



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

Friday, March 6, 2020
WELL WORK PERMIT
Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit approval for ANTONIO 1206 S-10H
47-033-05987-00-00

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

A blue ink signature of James A. Martin, written in a cursive style.

Operator's Well Number: ANTONIO 1206 S-10H
Farm Name: ANTONIO P., LLC
U.S. WELL NUMBER: 47-033-05987-00-00
Horizontal 6A New Drill
Date Issued: 3/6/2020

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.

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- _____ - _____
OPERATOR WELL NO. Antonio 1206 S-10H
Well Pad Name: Antonio 1206

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

<u>494519932</u>	<u>Harrison</u>	<u>Grant</u>	<u>West Milford 7.5'</u>
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Operator ID County District Quadrangle

2) Operator's Well Number: Antonio 1206 S-10H Well Pad Name: Antonio 1206

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

4) Elevation, current ground: 1364' Elevation, proposed post-construction: 1350'

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

(b) If Gas Shallow Deep _____
Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus at 7081'/7260' and 179' in thickness. Anticipated pressure at 4314#.

8) Proposed Total Vertical Depth: 7252'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 27,405'

11) Proposed Horizontal Leg Length: 18,307'

12) Approximate Fresh Water Strata Depths: 135', 480', 637', 731'

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

14) Approximate Saltwater Depths: No saltwater depths found on WR35's for offset wells, salt water expected to be below elevation

15) Approximate Coal Seam Depths: 623', 1010' to 1015' (Surface casing is being extended to cover the coal)

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: _____

WW-6B
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 Environmental Protection

WW-6B
(04/15)

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18) **CASING AND TUBING PROGRAM**

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	30"	New	LS	157.5	120'	120'	Drilled In
Fresh Water/Coal	20"	NEW	J-55	94	1100'	1100'	40% excess, CTS
Intermediate 1	13 3/8"	NEW	J-55	68	2200'	2200'	40% excess, CTS
Intermediate 2	9 5/8"	NEW	J-55	40	3000'	3000'	40% excess tail, CTS
Production	5 1/2"	NEW	P-110	23	27405'	27405'	20% excess tail, CTS
Tubing							
Liners							

SJW
1/23/2020

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
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 Lead
Production	5 1/2"	8 1/2"	.415	16240	12500	Type 1/Class A	20% excess yield = 1.19, tail yield 1.94
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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Environmental Protection

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 7252 feet. Drill horizontal leg to estimated 18,307' lateral length, 27,405' 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): 68.187 acres

22) Area to be disturbed for well pad only, less access road (acres): 11.058 acres

23) Describe centralizer placement for each casing string:

No centralizers will be used with conductor casing.
Freshwater - centralized every 3 joints to surface.
Coal - Bow Spring on every joint, will also be running ACP for isolating storage zone
Intermediate - 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 - 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 CaCl 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 CaCl zero% Excess. CTS"
Production - "Lead: 14.5 ppg POZ-PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA17020% ExcessLead Yield=1.19Tail Yield=1.94CTS"

25) Proposed borehole conditioning procedures:

Conductor - Ensure the hole is clean at TD.
Fresh Water - Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.
Coal - Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.
Intermediate - 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.

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*Note: Attach additional sheets as needed.

Antonio 1206 Well Pad (N-1H, N-2H, N-3H, N-4H, N-5H)
Cement Additives

Material Name	Material Type	Material Description	CAS #																		
Premium NE-1	Portland Cement	Premium NE-1 is a portland cement with early compressive strength properties.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Portland cement</td> <td>90 - 100</td> <td>65997-15-1</td> </tr> <tr> <td>Calcium oxide</td> <td>1 - 5</td> <td>1305-78-8</td> </tr> <tr> <td>Magnesium oxide</td> <td>1 - 5</td> <td>1309-48-4</td> </tr> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>0.1 - 1</td> <td>14808-60-7</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Portland cement	90 - 100	65997-15-1	Calcium oxide	1 - 5	1305-78-8	Magnesium oxide	1 - 5	1309-48-4	Crystalline silica: Quartz (SiO2)	0.1 - 1	14808-60-7			
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Bentonite	Extender	Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>bentonite</td> <td>90 - 100</td> <td>1302-78-9</td> </tr> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>5 - 10</td> <td>14808-60-7</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	bentonite	90 - 100	1302-78-9	Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7									
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Calcium Chloride	Accelerator	A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Calcium chloride</td> <td>90 - 100</td> <td>10043-52-4</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Calcium chloride	90 - 100	10043-52-4												
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Cello Flake	Lost Circulation	Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>No hazardous ingredient</td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient name	%	CAS number	No hazardous ingredient														
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FP-13L	Foam Preventer	FP-13L is a clear liquid organic phosphate antifoaming agent used in cementing operations. It is very effective minimizing air entrapment and preventing foaming tendencies of latex systems.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Tributyl phosphate</td> <td>90 - 100</td> <td>126-73-8</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Tributyl phosphate	90 - 100	126-73-8												
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Granulated Sugar	Retarder	Used to retard cement returns at surface. A proprietary product that provides expansive properties and improves bonding at low to moderate temperatures.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Sucrose</td> <td>90 - 100</td> <td>57-50-1</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Sucrose	90 - 100	57-50-1												
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MPA-170	Gas Migration	Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>No hazardous ingredient</td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient name	%	CAS number	No hazardous ingredient														
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Poz (Fly Ash)	Base	A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>5 - 10</td> <td>14808-60-7</td> </tr> <tr> <td>Calcium oxide</td> <td>1 - 5</td> <td>1305-78-8</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7	Calcium oxide	1 - 5	1305-78-8									
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R-3	Retarder	A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Organic acid salt</td> <td>40 - 50</td> <td>Trade secret.</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Organic acid salt	40 - 50	Trade secret.												
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S-5	Surfactant	Used to water wet casing and formation to facilitate cement bonding.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>2-Butoxyethanol</td> <td>20 - 30</td> <td>111-76-2</td> </tr> <tr> <td>Proprietary surfactant</td> <td>10 - 20</td> <td>Trade secret.</td> </tr> <tr> <td>D-Glucopyranose, oligomeric, C10-16-alkyl glycosides</td> <td>5 - 10</td> <td>110615-47-9</td> </tr> <tr> <td>Alkylarylsulfonate amine salt</td> <td>1 - 5</td> <td>Trade secret.</td> </tr> <tr> <td>Polyoxyalkylenes</td> <td>0.1 - 1</td> <td>Trade secret.</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	2-Butoxyethanol	20 - 30	111-76-2	Proprietary surfactant	10 - 20	Trade secret.	D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	5 - 10	110615-47-9	Alkylarylsulfonate amine salt	1 - 5	Trade secret.	Polyoxyalkylenes	0.1 - 1	Trade secret.
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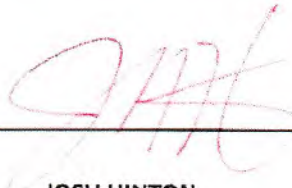
PROPOSAL TO DRILL WITHIN DOMINION TRANSMISSION STORAGE FIELD

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

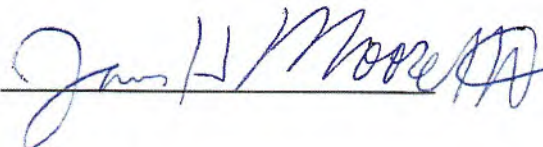
WELL NAME: Antonio 1206

Well # Antonio 1206 S-10H

DISTRICT/COUNTY/STATE: Grant/Harrison/WV

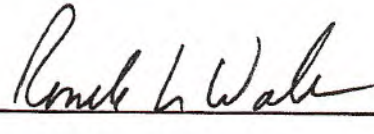
Submitted 
JOSH HINTON
HG ENERGY, LLC

DATE 1-24-2020

Approved 
Dominion Energy Transmission

DATE 1/27/2020

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JAN 30 2020
WV Department of
Environmental Protection

Approved 
Dominion Energy Transmission

DATE 1/27/2020

Comments:

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

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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, CTS
Intermediate 1	13 3/8"	NEW	J-55	68	2200'	2200'	40% excess, CTS
Intermediate 2	9 5/8"	NEW	J-55	40	3000'	3000'	40% excess tail, CTS
Production	5 1/2"	NEW	P-110	23	27405'	27405'	20% excess tail, CTS
Tubing							
Liners							

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 = 1.10, tail yield 1.00
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 7252 feet. Drill horizontal leg to estimated 18,307' lateral length, 27,405' 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): 68.187 acres

22) Area to be disturbed for well pad only, less access road (acres): 11.058 acres

23) Describe centralizer placement for each casing string:

