



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, May 3, 2023
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit Modification Approval for VANECK 1215 S-11H
47-041-05741-00-00

Lateral Extension/ Casing Revision

HG ENERGY II APPALACHIA, LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

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

James A. Martin
Chief

Operator's Well Number: VANECK 1215 S-11H
Farm Name: HG ENERGY II, APPALACHIA, LLC, ET AL
U.S. WELL NUMBER: 47-041-05741-00-00
Horizontal 6A New Drill
Date Modification Issued: 05/03/2023

Promoting a healthy environment.

05/05/2023

4704105741

WW-6B
(04/15)

API NO. 47- _____ - _____
OPERATOR WELL NO. Vaneck 1215 S-11H
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 II Appalachia, LLC 494519932 Lewis Freeman Camden 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Vaneck 1215 S-11H Well Pad Name: Vaneck 1215

3) Farm Name/Surface Owner: HG Energy II Appalachia, LLC Public Road Access: Mare Run Rd at CR 10 / 9

4) Elevation, current ground: 1259' Elevation, proposed post-construction: 1254.8'

5) Well Type (a) Gas Oil _____ Underground Storage _____
Other _____
(b) If Gas Shallow Deep _____
Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus at 7015'/7088' and 73' in thickness. Anticipated pressure at 4314#.

8) Proposed Total Vertical Depth: 7,040'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 32,433'

11) Proposed Horizontal Leg Length: 24,205'

12) Approximate Fresh Water Strata Depths: 60', 214', 600', 861'

13) Method to Determine Fresh Water Depths: Nearest offset well data, (47-041-02173, 0693, 0236, 2308, 0578)

14) Approximate Saltwater Depths: 1605'

15) Approximate Coal Seam Depths: 272', 700', 1040', 1150' (Surface casing is being extended to cover the coal in the DTI Field)

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

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

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

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of
Environmental Protection

05/05/2023

WW-6B
(04/15)

API NO. 47- _____
 OPERATOR WELL NO. Vaneck 1215 S-11H
 Well Pad Name: Vaneck 1215

18)

CASING AND TUBING PROGRAM

| TYPE | Size (in) | New or Used | Grade | Weight per ft. (lb/ft) | FOOTAGE: For Drilling (ft) | INTERVALS: Left in Well (ft) | CEMENT: Fill-up (Cu. Ft.)/CTS |
|------------------|-----------|-------------|----------|------------------------|----------------------------|------------------------------|-------------------------------|
| Conductor | 30" | New | LS | 157.5 | 120' | 120' ✓ | 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 | 6045' | 6045' ✓ | 40% Excess Tail, CTS |
| Production | 5 1/2" | NEW | P-110 HP | 23 | 32433' | 32433' ✓ | 20% Excess Tail, CTS ✓ |
| Tubing | | | | | | | |
| Liners | | | | | | | |

Kenneth Greynolds
Digitally signed by: Kenneth Greynolds
 DN: CN = Kenneth Greynolds email = Kenneth.L.Greynolds@wv.gov C = AD O = WVDEP OU = Oil and Gas
 Date: 2023.04.18 11:16:19 -0400

| TYPE | Size (in) | Wellbore Diameter (in) | Wall Thickness (in) | Burst Pressure (psi) | Anticipated Max. Internal Pressure (psi) | Cement Type | Cement Yield (cu. ft./k) |
|------------------|-----------|------------------------|---------------------|----------------------|--|-----------------|--|
| Conductor | 30" | 30" | .500 | | | | Drilled In |
| Fresh Water/Coal | 20" | 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 |
| Production | 5 1/2" | 8 1/2" | .415 | 16240 ✓ | 12500 | Type 1/Class A | 20% excess yield = 1.19, tail yield 1.24 |
| Tubing | | | | | | | |
| Liners | | | | | | | |

PACKERS

| | | | | |
|-------------|--|--|--|--|
| Kind: | | | | |
| Sizes: | | | | |
| Depths Set: | | | | |

RECEIVED
 Office of Oil and Gas
 APR 24 2023
 WV Department of Environmental Protection

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

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 7040'. Drill horizontal leg to estimated 24,205' lateral length, 32,433' TMD. Hydraulically fracture, stimulate and be capable of producing from the Marcellus Formation. Should we encounter an unanticipated void in the coal, we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface. We plan to run an ACP above the Gantz/Dominion Storage interval to aid in sealing off and isolating the storage interval.

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

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

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

No centralizers will be used with conductor casing.
 Freshwater/Coal - centralized every 3 joints to surface.
 Intermediate 1 - Bow Spring on every joint, will also be running ACP for isolating storage zone
 Intermediate 2 - Bow Spring on first 2 joints then every third joint to 100' from surface.
 Production - Vertical - Run 1 spiral 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 top of the curve.

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

Conductor -N/A, Casing to be drilled in w/ Dual Rotary Rig.
 Fresh Water/Coal - *15.6 ppg PNE-1 + 3% bwoc CaCl40% ExcessYield=1.20 / CTS*
 Intermediate 1 - *** Storage String *** CTS ***15.4 ppg Lead - Yield 1.24 - D896 Surface Set 100 lb / sack (Mix of Class A and Gypsum to meet Dominion Requirements)B348 - 0.5% BWOB Fluid Loss / D013 - 0.75% BWOB Retarder / D47 - 0.02 gal / sack VBWOB Anti Foam / D202 - 0.15% BWOB Dispersant / D085 1.5 lb per BBL CemNET* - 60% Excess15.9 ppg Tail - Yield 1.17 - D896 Surface Set 100 lb / sack (Mix of Class A and Gypsum to meet Dominion Requirements)B180A - 0.15% BWOB Dispersant / B547 - 0.35% BWOB GasBLOK* / D013 - 0.3% BWOB Retarder / D047 - 0.02 gal / sack Anti Foam / D801 - 0.03 gal / sack Retarder - 0% Excess*
 Intermediate 2 - *Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS*
 Production - *Lead: 14.5 ppg POZ/PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA17020% ExcessLead Yield=1.19Tail Yield=1.94CTS*

25) Proposed borehole conditioning procedures:

Conductor - Ensure the hole is clean at TD.
 Fresh Water/Coal - Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.
 Intermediate 1 - Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.
 Intermediate 2 - Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.
 Production - Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.

RECEIVED
 Office of Oil and Gas
 APR 24 2023
 WV Department of
 Environmental Protection

*Note: Attach additional sheets as needed.



1215 S-11H
Marcellus Shale Horizontal
Lewis County, WV

*** Storage String *** CTS ***
15.4 ppg Lead - Yield 1.24 - D896 Surface Set 100 lb / sack (Mix of Class A and Gypsum to meet Dominion Requirements)
B348 - 0.5% BWOB Fluid Loss / D013 - 0.75% BWOB Retarder / D47 - 0.02 gal / sack VBWOB Anti Foam / D202 - 0.15% BWOB
Dispersant / D095 1.5 lb per BBL CEMENT - 60% Excess
15.9 ppg Tail - Yield 1.17 - D896 Surface Set 100 lb / sack (Mix of Class A and Gypsum to meet Dominion Requirements)
B160A - 0.15% BWOB Dispersant / B547 - 0.35% BWOB GasBLOK / D013 - 0.3% BWOB Retarder / D047 - 0.02 gal / sack Anti Foam /
D801 - 0.03 gal / sack Retarder - 0% Excess

| Ground Elevation | | 1215 S-11H SHL | | 1215 S-11H LP | | 1215 S-11H BHL | | COMMENTS | | | |
|------------------|--------------|----------------------|---|---|--|--------------------------|---|---|---|---|--|
| Azim | | 1254.8' | | 159.779 / 161.164° | | | | | | | |
| WELLBORE DIAGRAM | HOLE | CASING | GEOLOGY | TOP | BASE | MUD | CEMENT | CENTRALIZERS | CONDITIONING | | |
| | 30" | 30" 157.5# LS | Conductor | 0 | 120 | AIR | N/A, Casing to be drilled in w/ Dual Rotary Rig | N/A | Ensure the hole is clean at TD. | Conductor casing = 0.5" wall thickness | |
| | 26" | 20" 94# J-55 | Fresh Water Kilniting Coal Fresh Water Protection | 0 | 214, 600, 861 905 1200 | AIR | 15.6 ppg PNE-1 + 3% bwoc CaCl 40% Excess Yield=1.20 / CTS | Centralized every 3 joints to surface | Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement. | Surface casing = 0.438" wall thickness Burst=2110 psi | |
| | 17.5" | 13-3/8" 68# J-55 BTC | Little Lime Big Lime Injun / Ganiz (Storage) Intermediate 1 | 1694 1741 1818 / 2073 | 1714 1818 1904 / 2125 | AIR / KCL - Salt Polymer | See above (LEFT) for Storage String Cement Blend to Meet DTI Requirements for Gas Storage Field Isolation | Bow Spring on every joint <i>*will also be running ACP for isolating storage zone*</i> | Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement. | Intermediate casing = 0.480" wall thickness Burst=3450 psi | |
| | 12.25" | 9-5/8" 40# N-80 BTC | Thirty Foot Gordon Gray / Gordon 5th Sand Bayard Speechley Benson Alexander / Elk Intermediate 2 | 2274 2320 / 2346 2590 2660 3287 4599 4930 / 5540 | 2286 2336 / 2446 2612 2675 3301 4615 5100 / 5600 TVD: 5650' MD: 6045' Inc: 36.46ft | AIR / KCL - Salt Polymer | Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS | Bow Spring on first 2 joints then every third joint to 100' form surface | Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement. | Intermediate casing = 0.395" wall thickness Burst=5750 psi | |
| | 8.75" | | Rhinestreet Cashaqua Middlesex West River Burkett Tully Limestone Hamilton Marcellus TMD / TVD (Production) Onondaga | 6203 6444 6650 6734 6831 6864 6950 7015 32433 7088 7088 | AIR / 9.0ppg SOB SOBM 11.5ppg-12.5ppg SOB SOBM 11.5ppg-12.5ppg SOB SOBM | | Lead: 14.5 ppg POZ/PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170 Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA170 20% Excess Lead Yield=1.19 Tail Yield=1.94 CTS | Run 1 spiral centralizer every 5 joints from the top of the curve to surface. | Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement. | Production casing = 0.415" wall thickness Burst=16240 psi Note-Actual centralizer schedules may be changed due to hole conditions | |
| | 8.5" Curve | P-110 HP CDC HTQ | | | 6831 6864 6950 7015 | | | | | | |
| | 8.5" Lateral | | | | 32433 7088 | 7040 | | | | | |
| | | | | | 7088 | | | | | | |
| | | | | | | | | | | | |

