



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-6H
47-033-05968-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: NEEL 1207 N-6H
Farm Name: HG ENERGY II APPALACHIA
U.S. WELL NUMBER: 47-033-05968-00-00
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.

WW-6B
(04/15)

API NO. 47- 33 - 05968 Rev.
OPERATOR WELL NO. Neel 1207 N-6H
Well Pad Name: Neel 1207

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-6H 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

*S Dew
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: 21,810'

11) Proposed Horizontal Leg Length: 13,918'

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: _____

RECEIVED
Office of Oil and Gas

OCT - 3 2019

WV Department of
Environmental Protection

4703305968

WW-6B
(04/15)

API NO. 47- _____
 OPERATOR WELL NO. Neel 1207 N-6H
 Well Pad Name: Neel 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 Lead 0% Excess Tail 0%
Production	5 1/2"	NEW	P-110	23	21810'	21810' ✓	20% excess yield = 1.18 tail yield = 1.18
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	Lead 40% excess, Tail 0% excess
Intermediate 2	9 5/8"	12 1/4"	.395	3950		Type 1/Class A	Lead 40% excess, Tail 0% excess
Production	5 1/2"	8 1/2"	.415	16240 ✓	12500	Type 1/Class A	20% excess yield = 1.18, tail yield = 1.18
Tubing							
Liners							

RECEIVED
Office of Oil and Gas

NOV 19 2019

PACKERS

WV Department of
Environmental Protection

Kind:				
Sizes:				
Depths Set:				

WW-6B
(10/14)

API NO. 47-33 - 05968 Rev.
OPERATOR WELL NO. Neel 1207 N-6H
Well Pad Name: Neel 1207

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 13,918' lateral length, 21,810' 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 -N/A, Casing to be drilled in w/ Dual Rotary Rig.
Fresh Water/Coal - 15.6 ppg PNE-1 + 3% bwoc CaCl₂ 40% Excess Yield = 1.20, CTS
Intermediate 1 - Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl₂ 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl₂ zero% Excess, CTS
Intermediate 2 - Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl₂ 40% Excess, Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl₂ 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

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.

RECEIVED
Office of Oil and Gas

OCT - 3 2019

WV Department of
Environmental Protection

*Note: Attach additional sheets as needed.



1207 N-6H 4703305968

Marcellus Shale Horizontal
Harrison County, WV

		1207 N-6H SHL				14218635.24N 1809809.05E				
Ground Elevation	1343'		1207 N-6H LP				14219486.9N 1811208.64E			
Azm	340.538°		1207 N-6H BHL				14232604.74N 1806573.28E			

WELLBORE DIAGRAM	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
	24"	20" 94# J-55	Fresh Water	0	135, 637, 731	AIR	15.6 ppg PNE-1 + 3% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl 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	2801 / 2931					
	8.5" Vertical	5-1/2" 23# P-110 HP CDC HTQ	Speechley	3211	3231	9.0ppg SOBMM	<u>Lead:</u> 14.5 ppg POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170 <u>Tail:</u> 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=18240 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 SOBMM				
Cashaqua			6646	6746						
Middlesex			6746	6778						
West River			6778	6849						
Burkett			6849	6859						
Tully Limestone			6859	6967						
Hamilton			6967	7076						
Marcellus			7076	7158						
8.5" Lateral	TMD / TVD (Production)		21810	7145	11.5ppg-12.5ppg SOBMM					
	Onondaga		7158							

LP @ 7145' TVD / 7892' MD

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

+/-13918' ft Lateral

TD @ +/-7145' TVD
+/-21810' MD

X=centralizers

RECEIVED
 Office of Oil and Gas
 WV Department of Environmental Protection
 OCT 3 2019

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

4703305968

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			
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																			
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									
Ingredient name	%	CAS number																			
bentonite	90 - 100	1302-78-9																			
Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7																			
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												
Ingredient name	%	CAS number																			
Calcium chloride	90 - 100	10043-52-4																			
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														
Ingredient name	%	CAS number																			
No hazardous ingredient																					
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												
Ingredient name	%	CAS number																			
Tributyl phosphate	90 - 100	126-73-8																			
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												
Ingredient name	%	CAS number																			
Sucrose	90 - 100	57-50-1																			
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														
Ingredient name	%	CAS number																			
No hazardous ingredient																					
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									
Ingredient name	%	CAS number																			
Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7																			
Calcium oxide	1 - 5	1305-78-8																			
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.												
Ingredient name	%	CAS number																			
Organic acid salt	40 - 50	Trade secret.																			
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.
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.																			

Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

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	

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

1207 Pad Wellhead Layout

9/13/2019



Access Road From 1208



Detail

0 250

1" = 250'

RECEIVED
Office of Oil and Gas

OCT - 3 2019

WV Department of
Environmental Protection

1207 PAD

0 1000

1" = 1,000'

1207 N-1H

1207 N-3H

1207 N-4H

1207 N-6H

1207 S-7H

1207 S-9H

1207 S-10H

1207 S-12H

WW-9
(4/16)

API Number 47 - _____ - _____

Operator's Well No. Neel 1207 N-6H

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 _____)

*SPW
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, SOB Horizontal - SOB

-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

RECEIVED
Office of Oil and Gas

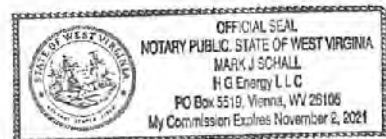
AUG 22 2019

WV Department of
Environmental Protection

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

[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: [Signature]

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? (X) Yes () No

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

Cuttings Disposal/Site Water**Cuttings -Haul off Company:**

Exp Industries, Inc. DOT # 0876278
1875 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
Cochranon, PA 16314
814-425-7773

Disposal Locations:

Apex Environmental, LLC Permit # 06-08488
11 County Road 78
Amsterdam, OH 43903
740-548-4889

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 / 301071
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 (Arnot) 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
Bridgeport, WV 26330

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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185
 Rt 1 Box 158A
 New Martinsville, WV 26035
 804-455-8800

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

Energy Solutions Services, Inc. Permit # R-73006-124
 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 DQT # 720488
 3790 State Route 7
 New Waterford, OH 44445
 830-892-0164

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

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

Nuverra Environmental Solutions
 11942 Veterans Memorial Highway
 Mesontown, WV 26542

Mustang Oilfield Services LLC
 PO Box 799
 St. Clairsville, OH 43950

Wilson's Outdoor Services, LLC
 486 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 44486
 880-586-6825

Adams #1 (Buckeye Brine, LLC)
 Permit # 34-031-2-7177
 23986 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. 286 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 15380

Nichols 1-A (SWIW #18)
 Permit # 3882
 300 Charrington Pkwy, Suite 200
 Coraopolis, PA 15108
 412-829-7275

Groselle (SWIW #34)
 Permit # 4096
 Rt. 88
 Garrettsville, OH
 719-275-4816

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

RECEIVED
 Office of Oil and Gas

AUG 22 2019

WV Department of
 Environmental Protection

4703305968

Adams #2 (Buckeye Brine, LLC)
2205 Westover Road
Austin Tx 78703
Permit # 34-031-2-7178
740-575-4484
612-478-6545

Adams #3 (Buckeye Brine, LLC)
Permit # 34-031-2-7241-00-00
2680 Exposition, Suite 117
Austin, TX 78703
612-478-6545

Mczena #1 Well (SWIW # 18)
Permit # 34-157-2-5511-00-00
8367 E. State Street
Newcomerstown, OH 43882
740-763-3866

Goff SWD #1 (SWIW # 27)
Permit # 34-119-2-8776-000
300 Cherrington Pkwy, Suite 200
Coraopolis, PA 15108
412-829-7275

SOS D#1 (SWIW #12)
Permit # 34-059-2-4202-00-00
Silar 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
7904 S. Pleasant's Hwy
St. Marys, WV 26170
304-665-2652

OH UIC #1. Buckeye 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
804-823-6568

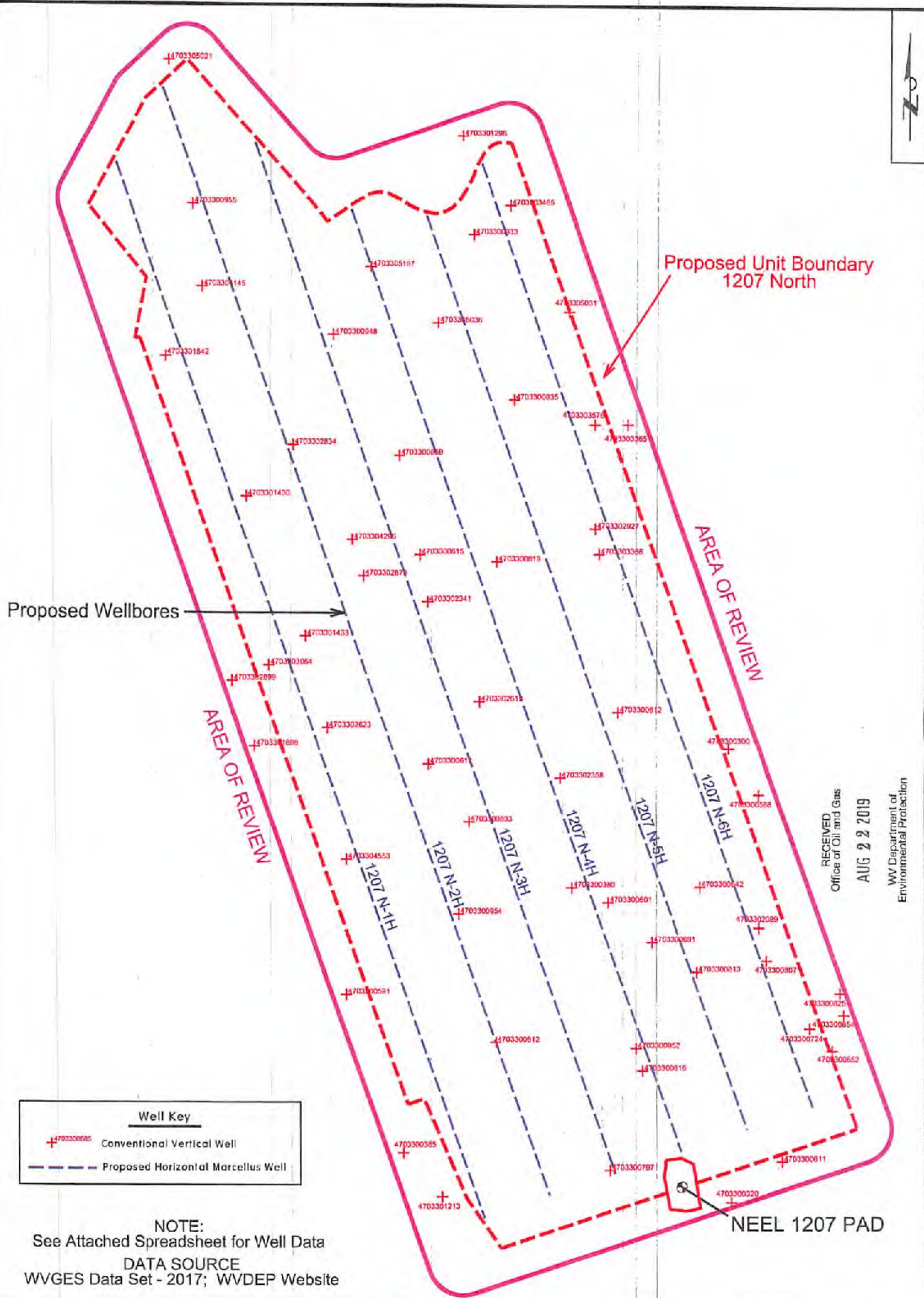
US Steel 11385
Permit # 47-001-00561
200 Evergreen Drive
Waynesburg, PA 15730
804-823-6568