No centralizers will be used with conductor casing.
Freshwater - centralized every 3 joints to surface.
Coal - Blow Spring on every joint, will also be running ACP for isolating storage zone
Intermediate - Blow Spring on first 3 joints from every lead joint to 100' from surface.
Production - Run 1 spiral centralizer every 3 joints from the top of the curve to surface. Run 1 spiral centralizer every 3 joints from the 1st 6.5' 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 - 15.8 ppg PMS-1 + 2% brine CaCl₂ 40% Brine Yield = 1.30. CTR
Intermediate 1 - Lead: 15.4 ppg PMS-1 + 3.2% brine CaCl₂ 40% Brine / Tail: 15.8 ppg PMS-1 + 3.2% brine CaCl₂ 40% Brine. CTR
Intermediate 2 - Lead: 15.4 ppg PMS-1 + 3.2% brine CaCl₂ 40% Brine / Tail: 15.8 ppg PMS-1 + 3.2% brine CaCl₂ 40% Brine. CTR
Production - Lead: 14.9 ppg PMS-1 + 0.5% brine RS + 1% brine BCI + 0.7% galib PPSL + 0.2% brine MPAT/STAB. Tail: 14.9 ppg PMS-1 + 0.5% brine RS + 0.7% galib PPSL + 0% brine ABCA1 + 0.5% brine MPAT/STAB. Cement/Land Yield=1.10Tail Yield=1.9ACTS"

25) Proposed borehole conditioning procedures:

Conductor - Ensure the hole is clean at TD.
Fresh Water - Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.
Coal - Once casing is at setting depth, circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.
Intermediate - Once casing is at setting depth, circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.
Production - Once on bottom/TD with casing, circulate at maximum allowable pump rate for at least 30 minutes up, or until returns and pump pressure indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.

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*Note: Attach additional sheets as needed.



1206 S-10H
Marcellus Shale Horizontal
Harrison County, WV

Ground Elevation		1350'		1206 S-10H SHL		14220504.1N 1815573.55E			
Azim		159.798°		1206 S-10H LP		14220929.14N 1819229.21E			
WELLBORE DIAGRAM		159.798°		1206 S-10H BHL		14203754.97N 1825548.86E			
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 Coal Surface / FW	0 1010 0	135, 480, 637, 731 1015 1100	AIR	15.8 ppg PNE-1 + 3% bwoc CaCl 40% Excess Yield=1.20 / CTS	Centralized every 3 joints to surface	Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.	Surface casing = 0.438" wall thickness Burst=2110 psi
17.5"	13-3/8" 68# J-55 BTC	Little/Big Lime Injun / Sanitz (Storage) Intermediate 1	1555 / 1598 1658 / 1985 0	1575 / 1658 1770 / 2050 2200	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
12.25"	9-5/8" 40# J-55 BTC	Fifty / Thirty Foot Gordon Stray / Gordon 5th Sand Bayard / Warren Intermediate 2	2095 / 2162 2232 / 2272 2515 2591 / 2881 0	2157 / 2200 2272 / 2385 2527 2601 / 2831 3000	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 circulate mud at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.395" wall thickness Burst=3950 psi
8.5" Vertical	5-1/2" 23# P-110 HP CDC HTQ	Speechley Balltown Benson Rhinstreet Cashaqua Middlesex West River Burkett Tully Limestone Hamilton Marcellus TMD / TVD (Production) Onondaga	3204 3438 4505 6395 6651 6751 6783 6854 6854 6864 6864 6972 7081 7260 27405 7260	9.0ppg SOB 6651 6751 6783 6854 6864 6972 7081 7260 27405 7260	11.5ppg-12.5ppg SOB	Lead: 14.5 ppg POZ/PNE-1 + 0.3% bwoc R3 + 1% bwoc EC-1 + 0.75 gal/sk MPAA170 Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPAA170 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. Run 1 spiral centralizer every 3 joints from the 1st 5.5" long joint to the top of the curve.	Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.415" wall thickness Burst=16240 psi Note: Actual centralizer schedules may be changed due to hole conditions
8.5" Lateral	8.5" Hole - Cemented Long String 5-1/2" 23# P-110 HP CDC HTQ								

LP @ 7252' TVD / 9088' MD
 +/-18307' ft Lateral
 TD @ +/-7252' TVD +/-27405' MD
 X=centralizers

JUL 20 2020

Wells Located Within the Area of Review for

ANTONIO 1206 SOUTH UNIT AND PROPOSED WELLS S-6H, S-7H, S-8H, S-9H and S-10H.

CT	API	COUNTY	FARM	OPERATOR NAME	FORMATION NAME	WELL TYPE	TVD	STATUS	LATITUDE	LONGITUDE
1	4703300038	HARRISON	B Swisher 2 CW417	Dominion Energy Transmission, Inc.	Gordon Stray	Storage	2350	ACTIVE	39.126611	-80.354494
2	4703300297	HARRISON	West	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1868	ACTIVE	39.135172	-80.374098
3	4703300301	HARRISON	John M McWhorter	Trio Petroleum Corporation	Hampshire Grp	Gas	2375	PLUGGED	39.129015	-80.376251
4	4703300306	HARRISON	A L West	Dominion Energy Transmission Inc.	Hampshire Grp	Gas	2340	ACTIVE	39.136607	-80.378501
5	4703300311	HARRISON	G Manley Curry	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	2020	ACTIVE	39.139325	-80.362560
6	4703300313	HARRISON	A L West	Dominion Energy Transmission Inc.	Gantz	Storage	1956	ACTIVE	39.137413	-80.382384
7	4703300314	HARRISON	J M McWhorter	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2185	PLUGGED	39.139183	-80.370227
8	4703300325	HARRISON	Curry	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	1729	ACTIVE	39.143102	-80.362213
9	4703300330	HARRISON	P A Davisson	Dominion Energy Transmission, Inc.	Gantz	Storage	1983	ACTIVE	39.136911	-80.367064
10	4703300339	HARRISON	Alton Bell CW-333	Dominion Energy Transmission, Inc.	Gantz	Storage	1959	ACTIVE	39.158620	-80.376275
11	4703300347	HARRISON	Herman Nixon	Dominion Energy Transmission, Inc.	not available	not available	-	ABANDONED	39.122387	-80.361419
12	4703300355	HARRISON	Fred H Smith CW-334	Dominion Energy Transmission, Inc.	Gantz	Storage	2012	ACTIVE	39.158950	-80.372286
13	4703300363	HARRISON	A Bell	Dominion Energy Transmission Inc.	Thirty-foot	Storage	2150	PLUGGED	39.158029	-80.381243
14	4703300399	HARRISON	L Davisson	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2042	PLUGGED	39.144408	-80.364636
15	4703300547	HARRISON	Maude Davisson	Dominion Energy Transmission, Inc.	Benson	Gas	4530	ACTIVE	39.144146	-80.372692
16	4703300579	HARRISON	Ode Bright	Dominion Energy Transmission Inc.	Benson	Gas	4595	ACTIVE	39.137253	-80.380576
17	4703300595	HARRISON	C E Snider	Dominion Energy Transmission Inc.	Benson	Gas	4620	ACTIVE	39.153667	-80.389060
18	4703300610	HARRISON	David H Nutter	Dominion Energy Transmission, Inc.	Benson	Gas	4412	ACTIVE	39.136470	-80.369890
19	4703300629	HARRISON	C Earl Snider	Dominion Energy Transmission Inc.	Thirty-foot	Storage	1949	ACTIVE	39.155591	-80.386677
20	4703300631	HARRISON	C E Hickman	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2094	ACTIVE	39.150163	-80.390145
21	4703300633	HARRISON	Flossie Davisson	Dominion Energy Transmission, Inc.	Gordon	Storage	1814	ACTIVE	39.147967	-80.376397
22	4703300634	HARRISON	Nora Davisson	Dominion Energy Transmission, Inc.	Fifty-foot	Gas	2072	ABANDONED	39.142236	-80.376677
23	4703300635	HARRISON	C W Snider CW231	Dominion Energy Transmission, Inc.	Gordon	Storage	1946	ACTIVE	39.152100	-80.386365
24	4703300639	HARRISON	Sophia McWhorter	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2121	ACTIVE	39.132963	-80.356778
25	4703300644	HARRISON	P M White	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	1825	ACTIVE	39.129169	-80.380402
26	4703300645	HARRISON	N A McWhorter	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2050	ACTIVE	39.131083	-80.362021
27	4703300650	HARRISON	S McWhorter CW312	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1892	ACTIVE	39.128533	-80.363342
28	4703300651	HARRISON	Allen M Dyer CW320	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	2050	ACTIVE	39.139952	-80.364713
29	4703300725	HARRISON	W E Ware CW325	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1985	ACTIVE	39.142666	-80.360350
30	4703300743	HARRISON	Petitto Brothers Inc	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	1988	ACTIVE	39.151385	-80.379306
31	4703300765	HARRISON	L Gifford CW331	Dominion Energy Transmission, Inc.	Fifth	Storage	2495	PLUGGED	39.154858	-80.368549
32	4703300782	HARRISON	H Kieffer CW229	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	2089	ACTIVE	39.146248	-80.383657

