

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

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

Wednesday, August 17, 2022 WELL WORK PERMIT Horizontal 6A / New Drill

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

Re: Permit approval for Vaneck 1215 N-2H 47-041-05733-00-00

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

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

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

James A. Martin Chief

Operator's Well Number: Farm Name: U.S. WELL NUMBER: Horizontal 6A Date Issued: 8/17/2022

Promoting a healthy environment.

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 supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number:

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

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API NO. 47-704105733 OPERATOR WELL NO. Vaneck 1215 N-2H Wall Pad Name: Vareck 1215

Well Pad Name: Vaneck 1215

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

| 1) Well Operator: HG Energy I | I Appalachia, 🛓 49 | 94519932 | ewis 🧹 Fre | eman Camden 7.5' |
|--|----------------------------|---------------------|----------------------|-------------------------------------|
| | C | perator ID | County Di | strict Quadrangle |
| 2) Operator's Well Number: Var | neck 1215 N-2H | Well Pad] | Name: Vaneck 1 | 215 |
| 3) Farm Name/Surface Owner: <u>+</u> | IG Energy II Appalachia, L | LC Public Road | Access: Mare F | Run Rd at CR 10 / 9 |
| 4) Elevation, current ground: | 1259' 🗾 Eleva | tion, proposed po | ost-construction: | 1254.8' |
| 5) Well Type (a) Gas <u>x</u> Other | Oil | Under | ground Storage | |
| (b)If Gas Shal | low x | Deep | | |
| Hori | izontal x | | | 6130/202 |
| 6) Existing Pad: Yes or No Yes | | | | |
| Proposed Target Formation(s) Marcellus at 6753'/6803' and 50 | | | | ure(s): |
| 8) Proposed Total Vertical Depth | n: 6,790' | | | 8 |
| 9) Formation at Total Vertical De | / | | | |
| 10) Proposed Total Measured De | | 1 | 14 A | |
| 11) Proposed Horizontal Leg Ler | 15 7001 | 1 | | |
| 12) Approximate Fresh Water St | | 0', 214', 600', 86 | 1' | |
| 13) Method to Determine Fresh | | rest offset well da | ata, (47-041-0217 | 3, 0693, 0236, 2308, 0578) |
| 14) Approximate Saltwater Dept | | | | |
| 15) Approximate Coal Seam Dep | | 1150' (Surface casi | ng is being extended | to cover the coal in the DTI Field) |
| 16) Approximate Depth to Possil | ble Void (coal mine, | , karst, other): N | one | |
| 17) Does Proposed well location directly overlying or adjacent to | | Yes | No _X | |
| (a) If Yes, provide Mine Info: | Name: | | | |
| And the second state of the second state of the | Depth: | | | DITION IN DISCRIVED |
| | Seam: | | | JUL 1 4 2022 |
| | Owner: | | | WVT repartment of |
| | | | | Envir sumental Protection |

Page 108/19/2022

API NO. 4-704105733

OPERATOR WELL NO. Vaneck 1215 N-2H

Well Pad Name: Vaneck 1215

WW-6B (04/15)

18)

CASING AND TUBING PROGRAM

| TYPE | <u>Size</u> (in) | <u>New</u> <u>or</u> <u>Used</u> | <u>Grade</u> | <u>Weight per ft.</u> <u>(lb/ft)</u> | <u>FOOTAGE: For</u> <u>Drilling (ft)</u> | INTERVALS: Left in Well (ft) | <u>CEMENT:</u> <u>Fill-up</u> (Cu. Ft.)/CTS |
|------------------|---------------------|--|--------------|---|---|------------------------------------|---|
| Conductor | 30" | New | LS | 157.5 | 120' | 120' 🖌 | CTS |
| Fresh Water/Coal | 20" | NEW | J-55 | 94 | 1200' | 1200' | 40% Excess, CTS |
| Intermediate 1 | 13 3/8" | NEW | J-55 BTC | 68 | 2250' | 2250' | 40% Excess, CTS |
| Intermediate 2 | 9 5/8" | NEW | N-80 BTC | 40 | 4780' | 4780' | 40% Excess Tail, CTS |
| Production | 5 1/2" | NEW | P-110 HP | 23 | 23527' | 23527' | 20% Excess Tail, CTS |
| Tubing | | | | | | | |
| Liners | | 1 | 1 | 1 | | | |

| ТҮРЕ | Size (in) | <u>Wellbore</u> Diameter (in) | <u>Wall</u> <u>Thickness</u> <u>(in)</u> | <u>Burst Pressure</u> (psi) | <u>Anticipated</u> <u>Max. Internal</u> <u>Pressure (psi)</u> | <u>Cement</u> <u>Type</u> | <u>Cement</u> <u>Yield</u> (cu. ft./k) |
|------------------|-----------|----------------------------------|--|--------------------------------|---|------------------------------|--|
| Conductor | 30" | 30" | .500 | | | | Drilled In |
| Fresh Water/Coal | 20" | 26" | .438 | 2110 | 1200 | Type 1, Class A | 40 % excess yield = 1.20, CTS |
| Intermediate 1 | 13 3/8" | 17 1/2" | .480 | 3450 | | Type 1/Class A | Lead 40% excess, Tail 0% excess |
| Intermediate 2 | 9 5/8" | 12 1/4" | .395 | 5750 | | Type 1/Class A | Lead 40% excess, Tail 0% Excess Lea |
| Production | 5 1/2" | 8 1/2" | .415 | 16240 | 12500 | Type 1/ClassA | 20% excess yield = 1,19, kall yield 1.94. |
| Tubing | | | | | | | |
| Liners | | | | | | | |

PACKERS

6130/2022

WW-6B (10/14)

Well Pad Name: Vaneck 1215

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 6790'. Drill horizontal leg to estimated 15,708' lateral length, 23,527' TMD. Hydraulically fracture, stimulate and be capable of producing from the Marcellus Formation. Should we encounter an unanticipated void in the coal, we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface. We plan to run an ACP above the Gantz/Dominion Storage interval to aid in sealing off and isolating the storage interval.

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

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

| 21) Total Area to be disturbed, including roads, stockpile area, pits, e | etc., (acres): 22.55 acres |
|---|---|
| 22) Area to be disturbed for well pad only, less access road (acres): | 8.70 acres |
| 23) Describe centralizer placement for each casing string: | -0.4575 |
| No centralizers will be used with conductor calling. Freshwater/Coal - centralized every 3 joints to auface. | DIFICE IVED Office of City and Fice |
| Intermediate 1 - Bew Spring on every joint, will also be running ACP for isolating storage zone | 1 1002 |
| Intermediate 2 - Row Spring on first 2 joints then every third joint to 100° from suitable. Such a first section suitable around 2 joints from the 1et 6.5° from block to the loss of the | JUL 1 4 2022 |
| Production - Ventical - Run 1 spiral centralizer every 5 joints from the top of the curve to surface. Curve - Run 1 spiral centralizer every 3 joints from the 1st 5.5" long joint to the lop of the s | W/V Depar Friend Of Environmental Protection |
| 24) Describe all cement additives associated with each cement type: | |
| Canductor -N/A, Casing to be dified in w/ Dual Rolary Rig. | 1 |
| Frosh Water/Coal = "15.5 ppg FNE-1 + 3% twoo CaCI40% Excess/Vield=1.20 / CTS" | |
| Intermediate 1 - *** Storage String *** CTS ***15.4 ppg Load - Yield 1.24 - DB95 Surface Set 100 lb / sack (Mix of Clairs A and Gypsum to meet Dominian Requirementa/D346 - D.5% BW/ Dispersan/ 10035 1.5 https://dom.nct.com/nct.edu/com/ | /QB Fluid Loss/ D013 - 0.75%, 8W/QB Related / D47 - 0.32 gal / sack VBWOB Anii Feam / U202 - 0.15% 6W/QB - 0.15% BWOB Dispersant / B547 - 0.33% BWOB GesBLOK / D013 - 0.3% BWOB Relater / D047 - 0.02 gal / sack |
| Intermediate 2 - "Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCH0% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS" | |

mammedual 2 - Least 134 bpg POZ/PNE-1 + 0.3% bwee R3 + 1% bwee RC1 + 0.75 ga/sk FP13L + 0.3% bwee R9A170Tail: 14.8 ppg PNE-1 + 0.35% bwee R3 + 0.75 ga/sk FP13L + 50% bwee ASCA1 + 0.5% bwee R9A17020% ExcessLead Yield+1.197a1 Yield=1.5

25) Proposed borehole conditioning procedures:

Conductor - Ensure the hole is clean at TD.

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

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

latermediate 2 - Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of ana hole volume prior ta pumping cement. Production - Once on textam/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, er until returns and pump prospures indicate the hole is clean. Circulate a minimum of one hole volume prior to pu

*Note: Attach additional sheets as needed.

23

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HG Energy II Appalachia, LLC Vaneck 1215 Well Pad (N-1H - N6H, S7H - S12H) Cement Additives

4704105733

| | Material Type | Material Description Premium NE-1 is a | CAS # | % | CAS number |
|--------------------------|------------------|---|---|---|--|
| | | portland cement with | Ingredient name | 90 - 100 | 65997-15-1 |
| | | | Portland cement Calcium oxide | 1 - 5 | 1305-78-8 |
| | | early compressive strength properties. | Magnesium oxide | 1-5 | 1309-48-4 |
| emium NE-1 | Portland Cement | strength properties. | Crystalline silica: Quartz (SiO2) | 0.1 - 1 | 14808-60-7 |
| | | | | | |
| | | Commonly called gel, it is | Ingredient name | % | CAS number |
| | | a clay material used as a | bentonite | 90 - 100 | 1302-78-9 |
| | | cement extender and to control excessive free | Crystalline silica: Quartz (SiO2) | 5 - 10 | 14808-60-7 |
| | | water. | | | |
| entonite | Extender | | | | |
| | | Contraction of the | | | |
| | | A powdered, flaked or pelletized material used | Ingredient name | % | CAS number |
| | | to decrease thickening | Calcium chloride | 90 - 100 | 10043-52-4 |
| | | time and increase the rate | Property Page 4 | | |
| | | of strength development | | | |
| lcium Chloride | Accelerator | | | | |
| | | Graded (3/8 to 3/4 inch) | Insertiont name | % | CAS number |
| | | cellophane flakes used as | Ingredient name | /8 | |
| | | a lost circulation material. | No hazardous ingredient | | |
| ello Flake | Lost Circulation | a to be the concerned of the second | | | |
| | | | | | |
| | | en en iss doculosad | | | |
| | | FP-13L is a clear liquid organic phosphate | | | |
| | | antifoaming agent used in | | | lassa to service |
| | | cementing operations. It | Ingredient name | % | CAS number |
| | | is very effective | Tributyl phosphate | 90 - 100 | 126-73-8 |
| | | minimizing air | | | |
| | | entrapment and | | | |
| | | preventing foaming | | | |
| | | tendencies of latex systems. | -1150 | | |
| P-13L | Foam Preventer | ayacenta. | RECEIVED Gat | 5 | |
| | a same revenuer | | FECEIVED Gar | % | CAS number |
| | | Used to retard cement | ingredient name | 90 - 100 | 57-50-1 |
| ranulated Sugar | Retarder | returns at surface. | | 200 10 S S | 57-50-1 |
| auniaren pakal | Noraldel | A proprietary product | Ingredient name | ŝ | |
| | | that provides expansive | INT DEPAIL Protect | otion | |
| | | properties and improves | Environmental | | - Incomentation |
| | | bonding at low to | 5 | | CAS number |
| | | moderate | Calcium magnesium oxide | 90 - 100 | 37247-91-9 |
| | | | | | |
| ic.1 | | temperatures. | | | |
| C-1 | | | | | |
| C-1 | | temperatures. | Inpredient pame | % | CAS number |
| C-1 | | temperatures. Multi-purpose polymer | Ingredient name | % | CAS number |
| C-1 | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas | Ingredient name No hazardous ingredient | % | CAS number |
| с-1 ИРА-170 | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, | | % | CAS number |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. | | % | CAS number |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas | No hazardous ingredient | % | CAS number |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. A synthetic pozzolan, | No hazardous ingredient | % | CAS number |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. A synthetic pozzolan, (primarily Silicon Dioxide). | No hazardous ingredient | | CAS number |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create | No hazardous ingredient | % | CAS number |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement | No hazardous ingredient | | |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) | % | CAS number 14808-60-7 |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) | % | CAS number 14808-60-7 |
| | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) | % | CAS number 14808-60-7 |
| 1PA-170 | Gas Migration | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) | % | CAS number 14808-60-7 |
| 1PA-170 | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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. | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) | % | CAS number 14808-60-7 |
| 1PA-170 | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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. A low temperature | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide | % 5 - 10 1 - 5 | CAS number 14808-60-7 1305-78-8 |
| 1PA-170 | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 cernent. A low temperature retarder used in a wide | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name | % 5 - 10 1 - 5 | CAS number 14808-60-7 1305-78-8 CAS number |
| 1PA-170 | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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. A low temperature retarder used in a wide range of slurry | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide | % 5 - 10 1 - 5 | CAS number 14808-60-7 1305-78-8 |
| 1PA-170 | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 cernent. A low temperature retarder used in a wide range of slurry formulations to extend | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name Organic acid salt | % 5 - 10 1 - 5 | CAS number 14808-60-7 1305-78-8 CAS number |
| IPA-170 oz (Fly Ash) | | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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. A low temperature retarder used in a wide range of slurry | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name Organic acid salt | % 5 - 10 1 - 5 | CAS number 14808-60-7 1305-78-8 CAS number |
| 192 (Fly Ash) | Base | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 cernent. A low temperature retarder used in a wide range of slurry formulations to extend | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name Organic acid salt | % 5 - 10 1 - 5 % 40 - 50 | CAS number 14808-60-7 1305-78-8 CAS number Trade secret. |
| NPA-170 Poz (Fly Ash) | Base | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 cernent. A low temperature retarder used in a wide range of slurry formulations to extend | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Galcium oxide Ingredient name Organic acid salt Ingredient name | % 5 - 10 1 - 5 % 40 - 50 % | CAS number 14808-60-7 1305-78-8 CAS number Trade secret. |
| 192 (Fly Ash) | Base | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 cernent. A low temperature retarder used in a wide range of slurry formulations to extend | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name Organic acid salt Ingredient name 2-Butoxyethanol | % 5 - 10 1 - 5 40 - 50 % 20 - 30 | CAS number 14808-60-7 1305-78-8 CAS number Trade secret. CAS number 111-76-2 |
| NPA-170 Poz (Fly Ash) | Base | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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. A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time. | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name Organic acid salt Ingredient name Qrganic acid salt Ingredient name Qrganic acid salt Ingredient name Q-Butoxyethanol Proprietary surfactant D-Glucopyranose, oligomeric, C10-16-alkyl glycosides | % 5 - 10 1 - 5 % 40 - 50 % 20 - 30 10 - 20 5 - 10 | CAS number 14808-60-7 1305-78-8 CAS number Trade secret. CAS number 111-76-2 Trade secret. 110615-47-9 |
| | Base | temperatures. Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration. 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 cernent. A low temperature retarder used in a wide range of slurry formulations to extend | No hazardous ingredient Ingredient name Crystalline silica: Quartz (SiO2) Calcium oxide Ingredient name Organic acid salt Ingredient name Progenic acid salt Ingredient name Q-Butoxyethanol Proprietary surfactant D-Glucopyranose, oligomeric, C10-16-alkyl glycosides Alkvarvisulfonate amine salt | % 5 - 10 1 - 5 % 40 - 50 % 20 - 30 10 - 20 | CAS number 14808-60-7 1305-78-8 CAS number Trade secret. CAS number 111-76-2 Trade secret. |