Chapin #7 UIC (SWIW #7)
Permit # 34-083-2-4187-00-00
Elkhead Gas & Oil Company
12168 Marne Rd. NE
Newark, OH 43055
740-763-3966

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection



Proposed Unit Boundary
1207 North

AREA OF REVIEW

Proposed Wellbores

AREA OF REVIEW

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

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:

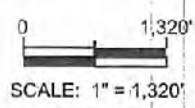
NEEL 1207 UNIT

- 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.



4703 05968

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

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

4703305968

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

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	4703303054	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



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

4703305968

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

RECEIVED
Office of Oil and Gas
AUG 22 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

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 22 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)
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



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

January 7, 2019

Alliance Petroleum Company
214 Warner Street
Marietta, OH 45750

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 22 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

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 22 2019
WV Department of
Environmental Protection

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

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®

OFFICIAL USE

7018 0680 0001 1980 3736

Certified Mail Fee	\$ 3.45
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 2.75
<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

PARKERSBURG WV 26107
 JAN 10 2019
 Postmark Here

Sent To: 1207NIH AOR
 Alliance Petroleum Company
 Street and Apt. No., or PO Box No.
 214 Warner Street
 City, State, ZIP+4®
 Marietta OH 45750

PS Form 3800, April 2015 PSN 7530-02-000-6047 See Reverse for Instructions

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®

OFFICIAL USE

7018 0680 0001 1980 3729

Certified Mail Fee	\$ 3.45
Extra Services & Fees (check box, add fee as appropriate)	
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$ 2.75
<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

PARKERSBURG WV 26107
 JAN 10 2019
 Postmark Here

Sent To: 1207NIH AOR
 EQT Production Company
 Street and Apt. No., or PO Box No.
 115 Professional Place
 City, State, ZIP+4®
 Bridgeport WV 26330

PS Form 3800, April 2015 PSN 7530-02-000-6047 See Reverse for Instructions

RECEIVED
 Office of Oil and Gas
 AUG 22 2019
 WV Department of
 Environmental Protection

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

7016 0680 0001 1980 3712

**U.S. Postal Service™
 CERTIFIED MAIL® RECEIPT**
 Domestic Mail Only

For delivery information, visit our website at www.usps.com™.

OFFICIAL USE

Certified Mail Fee \$ 3.45

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

Return Receipt (hardcopy) \$ 2.75

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage \$ 1.21

Total Postage and Fees \$ 7.41

Postmark Here JAN 10 2019

1207 NIH AOR

Sent To Antero Resources

Street and Apt. No., or PO Box No. 533 White Oaks Blvd

City, State, ZIP+4® Bridgeport WV 26330

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

7016 0680 0001 1980 3705

**U.S. Postal Service™
 CERTIFIED MAIL® RECEIPT**
 Domestic Mail Only

For delivery information, visit our website at www.usps.com™.

OFFICIAL USE

Certified Mail Fee \$ 3.45

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

Return Receipt (hardcopy) \$ 2.75

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage \$ 1.21

Total Postage and Fees \$ 7.41

Postmark Here JAN 10 2019

1207 NIH AOR

Sent To Dominion Energy Transmission

Street and Apt. No., or PO Box No. 2397 Davison Run Road

City, State, ZIP+4® Clarksburg WV 26301

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

7016 0680 0001 1980 2975

**U.S. Postal Service™
 CERTIFIED MAIL® RECEIPT**
 Domestic Mail Only

For delivery information, visit our website at www.usps.com™.

OFFICIAL USE

Certified Mail Fee \$ 3.45

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

Return Receipt (hardcopy) \$ 2.75

Return Receipt (electronic) \$ _____

Certified Mail Restricted Delivery \$ _____

Adult Signature Required \$ _____

Adult Signature Restricted Delivery \$ _____

Postage \$ 1.21

Total Postage and Fees \$ 7.41

Postmark Here JAN 10 2019

1207 NIH - AOR

Sent To Ross & Wharton Gas Company

Street and Apt. No., or PO Box No. 29 Morton Street

City, State, ZIP+4® Buckhannon WV 26201

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

RECEIVED
 Office of Oil and Gas
 AUG 22 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**

HG Energy II Appalachia, LLC

5260 Dupont Road

Parkersburg, WV 26101

*SDW
1/4/19*

RECEIVED
Office of Oil and Gas

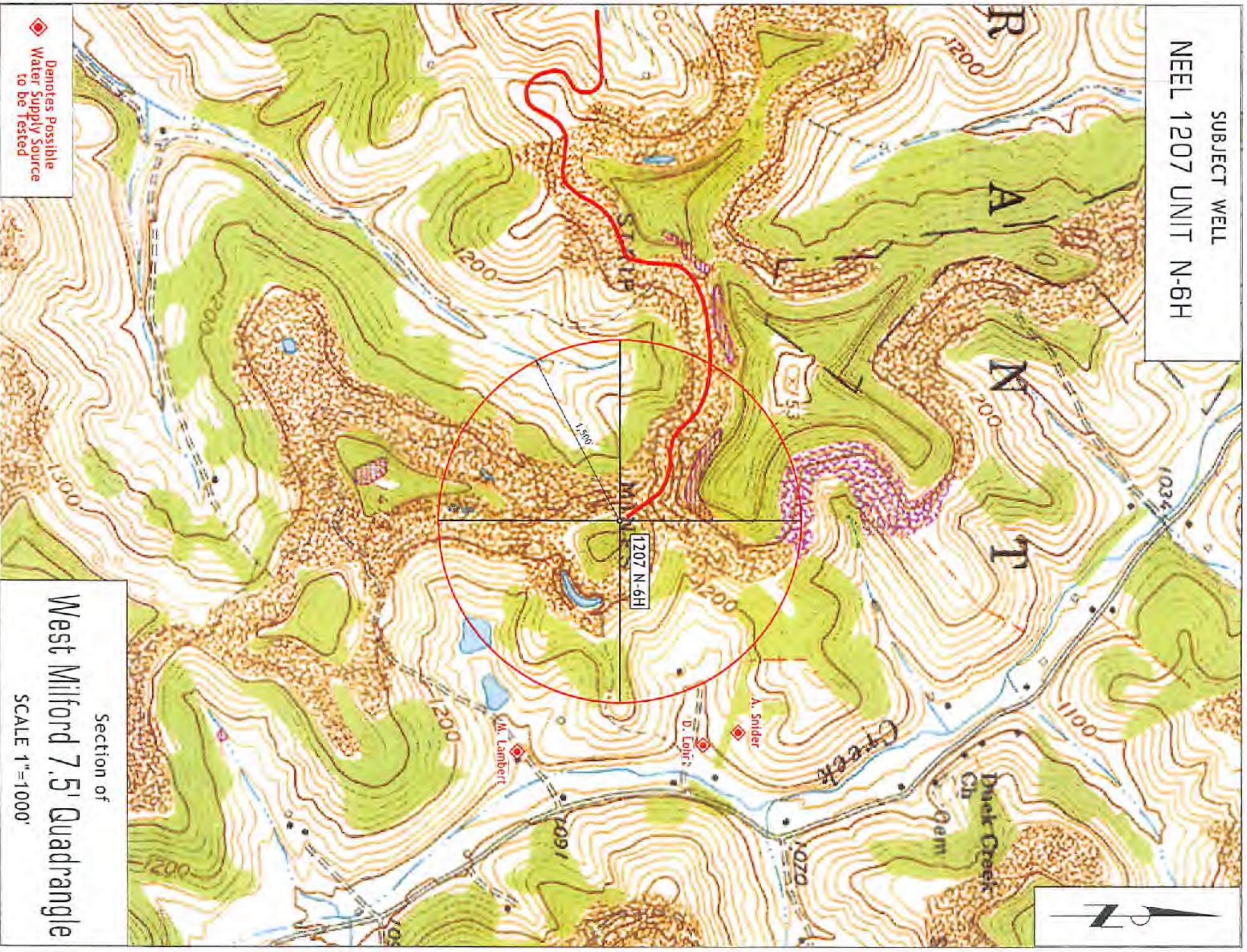
JAN 15 2019

WV Department of
Environmental Protection
RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