33	4703300784	HARRISON	Maxon Boylen	Dominion Energy Transmission, Inc.	Benson	Gas	4421	ACTIVE	39.124641	-80.362284
34	4703300789	HARRISON	Charles R Sutton	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4579	ACTIVE	39.141189	-80.362910
35	4703300808	HARRISON	Lloyd Stout CW330	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Storage	2160	ACTIVE	39.152853	-80.372851
36	4703300809	HARRISON	Lloyd Stout CW234	Dominion Energy Transmission, Inc.	Mid Devonian	not available	4793	PLUGGED	39.155225	-80.378746
37	4703300826	HARRISON	N A McWhorter	Dominion Energy Transmission, Inc.	Benson	Storage	4400	ACTIVE	39.130759	-80.365169
38	4703300872	HARRISON	L Prince CW213	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	1974	ACTIVE	39.131201	-80.378911
39	4703302157	HARRISON	N E Davisson	Dominion Energy Transmission, Inc.	Brallier	Gas	4989	ACTIVE	39.148180	-80.378194
40	4703302163	HARRISON	N McWhorten	Dominion Energy Transmission, Inc.	not available	Storage	-	ACTIVE	39.134829	-80.360453
41	4703302342	HARRISON	N A McWhorter	Dominion Energy Transmission, Inc.	Benson	Gas	4440	ACTIVE	39.132628	-80.364331
42	4703304027	HARRISON	Jack Shock etux 2	Ross & Wharton Gas Company, Inc.	Benson	Gas	4400	ACTIVE	39.125018	-80.377732
43	4703304058	HARRISON	Jack Shock etux 3	Ross & Wharton Gas Company, Inc.	Greenland Gap Fm	Gas	5102	ACTIVE	39.127194	-80.373262
44	4703304634	HARRISON	Rudy L McWhorter	Dominion Energy Transmission, Inc.	Benson	Gas	4551	ACTIVE	39.140605	-80.374607
45	4703304742	HARRISON	Robert Nelson Rector	Dominion Energy Transmission, Inc.	Hampshire Grp	not available	3183	PLUGGED	39.148072	-80.368972
46	4703304802	HARRISON	Vernon D Cochran Jr	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4641	ACTIVE	39.120647	-80.356801
47	4703304803	HARRISON	Chas R/F L Sutton	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4426	ACTIVE	39.122550	-80.352193
48	4703304813	HARRISON	Charles R & Franklin L Sutton	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4440	ACTIVE	39.128841	-80.360416
49	4703305562	HARRISON	William F & Mary A Reel	Dominion Energy Transmission, Inc.	Benson	Gas	4600	ACTIVE	39.133568	-80.380312
50	4703305736	HARRISON	Rudy L McWhorter	Dominion Energy Transmission, Inc.	Benson	Gas	4700	ACTIVE	39.141141	-80.370130
51	4703330820	HARRISON	E F Randolph	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4200	UNKNOWN	39.12103	-80.352489
52	4703331897	HARRISON	W M West CW275	Dominion Energy Transmission, Inc.	Gordon	not available	2492	UNKNOWN	39.140902	-80.378922
53	4703331899	HARRISON	JM Rector	Dominion Energy Transmission, Inc.	not available	not available	4390	PLUGGED	39.147409	-80.365129
54	4703331901	HARRISON	SJ Davisson	Dominion Energy Transmission, Inc.	Thirty-foot	not available	2330	PLUGGED	39.154343	-80.365053
55	4703331904	HARRISON	B Swisher CW420	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	2190	ACTIVE	39.132479	-80.354236
56	4703373731	HARRISON	Hazel Kieffer	Dominion Energy Transmission, Inc.	Benson	Gas	4530	ACTIVE	39.146203	-80.383580
57	4704101757	LEWIS	Fleming Howell	Dominion Energy Transmission, Inc.	Benson	Gas	4585	ACTIVE	39.116432	-80.369601
58	4704102969	LEWIS	M Edmonds cw-212	Dominion Energy Transmission, Inc.	Thirty-foot	Observation	2067	ACTIVE	39.119406	-80.376628
59	4704105056	LEWIS	Franklin Hicks	Dominion Energy Transmission, Inc.	Misc Sands-BNSN/BRLR	Gas	4287	ACTIVE	39.115377	-80.352876
60	4704105224	LEWIS	Rose Ann & John Hunter Kolb	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4450	ACTIVE	39.116102	-80.357902
GREEN DENOTES SURVEYED WELLS										

SOURCE: WVGES DATASET (2017) and WVDEP WEBSITE

WW-9
(4/16)

API Number 47 - _____ - _____

Operator's Well No. Antonio 1206 S-10H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy II Appalachia, LLC OP Code 494501907

Watershed (HUC 10) Middle West Fork Creek Quadrangle West Milford 7.5'

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: NA

Will a synthetic liner be used in the pit? Yes No If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

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

*SDW
1/23/2020*

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.M, Horizontal - SOB.M

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

Additives to be used in drilling medium? Water, Soap, KCl, Barite, Base Oil, Wetting Agents

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Approved Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) NA

-Landfill or offsite name/permit number? See Attached

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Diane White*

Company Official (Typed Name) Diane White

Company Official Title Agent

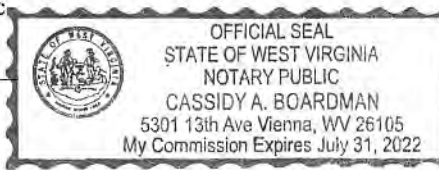
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Subscribed and sworn before me this 23rd day of January, 2020

Cassidy A. Boardman Notary Public

My commission expires 7/31/2022



HG Energy II Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 68.187 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
Tall Fescue	40
Ladino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Maintain E&S controls through the drilling and completion process

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *S. D. W...*

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

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

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WV Department of
Environmental Protection

Title: Oil & Gas Inspector

Date: 1/23/2020

Field Reviewed? Yes No

Cuttings Disposal/Site Water

Cuttings - Haul off Company:

Exp Industries, Inc. DOT # 0876278
1875 Smith Two State Rd. Atlasburg, PA 15004
1-888-284-5227

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

Environmental Coordination Services & Recycling (ECS&R)
8287 US Highway 19
Cochranon, PA 16314
814-425-7778

Disposal Locations:

Apex Environmental, LLC Permit # 06-08488
11 County Road 78
Amsterdam, OH 43908
740-548-4889

Westmoreland Waste, LLC Permit # 100277
111 Conner Lane
Belle Vernon, PA 15012
724-929-7884

Sycamore Landfill Inc. Permit #R80-078001 05-2010
4301 Sycamore Ridge Road
Hurricane, WV 25926
304-562-2611

Max Environmental Technologies, Inc. Facility Permit # PAD004888146 / 301071
233 Max Lane
Yukon, PA 25968
724-722-3500

Max Environmental Technologies, Inc. Facility Permit # PAD05087072 / 301359
200 Max Drive
Bulger, PA 15019
724-786-1571

Waste Management Kelly Run Permit # 100668
1801 Park Side Drive
Elizabeth, PA 15037
412-884-7569

Waste Management South Hills (Arnoni) Permit # 100582
3100 Hill Road
Liberty, PA 15129
724-348-7018
412-884-7569

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

Waste Management Meadowfill Permit # 1082
1488 Dawson Drive
Bridgeport, WV 26330

Brooke County Landfill Permit # SWR-108-87 / WV 0109029
Rd 2 Box 410
Colliers, WV 26035
304-748-0014

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Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185
Rt 1, Box 158A
New Martinsville, WV 26035
804-455-3800

Energy Solutions, LLC Permit # UT 2300249
428 West 300 South
Suite 200
Salt Lake City, UT 84101

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

Northern A-1 Environmental Services Permit ID MID020906814
3947 US 131 North, PO Box 1030
Kalkaska, MI 49648
261-258-9961

Water Haul off Companies:

Dynamic Structures, Clear Creek DOT # 720488
3790 State Route 7
New Waterford, OH 44445
330-892-0164

Nabors Completion & Production Services Co.
PO Box 976682
Dallas, TX 75397-6682

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

Nuverra Environmental Solutions
11942 Veterans Memorial Highway
Martinsburg, WV 26154

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/Inclination
Soil Remediation, Inc. Permit # 02-20753
6065 Arrel-Smith Road
Lowellville, OH 44436
880-586-6825

Adams #1 (Buckeye Brine, LLC)
Permit # 34-031-2-7177
23986 Airport Road
Coshocaton, 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 15632

Burna Drilling & Excavating
618 Crabapple Road P.O. Box
Wind Ridge, PA 15680

Nichols 1-A (SWIW #18)
Permit # 8862
800 Charrington Pkwy, Suite 200
Coraopolis, PA 15108
412-829-7275

Grosella (SWIW #34)
Permit # 4096
Rt. 88
Garrettsville, OH
718-276-4816

Kemble 1-D Well
Permit # 8780
7675 East Pike
Norwich, OH 43767
614-648-8898
740-796-6495

M/V Dept. of
Environmental Protection

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Adams #2 (Buckeye Brine, LLC)
2205 Westover Road
Austin TX 78703
Permit # 84-081-2-7178
740-575-4484
612-478-6545