| i.4 p 348 - sper 5.9 p 160A | rage String *** CTS *** og Lead - Yield 1.24 - D896 Surface Set 0.5% BWOB Fluid Loss / D013 - 0.75% sant / D095 1.5 lb per BBL CemNET* - 6 og Tail - Yield 1.17 - D896 Surface Set 1 - 0.15% BWOB Dispersant / B547 - 0.3 - 0.03 gel / sack Relarder - 0% Excess | BWOB Retards 0% Excess 00 lb / sack (Mix | of Class A and 1 | al / sack VBWOB Anti For | am / D202 0,15% E n Requirements) | k Anti Foam / |). | 1 4 2022 | 1215 N Marcellus Shal Lewis Cou | le Horizontal Inty, WV | ENERGY |
|---|--|--|---------------------------------------|---------------------------|---------------------------------------|--------------------|------------------------------|--|---|--|--|
| 11 | | | | | 1215 N | -2H SHL | | 14 | 205530.24N 176867 | 2.73E | |
| | Ground Elevation | - | 1254.8 | 3' | | 1215 N | -2H LP | C | 14 | 205311.46N 176689 | 9.28E |
| | Azm | | 340.53 | 90 | | 1215 N | -2H BHI | | 14 | 220116.1N 176166 | 7.88E |
| - | WELLBORE DIAGRAM | HOLE | CASING | GEOLOGY | TOP | BASE | MUD | CEMENT | CENTRALIZERS | CONDITIONING | COMMENTS |
| - | | | | | | | | | | | |
| | | | 30" 157.5# | | - | 1 | | N/A, Casing to be drilled | N/A | Ensure the hole is clean at | Conductor casing = 0.5" w |
| ~ | | 30" | LS | Conductor | 0 | 120 | AIR | in w/ Dual Rotary Rig | IN/A | TD. | thickness |
| ~ | A | | × | 1 m 7 m 7 | | 214, 600, 861 | 1 | | | Once casing is at setting | |
| | | | 20" | Fresh Water | D | | | 15.6 ppg PNE-1 + 3% bwoc CaCl | Centralized every 3 | depth, circulate a minimum of one hole volume with | Surface casing = 0.438" w thickness |
| × | X | 26" | 94# J-55 | Kittaning Coal | 900 | 905 | AIR | 40% Excess | joints to surface | Fresh Water prior to | Burst=2110 psi |
| | x | | | Fresh Water Protection | 0 | 1200 | - | Yield=1.20 / CTS | | pumping cement. | |
| Bare | | 1 1 1 | | Little Lime | 1694 | 1714 | | See above (LEFT) for | Bow Spring on every | Once casing is at setting | 11 |
| | | 1.55 | 13-3/8" 68# | Big Lime | 1741 | 1818 | AIR / KCL | Storage String Cement | joint condition at | depth, Circulate and condition at TD. Circulate a | Intermediate casing = 0.48 wall thickness |
| 1 | XXX | 17.5" | J-55 BTC | Injun / Gantz (Storage) | 1818 / 2073 | 1904 / 2125 | Salt Polymer | Blend to Meet DTI Requirements for Gas | will also be running ACP for isolating | minimum of one hole volume prior to pumping cement. | Burst=3450 psi |
| | | | | Intermediate 1 | 0 | 2250 | | Storage Field Isolation | slorage zone* | | |
| 6.3 | XXX | | | Thirty Foot | 2274 | 2286 | AIR / KCL Sait Polymer | | | | |
| | | | | Gordon Stray / Gordon | 2320 / 2346 | 2336 / 2446 | | | | | |
| | | | | 5th Sand | 2590 | 2612 | | Lead: 15.4 ppg PNE-1 + | in the second second | Once casing is at setting | Intermediate casing ≍ 0.395" wall thickness Burst≂5750 psi |
| | XXX | 12.25" | 9-5/8" 40# N-80 BTC | Bayard | 2660 | 2675 | | t A0% Excess / Tall: 15.9 | | depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement. | |
| | | | | Speechley | 3287 | 3301 | | | | | |
| | | | | | | 1 | | | | | |
| | | | | Benson | 4572 | 4588 TVD: 4780' | | | | | |
| | | | | Intermediate 2 | 0 | MD: 4950' Inc. | | | | | |
| | XXX | | | | | 25 deg. | | | | | |
| | | in and | | - | 1.0 | | AIR / | 1 m | Run 1 spiral centralizer every 5 joints from the | | Production casing = 0.415" wall thickness Burst≕16240 psi |
| | | 8.75" | | | 1 | | 9.0ppg SOBM | Lead: 14.5 ppg | top of the curve to surface. | | |
| | | | | | 1 | 1 | | POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc | | | |
| | | 1 | · · · · · · · · · · · · · · · · · · · | Rhinestreet | 6125 | 6290 | 1.0 | EC1 + 0.75 gal/sk FP13L | | Once on bottom/TD with | |
| | | | 1.1.1.1 | Cashaqua | 6290 | 6391 | | + 0.3% bwoc MPA170 Tail: 14.8 ppg PNE-1 + | | casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. | |
| | x | | 5-1/2" 23# | Middlesex | 6391 | 6425 | 11.5ppg- | 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% | | | |
| | | 8.5" Curve | P-110 HP | West River | 6425 | 6500 | 12.5ppg SOBM | bwoc ASCA1 + 0.5% | Run 1 spiral centralizer | | Note:Actual centralizer schedules may be chang |
| | | | CDC HTQ | Burkett | 6500 | 6535 | JODM | bwoc MPA170 20% Excess | every 3 joints from the | Circulate a minimum of one hole volume prior to | due to hole conditions |
| | | | | Tully Limestone | 6535 | 6625 | _ | Lead Yield=1.19 | 1st 5.5" long joint to the top of the curve. | pumping cement. | |
| | | | | Hamilton | 6625 | 6753 | - | Tail Yield=1.94 CTS | | | |
| | | | | Marcellus TMD / TVD | 6753 | 6803 | 11.5ppg- | 1.000 000 | | | |
| | | 8.5" Lateral | | (Production) | 23526 | 6789 | 12.5ppg SOBM | | · · · · · · · · · · · · · · · · · · · | | |
| | x x | | | Onondaga | 6803 | | | | | | |
| | SS Indiana and Andrews | X | X | X | | | | X | X | X | |
| | | 9' TVD / 7819' MD | | | 8.5" Hole - Cemer 5-1/2" 23# P-110 | | | | +/-157 | 07' ft Lateral | TD @ +/-6789' TVD +/-23526' MD |
| | | MD | | | 21.021 24.000 - 0.02 | | | | | X | |

| W | W-9 |
|-----|------|
| (4) | (16) |

My Commission Expires July 31, 2022

API Number 47 -

Operator's Well No. Vaneck 1215 N-2H

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 Quadr | angle Camden 7.5' |
| Do you anticipate using more than 5,000 bbls of water to complete the prop Will a pit be used? Yes No | posed well work? Yes <u>V</u> 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: | _ 11 so, what hill SDW SDW |
| Land Application | 012-12-2 |
| Underground Injection (UIC Permit Number | |
| Reuse (at API Number TBD - At next anticipated well |) |
| Off Site Disposal (Supply form WW-9 for disp | osal location) |
| Other (Explain | |
| | |
| Will closed loop system be used? If so, describe: Yes, cuttings and fluids will be collect | ed 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, AirKCL, AirSOBM. Horizontal - SOBM

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

Additives to be used in drilling medium? Water, Soap, KCI, 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 | | RECEIVED For of Offend Gas |
|--------------------------------|-----------------------|---------|--|
| Company Official (Typed Name | e) Diane White | Or. | 200 07 601 6110 (SS8 |
| Company Official Title | Agent | 1 | LIL 1.4 2022 |
| | | Tr | unontal Protection |
| Subscribed and sworn before me | this 27th day of June | , 20 22 | |
| My commission expires $-1/3$ | J Boach | | OFFICIAL SEAL TE OF WEST VIRGINIA NOTARY PUBLIC SSO8/ 40/2022 |

Cuttings Disposal/Site Water

Cuttings -Haul off Company:

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

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

Environmental Coordination Services & Recycling (ECS&R) 3237 US Highway 19 Cochranton, PA 16314 814-425-7773

Disposal Locations:

Apex Environnemental, LLC Permit # 06-08438 11 County Road 78 Amsterdam, OH 43903 740-543-4389

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

Sycamore Landfill Inc. Permit #R30-079001 05-2010 4301 Sycamore Ridge Road Hurricane, WV 25526 304-562-2611

Max Environnemental Technologies, Inc. Facility Permit # PAD004835146 / 301071. 233 Max Lane Yukon, PA 25968 724-722-3500

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

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

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

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

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

Brooke County Landfill Permit # SWF-103-87 / WV 0109029 Rd 2 Box 410 Colliers, WV 26035 304-748-0014 RECEIVED Office of Oil and Gas

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NV Department of Environmental Protection

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08/19/2022

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Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185 Rt 1 Box 156A New Martinsville, WV 26035 304-455-3800

Energy Solutions, LLC Permit # UT 2300249 423 West 300 South Suite 200 Sait Lake City, UT 84101

Energy Solutions Services, Inc. Permit # R-78006-L24 1560 Bear Creek Road Oak Ridge, TN 37830

Northern A-1 Environnemental Services Permit ID MID020906814 3947 US 131 North, PO Box 1030 Kalkaska, MI 49646 231-258-9961

Water Haul off Companies:

Dynamic Structures, Clear Creek DOT # 720485 3790 State Route 7 New Waterford, OH 44445 330-892-0164

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

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

Nuverra Environmental Solutions 11942 Veterans Memorial Highway Masontown, WV 26542

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

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

Disposal Locations:

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

Solidification/Incineration Soil Remediation, Inc. Permit # 02-20753 6065 Arrel-Smith Road Lowelville, OH 44436 330-536-6825

Adams #1 (Buckeye Brine, LLC) Permit # 34-031-2-7177 23986 Airport Road Coshocton, OH 43812 740-575-4484 512-478-6545 CMS of Delaware Inc. DBA CMS Olifield Serv 301 Commerce 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 Balipark Court Export, PA 15632

Burns Drilling & Excavating 618 Crabappie Road P.O. Bok Wind Ridge, PA 15380

Nichlos 1-A (SWIW #13) Permit # 3862 300 Cherrington Pkwy, Suite 200 Coraopolis, PA 15108 412-829-7275

Groselle (SWIW #34) Permit # 4096 Rt. 88 Garrettsville, OH 713-275-4816

Kemble 1-D Well Permit # 8780 7675 East Pike Norwich, Oh 48767 614-648-8898 740-796-6495 RECEIVED Office of Oil and Gas

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

Adams #3 (Buckeye Brîne, LLC) Permit #34-031-2-7241-00-00 2630 Exposition, Suite 117 Austin, TX 78703 512-478-6545

Mozena #1, Well (SWIW # 13) Permit # 34-157-2-5511-00-00 5367 E. State Street Newcomerstown, OH 43832 740-763-3966

Goff SWD #1 (SWIW # 27) Permit # 34-119-2-8776-000 300 Cherrington Pkwy, Suite 200 Coraopolis, PA 15108 412-329-7275

SOS D#1 (SWIW #12) Permit # 34-059-2-4202-00-00 Silcor Oilfield Services, Inc. 2939 Hubbard Road Youngstown, PH 44505

Dudley #1 UIC (SWIW #1) Permit # 34-121-2-2459-00-00 Select Energy Services, LLC 7994 S. Pleasants Hwy St. Marys, WV 26170 304-665-2652 OH UIC #1.Bu keye UIC Barnesville 1 & 2 CNX Gas Con...any, LLC 1000 Consol Energy Drive Permit # 34-013-2-0609-00-00 Permit # 34-013-2-0614-00-00 304-323-6568

US Steele 11385 Permit # 47-001-00561 200 Evergreen Drive Waynesburg, PA 15730 304-823-6568

Chapin #7 UIC (SWIW #7) Permit # 34-083-2-4197-00-00 Elkhead Gas& Oil Company 12163 Marne Rd. NE Newark, OH 43055 740-763-3966

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WV Department of Environmental Protection

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Form WW-9

Operator's Well No. Vaneck 1215 N-2H

HG Energy II Appalachia, LLC

| Partie Barnesse | atment: Acres Disturbed | 22.55 Prevegetation pl | I |
|---|---|--|---|
| Lime | 3 Tons/acre or to corre | et to pH6.5 | |
| Fertilizer type1 | 0-20-20 | | |
| Fertilizer amount_ | 5 | 00 lbs/acre | |
| Mulch Hay | 2 | Tons/acre | |
| | | Seed Mixtures | |
| 1 | emporary | Perma | inent |
| Seed Type | lbs/acre | Seed Type | lbs/acre |
| Tall Fescue | 40 | Tall Fescue | 40 |
| Ladino Clover | 5 | Ladino Clover | 5 |
| | | | |
| Maintain E&S con | trols through the dri | lling and completion process | |
| Attach: | e pit will be land applied, in | d application (unless engineered plans inclu clude dimensions (L x W x D) of the pit, and | ding this info have beer d dimensions (L x W), a |
| Maps(s) of road, location, p provided). If water from the acreage, of the land application | tion area. blved 7.5' topographic sheet. | | |
| Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of inver- Plan Approved by: | olved 7.5' topographic sheet. | ĨA | rogulation |
| Maps(s) of road, location, j provided). If water from the acreage, of the land applica Photocopied section of inver- Plan Approved by: Comments: | blved 7.5' topographic sheet. | | regulation. |