SUBJECT WELL
NEEL 1207 UNIT N-6H



Denotes Possible
Water Supply Source
to be Tested

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



10,978' to Bottom Hole

7,839' to Top Hole

BTM LATITUDE 39 - 12 - 30
TOP LATITUDE 39 - 10 - 00

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 P. Matheny, P.S. 2070

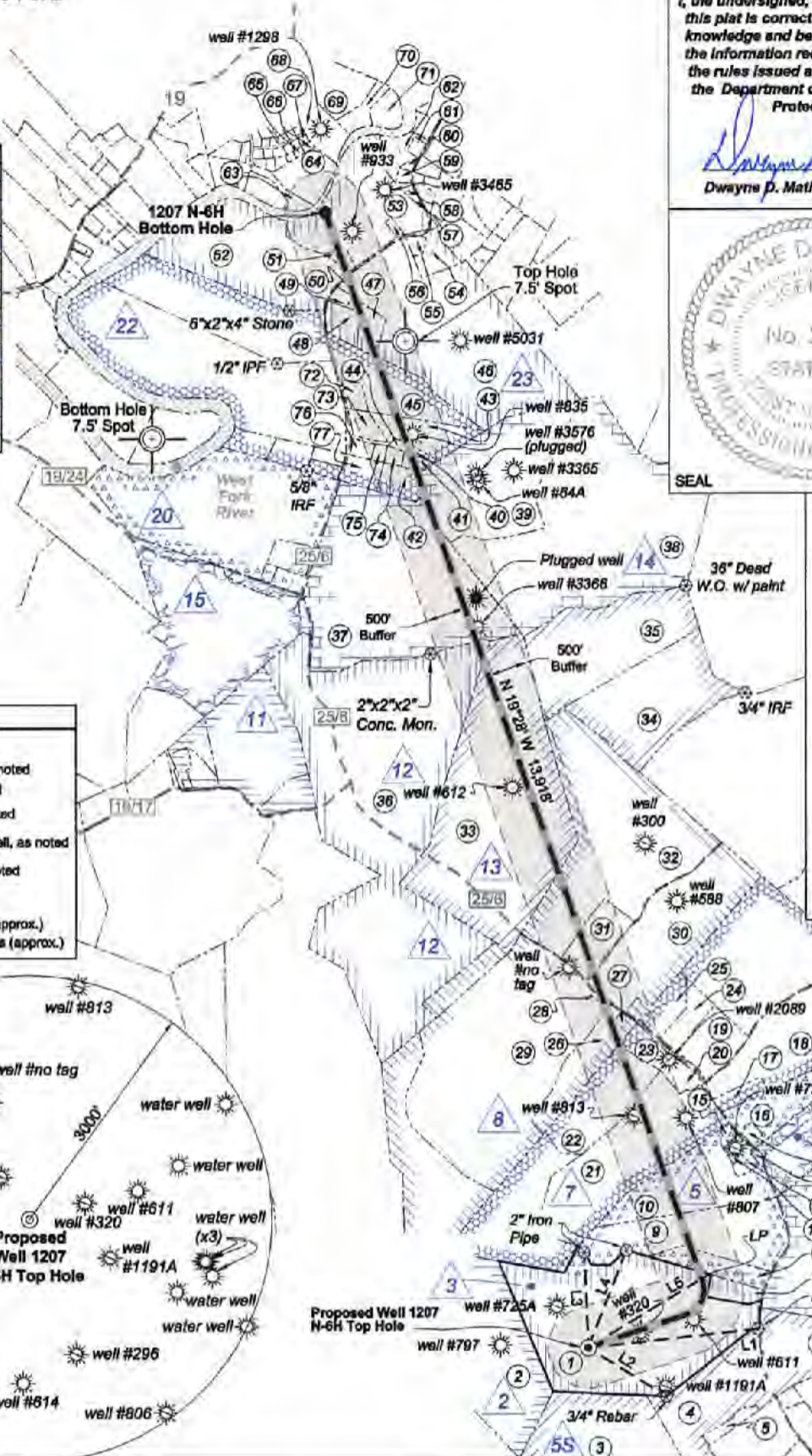


LONGITUDE 80 - 22 - 30

5,263' to Top Hole

6,441' to Bottom Hole

ID	Lease
2	A.J. Smith, et ux
3	Dora B. McWhorter, et al
4	C. Earl Snider, et al
5	A.C. Thrash, et al
6	Hiram E. Edmonds, et al
7	Mae Gaston, of al
8	Charles H. Gaston, et al
11	Camella Y. Morris, et al
12	WV Conservation Committee
13	Rachel S. Hershey, et al
14	Robert & Betty Stevenson, et al
15	Hiram J. Burnside
20	Union National Bank, et al
22	Vance Ward, et al
23	Roscoe Allman, et ux
6S	Union National Bank, et al

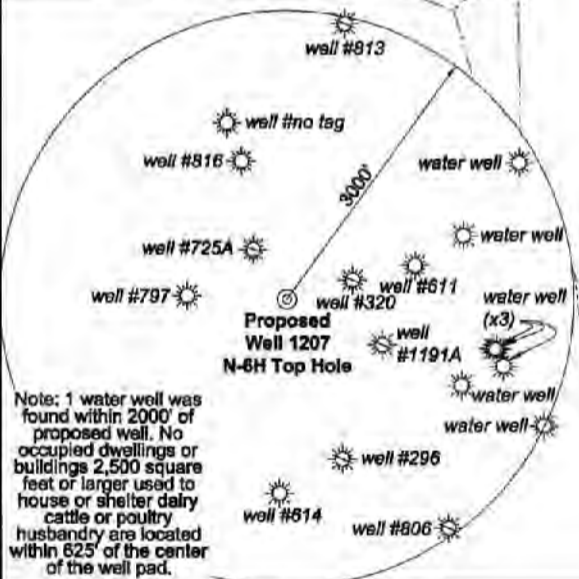


Legend

- 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.)

Notes: Well No. 1207 N-6H West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Top Hole coordinates
Latitude: 39°08'07.98"
Longitude: 80°24'09.54"
Bottom Hole coordinates
Latitude: 39°11'28.31"
Longitude: 80°24'49.48"
UTM Zone 17, NAD 1983
Top Hole Coordinates
N: 4,333,848.889m
E: 551,630.902m
Bottom Hole Coordinates
N: 4,338,106.601m
E: 550,644.837m
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-4H UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,218,635.24'
E: 1,809,809.05'
Landing Point Coordinates
N: 14,219,466.90'
E: 1,811,208.64'
Bottom Hole Coordinates
N: 14,232,804.74'
E: 1,806,573.28'



Note: 1 water well was found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.

Tag	Bearing	Dist.
L1	S 83°38' W	2,109.2'
L2	N 58°12' W	1,130.6'
L3	S 02°30' E	1,173.3'
L4	S 21°35' W	1,288.8'
L5	N 58°41' E	1,638.3'

FILE NO: 296-36-G-18
DRAWING NO: 1207 N-6H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

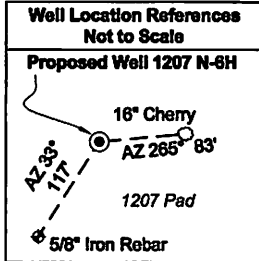
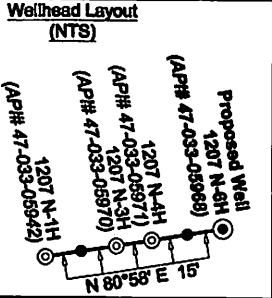
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: September 26 20 19
OPERATOR'S WELL NO. 1207 N-6H
API WELL NO
47 - 033 - 05968
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: 21,810' 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



No.	TM / Par	Ac.	Owner	Bk / Pg
1	445 / 5	89.07	HG Energy II Appalachia, LLC	--- / ---
2	445 / 3	64.00	Lisa M. Nutter	W887 / 445
3	445 / 13	132.85	Mickey Pettito	W175 / 1167
4	445 / 13.1	26.67	Martha Ellen Lambert	--- / ---
5	445 / 15.1	35.00	Martha Ellen Lambert	1278 / 582
6	445 / 5.1	3.38	David W. Lohr	1531 / 421
7	445 / 7	8.00	Anthony D. Snider	1350 / 818
8	426 / 71	233.35	Antonio P LLC	1503 / 291
9	425 / 30.1	30.00	James W. & Susan A. Freeman	1139 / 388
10	425 / 30	21.39	Earl H. & Melissa J. Graham	1337 / 366
11	425 / 29.1	0.27	Rhonda R. & George P. Koutsobaris	1420 / 93
12	425 / 23.3	0.54	Rhonda R. & George P. Koutsobaris	1420 / 93
13	425 / 23.5	0.29	Rhonda R. & George P. Koutsobaris	1411 / 1231
14	425 / 22	1.00	Duck Creek Mission Church Trust	1024 / 984
15	425 / 23.4	0.80	Marlene & Robert V. Shepherd	1201 / 12
16	425 / 21	0.38	Judith H. Russell	1212 / 1074
17	425 / 20	3.00	Jeffery L. & Pamy S. Harvey	1394 / 607
18	425 / 19	31.00	Antonio P LLC	1503 / 291
19	425 / 10	9.60	Joy L. Jarrett	1272 / 348
20	425 / 10.1	3.10	Robert R. & Debbie A. Partain	1308 / 553
21	425 / 29	63.04	Marva Shepherd	W168 / 413
22	425 / 28	19.92	Marva Shepherd	W168 / 413
23	425 / 9	3.88	Leslie S. Riggelman	W127 / 680
24	425 / 11.1	5.12	Linda Snyder	1124 / 768
25	425 / 11	6.29	Linda Snyder	1124 / 768
26	425 / 8.1	13.48	James L. Seilers Family Revocable Trust	1480 / 726
27	425 / 8.3	1.41	Melanie S. & Jay A. Morris	1388 / 680
28	425 / 8.2	0.39	Linda & Mark Wilfong	1438 / 93
29	425 / 8	100.18	James L. Seilers Family Revocable Trust	1480 / 725
30	425 / 12	42.60	Antonio P LLC	1503 / 291
31	425 / 13	9.00	Penny L. Hines	1481 / 63
32	425 / 14	73.60	WVDNR	W85 / 624
33	425 / 6	105.55	WVDNR	W85 / 624
34	425 / 15	40.85	WVDNR	W85 / 624
35	405 / 81	42.00	WVDNR	W85 / 624
36	425 / 5	173.80	WV State Conservation Commission	W33 / 148
37	405 / 80	90.97	Mary Lou Smith	W177 / 1179
38	405 / 80	90.97	Mary Lou Smith	W177 / 1179
39	405 / 74	107.76	Mary Lou Smith	W177 / 1179