Adams #3 (Buckeye Brine, LLC)
Permit # 84-081-2-7241-00-00
2680 Exposition, Suite 117
Austin, TX 78703
612-478-6545

Mozena #1 Well (SWIW # 18)
Permit # 84-157-2-6511-00-00
8367 E. State Street
Newcomerstown, OH 43882
740-768-3966

Goff SWD #1 (SWIW # 27)
Permit # 84-119-2-8776-000
300 Cherrington Pkwy, Suite 200
Coraopolis, PA 15108
412-828-7275

SCS D#1 (SWIW #12)
Permit # 84-059-2-4202-00-00
Silcor Oilfield Services, Inc.
2999 Hubbard Road
Youngstown, OH 44505

Dudley #1 UIC (SWIW #1)
Permit # 84-121-2-2458-00-00
Select Energy Services, LLC
7994 S. Pleasant Hwy
St. Marys, WV 26170
304-668-2652

OH UIC #1 Buckeye UIC Barnesville 1 & 2
CNX Gas Company, LLC
1000 Conoco Energy Drive
Permit # 84-018-2-0609-00-00
Permit # 84-018-2-0614-00-00
804-828-6568

US Steele 11385
Permit # 47-001-00561
200 Evergreen Drive
Waynesburg, PA 15780
804-828-6568

Chapin #7 UIC (SWIW #7)
Permit # 84-083-2-4187-00-00
Elkhead Gas & Oil Company
12188 Marne Rd. NE
Newark, OH 43055
740-768-3966

WV Department of
Environmental Protection

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HG Energy II Appalachia, LLC

Site Safety Plan

**Antonio 1206 Well Pad
5279 Duck Creek Road Lost Creek
Harrison County, WV 26385**

September 2019: Version 1

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

HG Energy II Appalachia, LLC

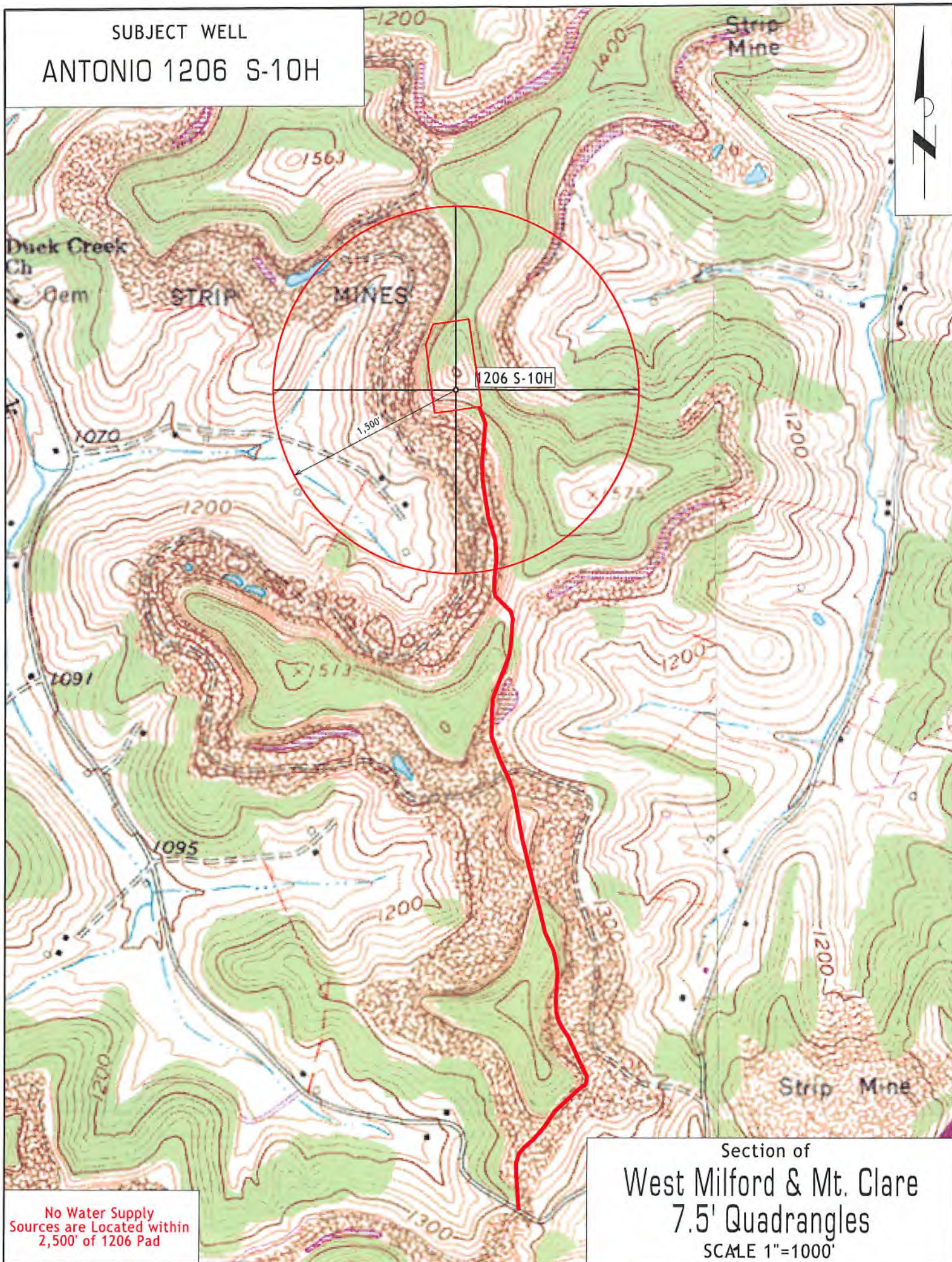
*SDW
1/23/2020*

5260 Dupont Road

Parkersburg, WV 26101

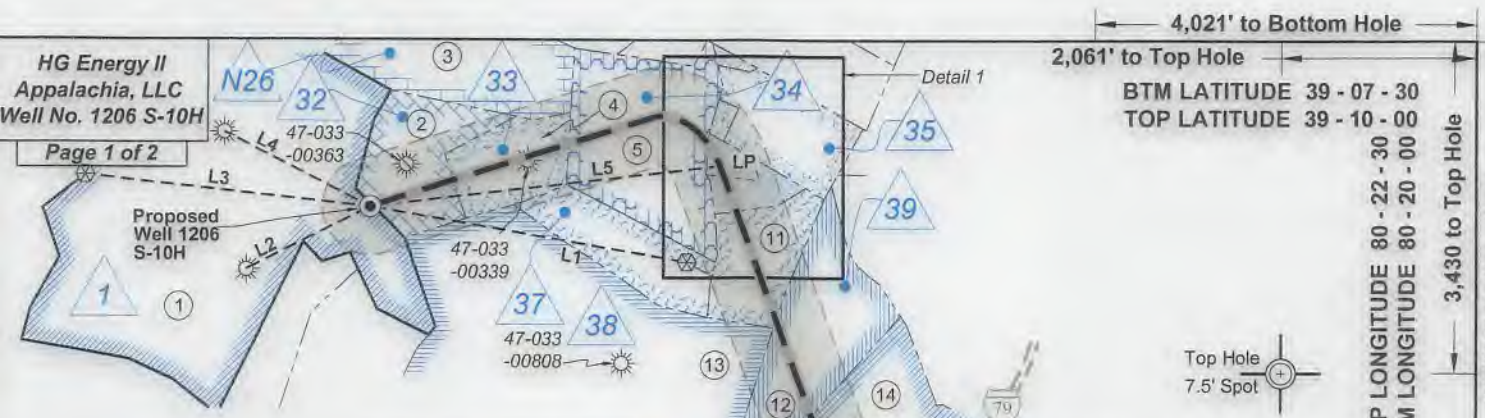
RECEIVED
Office of Oil and Gas
JAN 30 2020
WV Department of
Environmental Protection

SUBJECT WELL
ANTONIO 1206 S-10H



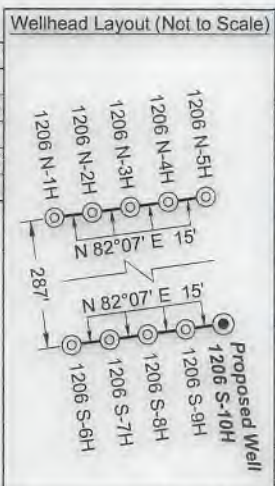
No Water Supply
Sources are Located within
2,500' of 1206 Pad

Section of
West Milford & Mt. Clare
7.5' Quadrangles
SCALE 1"=1000'