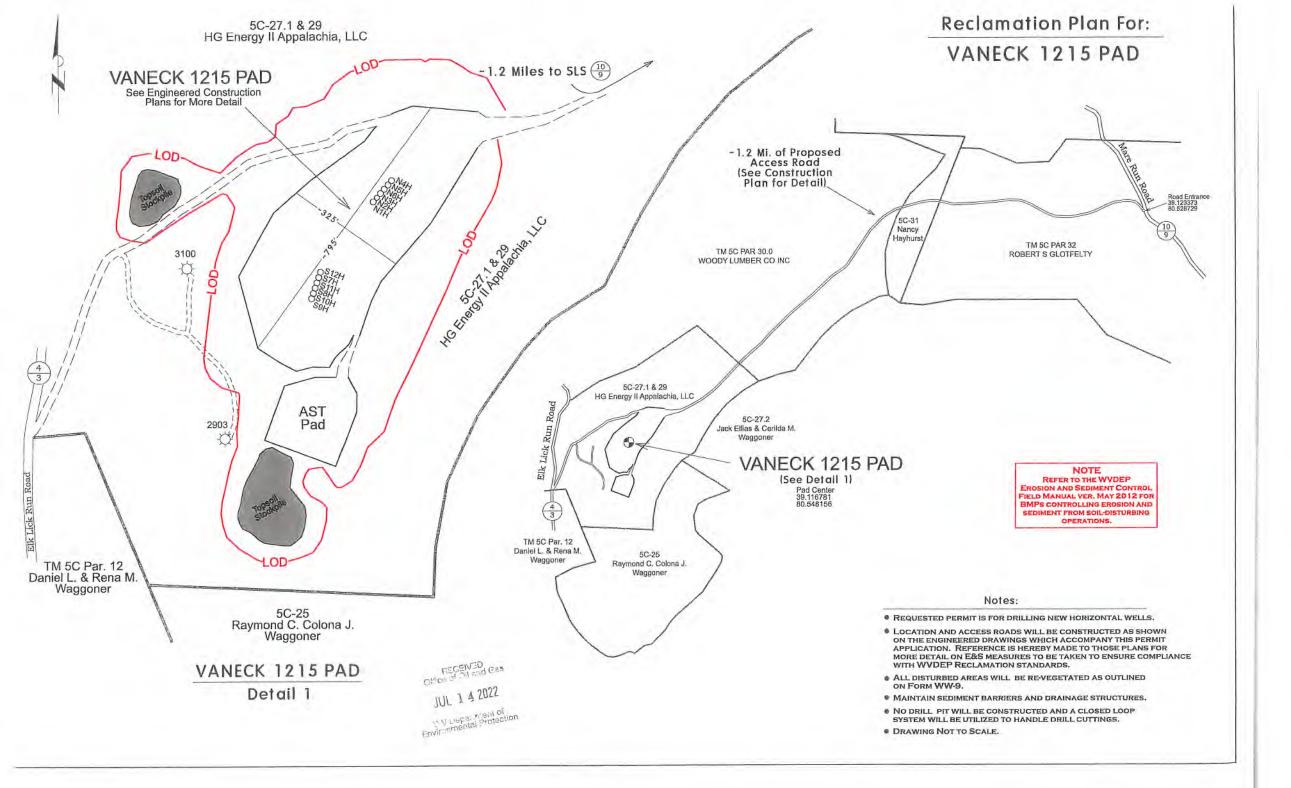
neorivieo Gas

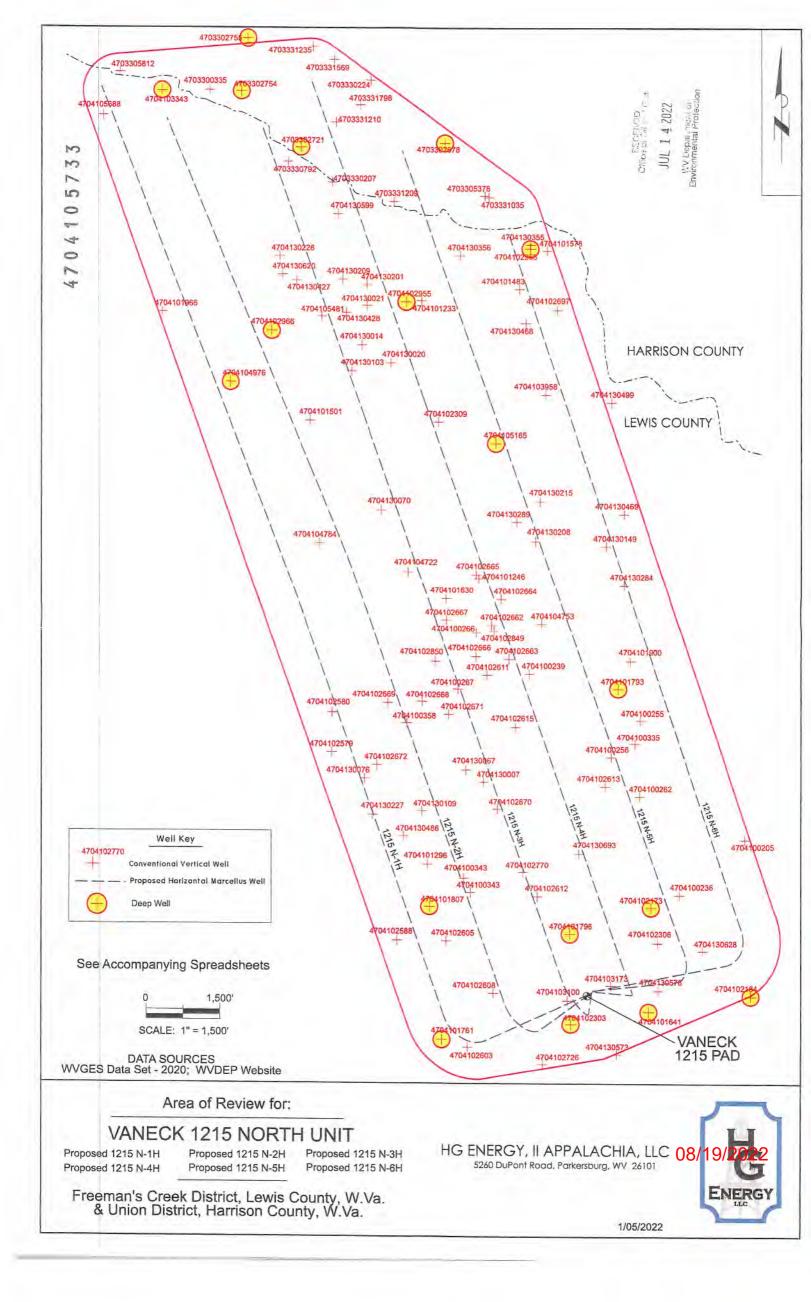
111 1 4 2022

WV Department of Environmental Protection

| Title: WV DEP Oil & Gas Inspector | Date: 6/20/2072 |
|-----------------------------------|-----------------|
| | |

Field Reviewed? (_____) Yes (_____) No





| | | | VANECK 1215 | EXISTING WELLS LOCATED | WITHIN THE AREA OF REVIEW | | -5H & N | -6H | | |
|----|------------|----------|---------------------|------------------------------------|---------------------------|-----------------|---------|-----------|-----------|------------|
| СТ | API | COUNTY | FARM | OPERATOR NAME | FORMATION NAME | WELL TYPE | TVD | STATUS | LATITUDE | LONGITUDE |
| 1 | 4703302678 | Harrison | K W Coffindaffer | Tenmile Land, LLC | Alexander | House Gas | 5550 | ABANDONED | 39.164144 | -80.558442 |
| 2 | 4703302721 | Harrison | Robert B Weiman | Tenmile Land, LLC | Alexander | Gas | 5081 | ACTIVE | 39.163273 | -80.571299 |
| 3 | 4703305378 | Harrison | Ray Mosser Jr | Alliance Petroleum Co. LLC | Greenland Gap Fm | Oil and Gas | 4010 | ACTIVE | 39.160970 | -80.554949 |
| 4 | 4703330207 | Harrison | Harvey Morris | South Penn Oil Co. | Hampshire Grp | Oil | 3021 | PLUGGED | 39.161822 | -80.566082 |
| 5 | 4703330792 | Harrison | J B Coffindaffer | Hope Natural Gas Company | Hampshire Grp | Gas | 2857 | PLUGGED | 39.162983 | -80.569250 |
| 6 | 4703331035 | Harrison | William Moses | Moses, William | Gordon Stray | Oil | 2660 | PLUGGED | 39.160956 | -80.555326 |
| 7 | 4703331209 | Harrison | Tillman Clemens | Bradford Supply Co. | Gordon | Oil | 2592 | PLUGGED | 39.160956 | -80.562964 |
| 8 | 4703331210 | Harrison | J B Coffindaffer | Bradford Supply Co. | Gordon Stray | Oil | 2775 | PLUGGED | 39.165016 | -80.565762 |
| 9 | 4704100205 | Lewis | Flossie Riley | Dominion Energy Transmission, Inc. | Hampshire Grp | Storage | 2361 | ACTIVE | 39.126554 | -80.538388 |
| 10 | 4704100236 | Lewis | F B Riley | Dominion Energy Transmission, Inc. | Gantz | Storage | 2110 | ACTIVE | 39.123206 | -80.540588 |
| 11 | 4704100239 | Lewis | George C Francis | Dominion Energy Transmission, Inc. | Gantz | Storage | 2322 | ACTIVE | 39.135143 | -80.551911 |
| 12 | 4704100255 | Lewis | J T Bailey 📅 | Hope Natural Gas Company | Fifth | Storage | 2556 | PLUGGED | 39.130502 | -80.546138 |
| 13 | 4704100256 | Lewis | JT Bailey | Hope Natural Gas Company | Gordon Stray | Storage | 2435 | PLUGGED | 39.131952 | -80.544090 |
| 14 | 4704100262 | Lewis | Olive Thoms | Dominion Energy Transmission, Inc. | Thirty-foot | Storage | 2370 | ACTIVE | 39.128472 | -80.544276 |
| 15 | 4704100266 | Lewis | LEGall | Hope Natural Gas Company | Gantz | Storage | 2346 | PLUGGED | 39.137463 | -80.555636 |
| 16 | 4704100267 | Lewis | LEGall | Dominion Energy Transmission, Inc. | Gantz | Storage | 2240 | ACTIVE | 39.134998 | -80.555077 |
| 17 | 4704100335 | Lewis | JTBailey 8 8 | Hope Natural Gas Company | Up Devonian | Storage | 2341 | PLUGGED | 39.131082 | -80.544649 |
| 18 | 4704100343 | Lewis | E Haney | Dominion Energy Transmission, Inc. | Hampshire Grp | Storage | 2312 | ACTIVE | 39.123351 | -80.556936 |
| 19 | 4704100358 | Lewis | L E Gall | Dominion Energy Transmission, Inc. | Hampshire Grp | Gas | 2767 | ACTIVE | 39.131662 | -80.560662 |
| 20 | 4704101233 | Lewis | Jacob Freeman Heirs | Diversified Resources, Inc. | Fifth | Oil and Gas | 2796 | ACTIVE | 39.155445 | -80.560110 |
| 21 | 4704101246 | Lewis | L E Gall | Hope Natural Gas Company | Thirty-foot | Storage | 2594 | PLUGGED | 39.139934 | -80.555775 |
| 22 | 4704101483 | Lewis | D C Burnside | Diversified Resources, Inc. | Squaw | Gas w/ Oil Show | 2102 | ACTIVE | 39.155735 | -80.553405 |
| 23 | 4704101501 | Lewis | E Freeman | Pioneer Petroleum, Inc. | Squaw | Dry | 2100 | PLUGGED | 39.148850 | -80.567438 |
| 24 | 4704101630 | Lewis | W S Bennett | Dominion Energy Transmission, Inc. | Gantz | Storage | 2368 | PLUGGED | 39.138805 | -80.558116 |
| 25 | 4704101793 | Lewis | Burnside & Freeman | Stephen Gas Company | Benson | Gas w/ Oil Show | 4705 | ACTIVE | 39.134800 | -80.546980 |
| 26 | 4704101796 | Lewis | David A Caynor | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4755 | ACTIVE | 39.120305 | -80.549489 |
| 27 | 4704101900 | Lewis | Burnside & Freeman | Stephen Gas Company | Big Injun (Grnbr) | Oil and Gas | 1988 | ACTIVE | 39.135288 | -80.545022 |
| 28 | 4704102173 | Lewis | Woody Lumber Co Inc | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4746 | ACTIVE | 39.121756 | -80.543531 |
| 29 | 4704102303 | Lewis | Orpha D Waggoner | Dominion Energy Transmission, Inc. | Benson | Oil and Gas | 4777 | ACTIVE | 39.115810 | -80.550605 |
| 30 | 4704102309 | Lewis | J S Burnside | Dominion Energy Transmission, Inc. | not available | Gas | 2591 | PLUGGED | 39.148547 | -80.558619 |
| 31 | 4704102611 | Lewis | George C Francis | Dominion Energy Transmission, Inc. | not available | Storage | 2350 | ACTIVE | 39.134563 | -80.553587 |
| 32 | 4704102612 | Lewis | S Minter Heirs | Dominion Energy Transmission, Inc. | not available | Storage | 2273 | ACTIVE | 39.122481 | -80.551537 |
| 33 | 4704102613 | Lewis | Caroline Minter | Dominion Energy Transmission, Inc. | Hampshire Grp | Storage | 2622 | ACTIVE | 39.129052 | -80.546325 |

| 34 | 4704102615 | Lewis | Geo C Francis | Dominion Energy Transmission, Inc. | not available | Storage | 4 | ACTIVE | 39.132242 | -80.552842 |
|----|------------|-------|-------------------------|------------------------------------|-------------------|-----------------|----------|-----------|-----------|------------|
| 35 | 4704102662 | Lewis | Francis M McKinley | Hope Natural Gas Company | not available | not available | - | ABANDONED | 39.137318 | -80.554891 |
| 36 | 4704102663 | Lewis | Francis M McKinley | Dominion Energy Transmission, Inc. | not available | Storage | | ACTIVE | 39.135723 | -80.553401 |
| 37 | 4704102664 | Lewis | Francis M McKinley | Dominion Energy Transmission, Inc. | not available | Storage | - | ACTIVE | 39.138913 | -80.554147 |
| 38 | 4704102665 | Lewis | W S Bennett | Dominion Energy Transmission, Inc. | not available | Storage | | ACTIVE | 39.140653 | -80.555823 |
| 39 | 4704102666 | Lewis | Norman S Small | Dominion Energy Transmission, Inc. | Hampshire Grp | Storage | 2673 | ACTIVE | 39.135578 | -80.556380 |
| 40 | 4704102667 | Lewis | L E Gall | Dominion Energy Transmission, Inc. | not available | Storage | () (Q | ACTIVE | 39.137753 | -80.558243 |
| 41 | 4704102668 | Lewis | L E Gall | Dominion Energy Transmission, Inc. | not available | Storage | 1.4 | ACTIVE | 39.133376 | -80.559000 |
| 42 | 4704102670 | Lewis | B J & B E Rhoades | Dominion Energy Transmission, Inc. | Hampshire Grp | Observation | 2141 | ACTIVE | 39.127747 | -80.554703 |
| 43 | 4704102671 | Lewis | L E Gall | Dominion Energy Transmission, Inc. | not available | Storage | 11-2-1-1 | ACTIVE | 39.132532 | -80.557869 |
| 44 | 4704102770 | Lewis | Sheldon Minter | Dominion Energy Transmission, Inc. | undetermined unit | Storage | 2232 | ACTIVE | 39.124076 | -80.552840 |
| 45 | 4704102955 | Lewis | Zella Curry | Alliance Petroleum Co. LLC | Alexander | Gas | 5353 | ACTIVE | 39.155445 | -80.561414 |
| 46 | 4704102956 | Lewis | James E Elmer | Diversified Resources, Inc. | Alexander | Oil and Gas | 5431 | ABANDONED | 39.157911 | -80.552288 |
| 47 | 4704102966 | Lewis | Ralph Pitzer | Alliance Petroleum Co. LLC | Greenland Gap Fm | Oil and Gas | 5535 | ACTIVE | 39.154285 | -80.569982 |
| 48 | 4704103100 | Lewis | Marjorie Hyatt | Dominion Energy Transmission, Inc. | Big Injun (Grnbr) | Oil w/ Gas Show | 2075 | ACTIVE | 39.116970 | -80.549302 |
| 49 | 4704103173 | Lewis | Orpha Waggoner | Consolidated Gas Supply Corp. | Big Injun (Grnbr) | Dry | 2089 | PLUGGED | 39.117405 | -80.546510 |
| 50 | 4704103958 | Lewis | James W Wagner et al | Diversified Resources, Inc. | Greenland Gap Fm | Gas | 3131 | ACTIVE | 39.150370 | -80.550610 |
| 51 | 4704104722 | Lewis | W S Bennett | Dominion Energy Transmission, Inc. | Fifth | Gas | 2752 | PLUGGED | 39.140307 | -80.560812 |
| 52 | 4704104753 | Lewis | Allegheny Wood Products | Dominion Energy Transmission, Inc. | not available | not available | 1 | PLUGGED | 39.138043 | -80.550422 |
| 53 | 4704105165 | Lewis | J Todd Hatfield | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4910 | ACTIVE | 39.147469 | -80.554521 |
| 54 | 4704105481 | Lewis | Jerry Tomes | Diversified Resources, Inc. | Hampshire Grp | Oil and Gas | 3300 | ACTIVE | 39.154351 | -80.566871 |
| 55 | 4704130007 | Lewis | L E Gall | Hope Construction & Refining | not available | not available | 1 | PLUGGED | 39.129052 | -80.556751 |
| 56 | 4704130014 | Lewis | Stella Freeman Hrs | South Penn Oil Co. | Gordon Stray | Oil | 2778 | PLUGGED | 39.152835 | -80.564021 |
| 57 | 4704130020 | Lewis | S M Burnside | South Penn Oil Co. | Greenland Gap Fm | Oil and Gas | 3675 | PLUGGED | 39.151820 | -80.561972 |
| 58 | 4704130021 | Lewis | J L Freeman | Hope Natural Gas Company | Hampshire Grp | Oil and Gas | 3038 | PLUGGED | 39.155010 | -80.563649 |
| 59 | 4704130067 | Lewis | L O Stutler | Pittsburgh & WV Gas | Gordon | Oil and Gas | 2411 | PLUGGED | 39.129342 | -80.556751 |
| 60 | 4704130070 | Lewis | William Furley | Pittsburgh & WV Gas | Hampshire Grp | Gas | 2760 | PLUGGED | 39.143699 | -80.562714 |
| 61 | 4704130103 | Lewis | Earl Freeman | South Penn Oil Co. | Hampshire Grp | Oil | 2782 | PLUGGED | 39.151384 | -80.564765 |
| 62 | 4704130149 | Lewis | F M McKinley | Douglas, Septer W. | not available | not available | × | PLUGGED | 39.141669 | -80.546698 |
| 63 | 4704130201 | Lewis | J L Freeman | UNKNOWN TOTAL | not available | not available | | PLUGGED | 39.156170 | -80.563649 |
| 64 | 4704130208 | Lewis | Enn Bailey | Atha Supply Company | not available | not available | | PLUGGED | 39.141959 | -80.551726 |
| 65 | 4704130209 | Lewis | Jacob L Freeman Bros | South Penn Oil Co. | Gordon Stray | Oil and Gas | 2580 | PLUGGED | 39.156460 | -80.565381 |
| 66 | 4704130215 | Lewis | Lelía Grace | South Penn Oil Co. | Hampshire Grp | Oil | 2846 | PLUGGED | 39.144134 | -80.551402 |
| 67 | 4704130228 | Lewis | Chas A Coffindaffer | South Penn Oil Co. | Gordon | Oil | 2736 | PLUGGED | 39.157765 | -80.569853 |
| 68 | 4704130284 | Lewis | Francis M Mckinley | Hope Natural Gas Company | Hampshire Grp | Oil and Gas | 2821 | PLUGGED | 39.139493 | -80.545440 |
| 69 | 4704130289 | Lewis | John S Burnside | Hope Natural Gas Company | Hampshire Grp | Oil and Gas | 2818 | PLUGGED | 39.142829 | -80.552891 |