No.	TM / Par	Ac.	Owner	Bk / Pg
40	405 / 62.8	0.73	Dualne L. & Tracy M. Butcher	1452 / 343
41	405 / 62.5	1.24	Dean C. Ramsey, Trustee	1338 / 885
42	405 / 72.1	4.32	Meilissa Barker	1403 / 68
43	405 / 62.2	9.93	Danny Joe Miller	1521 / 1108
44	405 / 62.7	0.48	Jeremy L. & Tricia Dobbins	1452 / 340
45	405 / 62	56.18	Evelyn Marie Ward	--- / ---
46	405 / 63.8	80.25	Kimberly K. & John T. Lough	1518 / 822
47	405 / 63.10	4.00	Kimberly K. & John T. Lough	1518 / 822
48	405 / 63.5	4.00	Charles F. & Dawn L. Grow	1485 / 523
49	405 / 63.7	1.00	Robert J. Markley, Jr., et al	1560 / 310
50	405 / 63.6	0.50	John P. & Virginia R. Markley	1353 / 1084
51	405 / 63.3	1.15	Ralph L. & Ruth A. Davis	1027 / 283
52	405 / 63.2	42.47	Larry D. Myers Revocable Trust	W191 / 1279
53	405 / 63	32.60	Larry D. Myers & Joseph E. Nutter	1294 / 1089
54	405 / 63.4	4.26	Kimberly K. & John T. Lough	1518 / 822
55	405 / 63.9	1.01	Michael J. & Carolyn L. Thomas	1348 / 92
56	405 / 63.1	0.53	Larry D. Myers Revocable Trust	W191 / 1279
57	405 / 35.2	1.00	Joseph R. & Tammy A. Romano	1482 / 512
58	405 / 35.5	0.87	Ricky W. & Michele K. Hitt	1208 / 1133
59	405 / 35.3	0.70	Adam & Danae O'Connell	1586 / 539
60	405 / 35.1	0.36	Robert A. Holland	1594 / 281
61	405 / 35.4	1.02	Gary A. & Judith A. Garton	1381 / 948
62	405 / 35	1.50	John Huff	1539 / 126
63	405 / 34.1	2.00	Daniel Scott Frame	1579 / 549
64	405 / 34	7.00	Jamie M. & William H. McDaniel, Sr.	1382 / 347
65	385A / 32	Lot 32	Deeanna E. & Paul D. Blake	1480 / 1119
66	385A / 33	Lot 33	Deeanna E. & Paul D. Blake	1480 / 1119
67	385A / 22	Lot 22	Sean Eric Cottrill	1531 / 1169
68	385 / 111	7.41	Donna J. Heldreth & Connie L. Wease Estate	--- / ---
69	385 / 112	11.79	Victor J. & Delores N. Hunt	1387 / 527
70	405 / 12	3.38	Roger D. Mealey, Jr.	1400 / 1031
71	405 / 12.1	3.38	Brandy D. Fultz	1491 / 512
72	405 / 62.10	2.06	Danny J. & Deborah J. Miller	1505 / 8
73	405 / 62.6	2.63	Michael T. Jr & Ramona J. Morris	1527 / 376
74	405 / 62.4	0.99	Tricia A. & Jeremy L. Dobbins	1336 / 990
75	405 / 62.9	0.74	Tricia A. & Jeremy L. Dobbins	1476 / 953
76	405 / 62.3	1.26	Wayne & Naomi McHenry	1537 / 488
77	405 / 72	4.32	Sandra W. & Willard Miller	1031 / 554

FILE NO: 296-36-G-18
DRAWING NO: 1207 N-6H 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-6H
API WELL NO
47 - 033 - 05968
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: 21,810' 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



ID	Lease
2	A. J. Smith, et ux
3	Dora B. McWhorter, et al
4	C. Earl Snider, et al
5	A.C. Thrash, et al
6	Hiram E. Edmonds, et al
7	Mee Gaston, et al
8	Charles H. Gaston, et al
11	Camella Y. Morris, et al
12	WV Conservation Committee
13	Rachel S. Harshay, et al
14	Robert & Betty Stevenson, et al
15	Hiram J. Burnside
20	Union National Bank, et al
22	Vance Ward, et al
23	Roscoe Allman, et ux
5S	Union National Bank, et al

10,978' to Bottom Hole
7,839' to Top Hole

BTM LATITUDE 39 - 12 - 30
TOP LATITUDE 39 - 10 - 00

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, P.S. 2070



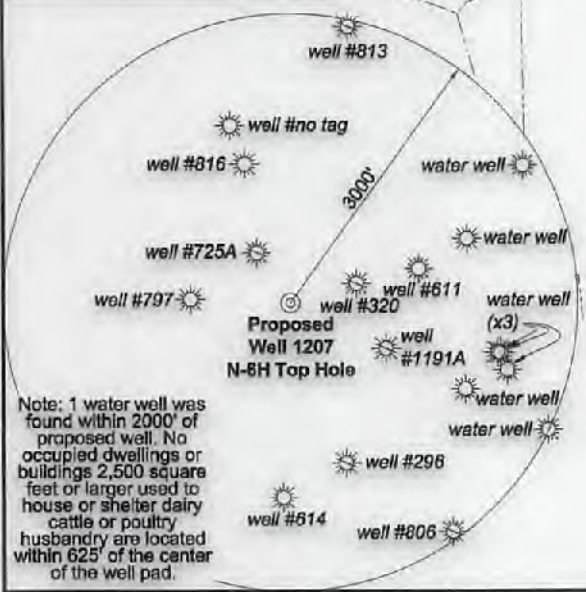
LONGITUDE 80 - 22 - 30
5,263' to Top Hole
6,441' to Bottom Hole

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.)

Notes: Well No. 1207 N-6H
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Top Hole coordinates
Latitude: 39°09'07.98"
Longitude: 80°24'09.54"
Bottom Hole coordinates
Latitude: 39°11'26.31"
Longitude: 80°24'49.48"
UTM Zone 17, NAD 1983
Top Hole Coordinates
N: 4,333,848.889m
E: 551,630.902m
Bottom Hole Coordinates
N: 4,338,106.801m
E: 550,644.637m
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-4H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,218,635.24'
E: 1,809,809.05'
Landing Point Coordinates
N: 14,219,466.90'
E: 1,811,208.64'
Bottom Hole Coordinates
N: 14,232,604.74'
E: 1,806,573.26'



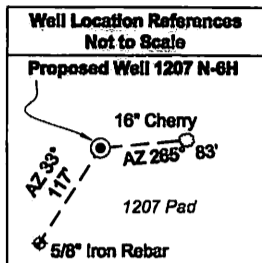
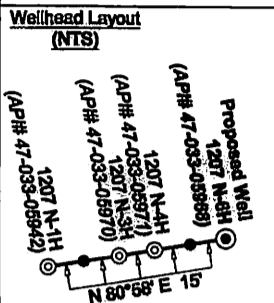
FILE NO: 296-36-G-18
DRAWING NO: 1207 N-6H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: September 26 20 19
OPERATOR'S WELL NO. 1207 N-6H
API WELL NO
47 - 033 - 05968
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: 21,810' 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



No.	TM / Par	Ac.	Owner	Bk / Pg
1	445 / 5	89.07	HG Energy II Appalachia, LLC	--- / ---
2	445 / 3	64.00	Lisa M. Nuttar	W887 / 445
3	445 / 13	132.85	Mickey Patton	W175 / 1167
4	445 / 13.1	28.67	Martha Ellen Lambert	--- / ---
5	445 / 15.1	35.00	Martha Ellen Lambert	1278 / 582
6	445 / 5.1	3.38	David W. Lohr	1531 / 421
7	445 / 7	8.00	Anthony D. Snider	1350 / 818
8	426 / 71	233.35	Antonio P LLC	1603 / 281
9	425 / 30.1	30.00	James W. & Susan A. Freeman	1139 / 388
10	425 / 30	21.39	Earl H. & Melissa J. Graham	1337 / 368
11	425 / 29.1	0.27	Rhonda R. & George P. Koutsobaris	1420 / 93
12	425 / 23.3	0.54	Rhonda R. & George P. Koutsobaris	1420 / 93
13	425 / 23.5	0.29	Rhonda R. & George P. Koutsobaris	1411 / 1231
14	425 / 22	1.00	Duck Creek Mission Church Trust	1024 / 984
15	425 / 23.4	0.80	Marlene & Robert V. Shepherd	1201 / 12
16	425 / 21	0.38	Judith H. Russell	1212 / 1074
17	425 / 20	3.00	Jeffery L. & Parry S. Harvey	1394 / 607
18	425 / 19	31.00	Antonio P LLC	1503 / 291
19	425 / 10	9.60	Joy L. Jarrett	1272 / 348
20	425 / 10.1	3.10	Robert R. & Debbie A. Pertain	1308 / 553
21	425 / 29	53.04	Marva Shepherd	W166 / 413
22	425 / 28	19.92	Marva Shepherd	W166 / 413
23	425 / 9	3.88	Leslie S. Riggelman	W127 / 680
24	425 / 11.1	5.12	Linda Snyder	1124 / 768
25	425 / 11	6.29	Linda Snyder	1124 / 768
26	425 / 8.1	13.48	James L. Sellers Family Revocable Trust	1480 / 728
27	425 / 8.3	1.41	Melanie S. & Jay A. Morris	1366 / 660
28	425 / 8.2	0.39	Linda & Mark Wittong	1438 / 93
29	425 / 8	100.18	James L. Sellers Family Revocable Trust	1480 / 725
30	425 / 12	42.60	Antonio P LLC	1503 / 291
31	425 / 13	9.00	Penny L. Hines	1481 / 53
32	425 / 14	73.60	WVDNR	W85 / 624
33	425 / 6	105.55	WVDNR	W85 / 624
34	425 / 15	40.85	WVDNR	W85 / 624
35	405 / 81	42.00	WVDNR	W85 / 624
36	425 / 5	173.60	WV State Conservation Commission	W33 / 148
37	405 / 80	90.97	Mary Lou Smith	W177 / 1179
38	405 / 80	90.97	Mary Lou Smith	W177 / 1179
39	405 / 74	107.78	Mary Lou Smith	W177 / 1179