RECEIVED
Office of Oil and Gas
APR 24 2023

WV Department of Environmental Protection

LP @ 7040' TVD / 8228'
8.5" Hole - Cemented Long String
5-1/2" 23# P-110 HP CDC HTQ
+/-24205' ft Lateral
TD @ +/-7040' TVD
+/-32433' MD
X=Centralizers

**EXISTING WELLS LOCATED WITHIN THE AREA OF REVIEW FOR:
VANECK 1215 SOUTH UNIT AND PROPOSED WELLS S-7H, S-8H, S-9H, S-10H, S-11H & S-12H**

| CT | API | COUNTY | FARM | OPERATOR NAME | FORMATION NAME | WELL TYPE | TVD | STATUS | LATITUDE | LONGITUDE |
|----|------------|--------|--------------------------|--|---------------------|-----------------|------|---------------|-----------|------------|
| 1 | 4704100049 | Lewis | Alfred Woofter | Dominion Energy Transmission, Inc. | Heiderberg | Gas | 7325 | PLUGGED | 39.080348 | -80.530425 |
| 2 | 4704100064 | Lewis | R H Hall | Diversified Resources, Inc. | Fifth | Gas | 2316 | ACTIVE | 39.067649 | -80.514534 |
| 3 | 4704100089 | Lewis | J L J Bailey | Diversified Production LLC | Heiderberg | Gas | 7022 | ACTIVE | 39.075324 | -80.538664 |
| 4 | 4704100238 | Lewis | G W Jordon | Dominion Energy Transmission, Inc. | Fifth | Gas | 2471 | PLUGGED | 39.102380 | -80.538855 |
| 5 | 4704100334 | Lewis | Alice Burnside | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Storage | 2478 | ACTIVE | 39.111415 | -80.559086 |
| 6 | 4704100445 | Lewis | Uriah Rexroad | Lone Pine Operating Co., Inc. | Up Devonian | Gas | 2037 | ACTIVE | 39.061673 | -80.509115 |
| 7 | 4704100487 | Lewis | A E Wright | Deran Resources, Inc. | Up Devonian | Gas w/ Oil Show | 2304 | ACTIVE | 39.061528 | -80.521206 |
| 8 | 4704100497 | Lewis | L N Wilfong | Diversified Production LLC | Price Fm & eqivs | Gas | 1812 | ACTIVE | 39.058256 | -80.508699 |
| 9 | 4704100513 | Lewis | J A White | Clem Energy, LLC | Price Fm & eqivs | Gas | 1410 | ACTIVE | 39.083465 | -80.546827 |
| 10 | 4704100559 | Lewis | Florence Wagner et al | Deran Resources, Inc. | Conemaugh Group | Gas | 685 | ACTIVE | 39.075044 | -80.524939 |
| 11 | 4704100568 | Lewis | Florence Waggoner | Deran Resources, Inc. | Price Fm & eqivs | Gas | 1623 | ACTIVE | 39.073670 | -80.527386 |
| 12 | 4704100631 | Lewis | C M Hall | UNKNOWN | Price Fm & eqivs | Dry w/ Gas Show | 1666 | PLUGGED | 39.063703 | -80.523997 |
| 13 | 4704100655 | Lewis | John White | Alliance Petroleum Co. LLC | Price Fm & eqivs | Gas w/ Oil Show | 1698 | ABANDONED | 39.085791 | -80.540008 |
| 14 | 4704100687 | Lewis | Sarah A Kemper | Consol Gas Co. | Big Injun (Grnbr) | Gas w/ Oil Show | 1658 | PLUGGED | 39.080815 | -80.540191 |
| 15 | 4704100732 | Lewis | John W Kemper | UNKNOWN | Hampshire Grp | Gas | 2370 | NEVER DRILLED | 39.091447 | -80.522704 |
| 16 | 4704100762 | Lewis | S A Hall | Clem Energy, LLC | Squaw | Gas w/ Oil Show | 1507 | ACTIVE | 39.083184 | -80.522572 |
| 17 | 4704100802 | Lewis | Edward Carrell | Alliance Petroleum Co. LLC | Price Fm & eqivs | Gas | 1801 | ACTIVE | 39.085990 | -80.535815 |
| 18 | 4704100913 | Lewis | Israel Simmons | Dominion Energy Transmission, Inc. | Big Injun (Grnbr) | Gas | 1577 | ACTIVE | 39.089277 | -80.542014 |
| 19 | 4704101114 | Lewis | Gerald R Wright | Diversified Production LLC | Price Fm & eqivs | Gas | 1684 | ACTIVE | 39.061943 | 80.515336 |
| 20 | 4704101126 | Lewis | Bruce/J Carrell/M Bailey | Alliance Petroleum Co. LLC | Price Fm & eqivs | Gas | 1473 | ACTIVE | 39.090285 | -80.533119 |
| 21 | 4704101282 | Lewis | F White | Dominion Energy Transmission, Inc. | Undf PRICE blw INJN | Gas w/ Oil Show | 1716 | ACTIVE | 39.096724 | -80.531754 |
| 22 | 4704101375 | Lewis | F White | Dominion Energy Transmission, Inc. | Undf PRICE blw INJN | Gas | 1649 | ACTIVE | 39.102532 | -80.531000 |
| 23 | 4704101381 | Lewis | F White | Eastern Gas Transmission & Storage, Inc. | Price Fm & eqivs | Gas | 1533 | ACTIVE | 39.099706 | -80.525513 |
| 24 | 4704101439 | Lewis | Odle Bailey et al | UNKNOWN | not available | not available | - | PLUGGED | 39.079115 | -80.521697 |
| 25 | 4704101446 | Lewis | S & C Hall | Allegheny Land and Mineral Co. | Undf PRICE blw INJN | Dry w/ Oil Show | 1661 | PLUGGED | 39.088695 | -80.520315 |
| 26 | 4704101525 | Lewis | Israel Simmons | Dominion Energy Transmission, Inc. | Big Injun (Grnbr) | Gas w/ Oil Show | 1942 | ACTIVE | 39.096753 | -80.539858 |
| 27 | 4704101527 | Lewis | Edward E Garrett | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4718 | ACTIVE | 39.106969 | -80.536030 |
| 28 | 4704101602 | Lewis | F White | Dominion Energy Transmission, Inc. | Benson | Gas | 4414 | ACTIVE | 39.101644 | -80.543897 |
| 29 | 4704101603 | Lewis | J Kent Burnside | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 4670 | ACTIVE | 39.112060 | -80.522288 |
| 30 | 4704101641 | Lewis | F White | Dominion Energy Transmission, Inc. | Benson | Gas | 4703 | ACTIVE | 39.115940 | -80.543809 |
| 31 | 4704101657 | Lewis | Helen H Garrett | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 4450 | ACTIVE | 39.094622 | -80.546304 |
| 32 | 4704101658 | Lewis | James S Hall | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 4532 | ACTIVE | 39.102559 | -80.526798 |
| 33 | 4704101664 | Lewis | T T Taylor | Eastern Gas Transmission & Storage, Inc. | Brallier | Gas | 4571 | ACTIVE | 39.108066 | -80.544783 |
| 34 | 4704101676 | Lewis | Bruce Garrett | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 4600 | ACTIVE | 39.103695 | -80.553642 |
| 35 | 4704101692 | Lewis | S A & C M Hall | Diversified Production LLC | Benson | Gas | 4475 | ACTIVE | 39.087211 | -80.524793 |
| 36 | 4704101694 | Lewis | Clark White | Alliance Petroleum Co. LLC | Benson | Gas | 4455 | ACTIVE | 39.099133 | -80.535363 |

