated Gross Material Balance (CY)			
Final Development - Gravel Option			
Item	Cur	Fill	Stockpile
Top Wet Pave & Impoundment	44,697	49,336	4,657
Access Road	11,879	15,753	3,804
Total	56,576	65,089	8,461
Est. Material for Aggregate Import			
Per		0.736	
Total Site Balance		1,846.78	
Shovel Trench (Line of Disturbance)			
Est. Soil Factor		22%	4,228
Est. Trench Spoil Volume (Line of Disturbance)			27,332
Material to be Imported (CY)			27,357

Notes:
1. Material balance for est. (open) earthwork quantities only.
2. Topsoil est. volume based on 6 inches average depth.
3. Material balance and aggregate quantities listed on plans are estimates and may not be representative of actual quantities.
4. Estimates do not reflect contractor pay volumes.

Estimated Gravel Quantities			
Item	100% Gravel	80% Gravel	Total
10' Soil Cover (Plan) (CY)	36,183	17,172	53,355
4' Depth of 3" Cover (Plan) (CY)	3,912		3,912
Total (CY)	40,095	17,172	57,267
Estimated Total Gravel (CY)			
100% Gravel			40,095
80% Gravel			17,172
Total Gravel			57,267
Estimated Total Gravel (CY) (Line of Disturbance)			
100% Gravel			3,912
80% Gravel			0
Total Gravel			3,912
Estimated Total Gravel (CY) (Line of Disturbance)			
100% Gravel			15,543
80% Gravel			15,543
Total Gravel			31,086
Estimated Total Gravel (CY) (Line of Disturbance)			
100% Gravel			15,543
80% Gravel			15,543
Total Gravel			31,086

CONSTRUCTION SEQUENCE

- Prior to commencement of any earth disturbance activity including clearing and grubbing, the registrant shall call West Virginia 811 by dialing 811 or 1-800-245-4848 to identify all utility lines. The registrant also must clearly delineate sensitive areas, riparian forest buffer boundaries, the limits of clearing, and trees that are to be conserved within the project site, and shall install appropriate barriers where equipment may not be parked, staged, operated or located for any purpose.
- Site access - This is the first land-disturbance activity to take place at the site and should provide BMPs to minimize accelerated erosion and sedimentation from the following areas: entrance to the site, construction routes, and areas designated for equipment or other use at the site including parking, stockpiles.
- Sediment Barriers - Install perimeter BMPs after the construction site is accessed, keeping associated clearing and grubbing limited to only that amount required for installing perimeter BMPs.
- Land Clearing and Grading - Implement clearing and grading only after all downslope E&S BMPs have been constructed and stabilized.
- Surface Stabilization - Apply temporary or permanent stabilization measures immediately to any disturbed areas where work has reached final grade, has been delayed or otherwise temporarily suspended.
- Construction of Buildings, Utilities, and Paving - During construction, install and maintain any additional erosion and sediment control BMPs, and implement any structural post-construction stormwater BMPs that may be required.
- Upon completion of pad grading, compact the pad to grade and begin placement of pad soil cement.
- Final Stabilization - Revegetation, Treat and Shrub - After construction is completed, install stabilization BMPs including: permanent seeding, mulching and riprap, and complete implementation of stormwater BMPs in this last construction phase. Stabilize all open areas, including borrow and spoil areas, and remove all temporary BMPs and stabilize any disturbances associated with the removal of the BMP.



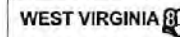
SHT. NO.	SHEET TITLE
1	TITLE SHEET
2A-2C	SITE DEVELOPMENT PLANS
3	PAD & IMPOUNDMENT SECTIONS
4A-4D	ACCESS ROAD SECTIONS
5A-5F	CONSTRUCTION NOTES & DETAILS
6A-6F	RESTORATION PLAN
7	PROPERTY MAP

WELL #	EAT.	LONG.
N-1H	N 39.152276°	W 80.422224°
N-2H	N 39.152284°	W 80.422272°
N-3H	N 39.152290°	W 80.422620°
N-4H	N 39.152297°	W 80.422567°
N-5H	N 39.152302°	W 80.422515°
N-6H	N 39.152308°	W 80.422463°
S-2H	N 39.151415°	W 80.422540°
S-3H	N 39.151417°	W 80.422487°
S-4H	N 39.151423°	W 80.422435°
S-10H	N 39.151430°	W 80.422383°
S-11H	N 39.151436°	W 80.422331°
S-12H	N 39.151442°	W 80.422279°