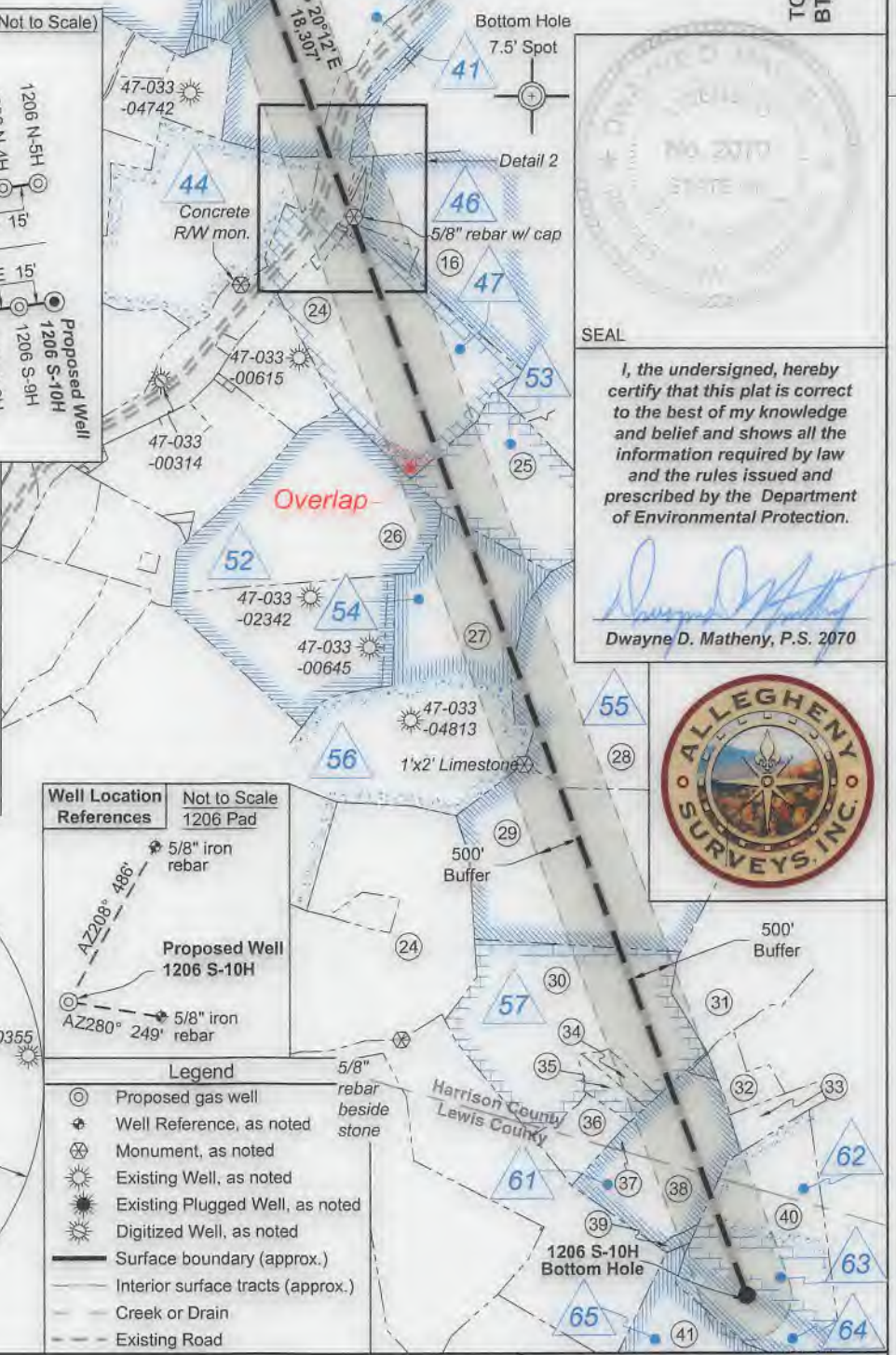
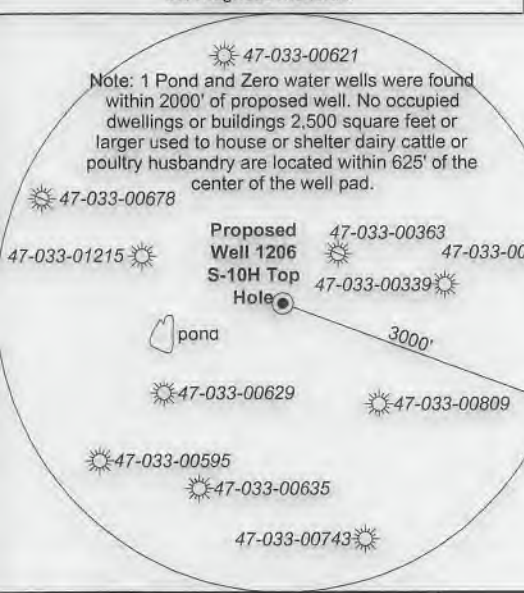


Tag	Bearing	Dist.	Description
L1	N 80°16' W	3,360.9'	5/8" Rebar
L2	N 63°36' E	1,448.3'	47-033-00629
L3	S 83°40' E	2,992.7'	1" Iron pipe
L4	S 63°02' E	1,709.8'	47-033-01215
L5	N 83°22' E	3,680.3'	Landing point

Notes:
Well No. 1206 S-10H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,220,504.10'
E: 1,815,573.55'
Landing Point Coordinates
N: 14,220,929.14'
E: 1,819,229.21'
Bottom Hole Coordinates
N: 14,203,754.97'
E: 1,825,548.86'



Notes: Well No. 1206 S-10H
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Top Hole coordinates
Latitude: 39°09'26.08"
Longitude: 80°22'56.18"
Bottom Hole coordinates
Latitude: 39°06'39.78"
Longitude: 80°20'51.04"
UTM Zone 17, NAD 1983
Top Hole Coordinates
N: 4,334,418.319m
E: 553,387.925m
Bottom Hole Coordinates
N: 4,329,313.170m
E: 556,428.410m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.



FILE NO: 06-36-12-G-H-19
DRAWING NO: 1206 S-10H 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: January 20 2020
OPERATOR'S WELL NO. 1206 S-10H
API WELL NO. **H6A**
47 - 033 - **05927**
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1,350' WATERSHED: Middle West Fork Creek
DISTRICT: Grant
SURFACE OWNER: Antonio P., LLC
ROYALTY OWNER: C. Earl Snider, et al LEASE NO: ACREAGE: 233.66
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7,252' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 27,405' 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
1	C. Earl Snider, et al
32	Alton Bell, et al
33	Alton Bell
34	Marcella R. Bond, et al
35	Mary E. Kennedy, et al
36	J.C. McWhorter, et al
37	Lillie Gifford, et al
38	Lloyd Stout, et al
39	S.J. Davisson
41	J.N. Rector, et al
44	Lucy Davisson
46	Willa E. Ware, et al
47	G. Manley Currey, et al
52	N.A. McWhorter, et al
53	G. Manley Currey, et al
54	Sopha McWhorter, et al
55	B. Swisher, et ux
56	Sopha McWhorter, et al
57	Alcinda B. Jackson, et vir
61	Ella Goodwin, et al
62	A.S. Holbert
63	N.J. Melton
64	N.J. Melton
65	B.B. Curtis, et al
N26	Marcella R. Bond, et al

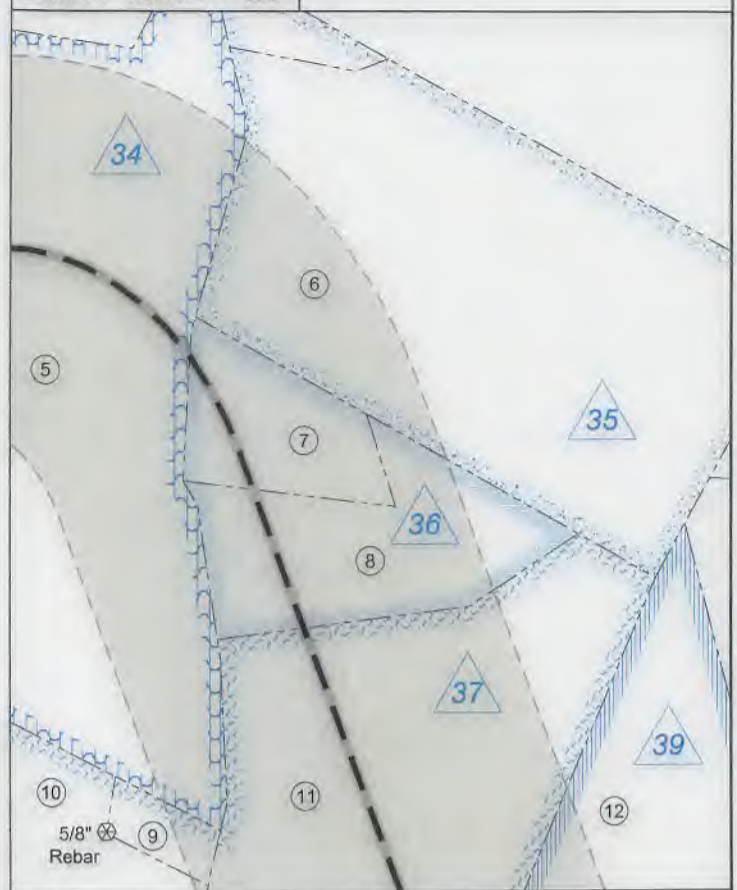
Harrison County - Grant Outside District