S

| 70 | 4704130356 | Lewis | William Moses | Moses, William | Gordon Stray | Oil | 2805 | PLUGGED | 39.157765 | -80.557000 |
|-----|------------|----------|----------------------|--|------------------|-----------------|---------|---------------|-----------|------------|
| 71 | 4704130427 | Lewis | Mrs Alona May Lowman | Bradford Supply Co. | Gordon Stray | Gas | 2702 | PLUGGED | 39.155880 | -80.567802 |
| 72 | 4704130428 | Lewis | Mrs Alona May Lowman | Bradford Supply Co. | Gordon Stray | Oil | 2594 | PLUGGED | 39.154430 | -80.565938 |
| 73 | 4704130468 | Lewis | J A Fox | Bradford Supply Co. | Hampshire Grp | Gas | 2850 | PLUGGED | 39.153995 | -80.552341 |
| 74 | 4704130499 | Lewis | J A Fox | South Penn Oil Co. | Hampshire Grp | Oil | 2793 | PLUGGED | 39.147614 | -80.547866 |
| 75 | 4704130578 | Lewis | Fortunatus White | Hope Natural Gas Company | Hampshire Grp | Gas | 2602 | PLUGGED | 39.117115 | -80.543159 |
| 76 | 4704130599 | Lewis | U A Morris | Bradford Supply Co. | Gordon Stray | Oil | 2707 | PLUGGED | 39.160086 | -80.565700 |
| 77 | 4704130620 | Lewis | J L Freeman | Hal Pack & Company | Hampshire Grp | Oil | 2619 | PLUGGED | 39.156750 | -80.569666 |
| 78 | 4704130628 | Lewis | Fortunatus White | Hope Natural Gas Company | not available | not available | 2702 | not available | 39.119580 | -80.539655 |
| 79 | 4704130693 | Lewis | Shelton Minter Hrs | Hope Natural Gas Company | Hampshire Grp | Gas | 2594 | PLUGGED | 39,124656 | -80.548745 |
| | | - | | WELLS ADDE | D 11/11/2021 | | | | | |
| 80 | 4703300335 | Harrison | C A Coffindaffer Hrs | Eastern Gas Transmission & Storage, Inc. | Fifth | Gas w/ Oil Show | 3000 | PLUGGED | 39.167929 | -80.576517 |
| 81 | 4703302754 | Harrison | Robert B Weiman | Tenmile Land, LLC | Alexander | Oil and Gas | 5389 | ACTIVE | 39.167058 | -80.574654 |
| 82 | 4703302755 | Harrison | Robert B Weiman | Tenmile Land, LLC | Alexander | Oil and Gas | 5520 | ACTIVE | 39.169816 | -80.572044 |
| 83 | 4703305812 | Harrison | John E Tyler | Diversified Resources, Inc. | UNKNOWN | not available | 1.0 | UNKNOWN | 39.167992 | -80.581201 |
| 84 | 4703330224 | Harrison | Luetta Bowen | South Penn Oil (S. Penn Nat. Gas) | Hampshire Grp | Oil and Gas | 2707 | PLUGGED | 39.167494 | -80.563286 |
| 85 | 4703331235 | Harrison | Minerva Walker | Bradford Supply Co. | Gordon Stray | Gas | 2778 | PLUGGED | 39.169381 | -80.567386 |
| 86 | 4703331569 | Harrison | Goynor Wise | Moses, William | Gordon Stray | Gas | 2778 | PLUGGED | 39.168655 | -80.565895 |
| 87 | 4703331798 | Harrison | Burgess Morris | Jackson, Richard C. | UNKNOWN | not available | - | PLUGGED | 39.166176 | -80.563155 |
| 88 | 4704100205 | Lewis | Flossie Riley | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Storage | 2361 | ACTIVE | 39.126554 | -80.538388 |
| 89 | 4704100343 | Lewis | E Haney | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Storage | 2312 | ACTIVE | 39.123351 | -80.556936 |
| 90 | 4704101296 | Lewis | E L Haney | UNKNOWN | Gantz | Storage | 2610 | PLUGGED | 39.124622 | -80.560098 |
| 91 | 4704101578 | Lewis | W A Booth | Diversified Resources, Inc. | Gordon | Gas | 2674 | ACTIVE | 39.157766 | -80.551356 |
| 92 | 4704101641 | Lewis | Jack E Waggoner | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 4703 | ACTIVE | 39.115955 | -80.543903 |
| 93 | 4704101761 | Lewis | William Burnside | Eastern Gas Transmission & Storage, Inc. | Benson | Gas | 4760 | ACTIVE | 39.114649 | -80.558796 |
| 94 | 4704101807 | Lewis | E L Hanley | Eastern Gas Transmission & Storage, Inc. | Benson | Storage | 4876 | ACTIVE | 39.122286 | -80.559783 |
| 95 | 4704101966 | Lewis | Brent Maxwell | Eastern Gas Transmission & Storage, Inc. | Gordon | Dry | 2896 | PLUGGED | 39.154711 | -80.578247 |
| 96 | 4704102184 | Lewis | M C Burnside | Eastern Gas Transmission & Storage, Inc. | Benson | Gas | 4848 | ACTIVE | 39.11755 | -80.535745 |
| 97 | 4704102303 | Lewis | Orpha D Waggoner | Eastern Gas Transmission & Storage, Inc. | Benson | Oil and Gas | 4777 | ACTIVE | 39.11581 | -80.550605 |
| 98 | 4704102579 | Lewis | Sarepta Nutter | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | 1 1-1-1 | ACTIVE | 39.130647 | -80.566062 |
| 99 | 4704102580 | Lewis | J R H Straley | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | - | ACTIVE | 39.132532 | -80.566249 |
| 100 | 4704102588 | Lewis | Minor J Hall | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Storage | 2350 | ACTIVE | 39.119866 | -80.561015 |
| 101 | 4704102603 | Lewis | W Burnside | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | | ACTIVE | 39.114351 | -80.557109 |
| 102 | 4704102605 | Lewis | T J Halterman | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | | ACTIVE | 39.120447 | -80.558783 |
| 103 | 4704102608 | Lewis | G W Waggoner | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Storage | 2296 | ACTIVE | 39.117979 | -80.555807 |

| OUR | CE: WVGES DAT | GES DATASET (2020) and WVDEP WEBSITE AND FIELD SURVEYS YELLOW DENOTES WELL WITH TVD > 4,500' | | 00' | GREEN DE | NOTES SURVEYED | WELLS | | | |
|-----|---------------|--|----------------------|--|---------------|----------------|-------|---------------|-----------|------------|
| 119 | 4704130486 | Lewis | Serepta Nutter | South Penn Oil (S. Penn Nat. Gas) | Hampshire Grp | Oil | 2914 | PLUGGED | 39.126151 | -80.561219 |
| 118 | 4704130469 | Lewis | Alice White | Bradford Supply Co. | Hampshire Grp | Oil | 2850 | PLUGGED | 39.143409 | -80.54539 |
| 117 | 4704130355 | Lewis | William Moses | Moses, William | Fifth | Oil | 2806 | PLUGGED | 39.158346 | -80.551973 |
| 116 | 4704130227 | Lewis | Ray & Delphia Holden | South Penn Oil (S. Penn Nat. Gas) | Hampshire Grp | Oil and Gas | 2932 | PLUGGED | 39.128036 | -80.56498 |
| 115 | 4704130109 | Lewis | F M McKinley | Federal Oil Co. | UNKNOWN | not available | 2909 | PLUGGED | 39.127456 | -80.55954 |
| 114 | 4704130076 | Lewis | Ray & Delphia Holden | South Penn Oil (S. Penn Nat. Gas) | Hampshire Grp | Oil | 2869 | PLUGGED | 39.129197 | -80.56419 |
| 113 | 4704105688 | Lewis | John E Tyler | Diversified Resources, Inc. | 1 2 | 1.0 | | NEVER DRILLED | 39.165574 | -80.58240 |
| 112 | 4704104976 | Lewis | Phillip Burnside | Mountain V Oil and Gas, Inc. | Alexander | Gas | 5600 | ACTIVE | 39.150804 | -80.57351 |
| 111 | 4704104784 | Lewis | Troy/D Rickles | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | not available | | PLUGGED | 39.141793 | -80.56701 |
| 110 | 4704103343 | Lewis | R B Weimann | Diversified Resources, Inc. | Benson | Oil and Gas | 5058 | ACTIVE | 39.166611 | -80.57799 |
| 109 | 4704102850 | Lewis | L E Gall et al | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | | ACTIVE | 39.135333 | -80.55890 |
| 108 | 4704102849 | Lewis | Francis McKinley | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | | ACTIVE | 39.136993 | -80.55471 |
| 107 | 4704102726 | Lewis | E W Wagonner | UNKNOWN | Hampshire Grp | Gas | 2435 | PLUGGED | 39.113199 | -80.55134 |
| 106 | 4704102697 | Lewis | J A Fox | Fluharty Enterprises, Inc. | UNKNOWN | not available | 14 M | XABANDONED | 39.15472 | -80.550106 |
| 105 | 4704102672 | Lewis | L E Gall | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | | ACTIVE | 39.129892 | -80.56216 |
| 104 | 4704102669 | Lewis | L E Gall | Eastern Gas Transmission & Storage, Inc. | UNKNOWN | Storage | | ACTIVE | 39.132532 | -80.56196 |

UPDATED 11/11/2021

Critice of Citil and Gas JUL 1 4 2022 MV Departmential Environmential Protection 4704105733

HG Energy II Appalachia, LLC

Site Safety Plan

Vaneck 1215 Well Pad 1451 Mare Run Road, Weston Lewis County, WV 26452

January 2022: Version 1

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

> RECEIVED Office of Oil and Gas

JUL 1 4 2022

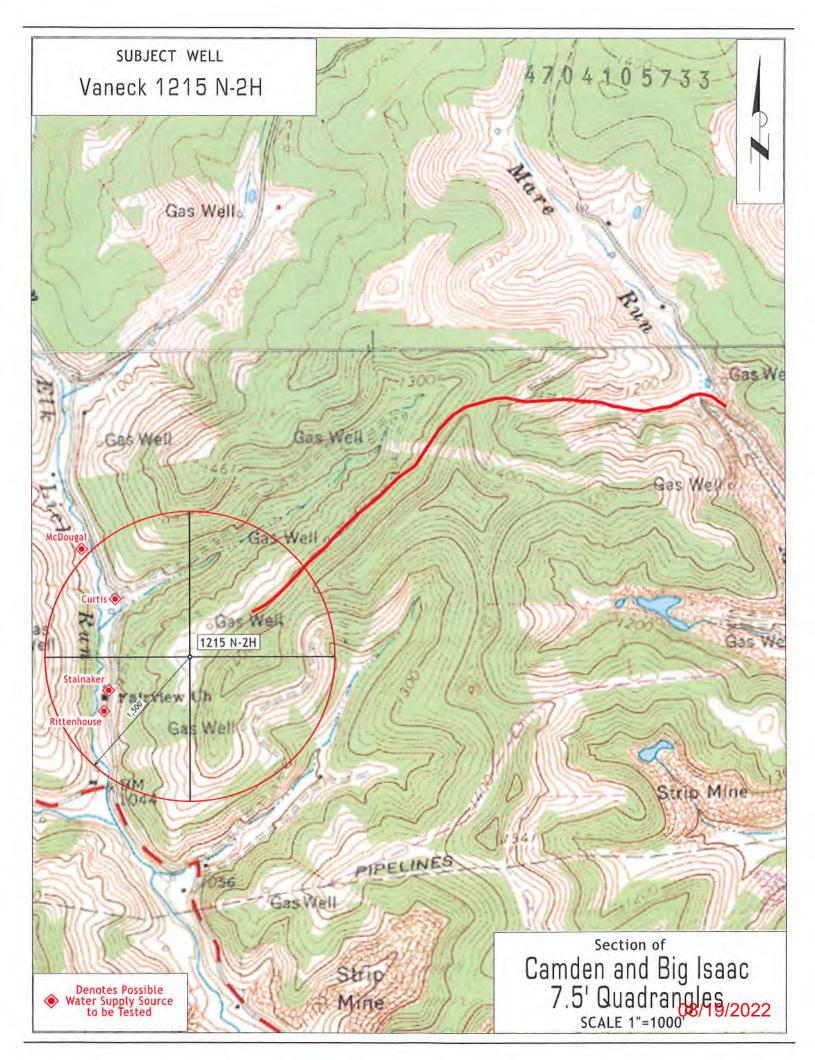
V.V Department of vironmental Protection