WELL ELEVATIONS 1343.750

	LATITUDE	LONGITUDE
1207 WELL PAD ACCESS ROAD ENTRANCE	N 39.152061°	W 80.420447°
1208 WELL PAD ACCESS ROAD ENTRANCE	N 39.149029°	W 80.429878°

RECORD CORNER	RECORD LOT #	RECORD AREA OF LOT	AREA WITHIN LOT
WET. ALBERT E. & SHERRA H.	17-12-0445-0005-0000	39.97 AC.	15.027 AC.
NUTTER LISA W.	17-12-0445-0003-0000	54.00 AC.	2,654 AC.
NUTTER LISA W.	17-12-0445-0012-0000	64.50 AC.	2,858 AC.
NUTTER LISA W.	17-12-0445-0011-0000	75.50 AC.	0.760 AC.
NUTTER LISA W.	17-12-0443-0010-0000	58.89 AC.	3,475 AC.
NUTTER LISA W.	17-12-0445-0002-0000	84.57 AC.	3,459 AC.
BROOKVIEW WELLS W. & B. LISA L.	17-12-0425-0031-0000	247.84 AC.	0.023 AC.
TOTAL LIMIT OF DISTURBANCE			38,259 AC.



CALL BEFORE YOU DIG!

800.245.4848
West Virginia

1. SERVICE SHEET 1 FILES WILL NOT BE SHIPPED FOR THE CLIENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MARKING, AND REPAIRING ANY NECESSARY DISTURBANCE TO THE ROAD SERVICE.

REVISION	DATE	DESCRIPTION
1	02/18/19	REVISED ACCESS ROAD LAYOUT & BENCH
2	02/17/19	IMPROVED E&S CONTROL LAYOUT
3	02/12/19	REVISING FOR DEW COMMENTS

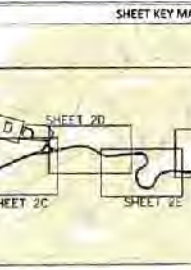
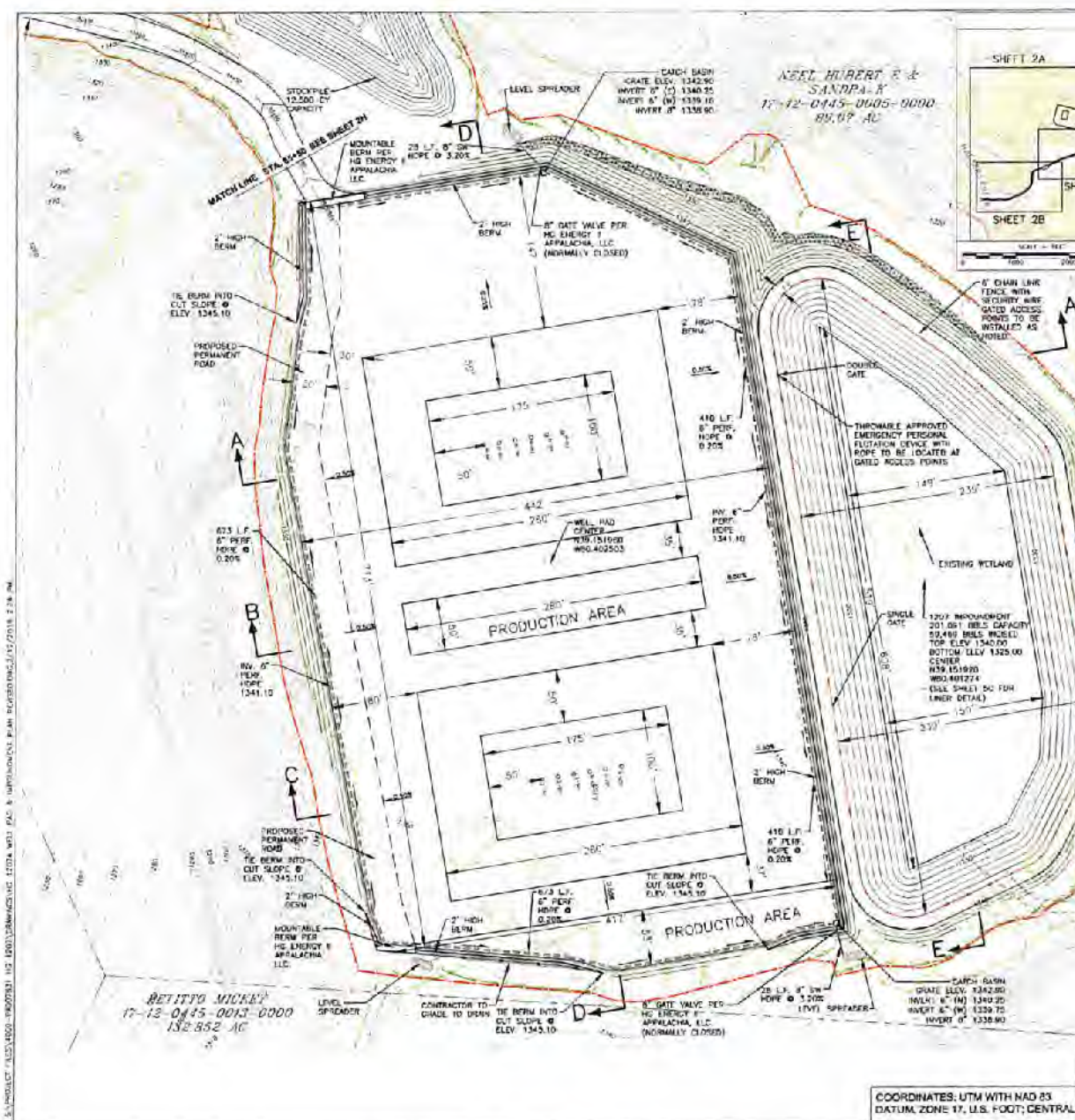