No.	TM / Par	Owner	Bk / Pg	Ac.
1	426 / 71	Antonio P., LLC	1503 / 291	233.35
2	426 / 72	Charles R. & Franklin L. Sutton	1301 / 98	30.00
3	426 / 63	Charles R. & Franklin L. Sutton	1301 / 98	51.33
4	426 / 73	Charles R. & Franklin L. Sutton	1301 / 98	22.96
5	426 / 74	Harriet June Ferree	1514 / 480	60.30
6	426 / 77	Kenneth E. Rigdon	1569 / 903	28.26
7	426 / 75	Dale & Lepha Ables, et al	F119 / 565	3.00
8	426 / 76	Frances Phares, et al	W166 / 606	7.00
9	446 / 4.1	Johnny & Emmalie Maxwell	1453 / 980	0.98
10	446 / 4	Bob R. Blankenship	1310 / 740	27.67
11	446 / 5	Kathy D. Bennett	W184 / 51	20.38
12	446 / 6	Robert N. Rector	1621 / 719	49.33
13	446 / 3	Antonio P., LLC	1503 / 291	200.00
14	446 / 24	Robert N. Rector	1621 / 719	82.90
15	446 / 28.2	David D. Vanhorn, et al	W177 / 92	42.66
16	446 / 38	Sandra J. Hogsed	1257 / 137	70.16
17	446 / 34	David & Daniel Curry	1451 / 987	97.41
18	446 / 34.1	Corey Alan Rudder	1537 / 200	0.79
19	446 / 34.2	Corey Alan Rudder	1537 / 200	0.29
20	446 / 34.4	Sheila K. Frazier	1536 / 1056	0.38
21	446 / 36.1	Sarah M. Hogsed	1434 / 1034	0.15
22	446 / 48.1	Karen Stronsider	F118 / 483	0.75
23	446 / 37	Sandra J. Hogsed	1123 / 956	3.00
24	446 / 48	Charles R. & Franklin L. Sutton	--- / ---	88.00
25	446 / 19	Charles R. & Franklin L. Sutton	1284 / 75	63.00
26	466 / 18	Charles R. & Franklin L. Sutton	1420 / 1107	82.50
27	466 / 38	Charles R. & Franklin L. Sutton	1342 / 1173	123.00
28	467 / 29.1	Charles R. & Franklin L. Sutton	1170 / 396	129.61
29	466 / 56	Charles R. & Franklin L. Sutton	1170 / 396	110.00
30	466 / 71	Joyce A. & Vernon D. Cochran, Jr.	1253 / 240	91.79
31	467 / 49	Charles R. & Franklin L. Sutton	1234 / 635	105.17
32	487 / 2	Mark Hutson	1410 / 156	10.17
33	487 / 10	Donley W. & Mark Hutson	1410 / 164	6.85
34	466 / 71.1	Tracy L. Hebb	1417 / 782	4.16
35	466 / 71.2	Tracy L. Smith	1358 / 1193	5.00

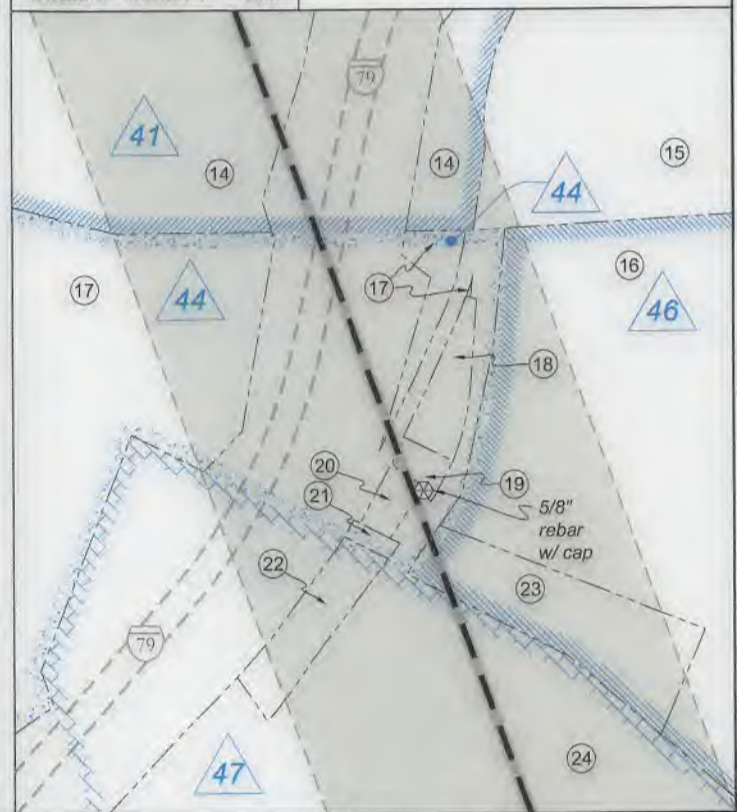
Lewis County - Hackers Creek District

No.	TM / Par	Owner	Bk / Pg	Ac.
36	9C / 48	Everet Randolph	W28 / 236	12.11
37	10C / 22	Leonard C. & Cynthia L. Riley	--- / ---	1.00
38	9C / 41	Elizabeth J. Hicks	W26 / 481	47.37
39	10C / 19	Myrtle B. Arbogast	W17 / 218	1.20
40	10C / 2	Myrtle B. Arbogast	W17 / 218	78.64
41	10C / 4	Myrtle B. Arbogast	W17 / 218	48.90

Detail 1 - Scale: 1" = 500'



Detail 2 - Scale: 1" = 500'



FILE NO: 06-36-12-G-H-19

DRAWING NO: 1206 S-10H 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: January 20 2020

OPERATOR'S WELL NO. 1206 S-10H

API WELL NO. **H44**

47 - 033 - **05967**
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1,350' WATERSHED: Middle West Fork Creek

QUADRANGLE: West Milford

DISTRICT: Grant

COUNTY: Harrison

SURFACE OWNER: Antonio P., LLC

ACREAGE: 233.35

ROYALTY OWNER: C. Earl Snider, et al

LEASE NO: _____ ACREAGE: 233.66

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7.252' TVD

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 27,405' MD

WELL OPERATOR: HG Energy II Appalachia, LLC

DESIGNATED AGENT: Diane C. White

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

**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

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

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

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HG Energy II Appalachia, LLC
Antonio 1206 S-10H Lease Chain

1206 Tract	LEGACY LEASE NUMBER	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE
32	LC066828	12-0426-0072-0000	Q100892000	ALTON BELL, SINGLE; MARCELLA R. BOND AND KARELY D. BOND, HER HUSBAND; MARY E. KENNEDY, WIDOW; DORSEY C. KENNEDY AND VELMA ICE KENNEDY, HIS WIFE; LEIA K. RUMBLE, WIDOW; MARTHA F. WILSON, WIDOW; HARRY W. KENNEDY AND LILLIAN KENNEDY, HIS WIFE; JOHN L. KENNEDY AND REVA B. KENNEDY, HIS WIFE; SUE K. SWISHER, WIDOW; KATHRYN BUTLER AND THURMAN BUTLER, HER HUSBAND; EVA WOLFE AND LYNN B. WOLFE, HER HUSBAND; S. G. KENNEDY AND JESSIE L. KENNEDY, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	781	591
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				DOMINION TRANSMISSION, INC.	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	WV505	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
				33	LC066627	12-0426-0073-0000	Q100876000	ALTON BELL, SINGLE
HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903					179
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136					250
CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51					795
DOMINION TRANSMISSION, INC.	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	WV505					
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601					581
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621					1295
34	LC066665	12-0426-0074-0000	Q100640000					MARCELLA R. BOND AND H. D. BOND, HER HUSBAND
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				DOMINION TRANSMISSION, INC.	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.	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				DOMINION TRANSMISSION, INC.	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. DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	ASSIGNMENT MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1600 WVS05 1601 1621	692 581 1295
35	LC066833	12-0426-0077-0000 12-0426-0064-0000	Q100840000	MARY E. KENNEDY, WIDOW; DORSEY C. KENNEDY AND VEIUMA ICE KENNEDY, HIS WIFE; HARRY W. KENNEDY AND LILLIAN A. KENNEDY, HIS WIFE; JOHN L. KENNEDY AND REVA B. KENNEDY, HIS WIFE; MARTHA E. WILCOX, WIDOW; LELA K. RUMBLE, WIDOW; SUE K. SWISHER, WIDOW; KATHERINE BUTLER AND THERMAN BUTLER, HER HUSBAND; EVA WOLFE AND LYNN B. WOLFE, HER HUSBAND; S. G. KENNEDY AND JESSIE L. KENNEDY, HIS WIFE HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC. DOMINION ENERGY 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. DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC 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 MERGER/NAME CHANGE ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	782 903 1136 51 58 1522 1524 1543 1576 1584 WVS05 1600 1601 1621	8 179 250 795 362 33 491 1235 125 942 692 581 1295
36	LC066778	12-0426-0075-0000 12-0426-0076-0000	Q100967000	J. C. MCWHORTER AND GRACE A. MCWHORTER, HIS WIFE; IDEN MCWHORTER AND OKLA MCWHORTER, HIS WIFE; IDA MAY CAIN, LEAMON CAIN AND FREDA CAIN, HIS WIFE; JOHN CAIN AND FAYE CAIN, HIS WIFE; SHERMAN CAIN, PEARL FOLSTROM AND CHARLES FOLSTROM, HER HUSBAND; AND EDNA HELBING AND KARL R. HELBING, HER HUSBAND 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. DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION ENERGY 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. DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC 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 MERGER/NAME CHANGE ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	781 903 1136 51 58 1522 1543 1576 1584 WVS05 1600 1601 1621	51 179 250 795 362 33 1235 125 942 692 581 1295