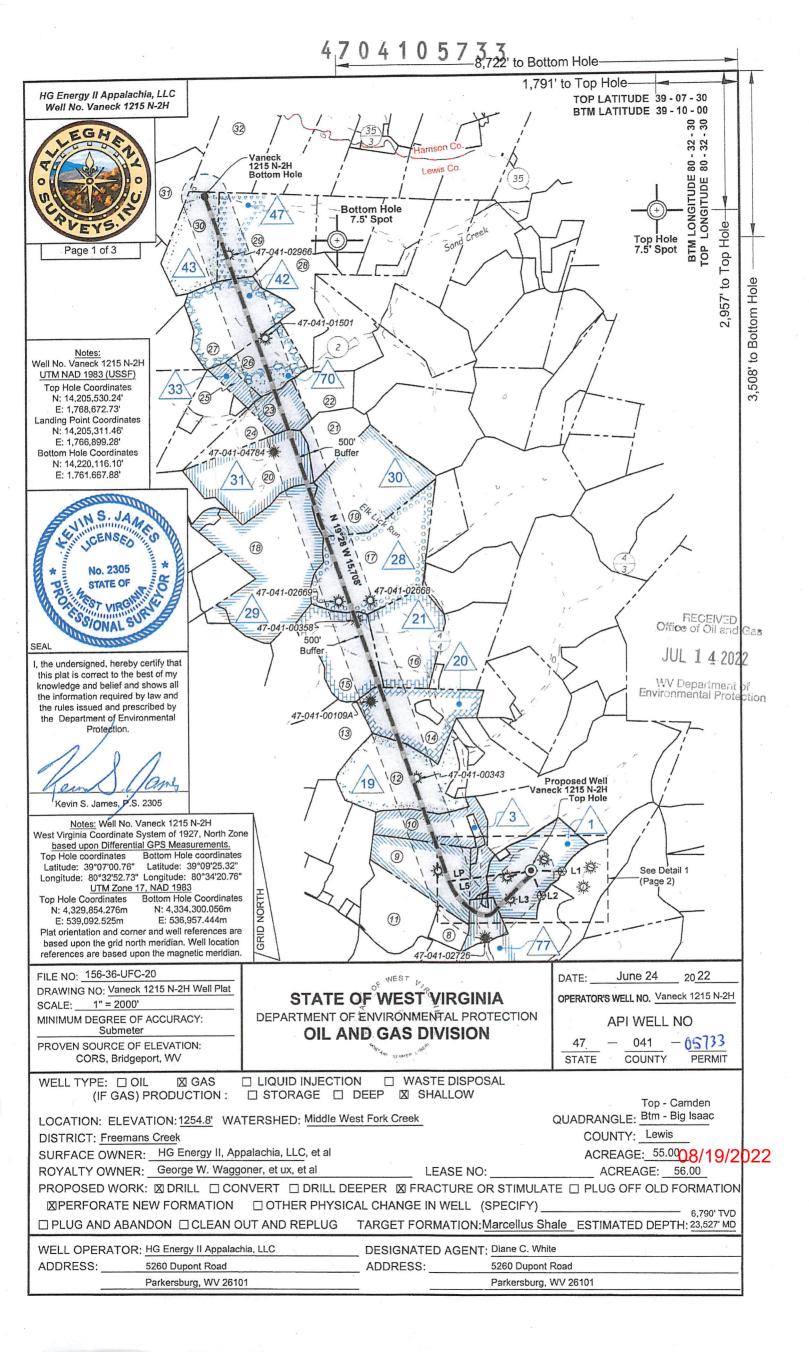
HG Energy II Appalachia, LLC

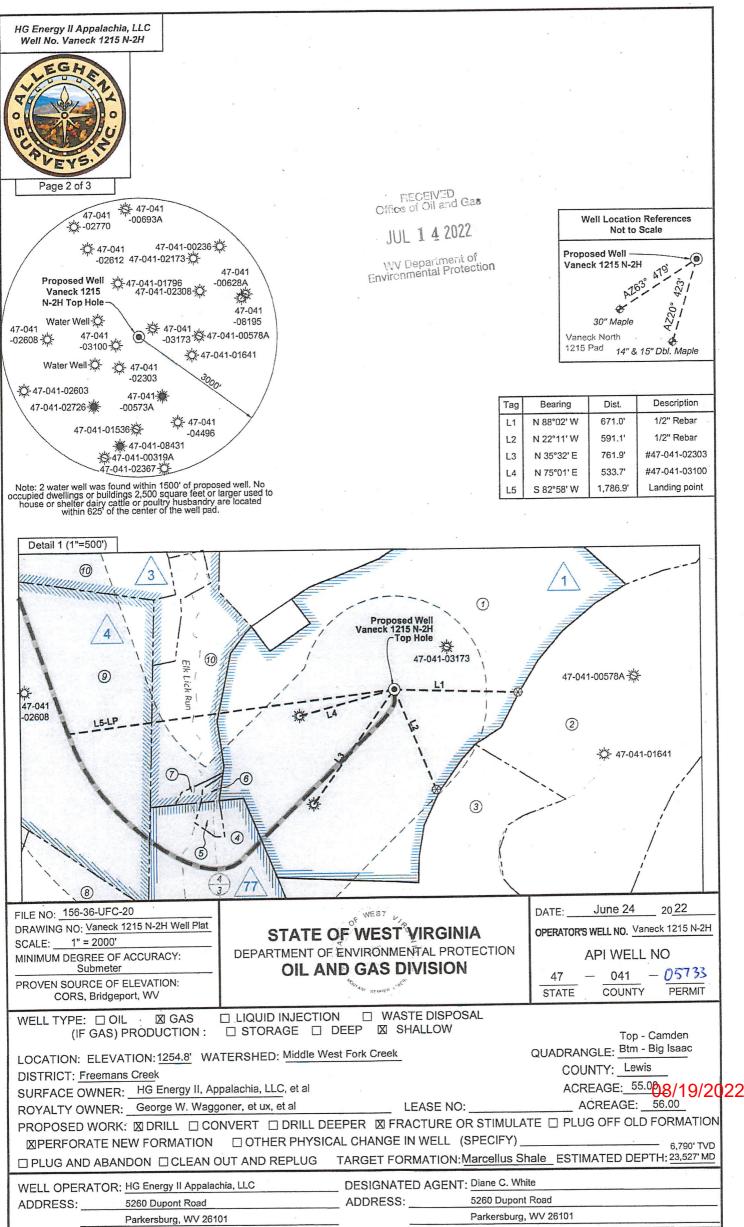
5260 Dupont Road

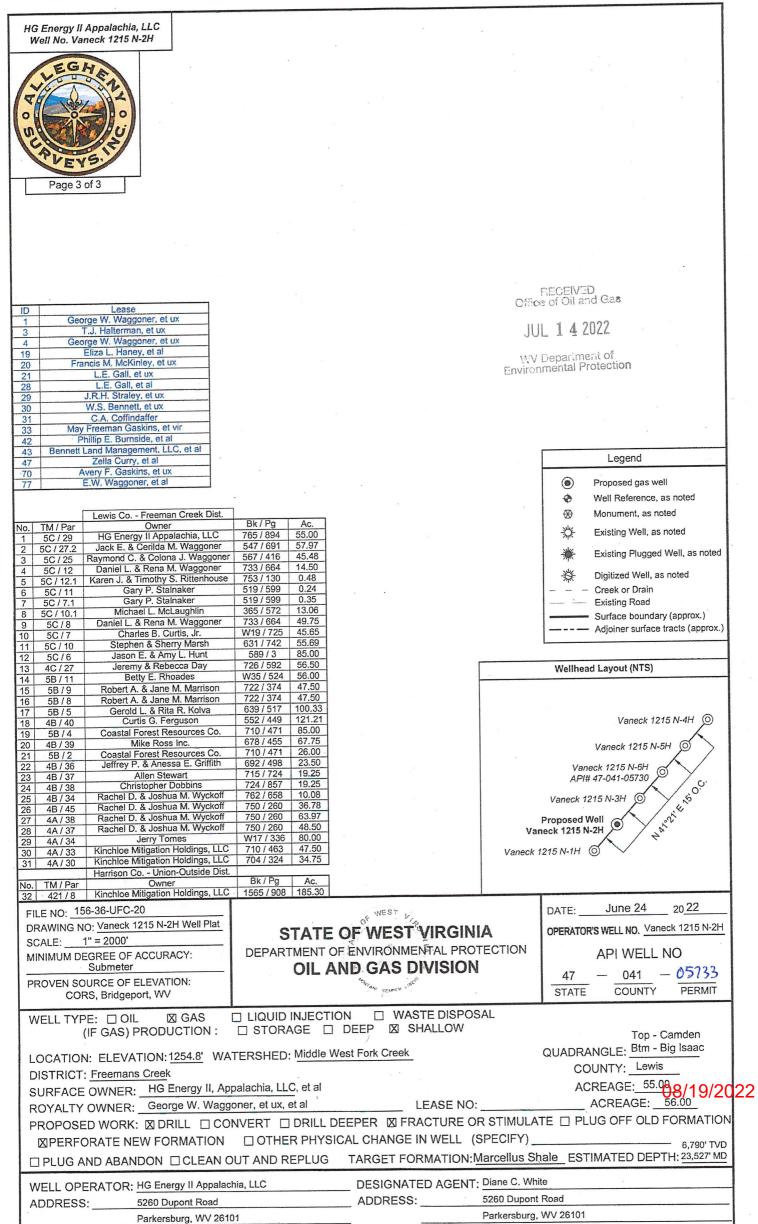
Parkersburg, WV 26101

5p.W 6.(30/2022

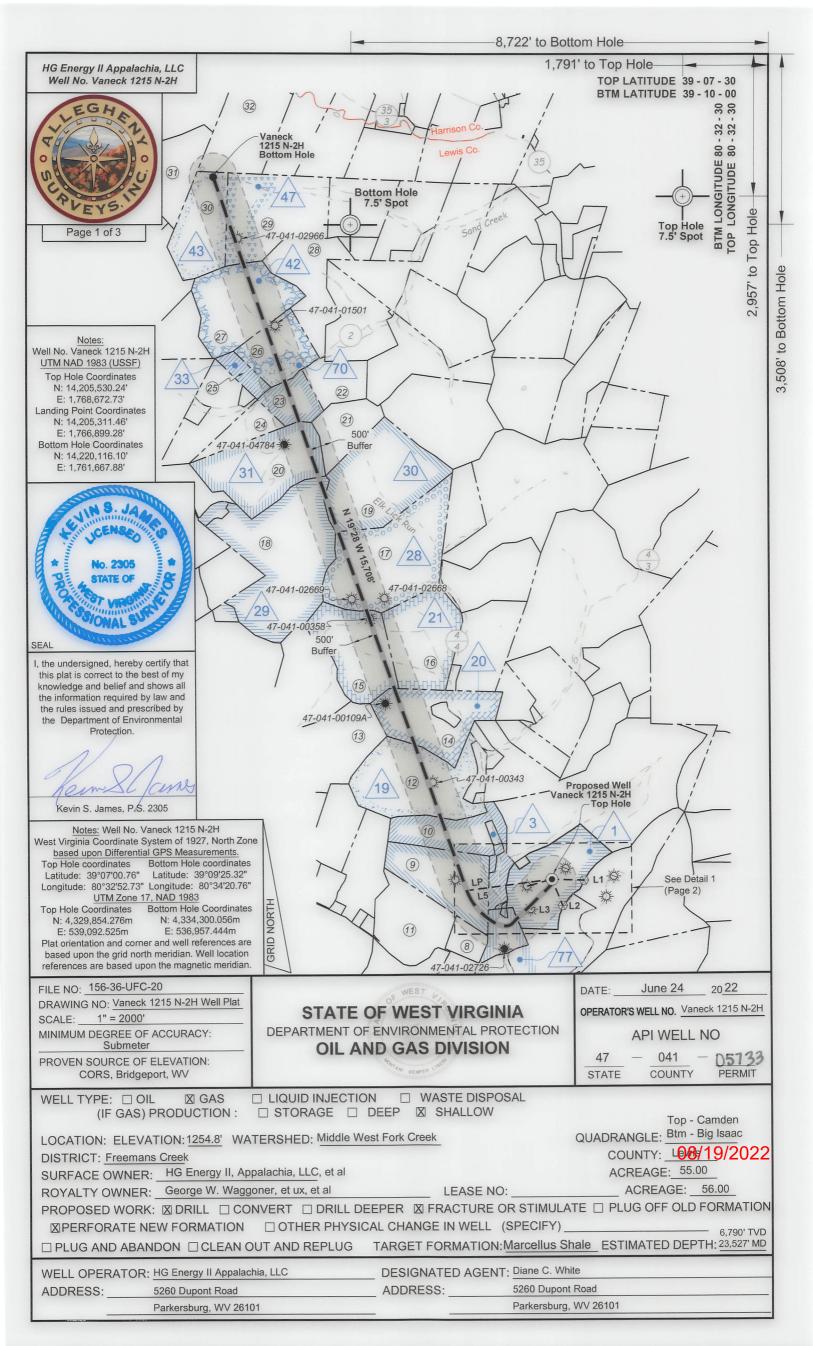


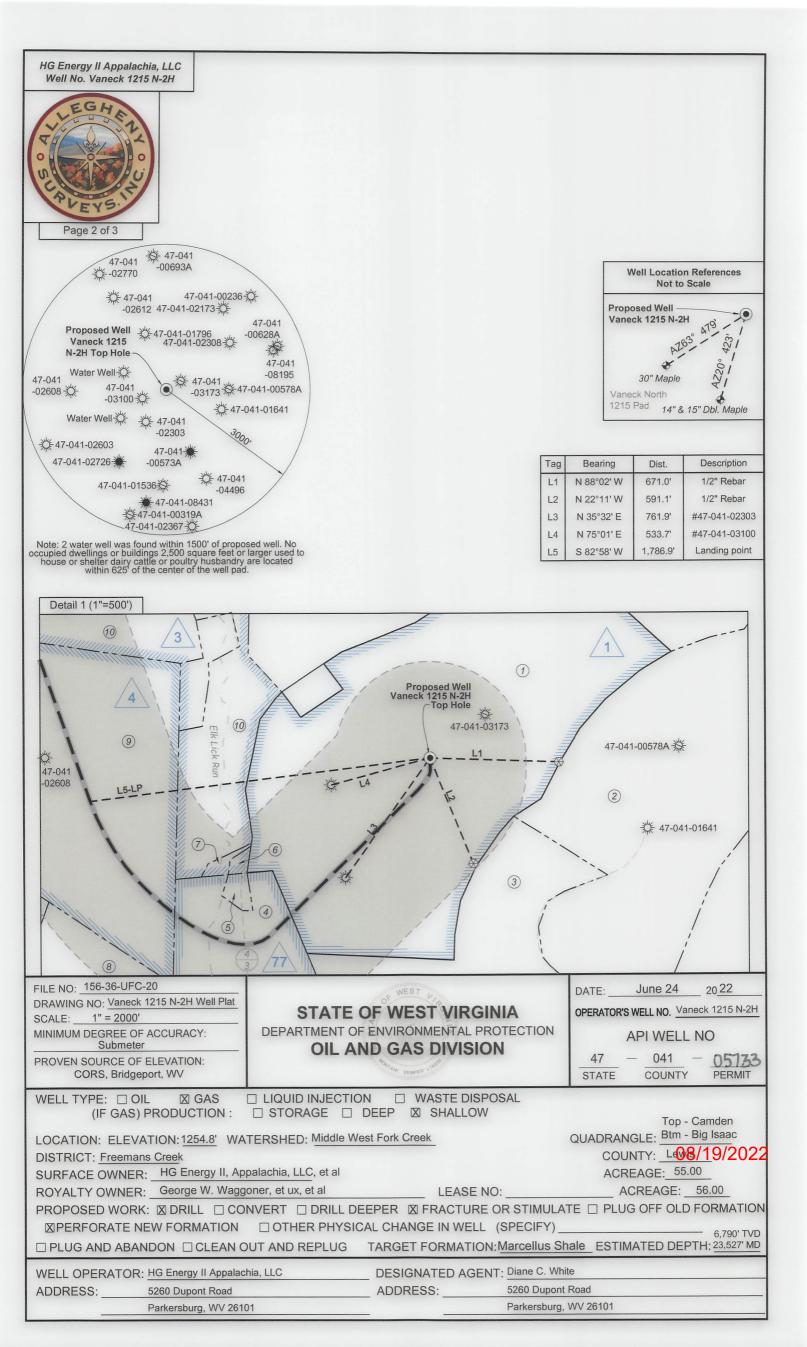






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| HG Energy II Appalachia, LLC Well No. Vaneck 1215 N-2H | | | |
|--|---|--|--|
| ID Lease 1 George W. Waggoner, et ux 3 T.J. Halterman, et ux 4 George W. Waggoner, et ux 19 Eliza L. Haney, et al 20 Francis M. McKinley, et ux 21 L.E. Gall, et ux 28 L.E. Gall, et al 29 J.R.H. Straley, et ux 30 W.S. Bennett, et ux 31 C.A. Coffindaffer 33 May Freeman Gaskins, et vir 42 Phillip E. Burnside, et al 43 Bennett Land Management, LLC, et al 47 Zella Curry, et al 70 Avery F. Gaskins, et ux 77 E.W. Waggoner, et al Lewis Co Freeman Creek Dist. No. TM / Par Owner 1 5C / 29 HG Energy II Appalachia, LLC 2 5C / 27.2 Jack E. & Cerilda M. Waggoner 3 5C / 12 Marond C. & Colona J. Waggoner 3 5C / 12 Daniel L. & Rena M. Waggoner 3 5C / 11 <th>Bk / Pg Ac. 765 / 894 55.00 547 / 691 57.97 567 / 416 45.48 733 / 664 14.50 753 / 130 0.48 519 / 599 0.24 519 / 599 0.35 365 / 572 13.06 733 / 664 49.75 W19 / 725 45.65 631 / 742 55.69</th> <th></th> <th>Legend ● Proposed gas well ◆ Well Reference, as noted ※ Monument, as noted ※ Existing Well, as noted ※ Existing Plugged Well, as noted ※ Digitized Well, as noted ※ Digitized Well, as noted … Creek or Drain … Surface boundary (approx.) … Adjoiner surface tracts (approx.)</th> | Bk / Pg Ac. 765 / 894 55.00 547 / 691 57.97 567 / 416 45.48 733 / 664 14.50 753 / 130 0.48 519 / 599 0.24 519 / 599 0.35 365 / 572 13.06 733 / 664 49.75 W19 / 725 45.65 631 / 742 55.69 | | Legend ● Proposed gas well ◆ Well Reference, as noted ※ Monument, as noted ※ Existing Well, as noted ※ Existing Plugged Well, as noted ※ Digitized Well, as noted ※ Digitized Well, as noted … Creek or Drain … Surface boundary (approx.) … Adjoiner surface tracts (approx.) |
| 12 5C / 6 Jason E. & Amy L. Hunt 13 4C / 27 Jeremy & Rebecca Day 14 5B / 11 Betty E. Rhoades 15 5B / 9 Robert A. & Jane M. Marrison 16 5B / 8 Robert A. & Jane M. Marrison 17 5B / 5 Gerold L. & Rita R. Kolva 18 4B / 40 Curtis G. Ferguson 19 5B / 4 Coastal Forest Resources Co. 20 4B / 39 Mike Ross Inc. 21 5B / 2 Coastal Forest Resources Co. 22 4B / 30 Jeffrey P. & Anessa E. Griffith 23 4B / 37 Allen Stewart 24 4B / 34 Rachel D. & Joshua M. Wyckoff 26 4B / 45 Rachel D. & Joshua M. Wyckoff 27 4A / 38 Rachel D. & Joshua M. Wyckoff 28 4A / 37 Rachel D. & Joshua M. Wyckoff 29 4A / 33 Kinchloe Mitigation Holdings, LLC 30 4A / 30 Kinchloe Mitigation Holdings, LLC | 589 / 3 85.00 726 / 592 56.50 W35 / 524 56.00 722 / 374 47.50 639 / 517 100.33 552 / 449 121.21 710 / 471 85.00 678 / 455 67.75 710 / 471 26.00 692 / 498 23.50 715 / 724 19.25 722 / 658 10.08 750 / 260 36.78 750 / 260 48.50 W17 / 336 80.00 710 / 463 47.50 | | Wellhead Layout (NTS) Vaneck 1215 N-4H O Vaneck 1215 N-5H O Vaneck 1215 N-6H API# 47-041-05730 C. Vaneck 1215 N-3H O Proposed Well Vaneck 1215 N-2H O |
| | DEPARTMENT O OIL A | | DATE: June 24 20.22 OPERATOR'S WELL NO. Vaneck 1215 N-2H API WELL NO 47 041 05733 STATE COUNTY PERMIT |
| LOCATION: ELEVATION: <u>1254.8</u> ' WA DISTRICT: <u>Freemans Creek</u> SURFACE OWNER: <u>HG Energy II, App</u> ROYALTY OWNER: <u>George W. Waggo</u> | oalachia, LLC, et al oner, et ux, et al NVERT | LEASE NO: LEASE NO: EEPER X FRACTURE OR S CAL CHANGE IN WELL (SPE | TIMULATE 🗆 PLUG OFF OLD FORMATIO |
| WELL OPERATOR: HG Energy II Appalact ADDRESS: 5260 Dupont Road Parkersburg, WV 2610 | | | ne C. White 50 Dupont Road rkersburg, WV 26101 |