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of Environmental Protection

05/05/2023

| | | | | | | | | | | |
|----|------------|-------|--------------------|--|----------------------|-----------------|------|---------------|-----------|------------|
| 37 | 4704101698 | Lewis | John A White | UNKNOWN | Benson | Dry | 4450 | PLUGGED | 39.084633 | -80.542210 |
| 38 | 4704101709 | Lewis | James H Hall | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4345 | ACTIVE | 39.094637 | -80.526492 |
| 39 | 4704101739 | Lewis | Gerald Hull | Eastern Gas Transmission & Storage, Inc. | Benson | Gas | 4176 | ACTIVE | 39.087605 | -80.544982 |
| 40 | 4704101744 | Lewis | Israel Simmons | Dominion Energy Transmission, Inc. | Misc Sands-BNSN/BRLR | Gas | 4375 | ACTIVE | 39.089762 | -80.537573 |
| 41 | 4704101761 | Lewis | William Burnside | Eastern Gas Transmission & Storage, Inc. | Benson | Gas | 4760 | ACTIVE | 39.114437 | -80.558559 |
| 42 | 4704101774 | Lewis | E W & R M Waggoner | Eastern Gas Transmission & Storage, Inc. | Benson | Gas | 4765 | ACTIVE | 39.109214 | -80.553177 |
| 43 | 4704101821 | Lewis | R H Hall | Greylock Conventional, LLC | Benson | Gas | 4541 | ACTIVE | 39.072366 | -80.516863 |
| 44 | 4704101845 | Lewis | J A Kemper | Alliance Petroleum Co. LLC | Big Injun (Grnbr) | Gas | 2062 | ACTIVE | 39.087540 | -80.528065 |
| 45 | 4704101851 | Lewis | T T Taylor | Dominion Energy Transmission, Inc. | Up Devonian | Gas | 2548 | ACTIVE | 39.107144 | -80.542702 |
| 46 | 4704101853 | Lewis | M L Butcher | UNKNOWN | not available | not available | - | NEVER DRILLED | 39.065298 | -80.538880 |
| 47 | 4704101864 | Lewis | Albert Woofter | Mountain V, LLC | Helderberg | Gas w/ Oil Show | 7045 | ACTIVE | 39.082958 | -80.534527 |
| 48 | 4704101866 | Lewis | F M McKinley | Clem Energy, LLC | Helderberg | Gas | 7325 | ACTIVE | 39.078844 | -80.516421 |
| 49 | 4704101871 | Lewis | M L Butcher | Mountain V, LLC | Helderberg | Gas | 7104 | ACTIVE | 39.065841 | -80.539537 |
| 50 | 4704101889 | Lewis | S A & C M Hall | Mountain V, LLC | Helderberg | Gas w/ Oil Show | 7140 | ACTIVE | 39.088230 | -80.519941 |
| 51 | 4704101899 | Lewis | Charles Kemper | Clem Energy, LLC | Benson | Gas | 4443 | ACTIVE | 39.091320 | -80.523335 |
| 52 | 4704101901 | Lewis | Alfred Woofter | Alliance Petroleum Co. LLC | Big Injun (Grnbr) | Gas | 1650 | ACTIVE | 39.081599 | -80.534810 |
| 53 | 4704101907 | Lewis | Harvey Hall | Eastern Gas Transmission & Storage, Inc. | Helderberg | Gas w/ Oil Show | 7206 | PLUGGED | 39.063990 | -80.529565 |
| 54 | 4704102050 | Lewis | Israel Simmons | Alliance Petroleum Co. LLC | Benson | Gas | 4775 | ACTIVE | 39.096272 | -80.539878 |
| 55 | 4704102054 | Lewis | Israel Simmons | Diversified Production LLC | Benson | Gas | 4670 | ABANDONED | 39.099940 | -80.549132 |
| 56 | 4704102077 | Lewis | A T Simmons | Ross & Wharton Gas Co., Inc. | Benson | Gas | 4324 | ACTIVE | 39.086449 | -80.530455 |
| 57 | 4704102132 | Lewis | A C Simmons | Mike Ross, Inc. | Bayard | Gas | 2575 | ACTIVE | 39.096272 | -80.547464 |
| 58 | 4704102148 | Lewis | J B Snyder | Alliance Petroleum Co. LLC | Benson | Gas | 4420 | ACTIVE | 39.094083 | -80.532822 |
| 59 | 4704102184 | Lewis | M C Burnside | Dominion Energy Transmission, Inc. | Benson | Gas | 4848 | ACTIVE | 39.116787 | -80.536540 |
| 60 | 4704102302 | Lewis | M Halterman | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Gas | 2420 | ACTIVE | 39.109733 | -80.556808 |
| 61 | 4704102303 | Lewis | Orpha D Waggoner | Dominion Energy Transmission, Inc. | Benson | Oil and Gas | 4777 | ACTIVE | 39.115272 | -80.549369 |
| 62 | 4704102308 | Lewis | F Riley | Eastern Gas Transmission & Storage, Inc. | Gordon | Gas | 2393 | ACTIVE | 39.119733 | -80.543167 |
| 63 | 4704102312 | Lewis | C White | Alliance Petroleum Co. LLC | not available | not available | - | ACTIVE | 39.101284 | -80.534893 |
| 64 | 4704102317 | Lewis | C Flesher | Alliance Petroleum Co. LLC | Hampshire Grp | Gas | 2243 | ACTIVE | 39.067267 | -80.529123 |
| 65 | 4704102318 | Lewis | C Flesher | Diversified Production LLC | Hampshire Grp | Gas | 2261 | ACTIVE | 39.062863 | -80.529881 |
| 66 | 4704102340 | Lewis | I Simmons | Eastern Gas Transmission & Storage, Inc. | not available | Gas | - | ACTIVE | 39.087382 | -80.549064 |
| 67 | 4704102342 | Lewis | W Waggy | Diversified Production LLC | not available | not available | - | ACTIVE | 39.055002 | -80.525668 |
| 68 | 4704102348 | Lewis | A Woofter | Alliance Petroleum Co. LLC | not available | not available | - | ACTIVE | 39.076895 | -80.530846 |
| 69 | 4704102349 | Lewis | A Woofter | Alliance Petroleum Co. LLC | not available | not available | - | ACTIVE | 39.080604 | -80.529038 |
| 70 | 4704102352 | Lewis | E Hall | Alliance Petroleum Co. LLC | not available | not available | - | ABANDONED | 39.088272 | -80.528906 |
| 71 | 4704102355 | Lewis | C Robinson | Diversified Production LLC | not available | not available | - | ACTIVE | 39.089927 | -80.528642 |
| 72 | 4704102363 | Lewis | M Losh | Alliance Petroleum Co. LLC | not available | not available | - | ACTIVE | 39.067651 | -80.522328 |
| 73 | 4704102367 | Lewis | T T Taylor | Dominion Energy Transmission, Inc. | Gordon | Gas | 2322 | ACTIVE | 39.109935 | -80.546012 |
| 74 | 4704102375 | Lewis | J Bailey | Alliance Petroleum Co. LLC | Hampshire Grp | Gas | 2434 | ACTIVE | 39.072712 | -80.532273 |
| 75 | 4704102486 | Lewis | Helen Garrett | Dominion Energy Transmission, Inc. | Balltown | Gas | 3535 | ACTIVE | 39.093256 | -80.542467 |
| 76 | 4704102532 | Lewis | M Fultinear | Alliance Petroleum Co. LLC | Benson | Gas | 4496 | ACTIVE | 39.081256 | -80.524657 |