TITLE SHEET
HG 1207 WELL PAD & IMPOUNDMENT
GRANT DISTRICT
HARRISON COUNTY, WEST VIRGINIA
PREPARED FOR:
HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

APPROVED: WEP 12/14/2018
CHECKED: MFP 12/17/2018
DRAWN: DUA 12/17/2018
PROJECT No.: 4000-PEN-19-001
DRAWING NUMBER: PA0078.51-001
SHEET: 1

Penn E&R
Environmental & Remediation, Inc.
111 RYAN COURT, PITTSBURGH, PA 15205
412-722-1222

S:\PROJECTS\15-0000-0002\831 - HG 1207\DRAWINGS\1207 WELL PAD & IMPOUNDMENT TITLE SHEET.DWG/12/17/2018 1:57 PM



WELL #	LAT.	LONG.
W-11	N 29.152678	W 80.402224
W-24	N 29.152254	W 80.402972
W-34	N 29.152295	W 80.401620
W-41	N 29.152222	W 80.402951
W-5H	N 29.152353	W 80.402515
W-6H	N 29.152209	W 80.402463
W-7H	N 29.151411	W 80.403540
W-8H	N 29.151435	W 80.402952
W-9H	N 29.151434	W 80.402458
W-10H	N 29.151455	W 80.402383
W-11H	N 29.151436	W 80.402251
W-12H	N 29.151442	W 80.402278

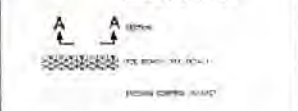
APPROVED WVDEP OOG
3/17/2019

Estimated Gross Machine Balance (CT)
Five Dollars (USD) - Cloud Center

EST. AREA	EST. AREA	EST. AREA
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Estimated Total Proposed Drainage
Estimated Total Proposed Drainage
Estimated Total Proposed Drainage

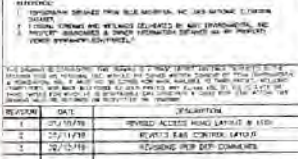
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WVDEP PERMITTING NOTES

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PERMISSION	DATE	APPROVED
1	2/17/19	APPROVED WVDEP OOG
2	2/17/19	APPROVED WVDEP OOG
3	2/17/19	APPROVED WVDEP OOG



APPROVED WVDEP OOG
3/17/2019

APPROVED WVDEP OOG

WEST VIRGINIA OIL & GAS BOARD

APPROVED WVDEP OOG

WEST VIRGINIA OIL & GAS BOARD

WVDEP PERMITTING NOTES

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20. APPROVED WVDEP OOG

WEST VIRGINIA

CALL BEFORE YOU DIG!

Dial 811 or 800 245.4646

COORDINATES: UTM WITH MAD 23 DATUM, ZONE 17, U.S. FOOT, CENTRAL

WEST VIRGINIA OIL & GAS BOARD

APPROVED WVDEP OOG

WEST VIRGINIA OIL & GAS BOARD

WVDEP PERMITTING NOTES

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DATE: 03/17/2019