WW-6A1 (5/13) Operator's Well No. Vaneck 1215 N-2H

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 A | Appalachia, L | LC | |
|----------------|----------------|---------------|-------|--|
| By: | Diane White | Diane | White | |
| Its: | Accountant | | | |
| | | | | |

Page 1 of _____

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JUL 1 4 2022

WV Department of Environmental Protection

HG Energy II Appalachia, LLC Vaneck 1215 N-2H Lease Chain

| | LEGACY LEASE | | | | | | | |
|-------------|--------------|---------------------|--------------|---|--|-----------------------------------|-----------|------|
| 1215N Tract | NUMBER | ΤΑΧ ΜΑΡ | LEASE NUMBER | GRANTOR/LESSOR | GRANTEE/LESSEE | ROYALTY | DEED BOOK | PAGE |
| | | | | GEO. W. WAGGONER AND ROSA M. WAGGONER, HIS WIFE | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | NOT LESS THAN 1/8 | 73 | |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 85 | |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 125 | |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | DEED | 125 | 37 |
| M | | | | PITTSBURG AND WEST VIRGINIA GAS COMPANY | EQUITABLE GAS COMPANY | ASSIGNMENT | 216 | 18 |
| | | | | EQUITABLE GAS COMPANY AND PHILADELPHIA OIL COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 246 | 19 |
| N | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 1 |
| | | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| S | | | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| O 1 | FK051509 | 03-005C-0027-0001 | Q100665000 | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 1 |
| | | 03-005C-0029-0000 | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 5 |
| Anne, | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | 84 |
| 4 | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | |
| * | | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 1 |
| 0 | | | | DOMINON TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | 49 |
| 4 | | | | | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | 55 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | 22 |
| | | | | T. J. HALTERMAN AND S. A. HALTERMAN, HIS WIFE | E. W. BOYD | NOT LESS THAN 1/8 | 35 | |
| | | | | E. W. BOYD | S. E. BARRETT | ASSIGNMENT | 30 | 36 |
| | | | | S. E. BARRETT | LOUIS BENNETT | ASSIGNMENT (50%) | 36 | 51 |
| | | | | LOUIS BENNETT | J. M. GUFFEY AND JNO. H. GALEY | ASSIGNMENT | 44 | 57 |
| | | | | S. E. BARRETT | J. M. GUFFEY AND JNO. H. GALEY | ASSIGNMENT | 44 | |
| | | | | J. M. GUFFEY AND JNO. H. GALEY | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | ASSIGNMENT (50%) | 44 | 58 |
| | | | | J. M. GUFFEY AND JOHN H. GALEY | F. N. BARNSDALL | ASSIGNMENT | 46 | 39 |
| | | | | F. N. BARNSDALL | F. L. BARTLETT | ASSIGNMENT | 46 | |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 85 | |
| | | | | LOUIS BENNETT | CRUDE OIL COMPANY | ASSIGNMENT | 92 | |
| | | | | CRUDE OIL COMPANY, A WV CORP | THE CRUDE OIL COMPANY, A OHIO CORP | ASSIGNMENT | 105 | |
| | | | | THE CRUDE OIL COMPANY | THE FEDERAL OIL & GAS COMPANY | ASSIGNMENT | . 100 | |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 125 | 37 |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | DEED | 125 | 37 |
| | | | | FRANCIS H. BEAM, SPECIAL MASTER FOR THE FEDERAL OIL AND GAS | | | | |
| | | | | COMPANY | A. E. MACINTOSH | DEED | 141 | |
| | | | | A. E. MACINTOSH | SEPTER W. DOUGLAS | ASSIGNMENT | 142 | 43 |
| | | 03-005C-0007-0000 | | ELIZABETH H. DOUGLAS, EXECUTRIX OF THE ESTATE OF SEPTER W. | | | | |
| | | 03-005C-0007-0001 | | DOUGLAS | ALFRED D. BARNES | ASSIGNMENT | 171 | |
| 3 | FK051508 | 03-005C-0007-0002 | Q100429000 | ALFRED D. BARNES AND MARION K. BARNES, HIS WIFE | OIL CITY TRUST COMPANY | ASSIGNMENT | 172 | 35 |
| | | 03-005C-0007-0003 | | ALFRED D. BARNES AND MARION K. BARNES, HIS WIFE; AND OIL CITY | | | | |
| | | 03-005C-0011-0000 · | | TRUST COMPANY - | HOPE NATURAL GAS COMPANY | DEED | 172 | 35 |
| | 1 | | | PITTSBURG AND WEST VIRGINIA GAS COMPANY | EQUITABLE GAS COMPANY | ASSIGNMENT | 216 | |
| | | | | EQUITABLE GAS COMPANY AND PHILADELPHIA OIL COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 246 | |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | 8 |

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| M | | | | | | | | |
|----|----------|--|--|--|--|---------------------------------------|----------|-----|
| | 1 | i •0 | JUL 1 4 2022 WV Department of Environmental Protection | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
| ~ | | ත් ආ | uria ∼ | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| 7 | | | 2022 Protect | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| 2 | | Es | ية ماريخ (C | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| _ | | | 7 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| 0 | | 80 | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | 848 |
| | | <u><u><u></u></u> <u></u> <u></u> <u></u> し し の た の</u> | Jee J | | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | 1 |
| • | | -8 | | CNX GAS COMPANY LLC | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 170 |
| 4 | | Cífi ce la c | | NOBLE ENERGY, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | 1/0 |
| 0 | | J S | | DOMINON TRANSMISSION, INC. | DUMINION ENERGY TRANSMISSION, INC. | SECOND AMENDMENT TO MEMORANDUM OF | VV V 303 | |
| 2 | | | L L | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | 499 |
| | | | | | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| 4 | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | 558 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | 220 |
| | | | | GEO. W. WAGGONER AND R. M. WAGGONER, HIS WIFE | E. W. BOYD | NOT LESS THAN 1/8 | 35 | 236 |
| | | | | E. W. BOYD | S. E. BARRETT | ASSIGNMENT | 30 | 369 |
| | 1 | | | S. E. BARRETT | LOUIS BENNETT | ASSIGNMENT (50%) | 36 | 517 |
| | 1 | | | S. E. BARRETT | J. M. GUFFEY AND JNO. H. GALEY | ASSIGNMENT | 44 | 569 |
| | | | | LOUIS BENNETT | J. M. GUFFEY AND JNO. H. GALEY | ASSIGNMENT | 44 | 571 |
| | | | | J. M. GUFFEY AND JNO. H. GALEY | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | ASSIGNMENT | 44 | 583 |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 85 | 141 |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURGH AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 125 | 379 |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURG AND WEST VIRGINIA GAS COMPANY | DEED | 125 | 371 |
| | | | | PITTSBURGH AND WEST VIRGINIA GAS COMPANY | EQUITABLE GAS COMPANY | ASSIGNMENT | 216 | 185 |
| | | | | EQUITABLE GAS COMPANY AND PHILADELPHIA OIL COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 246 | 192 |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | 89 |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
| 4 | FK051507 | 03-005C-0008-0000 | Q100757000 | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| 1 | | | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | FK051507 | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| | | | | 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 |
| | | | | | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 170 |
| | | | | NOBLE ENERGY, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | DOMINON TRANSMISSION, INC. | DUMINION ENERGY TRANSMISSION, INC. | SECOND AMENDMENT TO MEMORANDUM OF | ***505 | |
| | | | | DOMINION ENTROY TRANSMISSION INC | | FARMOUT AGREEMENT | 723 | 499 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | THIRD AMENDMENT TO MEMORANDUM OF | 725 | 499 |
| | | | | | | 1 | 724 | 558 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT ASSIGNMENT (68%) | 734 | 220 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGT II APPALACHIA, LLC | ASSIGNMENT (08%) | /30 | 220 |
| | 1 | | | | | | | |
| | | | | ELIZA L. HANEY AND J. W. HANEY, HER HUSBAND, MARY B. EATON | | | | |
| | | | | AND T. R. EATON, HER HUSBAND, EMMA J. ATKINSON AND LEANDER | | | | |
| | | | | ATKINSON, HER HUSBAND, NELLIE K. FORE AND HARRY C. FORE, HER | | | | |
| | | | | HUSBAND, ELSIE STEWART AND CLAUD STEWART, HER HUSBAND, | | | | |
| | | | | ORIS CAMP, HUSBAND OF GARNETT CAMP, AND ORIS CAMP, | | | | |
| | | | 1 | GUARDIAN FOR GARNETTE CAMP AND OLIN WARREN | HOPE NATURAL GAS COMPANY | NOT LESS THAN 1/8 | 144 | 428 |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | 89 |
| | | ľ | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
| | | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| 40 | FV040000 | 02.0050.0000.0000 | 010000000 | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| 19 | FK049880 | 03-005C-0006-0000 | Q100660000 | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| | | | 1 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| | | | | | | | | 848 |

| | | qD | 2022 Protec | | T | | 717 | |
|----|----------|--|---------------------|--|--|--|-------|---|
| | | RECEIVED of Oil and | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | |
| | | <u>j</u> | tal 4 | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | WVSOS | |
| • | | o la | E G G | DOMINON TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | wvs0s | |
| > | | <u>ب</u> | JUL 1 <u>4</u> 2022 | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT | 723 | |
| | | õ | Zir. | | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | <u>ل</u> | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | | 734 | |
| 1 | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | | |
| | | · | | FRANCIS M. MCKINLEY AND M. E. MCKINLEY, HIS WIFE | J. M. GUFFEY AND JOHN H. GALEY | NOT LESS THAN 1/8 | 44 | |
| | | | | J. M. GUFFEY AND JOHN H. GALEY | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | ASSIGNMENT | 73 | |
| 1 | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURGH AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 125 | |
| | | | | PITTSBURGH AND WEST VIRGINIA GAS COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 174 | |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | |
| | | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| | | 03-005B-0011-0000 03-005B-0011-0001 | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | |
| 20 | FK056566 | | Q100775000 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | |
| | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | |
| | | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | |
| | | | | DOMINON TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | |
| | | | | | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | |
| | | | | L. E. GALL AND HENRIETTA GALL, HIS WIFE | HOPE NATURAL GAS COMPANY | NOT LESS THAN 1/8 | 58 | |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | |
| | | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| | | | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | |
| | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | |
| | | 03-005B-0007-0000 | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | _ |
| 21 | FK004388 | 03-005B-0008-0000 | Q100456000 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | |
| | | 03-005B-0009-0000 | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | |
| | | | | DOMINION TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | |
| | | | | L. E. GALL AND HENRIETTA GALL, HIS WIFE; AND J. L. GALL AND MARY | | | | - |
| | | | | | SOUTHERN OIL COMPANY | NOT LESS THAN 1/8 | 40 | |
| | | | | E. GALL, HIS WIFE J. N. BARNSDALL AND SOUTHERN OIL OCMPANY | FRED S. RICH | DEED | 46 | |
| | | | | | GEORGE H. CORNWALL AND JOHN M. REED | ASSIGNMENT (12.5%) | 46 | |
| | | | | FRED S. RICH AND M. B. RICH, HIS WIFE | OLONGE H. CONTAVALLAND JOHN W. REED | | | |
| | | 1 | | FRED S. RICH AND M. B. RICH, HIS WIFE, GEORGE H. CORNWALL AND | | | | |
| | 1 | | | MARY D. CORNWALL, HIS WIFE, J. M. REED AND ELLA REED, HIS | | | | |
| | | | | WIFE, (PARTNERS AS FRED S. RICH & CO.) AND W. I. GOBEL AND L. M. | | ASSIGNMENT | 52 | |
| | | | | GOBEL, HIS WIFE | | | 55 | |
| | | | | CRUDE OIL COMPANY | | ASSIGNMENT | 55 | |
| | | 1 | 1 | CRUDE OIL COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 294 | |
| | 1 | 1 | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 234 | |

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| , M | | ı | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
|-----|-----------|-----------------------|-----------------|---|--|-----------------------------------|-------|--------|
| | | | 0400044000 | CONSOLIDATED GAS SUPPLY CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| 28 | FK056564 | 03-005B-0005-0000 | Q100344000 | CONSOLIDATED GAS TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | wvsos | |
| വ | | | | CNG TRANSMISSION CORPORATION | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| | | | | DOMINION TRANSMISSION, INC. | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| 0 | | | 5 | CNX GAS COMPANY LLC | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | 848 |
| | | 60 เบ้ | Ť. t | DOMINION TRANSMISSION, INC. | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | 1 |
| | | 6 | 2022 Protect | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 170 |
| 4 | | 62 | 20 20 | DOMINION TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | wvsos | |
| 0 | | | | DOMINION TRANSMISSION, INC. | DOMINION ENERGY MANSMISSION, INC. | SECOND AMENDMENT TO MEMORANDUM OF | | |
| • | | 병양 | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | 499 |
| | | E D | 09 | DOMINION ENERGY INCOMINSION, INC. | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| 7 | | 100 | JUL | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | 558 |
| | | Cillon Cillon | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | 220 |
| | | | <u> </u> | J. R. H. STRALEY AND LILLIE STRALEY, HIS WIFE | SOUTH PENN OIL COMPANY | NOT LESS THAN 1/8 | 33 | 199 |
| | | | | SOUTH PENN OIL COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 85 | 127 |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | 89 |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
| | | 1 | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| | | | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | ······ |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| | FK064974 | 03-004B-0040-0000 | Q100559000 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| 29 | FK065438 | 03-004B-0040-0001 | Q100983000 | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | 848 |
| 29 | FK002595 | 03-004B-0025-0001 | Q100454000 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | 1 |
| | PK002595 | p/o 03-004B-0018-0000 | Q100434000 | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 170 |
| | | | | DOMINON TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | 499 |
| | | | | DOMINION EVENOT INANSMISSION, INC. | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | 558 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | 220 |
| | l | | | W. S. BENNETT AND A. V. BENNETT, HIS WIFE | THE LEWIS OIL COMPANY | NOT LESS THAN 1/8 | 44 | 6 |
| | | | | THE LEWIS OIL COMPANY | J. M. GUFFEY AND JNO. H. GALEY | ASSIGNMENT | 44 | 562 |
| | | | | THE LEWIS OIL COMPANY | J. M. GUFFEY AND JNO. H. GALEY | ASSIGNMENT | 46 | 399 |
| | | | | J. M. GUFFEY AND JNO. H. GALEY | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | ASSIGNMENT | 73 | 318 |
| | | | | THE PHILADELPHIA COMPANY OF WEST VIRGINIA | PITTSBURGH AND WEST VIRGINIA GAS COMPANY | ASSIGNMENT | 125 | 379 |
| | | | | THE PITTSBURGH AND WEST VIRGINIA GAS COMPANY | HOPE NATURAL GAS COMPANY | ASSIGNMENT | 174 | 231 |
| | | | | HUNTER M. BENNETT AND MADGE BENNETT, HIS WIFE; GUFFEY OIL | | | | |
| | | | | AND GAS ROYALTIES, INC.; AND JOSEPH SHIBEN AND MINNIE SHIBEN, | | | | |
| | | | | HIS WIFE | HOPE NATURAL GAS COMPANY | NOT LESS THAN 1/8 | 235 | 105 |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | 89 |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
| | FK056568 | | Q100345000 | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | |
| 30 | FK065934 | 03-005B-0004-0000 | Q100987000 | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | 110000001 | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| | | | | 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 |
| | | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 170 |
| | | | | DOMINION TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | 1 | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | 499 |
| | 1 | | | | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | 558 |