No.	TM / Par	Ac.	Owner	Bk / Pg
40	405 / 62.8	0.73	Duaine L. & Tracy M. Butcher	1462 / 343
41	405 / 62.5	1.24	Dean C. Ramsey, Trustee	1338 / 985
42	405 / 72.1	4.32	Melissa Barker	1403 / 68
43	405 / 62.2	9.93	Danny Joe Miller	1621 / 1108
44	405 / 62.7	0.48	Jeremy L. & Tricia Dobbins	1462 / 340
45	405 / 62	56.18	Evelyn Marie Ward	--- / ---
46	405 / 63.8	80.25	Kimberly K. & John T. Lough	1518 / 822
47	405 / 63.10	4.00	Kimberly K. & John T. Lough	1518 / 822
48	405 / 63.5	4.00	Charles F. & Dawn L. Grow	1495 / 523
49	405 / 63.7	1.00	Robert J. Markley, Jr., et al	1560 / 310
50	405 / 63.6	0.50	John P. & Virginia R. Markley	1353 / 1084
51	405 / 63.3	1.15	Ralph L. & Ruth A. Davis	1027 / 283
52	405 / 63.2	42.47	Larry D. Myers Revocable Trust	W191 / 1279
53	405 / 63	32.60	Larry D. Myers & Joseph E. Nuttar	1294 / 1089
54	405 / 63.4	4.26	Kimberly K. & John T. Lough	1518 / 822
55	405 / 63.9	1.01	Michael J. & Carolyn L. Thomas	1348 / 92
56	405 / 63.1	0.53	Larry D. Myers Revocable Trust	W191 / 1279
57	405 / 35.2	1.00	Joseph R. & Tammy A. Romano	1192 / 512
58	405 / 35.5	0.87	Ricky W. & Michele K. Hitt	1208 / 1133
59	405 / 35.3	0.70	Adam & Danalea O'Connell	1558 / 539
60	405 / 35.1	0.36	Robert A. Holland	1694 / 261
61	405 / 35.4	1.02	Gary A. & Judith A. Garton	1381 / 946
62	405 / 35	1.50	John Huff	1539 / 126
63	405 / 34.1	2.00	Daniel Scott Frame	1579 / 549
64	405 / 34	7.00	Jamie M. & William H. McDaniels, Sr.	1382 / 347
65	385A / 32	Lot 32	Deanna E. & Paul D. Blake	1480 / 1119
66	385A / 33	Lot 33	Deanna E. & Paul D. Blake	1480 / 1119
67	385A / 22	Lot 22	Sean Eric Cottrill	1531 / 1189
68	385 / 111	7.41	Donna J. Heidreth & Connie L. Wease Estate	--- / ---
69	385 / 112	11.79	Victor J. & Delores N. Hunt	1387 / 527
70	405 / 12	3.38	Roger D. Mealey, Jr.	1400 / 1031
71	405 / 12.1	3.38	Brandy D. Fultz	1491 / 512
72	405 / 62.10	2.06	Danny J. & Deborah J. Miller	1605 / 8
73	405 / 62.6	2.63	Michael T. Jr. & Ramona J. Morris	1527 / 376
74	405 / 62.4	0.99	Tricia A. & Jeremy L. Dobbins	1338 / 990
75	405 / 62.9	0.74	Tricia A. & Jeremy L. Dobbins	1476 / 953
76	405 / 62.3	1.26	Wayne & Naomi McHenry	1537 / 466
77	405 / 72	4.32	Sandra W. & Willard Miller	1031 / 554

FILE NO: 296-36-G-18
DRAWING NO: 1207 N-6H 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-6H
API WELL NO
47 - 033 - 05968
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: 21,810' 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-6H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

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

See Attached Sheets

**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

RECEIVED
Office of Oil and Gas

OCT - 3 2019

WV Department of
Environmental Protection

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

HG Energy II Appalachia, LLC
1207 N - 6H 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				
5	LC068725	12-0425-0023-0004; 12-0425-0023-0003; 12-0425-0029-0001; 12-0425-0030-0001; 12-0425-0030-0000; 12-0425-0022-0000; p/o 12-0425-0029-0000; 12-0425-0021-0000; 12-0445-0004-0000; 12-0445-0007-0000	Q100848000	A. C. THRASH, MARTHA D. THRASH, HIS WIFE; ROSA A. SHEETS, WIDOW; AND MARY B. DAWSON, WIDOW	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	824	148	
				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	660	
	DOMINION 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	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. LACHAPPELLE AND RAYMOND C. LACHAPPELLE, 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	

		12-0425-0020-0000; 12-0425-0027-0000; 12-0425-0028-0000; p/o 12-0425-0011-0000; p/o 12-0425-0029-0000;		HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC. DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION ENERGY TRANSMISSION, INC.	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT MEMORANDUM OF LEASE MEMORANDUM OF AMENDED AND RESTATED LEASE FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	903 1136 51 58 1522 1551 1601 1524 1543 1576 1584 1600 1601	179 250 795 362 33 969 563 491 1235 125 942 692 581
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 CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC.	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	822 903 1136 51 58 1522 1543 1576 1584 1600 WVSOS 1601	99 179 509 795 362 33 1235 125 942 692 581
13	LC069359; LC068670	12-0425-0006-0000; 12-0425-0015-0000; 12-0405-0081-0000	Q100817000; Q100630000	RACHEL SMITH HERSHEY APPALACHIAN ROYALTIES, INC. HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC.	HOPE NATURAL GAS COMPANY HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM OF FARMOUT AGREEMENT FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	823 834 903 1136 51 58 1522 1524 1543 1576 1584 1600 1601	138 58 179 250 795 362 33 491 1235 125 942 692 581
				CONSERVATION COMMISSION OF WEST VIRGINIA	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	831	446

12	LC069177	12-0425-0005-0000	Q101153000	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
14	LC090349	12-0405-0080-0000 12-0405-0070-0000 12-0405-0073-0000 12-0405-0074-0000	ANTERO1	ROBERT AND BETTY STEVENSON	UNITED OPERATING COMPANY, INC.	NOT LESS THAN 1/8	1000	309
				WILLIAM H. AND HELEN JENKINS	UNITED OPERATING COMPANY, INC.	NOT LESS THAN 1/8	1000	319
				CARL V. AND SADIE L. SMITH; WILLIAM L. AND ALBERTA FALKNOR	UNITED OPERATING COMPANY, INC.	NOT LESS THAN 1/8	1000	327
				ALAN AND EMMA YOHO	UNITED OPERATING COMPANY, INC.	NOT LESS THAN 1/8	1000	337
				UNITED OPERATING COMPANY, INC.	PATRICK PETROLEUM CORPORATION	PARTIAL ASSIGNMENT (32%)	1078	1068
				PATRICK PETROLEUM CORPORATION	LADD PETROLEUM CORPORATION	ASSIGNMENT	1142	305
				LADD PETROLEUM CORPORATION	UNITED OPERATING COMPANY, INC.	ASSIGNMENT	1167	207
				UNITED OPERATING COMPANY, INC.	PEAKE ENERGY, INC.	ASSIGNMENT	1303	17
				PEAKE ENERGY, INC.	NORTH COAST ENERGY EASTERN, INC.	NAME CHANGE	1354	1122
				NORTH COAST ENERGY EASTERN, INC.	EXCO - NORTH COAST ENERGY, INC.	NAME CHANGE	AOI 59	795
					EXCO PRODUCTION COMPANY (PA), LLC, EXCO RESOURCES (XA) LLC, BG PRODUCTION COMPANY (PA), LLC, BG PRODUCTION COMPANY (WV), LLC, AND APPALACHIA MIDSTREAM, LLC			721
					EXCO RESOURCES (WV), INC., AND EXCO RESOURCES (PA), INC.	MERGER	1448	
					EXCO PRODUCTION COMPANY (PA), LLC, EXCO RESOURCES (XA) LLC, BG PRODUCTION COMPANY (PA), LLC, BG PRODUCTION COMPANY (WV), LLC, AND APPALACHIA MIDSTREAM, LLC			565
					ANTERO RESOURCES APPALACHIAN CORPORATION	ASSIGNMENT	1503	
	ANTERO RESOURCES APPALACHIAN CORPORATION	NAME CHANGE	CNC 2	914				
	ANTERO RESOURCES CORPORATION	HG ENERGY II APPALACHIA, LLC	NOTICE OF AGREEMENT	1637	499			
22	FK108078; FK079962	12-0405-0062-0000; 12-0405-0062-0001; 12-0405-0062-0002; 12-0405-0062-0003; 12-0405-0062-0004; 12-0405-0062-0005; 12-0405-0062-0006; 12-0405-0062-0007; 12-0405-0062-0008; 12-0405-0062-0009; 12-0405-0062-0010; 12-0405-0070-0000; 12-0405-0070-0001; 12-0405-0071-0000; 12-0405-0071-0001; 12-0405-0071-0002; 12-0405-0072-0000; 12-0405-0072-0001	Q100451000	VANCE WARD AND EVELYN WARD, HIS WIFE; MARIE WARD, WIDOW; LLOYD S. WARD AND RUBY A. WARD, HIS WIFE; DALLAS L. WARD AND PEGGY L. WARD, HIS WIFE				
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	981	561
				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 EXPLORATION & PRODUCTION, INC.	CONFIRMATORY ASSIGNMENT	1442	356
				DOMINION EXPLORATION & PRODUCTION, INC.	DOMINION TRANSMISSION, INC.	ASSIGNMENT	1457	978
				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
						FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				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
						SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
						MEMORANDUM OF AMENDED AND RESTATED LEASE	1601	563
						DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	

23	LC071243; LC074384	12-405-0063-0000; 12-405-0063-0001; 12-405-0063-0002; 12-405-0063-0003; 12-405-0063-0004; 12-405-0063-0005; 12-405-0063-0006; 12-405-0063-0007; 12-405-0063-0008; 12-405-0063-0009; 12-405-0063-0010	Q101073000	AGNES SMALLWOOD AND HERMAN E. SMALLWOOD, HER HUSBAND; ALECIA MCELFRISH, WIDOW; JOSEPH S. FLOYD AND VIRGINIA V. FLOYD, HIS WIFE; WILLIAM EARL MCELFRISH, COMMITTEE OF MYRTLE FLOYD, A MENTALLY INCOMPETENT PERSON; KATHLEEN F. GOODWIN AND MURRY GOODWIN, HER HUSBAND; ANNA BUDNY AND STANLEY BUDNY, HER HUSBAND; HARRY W. FITTRO AND JUDY L. FITTRO, HIS WIFE; BETTY MCALEXANDER AND THOMAS W. MCALEXANDER, HER HUSBAND; ROSCOE M. FITTRO, WIDOWER; ROBERT M. FITTRO AND JONNA S. FITTRO, HIS WIFE; CARL FLOYD AND GLADYS FLOYD, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	856	604
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	ALLEGHENY LAND & MINERAL	ASSIGNMENT (PORTION WITHIN 300 FT. RADIUS OF WELL DRILLED)	1073	1101
				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 EXPLORATION & PRODUCTION, INC.	CONFIRMATORY ASSIGNMENT	1427	829
				DOMINION TRANSMISSION, INC.	DOMINION EXPLORATION & PRODUCTION, INC.	CONFIRMATORY ASSIGNMENT	1442	356
				DOMINION EXPLORATION & PRODUCTION, INC.	DOMINION TRANSMISSION, INC.	ASSIGNMENT	1457	978
				DOMINION TRANSMISSION, INC.	CONSOL ENERGY HOLDINGS LLC	ASSIGNMENT	1458	299
				DOMINION TRANSMISSION, INC., CONSOL ENERGY HOLDINGS LLC, AND DOMINION EXPLORATION & PRODUCTION, INC.	CNX GAS COMPANY	MERGER/NAME CHANGE	1472	294
				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



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

47 03 305968

July 19, 2019

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

RE: Drilling Under Roads – Neel 1207 N-6H
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

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

Gas

**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-6H
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>551630.9</u>
County: <u>Harrison</u>		Northing: <u>4333848.7</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.