RECEIVED
 Office of Oil and Gas
 JAN 30 2023
 WV Department of
 Environmental Protection

JAN 30 2020

			DOMINION ENERGY TRANSMISSION, INC. WV Department of Environmental Protection	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
			J. N. RECTOR AND JULIA E. RECTOR	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	LEWIS 736	220
			TRI-STATE GAS COMPANY, WHEELING NATURAL GAS COMPANY AND THE MANUFACTURERS LIGHT AND HEAT COMPANY	TRI-STATE GAS COMPANY	NOT LESS THAN 1/8	139	432
			HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	202	375
			CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
			CONSOLIDATED GAS TRANSMISSION CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
			CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
			DOMINION 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
			DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
			DOMINION ENERGY TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	692
			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
			WILLA E. WARE AND JOHN P. WARE, HER HUSBAND; AND THE HARRISON COUNTY BANK	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
			CONSOLIDATED GAS SUPPLY CORPORATION	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	LEWIS 736	220
			CONSOLIDATED GAS TRANSMISSION CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1011	167
			CNG TRANSMISSION CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT	1136	250
			DOMINION TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
			CNX GAS COMPANY LLC	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
			DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
			DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
			CNX GAS COMPANY LLC	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
			DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
			DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
			DOMINION ENERGY TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	581
			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
			DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
			G. MANLEY CURRY AND MARY GEORGIA CURRY, HIS WIFE	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
			HOPE NATURAL GAS COMPANY	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	1295
			CONSOLIDATED GAS SUPPLY CORPORATION	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	779	27
			CONFIRMATORY DEED	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
46	LC084263	12-0446-0038-0000 12-0446-0037-0000	Q100951000				
44	LC066681	12-0446-0034-0000 12-0446-0034-0001 12-0446-0034-0002 12-0446-0034-0004 and p/o WV Div. of Highways (11.46 ac not assessed)	Q100800000				
41	LC021469	12-0446-0024-0000 12-0446-0024-0001 12-0446-0024-0002 12-0446-0024-0003 12-0446-0024-0004 12-0446-0024-0005 12-0446-0026-0001	Q101114000				

54	LC056294	p/o 12-0466-0038-0000	Q100793000	DOMINION TRANSMISSION, INC.	Office of Oil and Gas	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF	1524	491
				CNX GAS COMPANY LLC		NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	JAN 30 2020	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.	WV Department of Environmental Protection	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVS05	
				DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF	1601	581
				DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	1295
				DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	LEWIS 736	220
				B. SWISHER AND I. M. SWISHER, HIS WIFE		SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	121	73
				SOUTH PENN OIL COMPANY		HOPE NATURAL GAS COMPANY	ASSIGNMENT	204	402
				HOPE NATURAL GAS COMPANY		CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION		CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT	1136	250
CONSOLIDATED GAS SUPPLY 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				
DOMINION TRANSMISSION, INC.		DOMINION ENERGY TRANSMISSION, INC.	ASSIGNMENT	WVS05					
NOBLE ENERGY, INC.		HG ENERGY II APPALACHIA, LLC	MERGER/NAME CHANGE	1600	692				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF	1601	581				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	581				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF	1621	1295				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	1295				
DOMINION ENERGY TRANSMISSION, INC.		CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	985	98				
SOPHA MCWHORTER, WIDOW; AND PHYLLIS F. BEACH, A MARRIED WOMAN; AND BRIGHT J. MCWHORTER AND VIRGINIA H. MCWHORTER, HIS WIFE		CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	1136	250				
CONSOLIDATED GAS SUPPLY CORPORATION		CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795				
CONSOLIDATED GAS TRANSMISSION CORPORATION		CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	58	362				
CNG TRANSMISSION CORPORATION		DOMINION TRANSMISSION, INC.	ASSIGNMENT	1427	829				
DOMINION TRANSMISSION, INC.		DOMINION EXPLORATION & PRODUCTION INC	ASSIGNMENT	1457	978				
DOMINION EXPLORATION & PRODUCTION INC		DOMINION TRANSMISSION, INC.	ASSIGNMENT	1522	33				
DOMINION TRANSMISSION, INC.		CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33				
DOMINION TRANSMISSION, INC.		NOBLE ENERGY, INC.	FIRST AMENDMENT TO MEMORANDUM OF	1524	491				
CNX GAS COMPANY LLC		NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
DOMINION TRANSMISSION, INC.		CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				
CNX GAS COMPANY LLC		NOBLE ENERGY, INC.	ASSIGNMENT	1584	942				
NOBLE ENERGY, INC.		HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692				
DOMINION TRANSMISSION, INC.		DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVS05					
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF	1601	581				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1601	581				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF	1621	1295				
DOMINION ENERGY TRANSMISSION, INC.		HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	1621	1295				
ALCINDA BLAKE JACKSON AND M. E. JACKSON, HER HUSBAND		HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	781	19				
HOPE NATURAL GAS COMPANY		CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179				
CONSOLIDATED GAS SUPPLY CORPORATION		CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT	1136	250				
CONSOLIDATED GAS TRANSMISSION CORPORATION		CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795				
CNG TRANSMISSION CORPORATION		DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362				
DOMINION TRANSMISSION, INC.		CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33				
CNX GAS COMPANY LLC		NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
DOMINION TRANSMISSION, INC.		CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				

57 LC066801 12-0466-0071-0000 12-0466-0071-0001 12-0466-0071-0002 Q100536000

62	LC009742	p/o 04-010C-0002-0000 LEWIS COUNTY	Q100546000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	848
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	1
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVS05	
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	LEWIS 736	220
				N. J. MELLON, WIDOWER	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	243	49
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	294	89
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	127
63	LC066734	p/o 04-010C-0002-0000 LEWIS COUNTY	Q101099000	CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	WVS05	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	672	154
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	684	57
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	712	848
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	ASSIGNMENT	717	1
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	717	848
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	ASSIGNMENT	722	170
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	MERGER/NAME CHANGE	WVS05	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558
64	LC066706	p/o 04-010C-0002-0000 LEWIS COUNTY	Q100963000	DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT	LEWIS 736	220
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	734	558
				B. B. CURTIS AND MARTHA A. CURTIS, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	736	220
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	44	258
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	73	272
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	294	89
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	ASSIGNMENT	425	127
				DOMINION TRANSMISSION, INC.	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVS05	
				DOMINION TRANSMISSION, INC.	DOMINION EXPLORATION & PRODUCTION INC	ASSIGNMENT	596	137
				DOMINION EXPLORATION & PRODUCTION INC	DOMINION TRANSMISSION, INC.	ASSIGNMENT	651	137
65	LC009786	04-010C-0004-0000 p/o 04-010C-0009-0000	Q100619000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	ASSIGNMENT	672	154
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	MEMORANDUM OF FARMOUT AGREEMENT	672	154
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	684	57
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	712	848
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	ASSIGNMENT	717	1
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVS05	
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499

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

Date of Notice Certification: 12/05/2019

API No. 47- _____ - _____

Operator's Well No. Antonio 1206 S-10H

Well Pad Name: Antonio 1206 Well Pad

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>553387.9</u>
County:	<u>Harrison</u>		Northing:	<u>4334418.3</u>
District:	<u>Grant</u>	Public Road Access:	<u>SR 19 / Hackers Creek Road</u>	
Quadrangle:	<u>West Milford</u>	Generally used farm name:	<u>Antonio</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 type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 40px;"><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> <div style="text-align: center; margin-top: 10px;"> <p>RECEIVED Office of Oil and Gas JAN 30 2020 WV Department of Environmental Protection</p> </div>	<p style="text-align: center;">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><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
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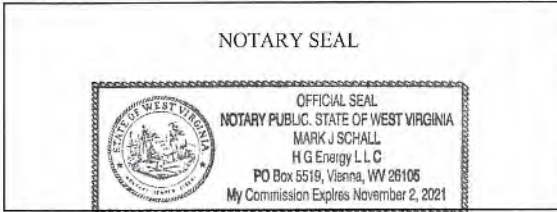
Required Attachments:

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

Certification of Notice is hereby given:

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

Well Operator:	<u>HG 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>Agent</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 5th day of December, 2019.

