



west virginia department of environmental protection

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

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

Wednesday, December 16, 2020
WELL WORK PERMIT
Horizontal 6A / New Drill

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

Re: Permit approval for BURNSIDE 1214 N-3H
47-041-05709-00-00

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: BURNSIDE 1214 N-3H
Farm Name: JOHN K BURNSIDE ET AL
U.S. WELL NUMBER: 47-041-05709-00-00
Horizontal 6A New Drill
Date Issued: 12/16/2020

Promoting a healthy environment.

PERMIT CONDITIONS 4704105709

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number: _____

PERMIT CONDITIONS

4704105709

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.



4704105709

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
dep.wv.gov

**ORDER
ISSUED UNDER
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 6A**

TO: HG Energy, LLC
5260 Dupont Circle
Parkersburg, WV 26101

DATE: December 10, 2020
ORDER NO.: 2020-W-8

INTRODUCTION

This Order (hereinafter "Order") is issued by the Office of Oil and Gas (hereinafter "OOG"), by and through its Chief, pursuant to the authority of W. Va. Code §§ 22-1-1, 22-6-1 and 22-6A-1 *et seq.* to HG Energy, LLC (hereinafter "HG" or "Operator"), collectively the "Parties."

FINDINGS OF THE CHIEF

In support of this Order, the Chief hereby finds the following:

1. OOG, an office within the West Virginia Department of Environmental Protection, is the agency with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 *et seq.*, and the rules and regulations promulgated thereunder.
2. HG is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 5260 Dupont Circle, Parkersburg, WV 26101.
3. On November 9, 2020 HG submitted a well work permit application identified as API# 47-041-05709. The well is located on the Burnside 1214 Pad in the Freemans Creek District of Lewis County, West Virginia.
4. On November 9, 2020 HG requested a waiver for Wetlands, A and C as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API# 47-041-05709.

CONCLUSIONS OF LAW

1. West Virginia Code §22-1-6(d) requires, in part, that “in addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to... (3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing.”
2. West Virginia Code §22-6A-2(a)(6) requires, in part, that “Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter.”
3. West Virginia Code §22-6A-12(b) requires, in part, that “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 Office of Oil and Gas 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 Office of Oil and Gas 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.”

ORDER

West Virginia Code §22-6A-12(b) requires, in part, that “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. The Office of Oil and Gas grants the request for a waiver for Wetlands A and C from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit application identified as API#s 47-041-05709. The Office of Oil and Gas hereby **ORDERS** that HG shall meet the following site construction and operational requirements for the Burnside 1214 Well Pad:

- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least twenty-four inches (24”) in height.
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs.
- c. Wetlands A and C shall be protected by two layers of eight (8”) compost filter sock. This along with temporary and permanent vegetative cover will prevent sediment from reaching the wetlands.
- d. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual.
- e. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill.
- f. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill.
- g. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls.
- h. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs.
- i. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½”) rain within any twenty-four (24) hour period.
- j. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies.
- k. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 10th day of December 2020.