<p>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:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p>RECEIVED Office of Oil and Gas AUG 22 2019 WV Department of Environmental Protection</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
--	---

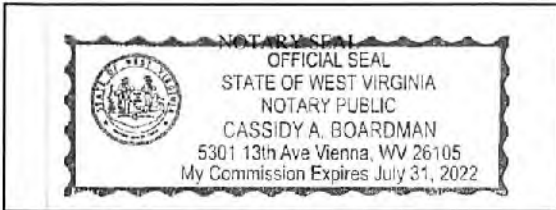
Required Attachments:

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:	<u>HG Energy II Appalachia, LLC</u>	Address:	<u>5260 Dupont Road</u>
By:	<u>Diane White <i>Diane White</i></u>		<u>Parkersburg, WV 26101</u>
Its:	<u>Accountant</u>	Facsimile:	<u>304-863-3172</u>
Telephone:	<u>304-420-1119</u>	Email:	<u>dwhite@hgenergyllc.com</u>



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 deprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

**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

RECEIVED
 Office of Oil and Gas
 AUG 22 2019
 WV Department of
 Environmental Protection

AUG 22 2019

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

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

RECEIVED
Office of Oil and Gas

AUG 22 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.

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

WW-6A
(8-13)

4703305968
API NO. 47-
OPERATOR WELL NO. Neel 1207 N-6H
Well Pad Name: Neel 1207

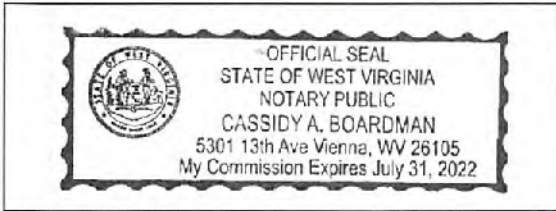
Notice is hereby given by:

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.

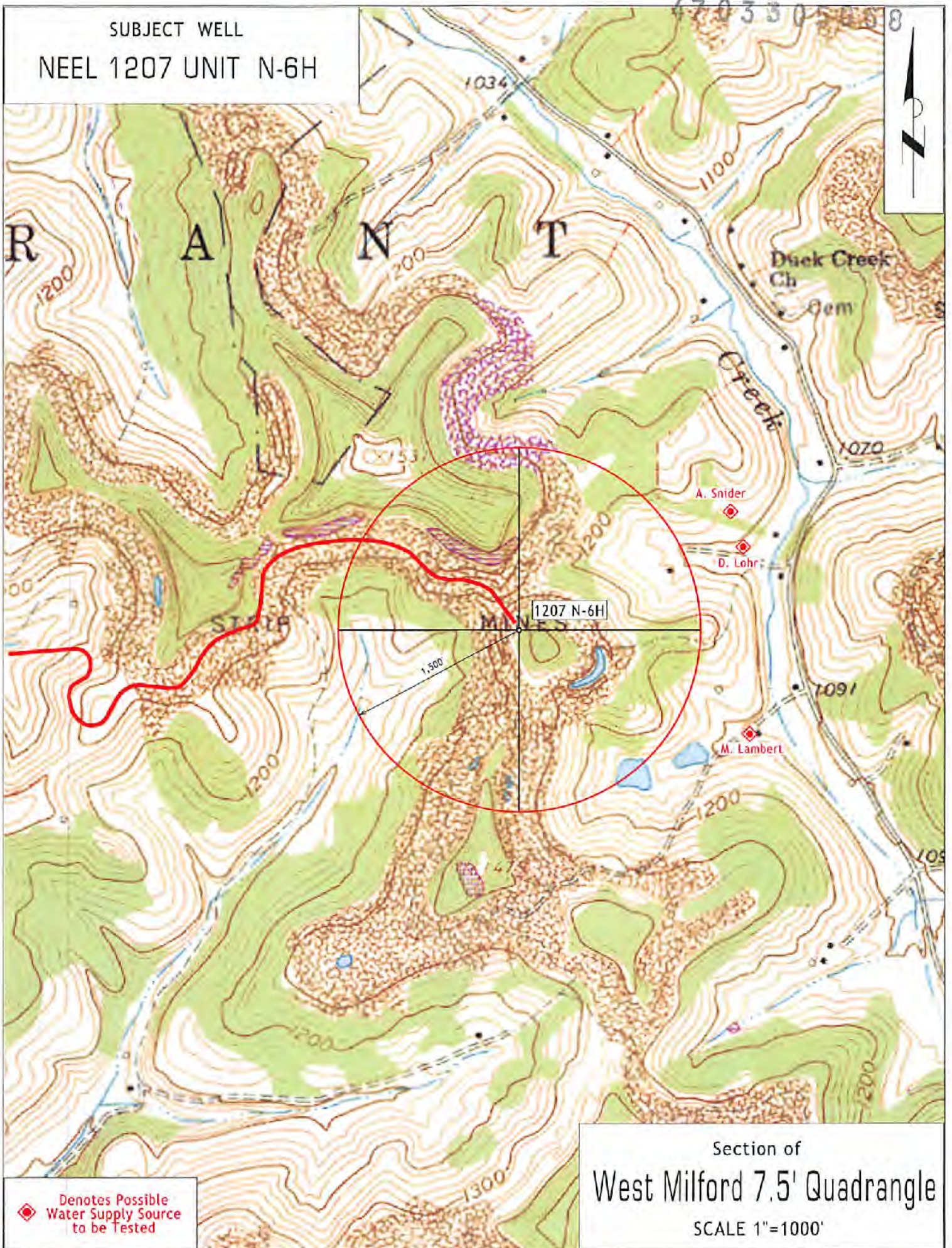


Subscribed and sworn before me this 29th day of July, 2019.

Cassidy Boardman Notary Public

My Commission Expires 7/31/2022

SUBJECT WELL
NEEL 1207 UNIT N-6H



◆ 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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection



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

47 03 305968

July 23, 2019

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

RE: Neel 1207 N-6H 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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection



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

4703305968

July 23, 2019

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

RE: Neel 1207 N-6H 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

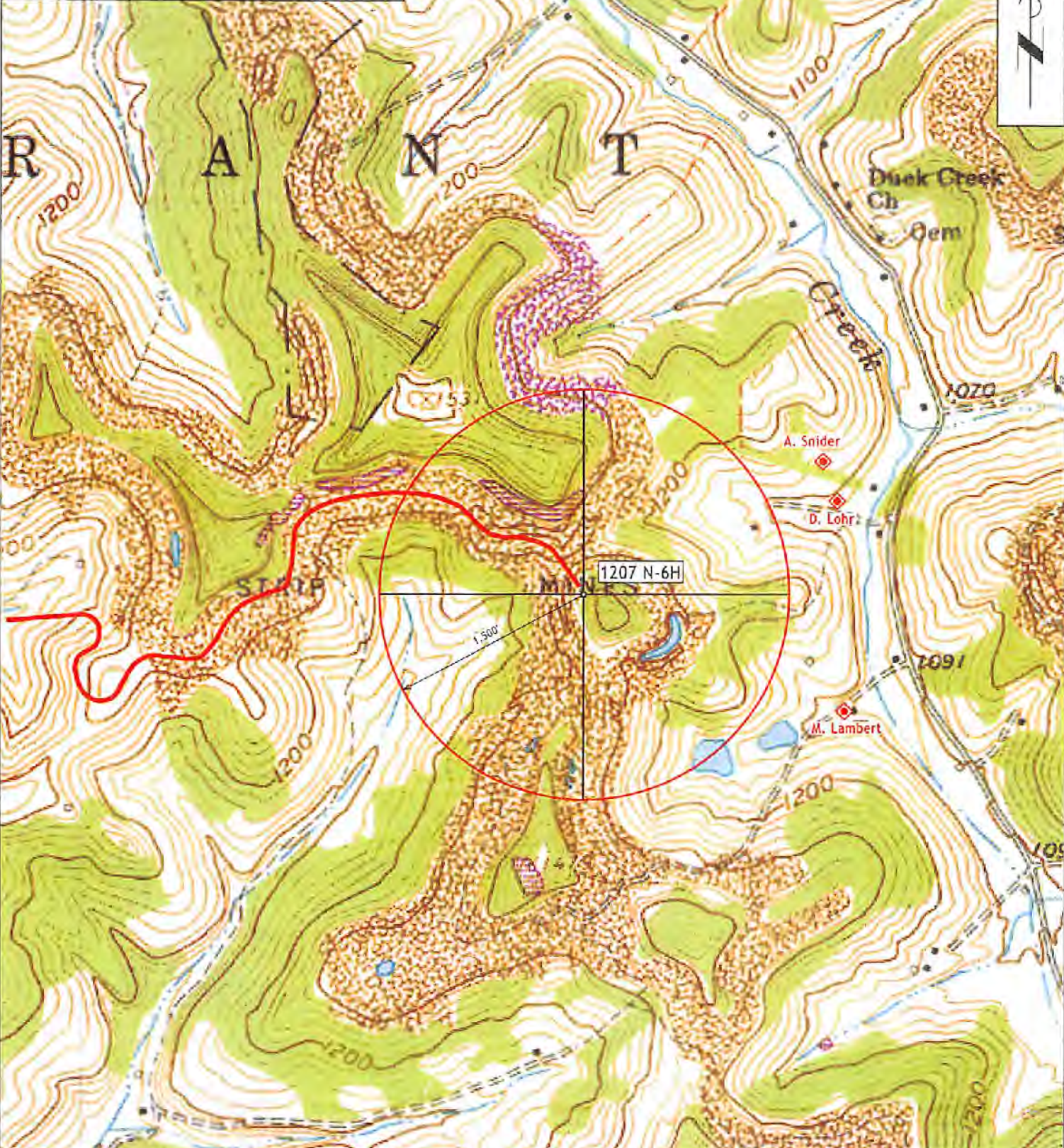
Enclosures

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

SUBJECT WELL
NEEL 1207 UNIT N-6H



◆ Denotes Possible Water Supply Source to be Tested

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

**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: 7/10/19 **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: 39.152309 / -80.402462
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: Neel

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: 304-863-3172

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

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-6A31207N 6H(1-12)Page 1 ContinuedMineral Owners