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of Environmental Protection

05/05/2023

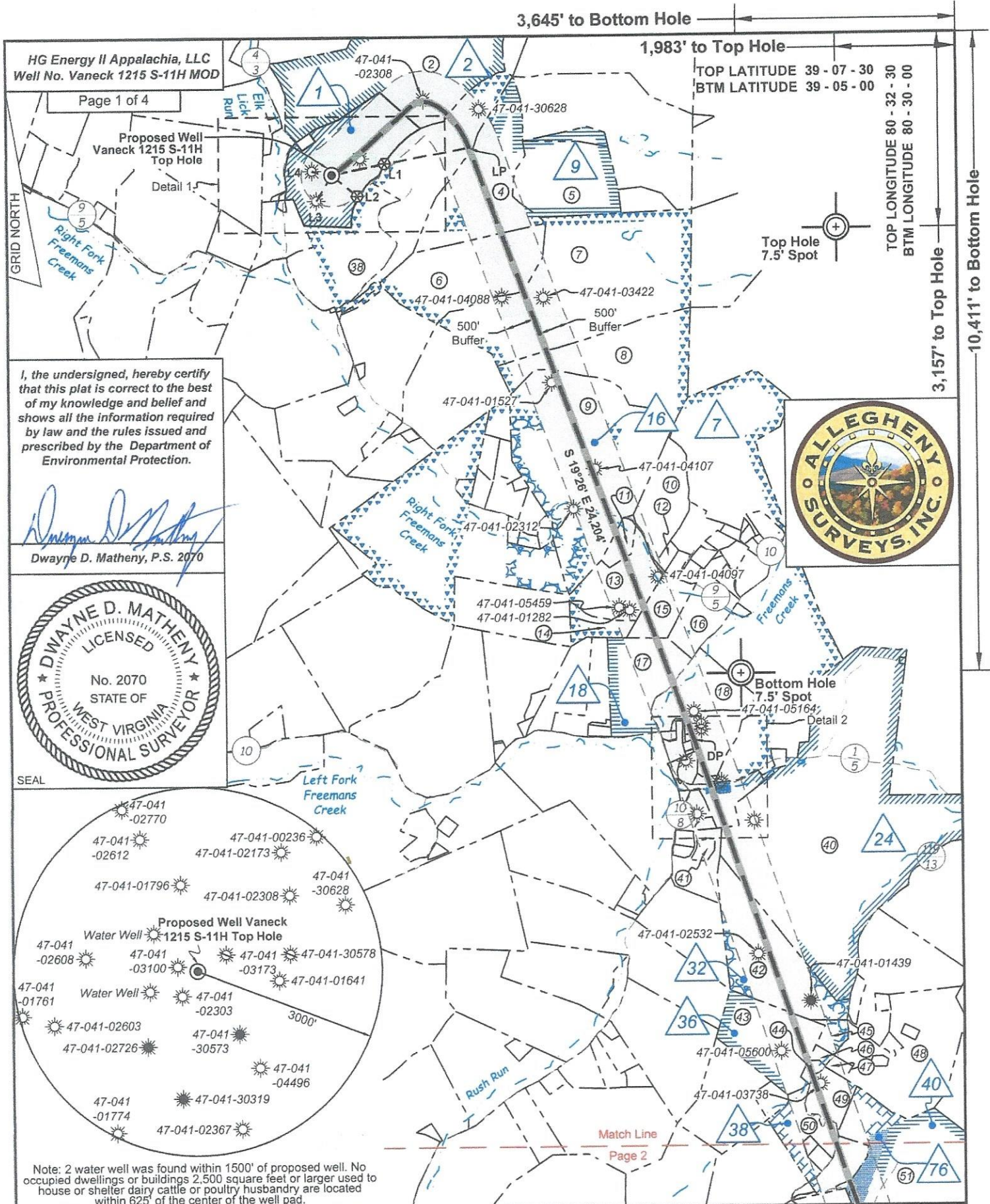
| | | | | | | | | | | |
|-----|------------|-------|---------------------------|--|---------------------|-----------------|------|-----------|------------|------------|
| 77 | 4704102603 | Lewis | W Burnside | Eastern Gas Transmission & Storage, Inc. | not available | Storage | - | ACTIVE | 39.114018 | -80.556711 |
| 78 | 4704102608 | Lewis | G W Waggoner | Eastern Gas Transmission & Storage, Inc. | Hampshire Grp | Storage | 2296 | ACTIVE | 39.117018 | -80.554880 |
| 79 | 4704102702 | Lewis | Israel Simmons | UNKNOWN | Gantz | Gas | 2265 | ABANDONED | 39.092671 | -80.548089 |
| 80 | 4704102703 | Lewis | M M Peterson | Diversified Production LLC | Big Injun (Gmbr) | Gas | 1950 | ACTIVE | 39.056581 | -80.516147 |
| 81 | 4704102714 | Lewis | W J Bailey | Diversified Production LLC | Gordon | Gas | 2305 | ACTIVE | 39.072570 | -80.540695 |
| 82 | 4704102726 | Lewis | E W Waggoner | Consolidated Gas Supply Corp. | Hampshire Grp | Gas | 2435 | PLUGGED | 39.113030 | -80.551358 |
| 83 | 4704102866 | Lewis | Uriah Rexroad | Petroleum Service Partners, Inc. | Greenland Gap Fm | Oil and Gas | 4648 | ACTIVE | 39.063878 | -80.513079 |
| 84 | 4704103079 | Lewis | M L Butcher | Red Gas Co. | not available | Gas | - | ACTIVE | 39.063922 | -80.536298 |
| 85 | 4704103100 | Lewis | Marjorie Hyatt | Dominion Energy Transmission, Inc. | Big Injun (Gmbr) | Oil w/ Gas Show | 2075 | ACTIVE | 39.116597 | -80.549618 |
| 86 | 4704103173 | Lewis | Orpha Waggoner | Consolidated Gas Supply Corp. | Big Injun (Gmbr) | Dry | 2089 | PLUGGED | 39.117125 | -80.546833 |
| 87 | 4704103406 | Lewis | R Hall/D Fisher | Mountain V, LLC | Benson | Gas | 4431 | ACTIVE | 39.085428 | -80.541750 |
| 88 | 4704103422 | Lewis | J Kent Burside | Dominion Energy Transmission, Inc. | Hampshire Grp | Oil and Gas | 2930 | ACTIVE | 39.110813 | -80.536431 |
| 89 | 4704103447 | Lewis | Nellie B Rohr | Mineral Resource Management, LLC | Benson | Gas | 4326 | ACTIVE | 39.077104 | -80.535130 |
| 90 | 4704103454 | Lewis | Fisher et al | Mountain V, LLC | Benson | Gas | 4602 | ACTIVE | 39.081958 | -80.544873 |
| 91 | 4704103545 | Lewis | R & V Cunningham | American Energy Holdings, LLC | Brallier | Gas | 5975 | ABANDONED | 39.073986 | -80.525964 |
| 92 | 4704103673 | Lewis | James M Sheared | Red Gas Company | Salt Sands (undiff) | Gas | 605 | ACTIVE | 39.066161 | -80.537114 |
| 93 | 4704103698 | Lewis | Frances/A Marple | Alliance Petroleum Co. LLC | Brallier | Gas | 6104 | ACTIVE | 39.064619 | -80.525432 |
| 94 | 4704103704 | Lewis | Frances J/Allen Marple | Alliance Petroleum Co. LLC | Brallier | Gas | 6225 | ACTIVE | 39.065008 | -80.518789 |
| 95 | 4704103711 | Lewis | John L Burnside | Eastern Gas Transmission & Storage, Inc. | Benson | Oil and Gas | 4621 | ACTIVE | 39.107689 | -80.529411 |
| 96 | 4704103738 | Lewis | Johathon R Dodson | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 3444 | ACTIVE | 39.075411 | -80.521187 |
| 97 | 4704103745 | Lewis | Jonathon R Dodson | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 3626 | ACTIVE | 39.070988 | -80.521548 |
| 98 | 4704103969 | Lewis | Ronald L Cunningham et al | Diversified Resources, Inc. | Alexander | Gas | 4912 | ABANDONED | 39.070294 | -80.528681 |
| 99 | 4704104068 | Lewis | Helen H Garrett | Enervest Operating, LLC | Greenland Gap Fm | Gas | 4605 | ACTIVE | 39.091674 | -80.542559 |
| 100 | 4704104088 | Lewis | Margaret Waggoner Hrs | Enervest Operating, LLC | Greenland Gap Fm | Gas | 4855 | ACTIVE | 39.110853 | -80.538807 |
| 101 | 4704104097 | Lewis | Carroll Gum | Enervest Operating, LLC | Greenland Gap Fm | Gas | 4426 | ACTIVE | 39.098206 | -80.530123 |
| 102 | 4704104107 | Lewis | Edward E Garrett | Enervest Operating, LLC | Greenland Gap Fm | Gas | 4625 | ACTIVE | 39.103087 | -80.533609 |
| 103 | 4704104168 | Lewis | Robert D Hall et al | Murvin & Meier Oil Co. | Greenland Gap Fm | Gas | 4431 | ACTIVE | 39.084109 | -80.521710 |
| 104 | 4704104181 | Lewis | Robert Shearer | Ross & Wharton Gas Co., Inc. | Brallier | Gas | 5775 | ACTIVE | 39.053841 | -80.520274 |
| 105 | 4704104352 | Lewis | Elmer C Cox | Diversified Production LLC | Greenland Gap Fm | Gas | 2422 | ACTIVE | 39.060255 | -80.532574 |
| 106 | 4704104353 | Lewis | Patrick Boyle | Diversified Production LLC | Greenland Gap Fm | Gas | 2636 | ACTIVE | 39.059497 | -80.526600 |
| 107 | 4704104366 | Lewis | Jay T Sheare | Red Gas Co. | Greenland Gap Fm | Gas | 2510 | ACTIVE | -80.536308 | -1.000000 |
| 108 | 4704104368 | Lewis | Jay T Sheare | Red Gas Co. | Price Fm & equivs | Gas | 2013 | ACTIVE | -80.539887 | -1.000000 |
| 109 | 4704104370 | Lewis | Jay T Sheare | Red Gas Co. | Price Fm & equivs | Gas | 2157 | ACTIVE | 39.070084 | -80.532743 |
| 110 | 4704104371 | Lewis | Jay T Sheare | Red Gas Co. | Price Fm & equivs | Gas | 2204 | ACTIVE | 39.066806 | -80.532805 |
| 111 | 4704104391 | Lewis | Johahan R Dodson | Diversified Production LLC | Greenland Gap Fm | Gas | 3475 | ACTIVE | 39.071205 | -80.512484 |
| 112 | 4704104396 | Lewis | Kenneth H Reckert | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4604 | ACTIVE | 39.104854 | -80.548657 |
| 113 | 4704104484 | Lewis | Simeon A Hall/D Hall hrs | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 3655 | ACTIVE | 39.068072 | -80.525221 |
| 114 | 4704104486 | Lewis | Jonathan R Dodson | Diversified Production LLC | Greenland Gap Fm | Gas | 3568 | ACTIVE | 39.069314 | -80.518032 |
| 115 | 4704104489 | Lewis | Elmer Cox Est | Diversified Production LLC | Greenland Gap Fm | Gas | 3595 | ACTIVE | 39.063584 | -80.532636 |
| 116 | 4704104494 | Lewis | J K Burnside/W Brunside | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 4906 | ACTIVE | 39.105763 | -80.529710 |