N

| | 1 1 | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | | |
|----|---|---------------------------------------|--|--|--|-----------------------------------|-------------------|-----|--|
| | | | | C. A. COFFINDAFFER, SINGLE | HOPE NATURAL GAS COMPANY | NOT LESS THAN 1/8 | 187 | | |
|) | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | | |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | | |
| • | | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | | |
| | | | 1 | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | 9 | | |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | | |
| • | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | | |
| | EK058573 | | 1 | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | 712 | | |
| 31 | | 03-004B-0039-0000 | Q100284000 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | | |
| 0 | T LETIGIIO437 | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | | |
| • | Q097910000 pp CNX260713000 FEE CNX260718000 FEE | · | | DOMINON TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | | |
| 9 | | 5 | 5 | | | SECOND AMENDMENT TO MEMORANDUM OF | · | | |
| • | | | - ⁵ 5 | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | | |
| | | | 2022 Protect | DOMINION ENERGY TRANSMISSION, INC. | | THIRD AMENDMENT TO MEMORANDUM OF | | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | | |
| | | | 4 2022 artment of tai Protection | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | | |
| | | <u></u> | | MAY FREEMAN GASKINS AND AVERY E. GASKINS, HER HUSBAND | HOPE NATURAL GAS COMPANY | NOT LESS THAN 1/8 | 185 | | |
| | | | JUL JUL Environment | | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | | |
| | | ; | JUL | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SOFTED CONFORMATION | ASSIGNMENT | 425 | | |
| | | i i i i i i i i i i i i i i i i i i i | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS | | |
| | | 5 | | CONSOLIDATED GAS TRANSMISSION CORPORATION | | MERGER/NAME CHANGE | WVSOS | | |
| | | | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MEMORANDUM OF FARMOUT AGREEMENT | 672 | | |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | | |
| | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | | 712 | _ | |
| 33 | FK058144 | 03-004B-0034-0000 | Q100679000 | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. | PARTIAL ASSIGNMENT (32%) | | | |
| 55 | 11050111 | 03-004B-0037-0000 | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | | |
| | 33 FK058144 | | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | |
| | | | | DOMINION TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | | |
| | | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | | |
| | | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | |
| | | | | | | THIRD AMENDMENT TO MEMORANDUM OF | | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | | |
| 70 | Q097910000 | p/o 03-004A-0038-0001 | Q097910000 | AVERY F GASKINS ET UX | CNX GAS COMPANY LLC | DEED | 748 | | |
| | | | | PHILLIP E. BURNSIDE | MOUNTAIN V OIL AND GAS COMPANY INC | NOT LESS THAN 1/8 | 595 | | |
| | 0.0000000000000000000000000000000000000 | | 01000000 | JOHN ROBERT CURREY AND VIRGINIA Y. CURREY, HIS WIFE | MOUNTAIN V OIL AND GAS COMPANY INC | NOT LESS THAN 1/8 | 595 | | |
| 42 | | 03-004A-0038-0000 | Q102226000 | MOUNTAIN V OIL AND GAS INC | CNX GAS COMPANY LLLC | ASSIGNMENT | 685 | | |
| | CNX260/18000 FEE | p/o 03-004B-0045-0000 | Q102225000 | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 717 | | |
| | | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | | |
| | | | | ZELLA CURRY AND H.O. CURRY, HER HUSBAND; AND ETHEL F. CURRY, | | | | | |
| | | | | WIDOW | E. DAVISSON HARDMAN | NOT LESS THAN 1/8 | 386 | | |
| | | | | E. DAVISSON HARDMAN | J. ROBERT HORNOR | ASSIGNMENT | 387 | | |
| | | | | J. ROBERT HORNOR | STONEWALL GAS COMPANY | ASSIGNMENT | 389 | | |
| | | | | | | | | | |
| | | | | STONEWALL GAS COMPANY | STONEWALL 80-2 JOINT VENTURE AND MOUNTAIN GAS 80-2 | ASSIGNMENT | 389 | | |
| | | | | | | | | | |
| | | | | STONEWALL 80-2 JOINT VENTURE AND MOUNTAIN GAS 80-2, ET AL | MOUNTAIN INCOME I LIMITED PARTNERSHIP | ASSIGNMENT (0.08007817) | 517 | | |
| | | | | STONEWALL 80-2 JOINT VENTURE AND MOUNTAIN GAS 80-2, ET AL | STONEWALL GAS COMPANY | ASSIGNMENT (0.0360762) | 517 | | |
| 47 | CNX109475000 | p/o 03-004A-0034-0000 | CNX109475000 | MOUNTAIN INCOME I LIMITED PARTNERSHIP | STONEWALL GAS COMPANY | ASSIGNMENT (0.00160160) | 532 | | |
| | | | | | | 1 1 | | | |
| | | | | MOUNTAIN INCOME I LIMITED PARTNERSHIP | DOMINION APPALACHIAN DEVELOPMENT PROPERTIES, LLC | ASSIGNMENT (0.07847660) | 533 | | |
| | | | | | | + | | | |
| | | | | | | | | | |

| I . | 1 1 | | | | | 1 | | |
|-----|-----------|---|-----------|--|---|-----------------------------------|-------|------------|
| | | | | DOMINION APPALACHIAN DEVELOPMENT PROPERTIES INC | DOMINION APPALACHIAN DEVELOPMENT PROPERTIES LLC | MERGER/NAME CHANGE | 10 | 38 |
| | | | | DOMINION APPALACHIAN DEVELOPMENT PROPERTIES, LLC | CNX GAS COMPANY LLC | MERGER/NAME CHANGE | 9 | 471 |
| | | | | CNX GAS COMPANY LLC | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 776 | 976 |
| | HGII02026 | | HGII02026 | BENNETT LAND MANAGEMENT LLC | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 776 | 517 |
| 43 | HGII02044 | 03-004A-0033-0000 | HGI102044 | KINCHELOE MITIGATION HOLDINGS LLC | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 777 | 750 |
| | FK053264 | 03-0056-0012-0000 03-0056-0013-0000 03-0056-0017-0000 03-0056-0024-0000 p/o 03-0056-0025-0000 | | E. W. WAGGONER; GEO. W. WAGGONER AND R. M. WAGGONER, HIS | | | | |
| | | | | WIFE; AND HARRIET E. BURNSIDE, WIDOW | RESERVE GAS COMPANY | NOT LESS THAN 1/8 | 68 | 516 |
| | | | | RESERVE GAS COMPANY | HOPE NATURAL GAS COMPANY | MERGER/NAME CHANGE | 155 | 202 |
| | | | | HOPE NATURAL GAS COMPANY | CONSOLIDATED GAS SUPPLY CORPORATION | CONFIRMATORY DEED | 294 | 89 |
| | | | | CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 | 127 |
| | | | | CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | 51 | 795 |
| | | | | CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | 9 | 628 |
| | | | | DOMINION TRANSMISSION, INC. | CNX GAS COMPANY LLC | MEMORANDUM OF FARMOUT AGREEMENT | 672 | 154 |
| | | | | CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 684 | 57 |
| 77 | | | | 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 |
| | | | | NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 722 | 170 |
| | | | | DOMINION TRANSMISSION, INC. | DOMINION ENERGY TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS | |
| | | | | | | SECOND AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 723 | 499 |
| | | | | · · · · · · · · · · · · · · · · · · · | | THIRD AMENDMENT TO MEMORANDUM OF | | |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | FARMOUT AGREEMENT | 734 | 558 |
| | | | | DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 | 558 220 |

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wy Department of ion FECENTD C28 JUL 1 \$ 2022



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

4704105733

June 29, 2022

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

RE: Drilling Under Roads – Vaneck 1215 N-2H Freemans Creek District, Lewis County West Virginia

Dear Mr. Blevins -

HG Energy II Appalachia, LLC, is submitting the attached application for a new well work permit for the Vaneck 1215 well pad. As an authorized representative, I certify HG Energy II Appalachia, LLC, has the right to drill, stimulate, extract, produce and market the oil, gas or condensate for all leases through which the Vaneck 1215 laterals will drill through including any and all roads crossed under as identified on the attached survey plat.

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

Very truly yours,

Diane White

Diane C. White

Enclosures

RECEIVED Office of Oil and Gas

JUL 1 4 2022

NV Department of Environmental Protection

STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE CERTIFICATION</u>

Date of Notice Certification: 07/05/2022

| API No. 47- | - |
|--------------------|----------------------|
| Operator's Well N | o. Vaneck 1215 N-2H |
| Well Pad Name: | Vaneck 1215 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: | West Virginia | UTM NAD 83 Easting: | 539083.4 |
|-------------|------------------------|---------------------------|---------------------------|
| County: | Lewis | Northing: | 4329862.4 |
| District: | Freemans Creek | Public Road Access: | Mare Run Road / CR 10 / 9 |
| Quadrangle: | Camden WV 7.5's | Generally used farm name: | Vaneck |
| Watershed: | Middle West Fork Creek | | |

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

| Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification | |
|--|------------------------|
| that the Operator has properly served the required parties with the following: | OOG OFFICE USE |
| *PLEASE CHECK ALL THAT APPLY | ONLY |
| □ 1. NOTICE OF SEISMIC ACTIVITY or ■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED | RECEIVED/ NOT REQUIRED |
| ■ 2. NOTICE OF ENTRY FOR PLAT SURVEY or □ NO PLAT SURVEY WAS CONDUCTED | |
| ■ 3. NOTICE OF INTENT TO DRILL or □ NOTICE NOT REQUIRED BECAUSE | RECEIVED/ |
| NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or | NOT REQUIRED |
| U WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) | |
| 4. NOTICE OF PLANNED OPERATION FIECEIVED Office of Oil and Cas Office of Oil and Cas | |
| JUL 1 4 2022 | |
| 6. NOTICE OF APPLICATION V.V. Experimental Protection Environmental Protection | |

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:

| HG II Appalachia, LLC | Address: | 5260 Dupont Road |
|-------------------------|--|--|
| Diane White Diane White | | Parkersburg, WV 26101 |
| Agent | Facsimile: | 304-863-3172 |
| 304-420-1119 | Email: | dwhite@hgenergyllc.com |
| Sub | scribed and sw | orn before me this 5th day of July, 2022 |
| | Diane White Diane White Agent 304-420-1119 | Diane White Diane White Agent Facsimile: 304-420-1119 Email: |

3

2022

| Oil and Gas Privacy N | otice: |
|-----------------------|--------|
|-----------------------|--------|

STATE OF WEST VIRGINIA

NOTARY PUBLIC CASSIDY A. BOARDMAN

5301 13th Ave Vienna, WV 26105

My Commission Expires July 31, 2022

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 <u>depprivacyofficer@wv.gov</u>.

My Commission Expires

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JUL 1 4 2022

Envir inmenital Protection

Notary Public

4704105733

API NO. 47-OPERATOR WELL NO. Vaneck 1215 N1H - S12H Well Pad Name: Vaneck 1215

A

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: 01/17/2022 Date Permit Application Filed: 01/25/22 Notice of:

| | PERMIT FOR AN WELL WORK | | FICATE OF APPROVAL FOR THE TRUCTION OF AN IMPOUNDMENT OR PIT |
|------|----------------------------|--------------------------|---|
| Deli | ivery method pursu | ant to West Virginia (| Code § 22-6A-10(b) |
| | PERSONAL SERVICE | REGISTERED MAIL | METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION |
| Purs | suant to W. Va. Code | § 22-6A-10(b) no later t | han the filing date of the application, the applicant for a permi |

nit 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:

| ☑ SURFA | CE OWNER(s) K Not noticed as 50 | urface , | | OWNER OF | R LESSEE | | RECEIVED |
|----------|---|----------|----------------|-------------------|---------------------|-----------------------|--|
| Name: | HG Energy II Appalachia, LLC (pad and road) | operator | Name: <u>N</u> | A | | 0 | files of Oil and Gas |
| Address: | 5260 Dupont Road | | Address: | | | _ | _ |
| | Parkersburg, WV 26101 | | | | | | JUL 1 4 2022 |
| Name: | | | COAL | OPERATOR | ٤. | | |
| Address: | | | Name: N | A . | | <u></u> | VV Department of renmental Protection |
| | | | Address: | | | Envi | renmental Protection |
| USURFA | CE OWNER(s) (Road and/or Other Dist | urbance) | | | | | _ |
| Name: | Nancy Hayhurst | | USURFA | CE OWNE | R OF WATEF | R WELL | |
| Address: | 195 Rexroad Drive | | AND/OR | WATER PU | JRVEYOR(s) | | |
| | Weston, WV 26452 | | Name: | Charles Curtis | Gary Stalnaker | Timothy Rittenhouse | - |
| Name: | Woody Lumber Company | | Address: | 377 Elk Lick Road | 179 Elk Lick Road | 1729 R Freemans Creek | _ |
| Address: | 201 Vicksburg Road | | | Weston, WV 26452 | Weston, WV 26452 | Weston, WV 26452 | |
| | Buckhannon, WV 26201 | | OPERA | TOR OF A | NY NATURA | L GAS STOR | AGE FIELD |
| I SURFA | CE OWNER(s) (Impoundments or Pits) | | Name: | Dominion Energ | y Transmission - At | tn: Ronald Waldren | |
| Name: | | | Address: | 925 White Oak | s Blvd | | - |
| Address: | · · · · · · · · · · · · · · · · · · · | | ••• | Bridgeport, W | / 26330 | | _ |
| | | | *Please a | ttach additio | nal forms if no | ecessary | |

OPERATOR WELL NO. Vageets 1215 N1H - 51211 Well Pad Name: Vaneck 1215

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 <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

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



OPERATOR WELL NO. Vaneck 1215 N1H-S12H Well Pad Name: Vaneck 1215

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 Office of Oil and Gas

JUL 1 4 2022

WV Department of Environmental Protection

08/19/2022

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.

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OPERATOR WELL NO. Vaneck 1215 N1H-S12H Well Pad Name: Vaneck 1215

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-

<u>Permits/Pages/default.aspx</u> 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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NV Department of Environmental Protection

4704105733

API NO. 47-____ OPERATOR WELL NO. Vaneck 1215 N1H-S12H Well Pad Name: Vaneck 1215

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: | 304-863-2172 | |

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 <u>depprivacyofficer@wv.gov</u>.

| 12 | OFFICIAL SEAL |
|-------|------------------------|
| 12 . | NOTARY PUBLIC |
| 1 65 | STATE OF WEST VIRGINIA |
| 5 3 | Mark J Schall |
| 1 6 | HG Energy LLC |
| 1: 1* | 5260 DUPONT ROAD |
| 10 | |
| 12 | PARKERSBURG WV 26105 |

| Subscribed and sworn before me this 17th day of Januar | , 2022 |
|--|---------------|
| Calle | Notary Public |
| My Commission Expires 11/2/2026 | |

RECEIVED Officer of Onland Gas

JUL 1 4 2022

WV Department of Environmental Protection

Time Limits and Methods for Filing Comments.