Alberta Lee Falknor
8710 Sugar Creek Point
Centerville, OH 45458

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

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

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

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

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

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

Christina L Workman
2803 McDermott Ridge Rd
Buckhannon, WV 26201

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

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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

Page 1 Continued

Mineral Owners

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

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

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

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

Elizabeth A. Fultineer
1925 Goff Ave
Clarksburg, WV, 26301

Elizabeth Ann Stevenson
650 Terra California Drive, Apt 7
Walnut Creek, CA 94595

Emma Jane Yoho
1581 Woodway Road
Kent, OH 44240

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

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

Helen M. Burton
PO Box 8179
Nutterfort, WV 26301

Helen R. Corder
132 Morningside Circle
Parkersburg, WV 26101

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

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection

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

Ira S. Norris
PO Box 7014
Akron, OH 44306

J.P Morgan Chase Bank
Trustee of Gore-Morris Trust
PO Box 659
Wichita Falls, TX 76307

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

Jimmy Ward
288 Coleman Dr.
Waterford, MI 48328

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

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

Kimberly K. Lough and John T. Lough
4019 Hawk Hwy
Lost Creek, WV 26385

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

Margaret Short
RR 2 Box 763
Clarksburg, WV 26301

Margaret V Saeler Burkett
2522 Carrington Way
Frederick, MD 21702

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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

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

Martha Jean Moss
227 Bonnie Brook Dr
Charlotte, MI 48813

Marva Shepherd
3350 Duck Creek Road
Lost Creek, WV 26385

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 02660-3628

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

Mary Lou Smith
1579 Duck Creek Road
Lost Creek, WV26386

Mary Thrash
770 Duck Creek Rd.
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

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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

WW-6A3(1-12)1207N 6HPage 1 ContinuedMineral Owners

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

Nancy C Harvey
4408 Lorraine Dr
Monroeville, PA 15146

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

Rhonda R and George P Koutsobaris
3478 Duck Creek Rd.
Lost Creek, WV 26385

Robert M. Lewis, Jr & Connie J Lewis
664 Turner Rd
Buckhannon, WV 26201

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

Ryan C. Radtka
205 Mystic Drive
Morgantown, WV 26508

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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

WW-6A31207N 6H(1-12)Page 1 ContinuedMineral Owners

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

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

Suzanne D. Simmons
624 Court Ave
Weston, WV, 26452

Timothy Ward
49 Coleman Dr.
Waterford, MI 48328

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

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

Waco Oil and Gas Company, Inc.
PO Box 880
Glenville, WV 26351

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

William Harmon Jenkins
636 Fleet Drive
Virginia Beach, VA 26454

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

WW-6A3
(1-12)

1207N 6H

Page 1 Continued

Mineral Owners

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

Zhen Wang
1845 Oakland Dr
Mount Pleasant, MI 48858

WV Dept of Natural Resources
324 Fourth Avenue, Bldg 74
South Charleston, WV 25303

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

*will not be noticed by certified mail

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

HG Energy II Appalachia, LLC

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

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

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection



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

November 27, 2018

Re: Lease Boundary Surveys – 1207 Drilling Unit

To: Landowners Located within the 1207 Drilling Unit:

HG Energy II Appalachia, LLC (HG) is planning to drill a Marcellus well in Harrison and Lewis Counties, WV. Your property has been identified as being located within the proposed drilling unit area.

HG has contracted with Allegheny Surveys, Inc. (ASI) of Bridgeport, WV to accurately locate and map HG's lease boundaries in the drilling unit. This letter is provided as authorization for ASI to act as agent on behalf of HG to survey and map HG's lease boundaries in preparation for the prospective well work permit.

As agent for HG, ASI is expected conduct its operations in a safe, courteous and respectful manner. If you have any problems with the survey crew on your property, or if you have any questions regarding HG's operations, you may call me at 304-420-1120 to discuss.

Thank you for your cooperation with us during this project.

Respectfully,

Timothy P. Roush, PS

Operations Land Manager
 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 22 2019

WV Department of
 Environmental Protection

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
Address: 5260 Dupont Road
Parkersburg, WV 26101

Name: _____
Address: _____

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: 551630.9
County: Harrison Northing: 4333848.7
District: Grant/Union Public Road Access: SR 19/Hackers Creek Road
Quadrangle: West Milford Generally used farm name: Hubert E & Sandra K Neal
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
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com *Diane White*
Facsimile: 304-863-3172

Authorized Representative: Diane White
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com
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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of Environmental Protection

4703305968

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)

- CERTIFIED MAIL 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</u> * Notice Not Sent	Name: _____
Address: <u>5260 Dupont Road</u>	Address: _____
<u>Parkersburg, WV 26101</u>	_____

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>4333848.7</u>
County: <u>Harrison</u>		Northing: <u>551630.9</u>
District: <u>Union</u>	Public Road Access: <u>SR19/Hackers Creek Road</u>	
Quadrangle: <u>West Millford</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>Diane White</i>	Facsimile: <u>304-853-3172</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.

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection



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-6H 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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

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

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	

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection



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		

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection



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
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection



Office of Oil and Gas

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

RECEIVED
Office of Oil and Gas
AUG 22 2019
WV Department of
Environmental Protection



Office of Oil and Gas

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

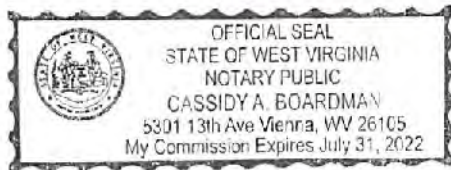
Signature: Diane White

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

RECEIVED
Office of Oil and Gas

AUG 22 2019

WV Department of
Environmental Protection

CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS HG 1207 WELL PAD & IMPOUNDMENT



GRANT DISTRICT
HARRISON COUNTY
WEST VIRGINIA

Estimated Gross Material Disturbance (GMD)			
Final Development - Gravel Option	CUA	7.0	1000000
Disturbance to Access Road	44,807	46,300	4,651
Disturbance to Access Road	11,875	15,750	3,864
Total	56,682	62,050	8,515
EST. Maximum 10' Aggregate Project PAC			
Total Site Disturbance		8,515	8,515
Selected Topsoil (3" Initial Disturbance)		27,750	8,515
Est. Stock Piles		20%	17,030
Est. Topsoil Stockpile Volume Excess (CY)			27,362
Maximum Total Stockpile Capacity Required (CY)			27,362

- Notes:
1. Material balance for est. gross aggregate quantities only.
2. Excess soil volume based on 3 inch average depth.
3. Material balance and aggregate quantities based on estimates and may vary, irrespective of actual quantities.
4. Figures are not valid for contractor pay estimates.

Estimated Gravel Quantities			
Final Development - Gravel Option	Volume (CY)	Aggregate (CY)	Notes
10' Soil Layer (Average 3")	16,861	11,210	52,175
3' Depth of 2" Gravel (Final)	28,17	11,210	3,817
Total Gravel & Soil (Final)		11,210	11,210

Estimated Total Gravel (Final)	11,210
Estimated Access Road (Final Gravel Length)	0.90
Estimated Well Pad and Impoundment (Final Gravel Length)	26.58
Estimated Total Length of Roadway (Acres)	27.48
Estimated Access Road (Final Gravel Length)	0.90
Estimated Well Pad and Impoundment (Final Gravel Length)	26.58
Estimated Total Length of Roadway (Acres)	27.48
Estimated Access Road (Final Gravel Length)	0.90
Estimated Well Pad and Impoundment (Final Gravel Length)	26.58
Estimated Total Length of Roadway (Acres)	27.48

SHT. NO.	SHEET TITLE
1	TITLE SHEET
2A-2G	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 #	LAT.	LONG.
N-1H	N 39.152276°	W 80.402224°
N-2H	N 39.152284°	W 80.402272°
N-3H	N 39.152290°	W 80.402220°
N-4H	N 39.152297°	W 80.402267°
N-5H	N 39.152303°	W 80.402215°
N-6H	N 39.152309°	W 80.402163°
S-2H	N 39.151411°	W 80.402340°
S-6H	N 39.151417°	W 80.402246°
S-8H	N 39.151423°	W 80.402340°
S-10H	N 39.151430°	W 80.402340°
S-11H	N 39.151436°	W 80.402341°
S-12H	N 39.151442°	W 80.402278°

WELL ELEVATIONS 1343.750

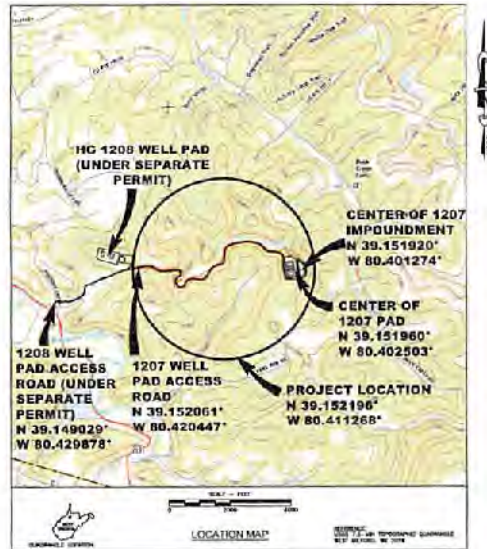
	LATITUDE	LONGITUDE
1207 WELL PAD ACCESS ROAD ENTRANCE	N 39.152261°	W 80.402447°
1208 WELL PAD ACCESS ROAD ENTRANCE	N 39.149029°	W 80.429828°

RECORD OWNER	RECORD AREA OF LOT	RECORD AREA OF LOT	AREA WITHIN LOT
NEEL HUBERT C & SANDRA K	17-12-0485-0005-0000	69.07 AC.	15.027 AC.
HURTER LSA W	17-12-0485-0005-0000	64.00 AC.	2,654 AC.
HURTER LSA W	17-12-0485-0012-0000	64.50 AC.	2,808 AC.
HURTER LSA W	17-12-0485-0011-0000	73.50 AC.	0,760 AC.
HURTER LSA W	17-12-0485-0010-0000	66.87 AC.	3,493 AC.
HURTER LSA W	17-12-0485-0009-0000	64.57 AC.	3,493 AC.
BROWNIE WILLIAM W & SARA L	17-12-0429-0031-0000	247.84 AC.	3,005 AC.
TOTAL LIMIT OF DISTURBANCE			29,228 AC.

WEST VIRGINIA **CALL BEFORE YOU DIG!** Dial 811 or 800.245.4848
West Virginia Department of Transportation
 SERVICE UTILITY LINES ARE NOT SHOWN ON THIS PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, IDENTIFYING AND MARKING ALL UTILITY LINES TO ENSURE CORRECT PLACEMENT.