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of Environmental Protection

05/05/2023

| | | | | | | | | | | |
|-----|------------|-------|-----------------------------|--|-----------------------|-----------------|------|---------|-----------|------------|
| 117 | 4704104495 | Lewis | Kevin Mullooly | Diversified Production LLC | Greenland Gap Fm | Gas | 3475 | ACTIVE | 39.059062 | -80.513393 |
| 118 | 4704104496 | Lewis | Joseph C Waggoner Sr | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4529 | ACTIVE | 39.112039 | -80.544948 |
| 119 | 4704104498 | Lewis | Patrick D Boyle | Diversified Production LLC | Greenland Gap Fm | Gas | 3535 | ACTIVE | 39.057322 | -80.522693 |
| 120 | 4704104526 | Lewis | Melvin L Davis | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4718 | ACTIVE | 39.104278 | -80.540345 |
| 121 | 4704104590 | Lewis | Jay T Shearer | Red Gas Co. | Greenland Gap Fm | Gas | 2651 | ACTIVE | 39.071881 | -80.536584 |
| 122 | 4704104604 | Lewis | Jay T Shearer | Red Gas Co. | Hampshire Grp | Gas | 2015 | ACTIVE | 39.063589 | -80.533182 |
| 123 | 4704104605 | Lewis | Jay T Shearer | Red Gas Co. | Greenland Gap Fm | Gas | 2560 | ACTIVE | 39.068574 | -80.535996 |
| 124 | 4704104606 | Lewis | Jay T Shearer | Red Gas Co. | Greenland Gap Fm | Gas | 2440 | ACTIVE | 39.064041 | -80.535779 |
| 125 | 4704104607 | Lewis | John & Rita Lydon | Diversified Production LLC | Greenland Gap Fm | Gas | 2760 | ACTIVE | 39.056004 | -80.510851 |
| 126 | 4704104650 | Lewis | Gerald R Wright | Diversified Production LLC | Greenland Gap Fm | Gas | 3497 | ACTIVE | 39.060098 | -80.518680 |
| 127 | 4704104659 | Lewis | Robert B Burnside | Alliance Petroleum Co. LLC | Misc Sands-RILY/BNSN | Gas | 3576 | ACTIVE | 39.078007 | -80.528041 |
| 128 | 4704104669 | Lewis | Dodson | Lone Pine Operating Co., Inc. | Greenland Gap Fm | Gas | 3814 | ACTIVE | 39.061673 | -80.508557 |
| 129 | 4704104755 | Lewis | Helen Garrett et al | Dominion Exploration & Production | Greenland Gap Fm | Gas | 2693 | ACTIVE | 39.078060 | -80.541952 |
| 130 | 4704104759 | Lewis | Robert B Burnside | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas w/ Oil Show | 2665 | ACTIVE | 39.080960 | -80.539075 |
| 131 | 4704104881 | Lewis | Madeline Moody | Diversified Production LLC | Hampshire Grp | Gas | 2803 | ACTIVE | 39.054566 | -80.529016 |
| 132 | 4704104885 | Lewis | Charles R Kemper | Alliance Petroleum Co. LLC | Misc Sands-RILY/BNSN | Gas | 3440 | ACTIVE | 39.074161 | -80.532587 |
| 133 | 4704104955 | Lewis | Kenneth/S Fox | Horizon Energy Corp. | Greenland Gap Fm | Gas | 3807 | ACTIVE | 39.061818 | -80.524741 |
| 134 | 4704104956 | Lewis | Violet I Wright | Horizon Energy Corp. | Misc Sands-RILY/BNSN | Gas | 3465 | ACTIVE | 39.062891 | -80.518252 |
| 135 | 4704105132 | Lewis | Hal A Brown | Ross & Wharton Gas Co., Inc. | Greenland Gap Fm | Gas | 5257 | ACTIVE | 39.091592 | -80.527729 |
| 136 | 4704105154 | Lewis | Dodson Farm LLC | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 3370 | ACTIVE | 39.071389 | -80.516706 |
| 137 | 4704105164 | Lewis | Richard Billanti | Dominion Energy Transmission, Inc. | Benson | Gas | 4430 | ACTIVE | 39.092141 | -80.528155 |
| 138 | 4704105166 | Lewis | Robert B Burnside | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 2450 | ACTIVE | 39.078997 | -80.531699 |
| 139 | 4704105185 | Lewis | Gerald Hull | Eastern Gas Transmission & Storage, Inc. | Greenland Gap Fm | Gas | 3440 | ACTIVE | 39.084491 | -80.547275 |
| 140 | 4704105186 | Lewis | Gerald Hull | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4520 | ACTIVE | 39.087632 | -80.539191 |
| 141 | 4704105187 | Lewis | Edward E Garrett | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 2690 | ACTIVE | 39.083963 | -80.538115 |
| 142 | 4704105188 | Lewis | Edward E Garrett | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 2450 | ACTIVE | 39.082051 | -80.550995 |
| 143 | 4704105228 | Lewis | Paul J Heater Jr | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 4490 | ACTIVE | 39.094107 | -80.537552 |
| 144 | 4704105278 | Lewis | Ronald Lee Cunningham Jr | Diversified Resources, Inc. | Greenland Gap Fm | Gas | 3900 | ACTIVE | 39.071152 | -80.532234 |
| 145 | 4704105458 | Lewis | Michael R Morris | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 4538 | ACTIVE | 39.084647 | -80.527630 |
| 146 | 4704105459 | Lewis | Clifford B Messenger | Dominion Energy Transmission, Inc. | Benson | Gas | 4561 | ACTIVE | 39.096861 | -80.532349 |
| 147 | 4704105527 | Lewis | Melvin L Davis | Alliance Petroleum Co. LLC | Misc Sands-BNSN/BRILR | Gas | 4430 | ACTIVE | 39.099365 | -80.539908 |
| 148 | 4704105544 | Lewis | Melvin L Davis | Dominion Energy Transmission, Inc. | Greenland Gap Fm | Gas | 3375 | ACTIVE | 39.098875 | -80.543700 |
| 149 | 4704105586 | Lewis | Nancy E Smith/R C Smith Jr | Diversified Production LLC | Greenland Gap Fm | Gas | 5894 | ACTIVE | 39.062354 | -80.528819 |
| 150 | 4704105587 | Lewis | Nancy E & Ronald C Smith Jr | Diversified Production LLC | Harrell Sh | Gas | 6125 | ACTIVE | 39.068525 | -80.530749 |
| 151 | 4704105600 | Lewis | Michael Meixner | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 3542 | ACTIVE | 39.076892 | -80.523411 |
| 152 | 4704105601 | Lewis | Michael Meixner | Alliance Petroleum Co. LLC | Greenland Gap Fm | Gas | 3640 | ACTIVE | 39.078825 | -80.525202 |
| 153 | 4704105655 | Lewis | Helen H Garrett | Eastern Gas Transmission & Storage, Inc. | Brallier | Gas | 4747 | ACTIVE | 39.095193 | -80.551189 |
| 154 | 4704130063 | Lewis | Harvey & Blondie Hall | Reserve Gas Co. | Fifth | Gas | 2135 | PLUGGED | 39.095952 | -80.525746 |
| 155 | 4704130064 | Lewis | J L J Bailey | Reserve Gas Co. | Hampshire Grp | Gas | 2378 | PLUGGED | 39.074289 | -80.535908 |
| 156 | 4704130089 | Lewis | Mrs Ova Lester | Reserve Gas Co. | Hampshire Grp | Gas w/ Oil Show | 2389 | PLUGGED | 39.105563 | -80.547186 |

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of Environmental Protection
05/05/2023

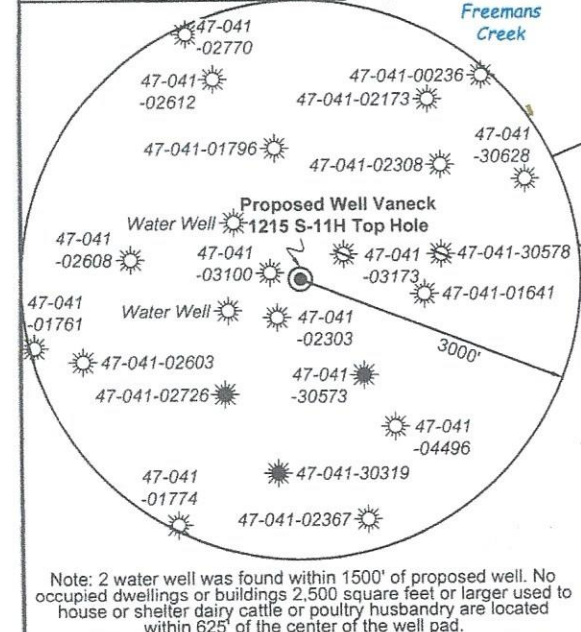
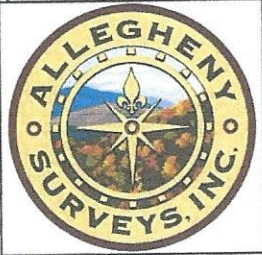


HG Energy II Appalachia, LLC
Well No. Vaneck 1215 S-11H MOD
Page 1 of 4
Proposed Well Vaneck 1215 S-11H Top Hole
Detail 1

TOP LATITUDE 39 - 07 - 30
BTM LATITUDE 39 - 05 - 00
TOP LONGITUDE 80 - 32 - 30
BTM LONGITUDE 80 - 30 - 00
Top Hole 7.5' Spot
3,157' to Top Hole
10,411' to Bottom Hole

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

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



FILE NO: 156-36-UFC-20
DRAWING NO: Vaneck 1215 S-11H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: April 28 2023
OPERATOR'S WELL NO. Vaneck 1215 S-11H
API WELL NO
47 - 041 - 05741
STATE COUNTY PERMIT

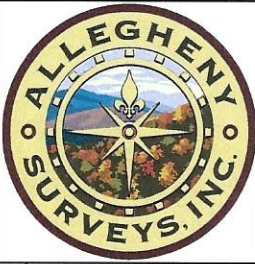
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1254.8' WATERSHED: Middle West Fork Creek QUADRANGLE: Camden
DISTRICT: Freemans Creek COUNTY: Lewis
SURFACE OWNER: HG Energy II, Appalachia, LLC, et al ACREAGE: 56.00
ROYALTY OWNER: George W. Waggoner, et ux, et al LEASE NO: ACREAGE: 56.00

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BH-MOD 7,040' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 32,433' MD