4704105733

OPERATOR WELL NO. Vaneck 1215 N1H - S12H Well Pad Name: Vaneck 1215

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-

<u>Permits/Pages/default.aspx</u> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

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

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

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

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

RECEIVED Office of OIL and Gas

JUL 1 4 2022

IVV Deparation of Environmental Protection

4704105733

API NO. 47-_____ OPERATOR WELL NO. Vaneck 1215 N1H-S12H Well Pad Name: Vaneck 1215

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: | 304-863-2172 | |

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OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA Mark J Schall HG Energy LLC 5260 DUPONT ROAD PARKERSBURG WV 26105 USSION FXPIRES NOVEMBER 2, 202

2022 Subscribed and sworn before me this 17th day of January Notary Public 11/2/2026 My Commission Expires

Office of Office of Ges

JUL 1 4 2022

WV Department of Environmental Protection

4704105733



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

January\19, 2022

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

RE: Vaneck 1215 N-1H – S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Sir -

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

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

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

Very truly yours,

Diane White

Diane C. White

Enclosures

DENENTED Office of Officed Gas

JUL 1 4 2022

WV Department of Environmental Protection



4704105733

January\19, 2022

Timothy Rittenhouse 1729 R Freeman's Creek Weston, WV 26452

RE: Vaneck 1215 N-1H – S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Sir -

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

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Very truly yours,

Diane White

Diane C. White

Enclosures

RECEIVED Office of Oil and Gas

JUL 1 4 2022

MV Department of Environmental Protection



4704105733

January\19, 2022

Gary Stalnaker 179 Elk Lick Road Weston, WV 26452

RE: Vaneck 1215 N-1H – S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Sir -

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

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

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Very truly yours,

Diane White

Diane C. White

Enclosures

RECEIVED Office of Oil and Gas

JUL 1 4 2022

Constants Protection



4704105733

January\19, 2022

Charlie Curtis 377 Elk Lick Road Weston, WV 26452

RE: Vaneck 1215 N-1H – S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Sir -

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

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

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

Very truly yours,

Diane White

Diane C. White

Enclosures

RECEIVED Office of Oil and Gas

JUL 1 4 2022

WV Department of Environmental Protection





January\19, 2022

Woody Lumber Company 201 Vicksburg Road Buckhannon, WV 26201

RE: Vaneck 1215 N-1H – S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Sir -

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

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

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

Very truly yours,

Diane White

Diane C. White

Enclosures

RECEIVED Office of Oil and Gas

JUL 1 4 2022

WV Depailment of Environmental Protection



4704105733

January\19, 2022

Nancy Hayhurst 195 Rexroad Drive Weston, WV 26452

RE: Vaneck 1215 N-1H – S-12H Well Work Permit Applications - Notification Freemans Creek District, Lewis County West Virginia

Dear Ms. Hayhurst -

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

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

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

Very truly yours,

Diane White

Diane C. White

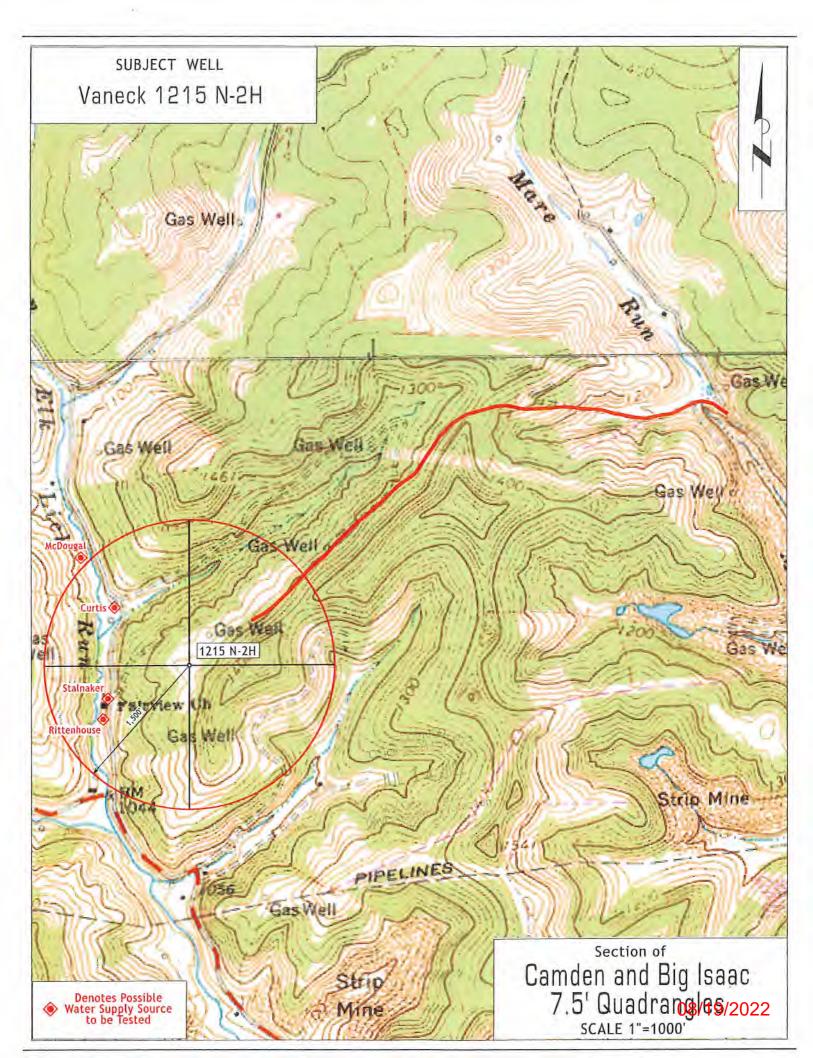
Enclosures

RECEIVED Office of Oil and Gas

JUL 1 4 2022

WV Department of Environmental Protection





WW-6A3 (1/12)

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

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry
Date of Notice: 12/29/2021
Date of Planned Entry: 01/05/2022

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

| D PERSON. | AL 🗌 REGISTERED | METHOD OF DELIVERY THAT REQUIRES A |
|-----------|-----------------|------------------------------------|
| SERVICE | MAIL | RECEIPT OR SIGNATURE CONFIRMATION |

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

Notice is hereby provided to: * Notice not given to Surface Owner as 50 is also the Operator

| SUR | FACE OWNER(s) | COAL OWNER OR LESSEE | | |
|---|-----------------------|--|--|--|
| Name: HG Energy II Appalachia, LLC (pad, road, royalty owner) | | Name: NA | | |
| Address: | 5260 Dupont Road | Address: | | |
| | Parkersburg, WV 26101 | | | |
| Name: | | MINERAL OWNER(s) | | |
| Address: | | | | |
| | | Name: ** See Atlached List | | |
| Name: | | Address: | | |
| Address: | | | | |
| | | *please attach additional forms if necessary | | |

Notice is hereby given:

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

| State: | West Virginia | Approx. Latitude & Longitude: | 39.117104 & 80.547833 | |
|-------------|-----------------|-------------------------------|------------------------|---|
| County: | Lewis | Public Road Access: | Mare Run Road / SR 19 | |
| District: | Freeman's Creek | Watershed: | Middle West Fork River | _ |
| Quadrangle: | Camden WV 7.5' | Generally used farm name: | Vaneck | _ |
| | | | | |

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

| Notice is here | by given by: | 3 | | | Office of Office Cas |
|----------------|------------------------------|---|------------|-----------------------|--------------------------|
| | HG Energy II Appalachia, LLC | | Address: | 5260 Dupont Road | |
| Telephone: | 304-420-1119 | | | Parkersburg, WV 26101 | JUL 1 4 2022 |
| Email: | dwhite@hgenergyllc.com | - | Facsimile: | 304-863-3172 | |
| | | | | | Environmental Protection |

Oil and Gas Privacy Notice:

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December 29, 2021

RE: Vaneck 1215 N-1H thru S-12H Freeman's Creek District, Lewis County West Virginia

Dear Royalty Owner

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

Pursuant to WV Code Chapter 22B, Article 6, you are receiving copies of this correspondence because you are an owner of mineral rights on one or more of the underlying leases impacted by this well (s). Statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WVDEP at 304-926-0450, located at 601 57th Street, Charleston, WV. Copies of such documents or additional information related to horizontal drilling may also be obtained by visiting the WV DEP online.

No action on your part is required. If you have any questions or comments regarding this permit application, you may call this office at (304) 420-1119. Questions concerning lease issues may be directed to Mark Schall at 304-420-1115. Address inquiries should be directed to Bethanne Wilson at 304-370-3246.

Very truly yours,

Diane White

Diane C. White

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JUL 1 4 2022

V.V Department of Environmental Protection

08/19/2022

Enclosures

Marjorie W Hyatt & Linda C Weekley 2908 Macon St. South Charleston, WV 25303

Betty Craft 120 E. 7th St. Weston, WV 26452

Kimberly Diana Byrd Trustee For Benefit of Kelly Ann Byrd 512 Jackson Ave. E. Hampton, SC 29924

Mark R. Fitzpatriek 958 McCanns Run Rd. Jane Lew, WV 26378

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

Mary Kemper Gum / 47 Meade St. Buckhannon, WV 26201

Linda Rose O'Hara 402 Thackery Ave. Catonsville, MD 21228

Joseph C. Waggoner 8892 US Hwy. 33 W. ~ Camden, WV 26338

Michael Lynn Small 456 Gaston Manor Rd. Jane Lew, WV 26378

William Everett Hamrick 1224 Trappe Road Street, MD 21154 Bertha F. Benedum 604 Mare Run Rd. Weston, WV 26452

Patrick A. Nies / 571 Deer Hill Rd. Sykesville, MD 21784

John E. Determan & Carolyn S. Determan 302 Copley Rd. Weston, WV 26452

Jane E. Horn 958 McCanns Run Rd. Jane Lew, WV 26378

Michael Ross PO Box 219 Coalton, WV 26257-0219

Richard Clay Hamrick / 7 Westferry Ct. Savannah, GA 31411

Linda Lou Waggoner / 24 Queen Eleanor Dr. Elkton, MD 21921

Mary Kay Small Justice 931 Beech Dr. Greenwood, IN 46142

Sharon Lea Small Senk-24 Fairview Ave. Ellington, CT 06029

Janet Rose Dawson 1744 Castleton Road Darlington, MD 21034 J. Kent Burnside 645 Mare Run Rd. Weston, WV 26452

Mary Katherine Hull / 1000 Maplewood Dr. Apt. 3102 Bridgeport, WV 26330

William L. Perry, Jr. & Hilda R. Perry 93 Riverview Hts. Weston, WV 26452

Joan E. Burnside Anderson PO Box 863 Blairsden, CA 96103

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

Steven Jay Hamrick 12104 Foley St. Silver Spring, MD 20902

Jack E. Waggoner / 1450 Kent Rd. Essex, MD 21221

Bea Ann Small Wilfong 543 Lee Burke Rd. Front Royal, VA 22630

Dorsey Frazier Hamrick, Jr. 105 Mitchell Rd. Airville, PA 17302

Alice Faye McQueen 401 Winslow Drive Bel Air, MD 21015 08/19/2022 Elizabeth Carol Brown 84 Schoolhouse Lane Windsor, PA 17366

Tina Louise Hamrick 17104 Indian Grass Drive Germantown, MD 20874

Delores E. Small / 105 Howard St. Clarksburg, WV 26301

J.P. Morgan Chase Bank, Trustee For Will E. Morris Heirs P.O. Box 659 Wichita Falls, TX 76307

Appalachian Royalties, Inc. PO Drawer 1917 Clarksburg, WV 26301 Barbara Jean Evans 1944 Franklin Church Road Darlington, MD 21034

Raymond C. Waggoner 7305 Church Ave. Pittsburg, PA 15202

Edward Earl Garrett / 2151 Rush Run Rd. Weston, WV 26452

Phillip E. Burnside 3 Briarwood Ter. Fairmont, WV 26554 Vickie Lynn Erickson 515 Evans Street Perryville, MD 21903

Margaret J. Morley 4429 Francis Younge Way Hollywood, SC 29449

J.P. Morgan Chase Bank, Trustee For S. Austin Smith and C. Burke-Morris P.O. Box 659 Wichita Falls, TX 76307

Bruce Hall Garrett, Trustee for Helen Garrett, et al. 1326 Freemans Creek Rd. Camden, WV 26338

John Kent Burnside 645 Mare Run Rd. Weston, WV 26452

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JUL 1 4 2022

WV Department of Environmental Protection

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

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: 01/17/2022 Date Permit Application Filed: 01/27/2022

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

| HAND | CERTIFIED MAIL |
|----------|--------------------------|
| DELIVERY | 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): * Notice not sent as Surface Dwiner is also Operator

| Name: | HG Energy II Appalachia, LLC | Name: |
|----------|------------------------------|----------|
| Address: | 5260 Dupont Road | Address: |
| | Parkersburg, WV 26101 | |

Notice is hereby given:

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

| State: | West Virginia | Easting Easting | 539089.4 |
|-------------|------------------------|-------------------------|--------------------------|
| County: | Lewis | UTM NAD 83 Northin | g; 4329869.2 |
| District: | Freemans Greek | Public Road Access: | Mare Run Road/ CR 10 / 9 |
| Quadrangle: | Camden WV 7.5' | Generally used farm nam | e: Vaneck |
| Watershed. | Middle West Fork Creek | | |

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Notice is hereby given by:

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

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Vev Lepatricator Environmental Protection

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:
 01/18/2022

 Date Permit Application Filed:
 01/27/2022

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) * Certified notice not sent as Surface Dwner is also the Operator

| (at the aut | field in the records of the sheriff a | . are thing of homesy. |
|-------------|---------------------------------------|------------------------|
| Name: | HG Energy II Appalachia, LLC | Name: |
| Address: | 5260 Dupont Road | Address: |
| | Parkersburg, WV 26101 | |

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 | 117111110 00 | Easting: | 539089.4 |
|-------------|------------------------|---------------------|------------|---------------------------|
| County: | Lewis | UTM NAD 83 | Northing: | 4329869.2 |
| District: | Freemans Creek | Public Road Access: | | Mare Run Road / CR 10 / 9 |
| Quadrangle: | Camden WV 7.5' | Generally used | farm name: | Vaneck |
| 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 <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

| Well Operator: | HG Energy II Appalachia, LL | 19 Parkersburg, WV 26101 | | | |
|----------------|-----------------------------|--------------------------|-----------------|-----------------------|--|
| Telephone: | 304-420-1119 | | de destante i . | Parkersburg, WV 26101 | |
| Email: | dwhite@hgenergylic.com | Diane White | Facsimile: | 304-863-3172 | |

Oil and Gas Privacy Notice:

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

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

D. Alan Reed, P.E. State Highway Engineer Jimmy Wriston, P. E. Secretary of Transportation Commissioner of Highways

December 27, 2021

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 Vaneck 1215 Pad, Lewis County Vaneck 1215 N-2H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #07-2021-0333 which has been issued to HG Energy II Appalachia, LLC for access to the State Road for a well site located off Lewis County Route 10/9 SLS MP 1.40.

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. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Jary K. Clayton

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

Cc: Diane White HG Energy II Appalachia, LLC CH, OM, D-6 File

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E.E.O./AFFIRMATIVE ACTION EMPLOYER

HG Energy II Appalachia, LLC List of Frac Additives by Chemical Name and CAS # Vaneck 1215 Well Pad (N-1H to N-6H, S-7H to S-12H)

| Chemical Name | CAS # | Multiple CAS #'s |
|-----------------------------|------------|------------------|
| | | |
| Pro Shale Slik 405 | Mixture | 68551-12-2 |
| | | 7647-14-5 |
| | | 12125-02-9 |
| | | 64742-47-8 |
| Pro Hib II | Mixture | 68412-54-4 |
| | | 68607-28-3 |
| | | 107-21-1 |
| | | 111-76-2 |
| | | 67-56-1 |
| | | 107-19-7 |
| | | |
| Silica Sand and Ground Sand | Mixture | 14808-60-7 |
| | | 1344-28-1 |
| | | 1309-37-1 |
| | | 13463-67-7 |
| Hydrochloric Acid 22 DEG BE | 7647-01-0 | |
| PROGEL - 4.5 | 64742-96-7 | |
| | | |
| BIO CLEAR 2000 | Mixture | 25322-68-3 |
| | | 10222-01-2 |
| SCALE CLEAR SI 112 | 107-21-1 | |
| | | |
| PROBREAK 4 | Mixture | 57-50-1 |
| | | 107-21-1 |
| Sulfamic Acid | 5329-14-6 | |
| PRO - Flow - 102-N | Mixture | 67-63-0 |
| | | 68439-45-2 |
| | | 2687-96-9 |
| PROGEL - 4 | 9000-30-0 | |
| FNOGEL - 4 | 19000-30-0 | |

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