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 downstream 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, Topsoiling, Trees and Shrubs - 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.



PREPARED FOR
HG ENERGY II APPALACHIA, LLC
 5260 DUPONT ROAD
 PARKERSBURG, WEST VIRGINIA 26101
 (304) 420-1100

PREPARED BY
PENN ENVIRONMENTAL & REMEDIATION, INC.
 111 RYAN COURT
 PITTSBURGH, PA 15205
 (412) 722-1232

THIS DRAWING IS CONSIDERED THE PROPERTY OF PENN ENVIRONMENTAL & REMEDIATION, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PENN ENVIRONMENTAL & REMEDIATION, INC.

REVISION	DATE	DESCRIPTION
1	07/10/19	REVISED ACCESS ROAD LAYOUT & EROSION CONTROL
2	07/17/19	REVISED EROSION CONTROL LAYOUT
3	07/17/19	REVISING PERM. SOIL COMMENTS

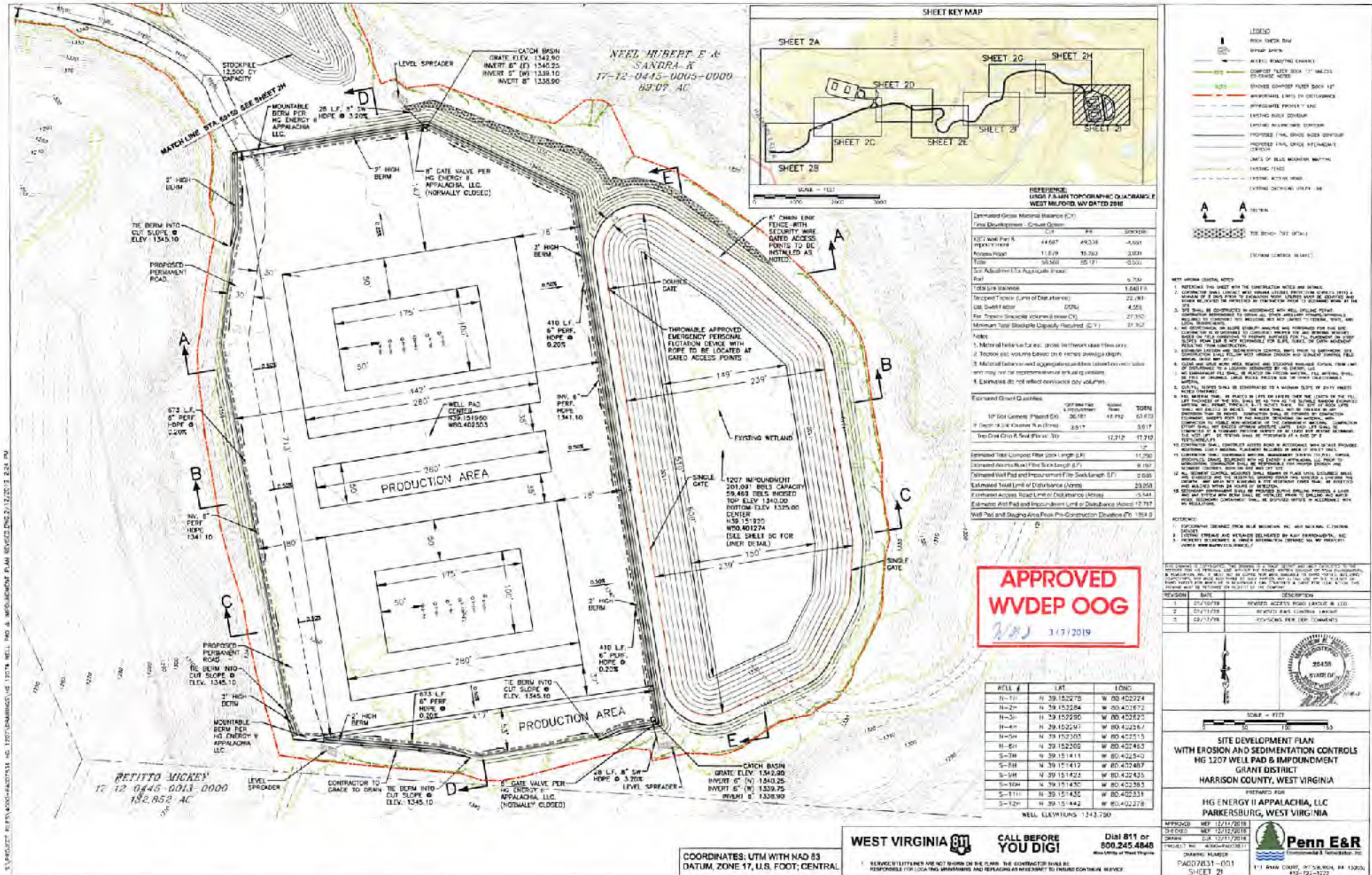


TITLE SHEET
 HG 1207 WELL PAD & IMPOUNDMENT
 GRANT DISTRICT
 HARRISON COUNTY, WEST VIRGINIA

PREPARED FOR
HG ENERGY II APPALACHIA, LLC
 PARKERSBURG, WEST VIRGINIA

APPROVED: **MEP 12/24/2018**
 CHECKED: **MEP 12/27/2018**
 DRAWN: **304 12/21/2018**
 PROJECT NO.: **800-2450931**
 DRAWING NUMBER: **PAD07831-001**
 SHEET: **1**

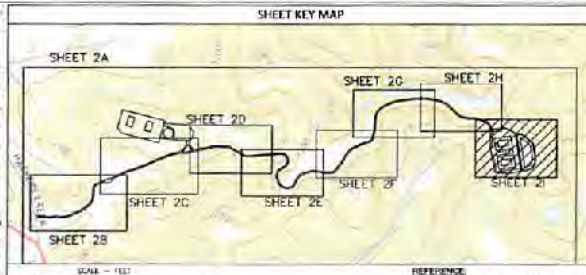
Penn E&R
 Environmental & Remediation, Inc.
 411 RYAN COURT, PITTSBURGH, PA 15201
 412-722-1232



S:\PROJECTS\WV\WV0000263\13074.WELL PAD & IMPROVEMENT PLAN REVISED.DWG 2/12/2013 2:24 PM

RETITTO MICKEY
17-12-0445-0013-0000
182.852 AC

NEEL HERBERT, P.E.
SANDRA R
17-12-0445-0005-0000
83-07 AC



REFERENCE:
USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE
WEST VIRGINIA, WV DATED 2016

Estimated Gross Material Balance (CY)	Excavation	Fill	Stockpile
1207 Well Pad & Impoundment	44,687	49,328	-4,599
Production Area	11,639	15,783	-3,399
Total	56,326	65,111	-7,998

Net Available On Site Aggregate Stockpile	81,709
Required Stockpile	1,641
Surplus Stockpile	80,068

- Notes:
- Material balance is for each circle in the work area.
 - Topsoil and mulch are not included in the material balance.
 - Material balance is based on a 90% efficiency of operation.
 - Excesses do not reflect contractor on volume.

Estimated Cost Quantities	Estimated Cost	Notes	TOTAL
1207 Well Pad & Impoundment	\$2,161,000		\$2,161,000
2 Production Area	\$5,017,000		\$5,017,000
1207 Well Pad and Impoundment	\$17,712,000		\$17,712,000

Estimated Total Construction Price (Job Lease) (\$)	11,730
Estimated Annual Rate (Five Year Lease) (\$/Yr)	8,167
Estimated Total Pad and Impoundment (5 Yr)	2,048

Estimated Total Pad and Impoundment (5 Yr)	2,048
Estimated Total Pad and Impoundment (5 Yr)	2,048
Estimated Total Pad and Impoundment (5 Yr)	2,048

APPROVED WVDEP OOG
1/7/2019

WELL #	LAT	LONG
W-1	N 39.152278	W 80.422224
W-2	N 39.152284	W 80.422272
W-3	N 39.152290	W 80.422320
W-4	N 39.152297	W 80.422367
W-5	N 39.152303	W 80.422415
W-6	N 39.152310	W 80.422463
W-7	N 39.151411	W 80.422510
W-8	N 39.151417	W 80.422557
W-9	N 39.151423	W 80.422605
W-10	N 39.151430	W 80.422653
W-11	N 39.151436	W 80.422700
W-12	N 39.151442	W 80.422748

LEGEND

- ROAD CENTER LINE
- ROAD RIGHT-OF-WAY
- ADJUSTED EXISTING CHANNEL
- CONCRETE FLUTE BOX 12" UNITS
- CONCRETE BOX
- BRUSH COVERED FLUTE BOX 12"
- WOODEN FLUTE BOX 12"
- ADJUSTED PROPERTY LINE
- EXISTING DRAINAGE CHANNEL
- PROPOSED DRAINAGE CHANNEL
- PROPOSED 12" DRAINAGE CHANNEL
- PROPOSED 18" DRAINAGE CHANNEL
- PROPOSED 24" DRAINAGE CHANNEL
- PROPOSED 30" DRAINAGE CHANNEL
- PROPOSED 36" DRAINAGE CHANNEL
- PROPOSED 42" DRAINAGE CHANNEL
- PROPOSED 48" DRAINAGE CHANNEL
- PROPOSED 54" DRAINAGE CHANNEL
- PROPOSED 60" DRAINAGE CHANNEL
- PROPOSED 66" DRAINAGE CHANNEL
- PROPOSED 72" DRAINAGE CHANNEL
- PROPOSED 78" DRAINAGE CHANNEL
- PROPOSED 84" DRAINAGE CHANNEL
- PROPOSED 90" DRAINAGE CHANNEL

KEY: SEE SHEET 20A

DATE: 1/7/2019

REVISIONS:

NO.	DATE	DESCRIPTION
1	01/11/2019	REVISED ACCESS ROAD (REVISE # 1)
2	01/11/2019	REVISED ACCESS ROAD (REVISE # 2)
3	02/17/2019	REVISED PER DEP COMMENTS

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES

APPROVED FOR CONSTRUCTION
DATE: 1/7/2019
BY: [Signature]

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES

HARRISON COUNTY, WEST VIRGINIA

HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

WEST VIRGINIA
CALL BEFORE YOU DIG!
Dial 811 or 800.245.4848
www.CallBeforeYouDig.com

Penn E&R
CONSULTANTS & TECHNOLOGISTS, INC.
111 BRAN COURT, P.O. BOX 1436, RR 1202B
412-721-1227