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

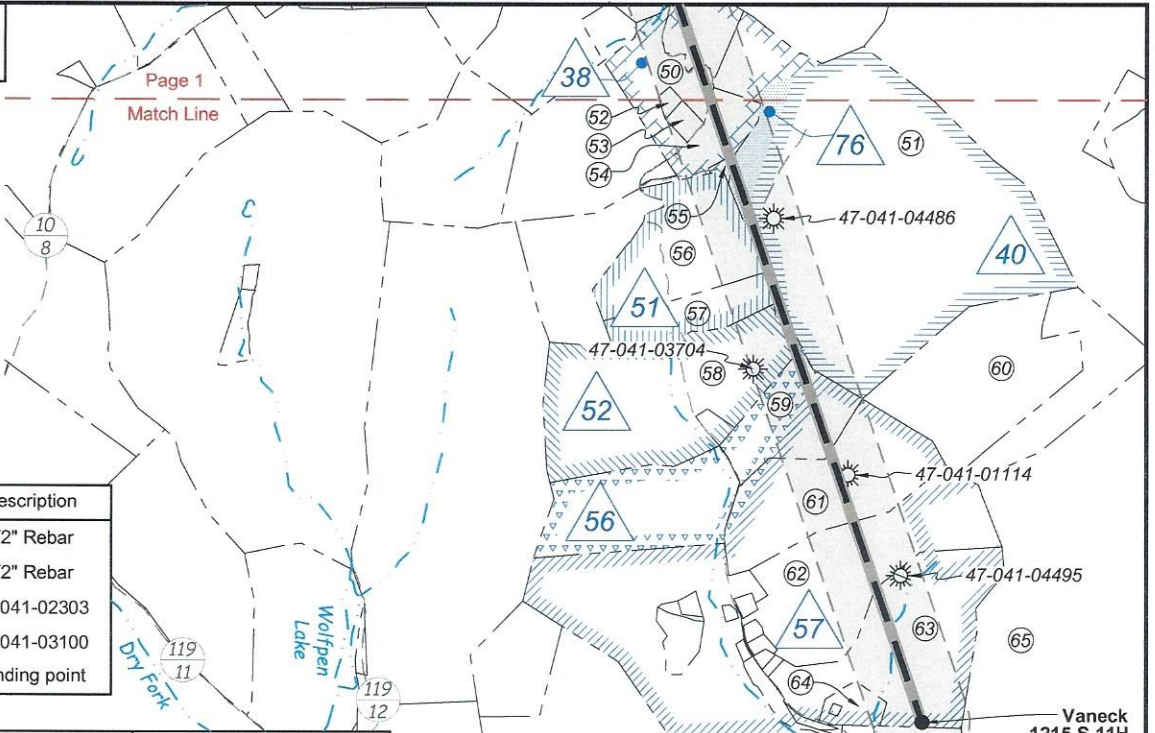
05/05/2023



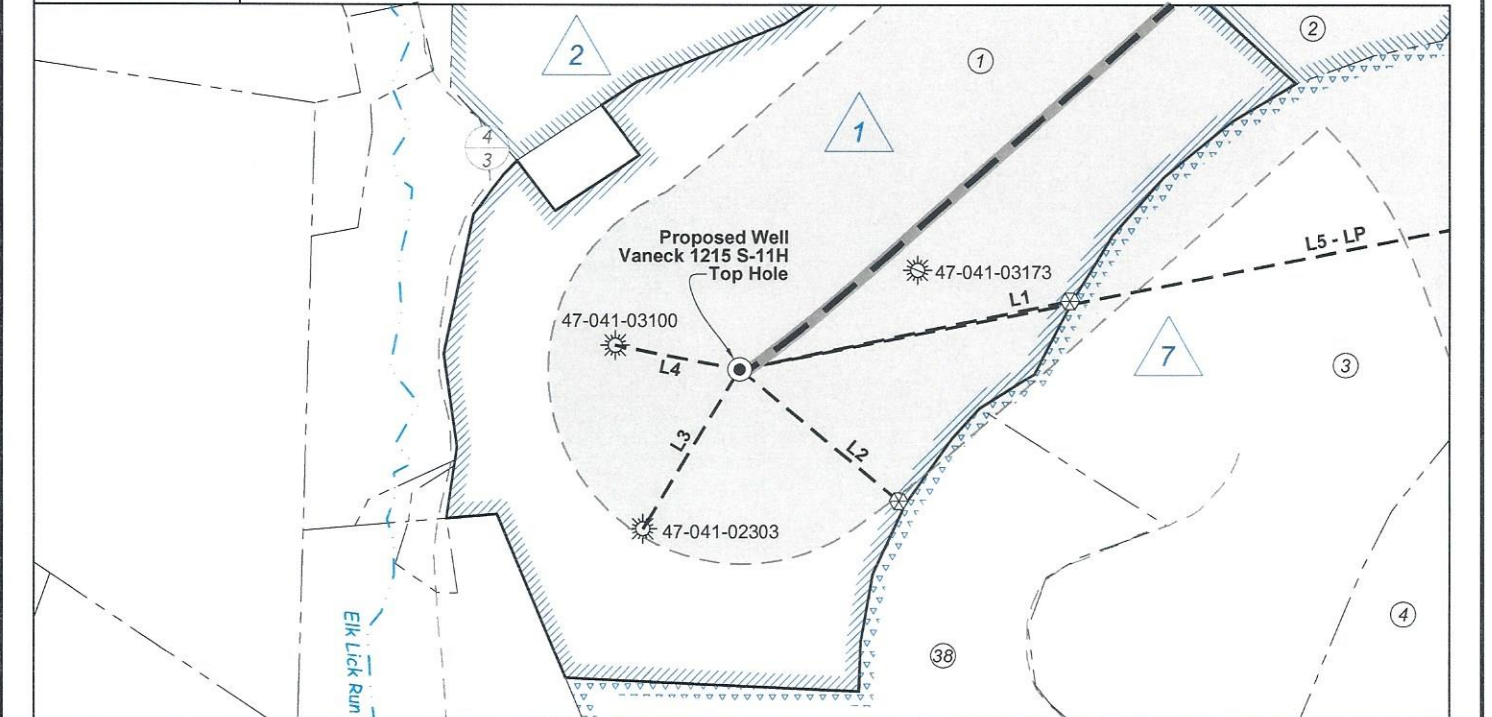
| Tag | Bearing | Dist. | Description |
|-----|------------|----------|---------------|
| L1 | S 78°20' W | 879.8' | 1/2" Rebar |
| L2 | N 50°07' W | 539.9' | 1/2" Rebar |
| L3 | N 31°01' E | 488.7' | 47-041-02303 |
| L4 | S 79°00' E | 330.6' | 47-041-03100 |
| L5 | N 78°53' E | 2,276.7' | Landing point |

Notes: Well No. Vaneck 1215 S-11H
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°06'58.78" Latitude: 39°03'17.06"
Longitude: 80°32'55.17" Longitude: 80°30'46.22"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,329,792.985m N: 4,322,974.351m
E: 539,034.303m E: 542,167.681m
Plat orientation and corner and well references are based upon the grid north meridian. Well location references are based upon the magnetic meridian.

Notes:
Well No. Vaneck 1215 S-11H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,205,329.15'
E: 1,768,481.71'
Landing Point Coordinates
N: 14,205,767.84'
E: 1,770,715.76'
Deflection Point Coordinates
N: 14,196,065.52'
E: 1,774,289.56'
Bottom Hole Coordinates
N: 14,182,958.35'
E: 1,778,761.80'



Detail 1 (1"=500')



FILE NO: 156-36-UFC-20
DRAWING NO: Vaneck 1215 S-11H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: March 16 2023
OPERATOR'S WELL NO. Vaneck 1215 S-11H
API WELL NO
47 - 041 - 05741
STATE COUNTY PERMIT

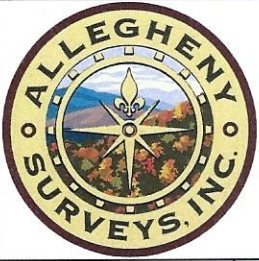
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1254.8' WATERSHED: Middle West Fork Creek QUADRANGLE: Camden
DISTRICT: Freemans Creek COUNTY: Lewis
SURFACE OWNER: HG Energy II, Appalachia, LLC, et al ACREAGE: 55.00
ROYALTY OWNER: George W. Waggoner, et ux, et al LEASE NO: ACREAGE: 56.00

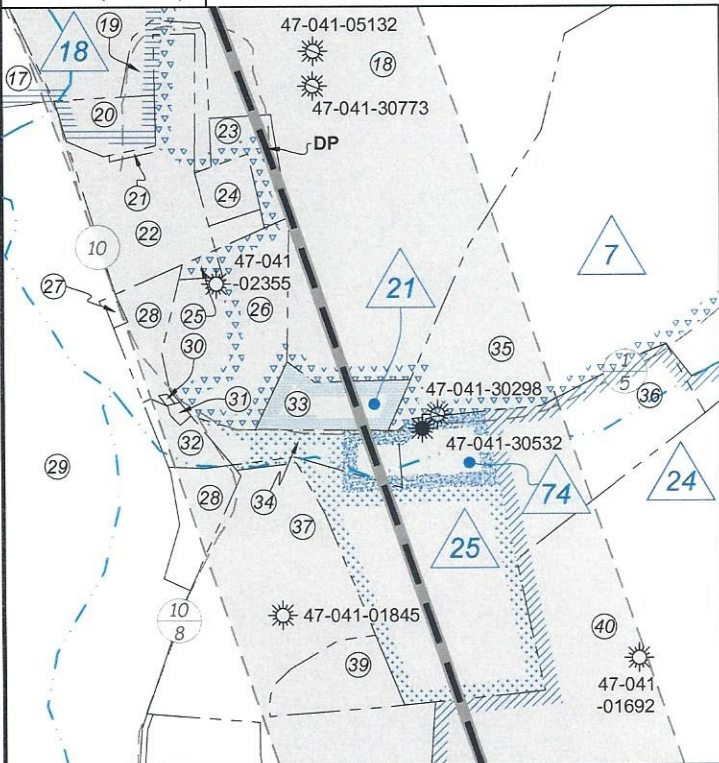
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BH-MOD 7,040' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 32,433' MD

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

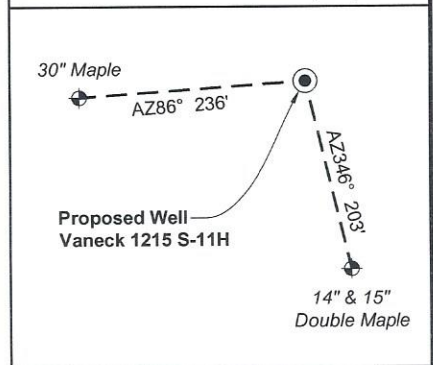
05/05/2023



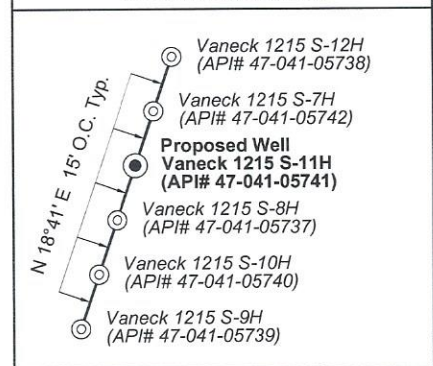
Detail 2 (1"=500')