Mark J Schall Notary Public

My Commission Expires 11/2/2021

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

JAN 30 2020

WW-6A
(9-13)

API NO. 47- 4703305987
OPERATOR WELL NO. 1206 S-10H
Well Pad Name: Antonio 1206

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: 12/17/19 **Date Permit Application Filed:** 12/20/19

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: Antonio PLLC, c/o Mike Ross ✓
Address: P. O. Box 219
Coalton, WV 26257

Name: Charles R. Sutton ✓
Address: 593 Long Run Road
Lost Creek, WV 26385

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: See Above
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: See Above
Address: _____

COAL OWNER OR LESSEE
Name: Antonio PLLC, c/o Mike Ross
Address: P. O. Box 219
Coalton, WV 26257

COAL OPERATOR
Name: _____
Address: _____

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

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: Dominion Energy Transmission, Inc Attn: Ron Walden
Address: 925 White Oaks Blvd ✓
Bridgeport, WV 26330

*Please attach additional forms if necessary

RECEIVED
Office of Oil and Gas
JAN 3 3 2020
Department of Environmental Protection

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

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WV Department of
Environmental Protection

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

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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Environmental Protection

WW-6A
(8-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. 1206 S-10H
Well Pad Name: Antonio 1206

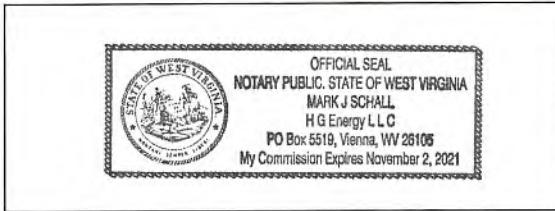
Notice is hereby given by:

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 deprivacyofficer@wv.gov.



Subscribed and sworn before me this 17th day of December, 2019.

Mark J Schall Notary Public

My Commission Expires 11/2/2021

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Environmental Protection

WW-6A4
(1/12)

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: 12/03/2019 **Date Permit Application Filed:** 12/20/2019

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: Antonio PLLC, c/o Mike Ross

Address: P. O. Box 219

Coalton, WV 26257

Name: Charles R. Sutton

Address: 593 Long Run Road

Lost Creek, WV 26385

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

County: Harrison

District: Grant

Quadrangle: West Milford

Watershed: Middle West Fork Creek

UTM NAD 83 Easting: 553387.9

Northing: 4334418.3

Public Road Access: SR19/Hackers Creek Road

Generally used farm name: Antonio

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

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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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

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

Date of Notice: 12/03/2019 **Date Permit Application Filed:** 12/20/2019

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: Antonio PLLC, c/o Mike Ross	Name: Charles R. Sutton
Address: P. O. Box 219	Address: 593 Long Run Road
Coalton, WV 26257	Lost Creek, WV 26385

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: West Virginia	UTM NAD 83 Easting: 553369.8
County: Harrison	Northing: 4334415.8
District: Grant	Public Road Access: SR19/Hackers Creek Road
Quadrangle: West Milford	Generally used farm name: Antonio
Watershed: Middle West Fork Creek	

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: HG Energy II Appalachia, LLC	Address: 5260 Dupont Road
Telephone: 304-420-1119	Parkersburg, WV 26101
Email: dwhite@hgeneryllc.com <i>Diane White</i>	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.

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JAN 30 2020
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/
Commissioner of Highways

October 18, 2019

Jimmy Wriston, P. E.
Deputy Secretary/
Deputy 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 Antonio 1206 Pad, Harrison County
1206 S-10H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2018-1374 which has been issued to HG Energy II for access to the State Road for a haul road located off Harrison County Route 19/20 SLS. The haul route will cross Harrison County Route 25/6 by permits 04-2019-0930 & 04-2019-0931.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

Very Truly Yours,

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

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

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List of Frac Additives by Chemical Name and CAS #**Antonio 1206 Well Pad (N-1H to N-5H)**

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	

CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS

HG 1206 WELL PAD & IMPOUNDMENTS

GRANT DISTRICT
HARRISON COUNTY
WEST VIRGINIA

APPROVED
WVDEP OOG
11/12/2019

SHT. NO.	SHEET TITLE
1	TITLE SHEET
2A-2Z	SITE DEVELOPMENT PLANS
3A-3B	IMPOUNDMENT SECTIONS
4A-4H	ACCESS ROAD SECTIONS
5A-5G	CONSTRUCTION NOTES & DETAILS
6A-6K	RESTORATION PLAN
7A-7C	PROPERTY MAP

Estimated Gross Water Withdrawal (MG)

Use	MG	MG	MG
1000 Impoundment North & Grading Area	32,852	37,315	3,500
1000 Impoundment South 04-11 & 02	3,610	70	3,540
1000 Impoundment South & Grading Area	24,758	44,516	2,052
1000 Pad & Impoundment Access Road	2,916	3,970	1,054
1000 Well Pad & Access	30,785	33,662	2,876
1000 Other (Storage Impoundments)	1,200	0	1,200
Total	126,161	159,673	13,222

100%
100%
100%
100%
100%
100%

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



WELL #	LAT	LONG
N-01	N 39.158006	W 80.382428
N-02	N 39.158101	W 80.382374
N-03	N 39.158107	W 80.382321
N-04	N 39.158112	W 80.382269
N-05	N 39.158118	W 80.382216
S-01	N 39.157314	W 80.382294
S-02	N 39.157319	W 80.382242
S-03	N 39.157325	W 80.382189
S-04	N 39.157330	W 80.382137
S-05	N 39.157336	W 80.382084

WELL ELEVATIONS 1349.75
UTM83-177

	LATITUDE	LONGITUDE
DUCK CREEK ROAD CROSSING	N 39.138843	W 80.380611
1207 WELL PAD ACCESS ROAD ENTRANCE	N 39.152061	W 80.420447
1208 WELL PAD ACCESS ROAD ENTRANCE	N 39.149029	W 80.429876

RECORD OWNER	RECORD LOT #	RECORD AREA OF LOT	AREA WITHIN LOT
MURPHY E & SANDRA K NEEL	17-12-0445-0005-0000	80.07	0.000
WICKLEY PETERO	17-12-0445-0013-0000	132.852	5.902
LELAND J FREEMAN	17-12-0445-0026-0000	15.5505	2.236
CHARLES R SUTTON	17-12-0445-0042-0000	4.655	1.134
FRANKLIN L SUTTON	17-12-0445-0047-0000	72.2783	4.570
RICHARD L HARKINS, JR	17-12-0446-0031-0000	53.1225	3.425
FRANKLIN L SUTTON	17-12-0446-0036-0001	48.3265	2.713
W JOE & FANNAY M SUTTON	17-12-0446-0040-0000	84.6202	1.708
DUCK CREEK RD	N/A	N/A	0.052
CHARLES MARY	17-12-0446-0039-0000	29.2318	2.168
CHARLES BATH & THORA K SUTTON	17-12-0446-0040-0000	84.6203	2.253
JER L BOOHER	17-12-0446-0031-0001	22.9732	1.811
MARY RICHARDS	17-12-0445-0033-0000	47.9334	6.427
WILLIAM LEROY & VIRGINIA A JENKINS	17-12-0446-0018-0000	78.8656	2.638
MARY RICHARDS	17-12-0446-0018-0001	0.9070	0.197
MARY RICHARDS	17-12-0446-0019-0000	56.5818	2.028
P ANDREWS, LLC	17-12-0446-0003-0000	180.7720	1.556
P ANDREWS, LLC	17-12-0446-0002-0000	41.0999	0.969
P ANDREWS, LLC	17-12-0426-0071-0000	230.6748	21.146
CHARLES R SUTTON	17-12-0426-0072-0000	31.1173	4.504
JUDITH A RUSSELL	17-12-0426-0021-0000	10.1580	0.701
TOTAL LIMIT OF DISTURBANCE			68.187 AC

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) 722-1222

REVISIONS

NO.	DATE	DESCRIPTION
1	9/16/19	REVISED WELLS HEAD LAYOUT
2	10/07/19	METALANE REVISIONS
3	10/31/19	REVISIONS PER DEP COMMENTS
4	11/12/19	REVISIONS PER DEP COMMENTS



TITLE SHEET
HG 1206 WELL PAD & IMPOUNDMENTS
GRANT DISTRICT
HARRISON COUNTY, WEST VIRGINIA

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

WEST VIRGINIA **CALL BEFORE YOU DIG!**

Dial 811 or 800.245.4848
West Virginia Department of Transportation

APPROVED SEP 29/2019
CHECKED SEP 25/2019
DRAWN MAR 09/2019
PROJECT NO. 4202-PA007871

Penn E&R
Environmental & Remediation, Inc.

DRAWING NUMBER: PA007871-DDT
SHEET 1

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