Well Location References (NTS)



Wellhead Layout (NTS)



Legend

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

FILE NO: 156-36-UFC-20
DRAWING NO: Vaneck 1215 S-11H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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



DATE: March 16 2023
OPERATOR'S WELL NO. Vaneck 1215 S-11H
API WELL NO
47 - 041 - 05741
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1254.8' WATERSHED: Middle West Fork Creek

QUADRANGLE: Camden

DISTRICT: Freemans Creek

COUNTY: Lewis

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

ACREAGE: 55.00

ROYALTY OWNER: George W. Waggoner, et ux, et al

LEASE NO: ACREAGE: 56.00

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BH-MOD 7,040' TVD

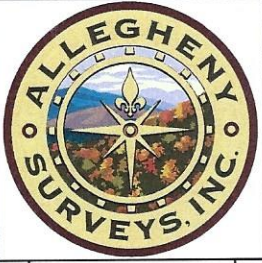
PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 32,433' MD

WELL OPERATOR: HG Energy II Appalachia, LLC

DESIGNATED AGENT: Diane C. White

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101



| Lewis Co. - Freeman Creek Dist. | | | | |
|---------------------------------|------------|------------------------------------|------------|--------|
| No. | TM / Par | Owner | Bk / Pg | Ac. |
| 1 | 5C / 29 | H.G. Energy II Appalachia, LLC | 765 / 894 | 55.00 |
| 2 | 5C / 30 | Woody Lumber Co. Inc. | 590 / 438 | 140.50 |
| 3 | 5C / 27.2 | Jack E. & Cerilda M. Waggoner | 547 / 691 | 57.97 |
| 4 | 5C / 22 | Linda Lou Waggoner | W33 / 157 | 57.76 |
| 5 | 5C / 39 | Phillip E. Burnside, et al | 666 / 503 | 47.00 |
| 6 | 5C / 22.1 | Janet L. & Joseph C. Waggoner, Sr. | 705 / 183 | 57.53 |
| 7 | 5C / 45 | Phillip E. Burnside, et al | 666 / 503 | 121.42 |
| 8 | 5C / 46 | John K. Burnside, et al | W1 / 393 | 60.00 |
| 9 | 5D / 35 | Edward E. Garrett, et al | 429 / 245 | 130.47 |
| 10 | 5D / 60.13 | Richard B. & Erica S. Messenger | 577 / 212 | 23.96 |
| 11 | 5D / 36.1 | Clifford B. Messenger | 625 / 166 | 5.00 |
| 12 | 5D / 60.1 | Michael & Juile Lough | 750 / 243 | 2.02 |
| 13 | 5D / 36.2 | Clifford B. Messenger | 625 / 166 | 27.32 |
| 14 | 5D / 36 | Carroll G. Gum, et al | 625 / 343 | 9.71 |
| 15 | 5D / 37 | Michael & Melissa Lattea | F32 / 55 | 13.86 |
| 16 | 5D / 38 | Marsha Boggs | W8 / 308 | 18.82 |
| 17 | 5D / 39.3 | Janice W. Sundstrom | W41 / 517 | 35.09 |
| 18 | 5D / 39 | John M. & Diana L. Garrett | 701 / 658 | 41.92 |
| 19 | 5D / 40 | United Brethern Church Cemetery | 219 / 27 | 1.00 |
| 20 | 5D / 41 | Freemansburg U.M. Church | 20 / 104 | 0.90 |
| 21 | 5D / 42 | Freemansburg U.M. Church | 5 / 216 | 0.05 |
| 22 | 5D / 56 | Freemans Creek Baptist Church | - / - | 0.90 |
| 23 | 5D / 39.1 | L.L. Kemper (Cemetery) | 284 / 287 | 1.50 |
| 24 | 5D / 44 | Freemans Creek Baptist Church | 28 / 337 | 1.00 |
| 25 | 5D / 43 | Perry & Grace Waggoner | 616 / 250 | 0.75 |
| 26 | 5D / 45 | Perry & Grace Waggoner | 616 / 250 | 2.45 |
| 27 | 5D / 46 | Edward E. Garrett, et al | 429 / 245 | 0.07 |
| 28 | 5D / 49 | Edward E. Garrett | WB R / 498 | 1.50 |
| 29 | 5D / 32 | Burce Garrett, et al | 577 / 351 | 100.60 |
| 30 | 5D / 55 | Harvey A. Hall Estate | F31 / 109 | 0.02 |
| 31 | 5D / 66 | Donald Smith & William Self, Sr. | 760 / 898 | 0.06 |
| 32 | 5D / 47 | John P. & Betty L. Rowan | 640 / 15 | 0.50 |
| 33 | 5D / 39.2 | Timothy R. & Alicia L. Beer | 601 / 673 | 1.25 |
| 34 | 5D / 48 | Edward E. Garrett | 553 / 382 | 1.00 |
| 35 | 5D / 57 | John T. Garrett, et al | 728 / 296 | 28.70 |
| 36 | 5D / 54 | Edward E. Garrett | W7 / 578 | 10.50 |
| 37 | 5D / 51 | Michael & Glodell Morris | 621 / 412 | 13.55 |
| 38 | 5C / 25 | Raymond C. & Colona J. Waggoner | 567 / 416 | 45.48 |
| 39 | 5D / 51.3 | Amanda & William Rowan | 726 / 69 | 1.11 |
| 40 | 6D / 10 | Sue E. Hall & Alice J. Fisher | 583 / 439 | 252.44 |
| 41 | 5D / 51.2 | Samuel T. & Julia A. Grant | 723 / 600 | 2.28 |
| 42 | 5E / 43 | KAIA | 721 / 683 | 58.22 |
| 43 | 5E / 40 | Paul J. & Sheila K. Slater | 783 / 560 | 38.00 |
| 44 | 5E / 44 | Jacob E. Cogar | 745 / 775 | 1.89 |
| 45 | 6E / 1.8 | Patricia A. & Joel S. Harris | 721 / 670 | 4.95 |
| 46 | 5E / 42 | Bruce S. Kimmel, et al | 778 / 516 | 1.62 |
| 47 | 6E / 1.5 | Diane Mosey | 714 / 772 | 2.00 |
| 48 | 6E / 1.7 | Patricia A. & Joel S. Harris | 721 / 670 | 61.20 |
| 49 | 6E / 2 | Sand Hill Land Ventures, LP | 777 / 873 | 8.12 |
| 50 | 5E / 37 | James E. & Edith A. Browning | 486 / 387 | 17.88 |
| 51 | 6E / 4 | Sand Hill Land Ventures, LP | 777 / 873 | 171.06 |
| 52 | 5E / 36 | Carolyn Jeffries, et al | 753 / 917 | 1.00 |
| 53 | 5E / 35 | Carolyn Jeffries, et al | 753 / 917 | 2.00 |
| 54 | 6E / 3 | Sand Hill Land Ventures, LP | 777 / 873 | 9.36 |
| 55 | 6E / 3.1 | Sand Hill Land Ventures, LP | 777 / 873 | 0.64 |
| 56 | 6E / 5 | Sandra Dodd & William Collins | 438 / 339 | 30.91 |
| 57 | 6E / 5.1 | Allen D. Marple | W10 / 258 | 15.34 |
| 58 | 5E / 32 | Allen D. Marple | W47 / 451 | 67.55 |
| 59 | 6E / 43 | Gary L. Wright | 767 / 622 | 22.82 |
| 60 | 6E / 10 | Sand Hill Land Ventures, LP | 777 / 873 | 51.75 |
| 61 | 6E / 7 | Gerald R. Wright | 388 / 322 | 50.67 |
| 62 | 6F / 1.2 | Roger L. & LaDonna F. Sprouse | 323 / 649 | 53.86 |
| 63 | 6F / 34 | Kevin & Janet Mullooly | 551 / 36 | 52.27 |
| 64 | 6F / 5.1 | Chasidy D. & William D. Murray | 729 / 828 | 4.81 |
| 65 | 6F / 35 | Roger D. Clem, Jr. | 577 / 558 | 63.90 |
| 66 | 6F / 33.4 | Bobby L. Jones | 713 / 59 | 11.48 |
| 67 | 6F / 33.2 | Kevin & Janet Mullooly | 551 / 36 | 1.57 |
| 68 | 6F / 33.3 | Charles C. & Paulette Beall | W11 / 551 | 0.94 |
| 69 | 6F / 33.6 | Charles C. & Paulette Beall | 490 / 275 | 0.03 |
| 70 | 6F / 33 | Dennis Marple, Sr. | 614 / 42 | 1.85 |

| ID | Lease |
|----|--|
| 1 | George W. Waggoner, et ux |
| 2 | Fielding B. Riley, et al |
| 7 | F. White |
| 9 | J.A. Burnside, et ux |
| 16 | Clark White, et ux |
| 18 | J. Belle Snyder, et al |
| 21 | Elaine Lovett Cox |
| 24 | S.A. Hall, et ux, et al |
| 25 | Ai B. Miller |
| 32 | Madge Fultineer, et al |
| 36 | H.G. Energy II Appalachia, LLC |
| 38 | Simeon A. Hall, Jr., et ux |
| 40 | R.H. Hall, et ux |
| 51 | Marion Losh, et ux |
| 52 | Paul B. Losh, et ux |
| 56 | Carl G. Alfred, et ux |
| 57 | M.M. Peterson, et ux |
| 74 | Donald R. Reynolds |
| 76 | Franklin Maxwell Heirs Limited Partnership 1 |

FILE NO: 156-36-UFC-20
DRAWING NO: Vaneck 1215 S-11H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: March 16 2023
OPERATOR'S WELL NO. Vaneck 1215 S-11H
API WELL NO
47 - 041 - 05741
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1254.8' WATERSHED: Middle West Fork Creek QUADRANGLE: Camden
DISTRICT: Freemans Creek COUNTY: Lewis
SURFACE OWNER: HG Energy II, Appalachia, LLC, et al ACREAGE: 55.00
ROYALTY OWNER: George W. Waggoner, et ux, et al LEASE NO: ACREAGE: 56.00

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BH-MOD 7,040' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 32,433' MD

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

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

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

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

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

****See Attached Sheets****

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

RECEIVED
Office of Oil and Gas

APR 24 2023

WV Department of
Environmental Protection

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

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

HG Energy II Appalachia, LLC - Vaneck 1215 511H Lease Chain

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of
Environmental Protection

05/05/2023

| 1215S Tract | LEGACY LEASE NUMBER | TAX MAP | LEASE NUMBER | GRANTOR/LESSOR | GRANTEE/LESSEE | ROYALTY | DEED BOOK | PAGE |
|-------------|---------------------|--|--------------|---|--|--|---|---|
| 1 | FK051509 | 03-005C-0027-0001 03-005C-0029-0000 | Q100665000 | GEO. W. WAGGONER AND ROSA M. WAGGONER, HIS WIFE THE PHILADELPHIA COMPANY OF WEST VIRGINIA THE PHILADELPHIA COMPANY OF WEST VIRGINIA THE PHILADELPHIA COMPANY OF WEST VIRGINIA PITTSBURG AND WEST VIRGINIA GAS COMPANY EQUITABLE GAS COMPANY AND PHILADELPHIA OIL COMPANY HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION NNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC. NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC. | THE PHILADELPHIA COMPANY OF WEST VIRGINIA PITTSBURG AND WEST VIRGINIA GAS COMPANY PITTSBURG AND WEST VIRGINIA GAS COMPANY EQUITABLE GAS COMPANY HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION NNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. | NOT LESS THAN 1/8 ASSIGNMENT ASSIGNMENT DEED ASSIGNMENT ASSIGNMENT CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT | 73 85 125 125 216 246 294 425 672 684 712 717 722 723 | 383 141 379 371 185 192 89 127 154 57 848 1 170 499 |
| 2 | FK052230 | 03-005C-0030-0000 | Q100666000 | FIELDING B. RILEY AND SAMUEL M. RILEY AND M. V. RILEY E. W. BOYD S. E. BARRETT LOUIS BENNETT LOUIS BENNETT AND S. E. BARRETT S. E. BARRETT LOUIS BENNETT J. M. GUFFEY AND JNO. H. GALEY THE PHILADELPHIA COMPANY OF WEST VIRGINIA THE PHILADELPHIA COMPANY OF WEST VIRGINIA THE PHILADELPHIA COMPANY OF WEST VIRGINIA PITTSBURG AND WEST VIRGINIA GAS COMPANY EQUITABLE GAS COMPANY AND PHILADELPHIA OIL COMPANY HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION NNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. | THE PHILADELPHIA COMPANY OF WEST VIRGINIA PITTSBURG AND WEST VIRGINIA GAS COMPANY PITTSBURG AND WEST VIRGINIA GAS COMPANY EQUITABLE GAS COMPANY HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION NNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. | NOT LESS THAN 1/8 ASSIGNMENT (50%) ASSIGNMENT (75%) ASSIGNMENT ASSIGNMENT ASSIGNMENT ASSIGNMENT ASSIGNMENT ASSIGNMENT ASSIGNMENT ASSIGNMENT CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT | 73 30 36 71 44 44 44 44 85 125 125 371 216 246 294 425 672 684 712 717 722 723 | 383 235 369 14 569 571 583 141 379 371 185 192 89 127 154 57 848 1 170 499 |

| | | | |
|----|----------------|--|----------------|
| 18 | CNX079187 | p/o 03-005D-0038-0000 p/o 03-005D-0039-0000 p/o 03-005D-0039-0003 p/o 03-005D-0040-0000 p/o 03-005D-0041-0000 p/o 03-005D-0055-0000 | HG102194 et al |
| 21 | HG102194 et al | p/o 03-005D-0039-0002 | HG102194 et al |

| | | | |
|---|---|----------------------------------|-----------|
| CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 659 521 |
| 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 736 |
| DOMINION ENERGY TRANSMISSION, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT (68%) | 736 220 |
| J. BELLE SNYDER, WIDOW; UNION NATIONAL BANK - TRUSTEE FOR S. A. SMITH AND C. BURKE MORRIS; JOHN R. MORRIS, IN HIS OWN RIGHT AND AS ATTORNEY-IN-FACT FOR WILLIAM Y. MORRIS AND VIRGINIA MORRIS, HIS WIFE; ROBERT H. MORRIS | CONSOLIDATED GAS SUPPLY CORPORATION | NOT LESS THAN 1/8 | 314 625 |
| CONSOLIDATED GAS SUPPLY CORPORATION | CONSOLIDATED GAS TRANSMISSION CORPORATION | ASSIGNMENT | 425 127 |
| CONSOLIDATED GAS TRANSMISSION CORPORATION | CNG TRANSMISSION CORPORATION | MERGER/NAME CHANGE | WVSOS 444 |
| CNG TRANSMISSION CORPORATION | DOMINION TRANSMISSION, INC. | MERGER/NAME CHANGE | WVSOS 453 |
| DOMINION TRANSMISSION INC | DOMINION ENERGY HOLDINGS LLC XVI | ASSIGNMENT | 651 313 |
| CONSOL ENERGY HOLDING, LLC XVI | CONSOL GAS COMPANY | MERGER/NAME CHANGE | WVSOS 521 |
| CONSOL GAS COMPANY | CONSOL GAS COMPANY LLC | MERGER/NAME CHANGE | 659 521 |
| CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | LIMITED PARTIAL ASSIGNMENT (50%) | 717 1 |
| CNX GAS COMPANY LLC | NOBLE ENERGY, INC. | ASSIGNMENT | 722 170 |
| NOBLE ENERGY, INC. | HG ENERGY II APPALACHIA, LLC | ASSIGNMENT | 766 432 |
| Elaine Lovett Cox | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 782 444 |
| Harvey Rawm | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 782 444 |
| Roger Lovett | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 782 453 |
| Milnor Edwin Matthews | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 782 756 |
| Carol Lovett Owens | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 784 747 |
| Andrew B. Rawm, III | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 784 952 |
| Melissa Altizer | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 789 582 |
| Jacqueline Roecker, a/k/a, Jacqueline Renee Roecker | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 790 233 |
| Linda L. Leonard, a/k/a, Linda Lou Leonard | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 790 297 |
| Christopher L. Fehring, a/k/a, Christopher Leonard Fehring | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 790 664 |
| Walter Richard Roecker, a/k/a, Richard Roecker | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 791 242 |
| Gary L. Leonard, a/k/a, Gary Lee Leonard | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 89 |
| Rhonda Jean Frost | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 93 |
| Lynn A. Fox | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 431 |
| Claudia J. Leonard | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 435 |
| Ellen Marie Freck | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 437 |
| Stephen Beryl Clark | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 441 |
| Pamela R. Reynolds | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 455 |
| Alan D. Miller | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 459 |
| Michael T. Moss | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 463 |
| Richard A. Fehring, a/k/a, Richard Allen Fehring | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 739 |
| James H. Fox | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 761 |
| A.I.B. Miller | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 779 |
| Wilbur Wayne Leonard, Jr. | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 793 673 |
| Keith Ryan Gaston | HG ENERGY II APPALACHIA LLC | DEED | 783 673 |
| Ryan Gaston aka Keith Ryan Gaston | HG ENERGY II APPALACHIA LLC | DEED | 790 59 |
| Larry E. Bellamy, a/k/a, Larry Eugene Bellamy | HG ENERGY II APPALACHIA LLC | DEED | 781 367 |
| Peggy Ann Jarrell | HG ENERGY II APPALACHIA LLC | DEED | 782 687 |
| Timothy H. Lovett | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 83 |
| John Mark Kemper | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 791 368 |
| Paul E. Campbell | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 77 |
| Donald R. Reynolds | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 792 83 |
| John Mark Kemper | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 789 442 |
| Shelia Mahaffey | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 788 55 |
| James Dudley Griffin | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 787 863 |
| William Kenneth Weaver (by his POA, Stella Weaver) | HG ENERGY II APPALACHIA LLC | NOT LESS THAN 1/8 | 787 863 |

RECEIVED
Office of Oil and Gas
APR 24 2023
WV Department of
Environmental Protection

05/05/2023



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

CK# 035443

\$ 5000⁰⁰

Expedited
Mod

April 17, 2022

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

RE: Vaneck 1215 S-11H Drill Permit Revision Request – (47-041-05741)
Freeman's Creek District, Lewis County
West Virginia

Dear Mr. Blevins -

Per our discussions, enclosed are revised forms (survey plat, mylar, WW-6B, casing schematic, AOR, WW-6A1) and a check for expedited service for the 1215 S-11H well work permit revision request. We ask the permit be modified as the lateral has been lengthened and the Intermediate Casing has been revised.

Please let me know if you have any questions or require additional information. I can be reached at (304) 420-1119 or dwhite@hgenergyllc.com.

Very truly yours,

Diane White

Diane C. White

Enclosures

cc: Ken Greynolds – WV DEP State Inspector

RECEIVED
Office of Oil and Gas

APR 24 2023

WV Department of
Environmental Protection

05/05/2023