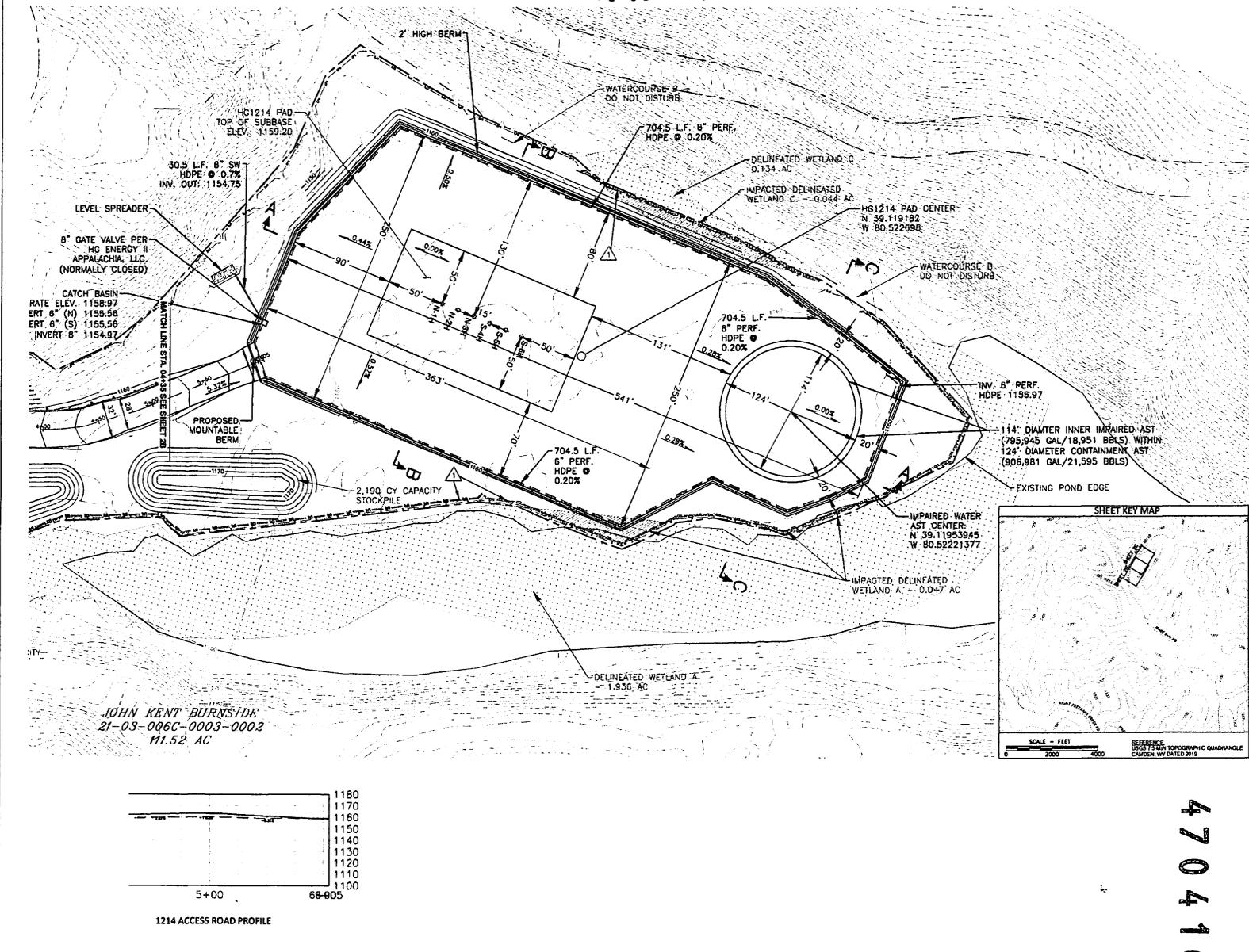
4704105709

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

By: James Martin Digitally signed by James Martin
Date: 2020.12.10 16:55:47 -05'00'
JAMES A. MARTIN, CHIEF

Attachment 1



LEGEND

- ROCK CHECK DAM
- ROCK APRON
- ACCESS ROAD/PAD CHANNEL
- CONCRETE FILTER SOCK 8\"/>
- APPROXIMATE LIMITS OF DISTURBANCE
- APPROXIMATE PROPERTY LINE
- EXISTING INDEX CONTOUR
- PROPOSED SUBBASE INTERMEDIATE CONTOUR
- PROPOSED SUBBASE INTERMEDIATE CONTOUR
- EXISTING ACCESS ROAD
- EXISTING OVERHEAD UTILITY LINE
- EXISTING GAS LINE
- EXISTING WATER LINE
- CONSTRUCTION FENCE
- GENERAL

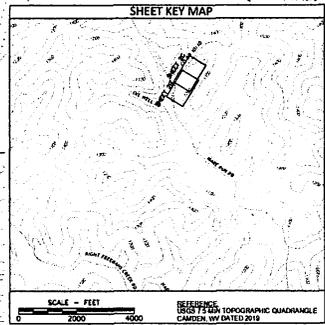
SECTION

TOE BENCH (SEE BENCH DETAIL)

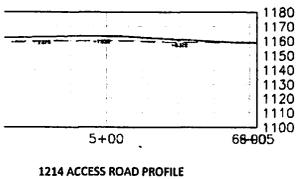
EROSION CONTROL BLANKET

EXISTING WETLAND

- BEST PRACTICE GENERAL NOTES:**
- ALL PROPOSED ELEVATIONS SHOWN ON PLAN SHEETS REFLECT PROPOSED SUBBASE ELEVATIONS.
 - REFERENCE THIS SHEET WITH THE CONSTRUCTION NOTES AND DETAILS.
 - A CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS/APPROVALS REQUIRED TO CONSTRUCT THIS SITE INCLUDING BUT NOT LIMITED TO FEDERAL, STATE, AND LOCAL PERMITS/APPROVALS.
 - NO CONSTRUCTION IS TO BE PERFORMED WITHIN ANY DELINEATED WETLANDS UNLESS PERMITTED BY THE APPROPRIATE AGENCIES.
 - CONTRACTOR IS RESPONSIBLE TO CONSTRUCT PROPER TIE AND SPACING BELCHES TO BE USED IN ALL CONSTRUCTION WORK TO PREVENT EROSION AND SEDIMENTATION.
 - CONTRACTOR SHALL MAINTAIN BEST PRACTICE EROSION AND SEDIMENTATION CONTROL MEASURES THROUGHOUT THE CONSTRUCTION PROCESS.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
 - CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.



JOHN KENT BURNSIDE
21-03-006C-0003-0002
111.52 AC



REFERENCE:

- PROPERTY BOUNDARIES & OTHER INFORMATION OBTAINED BY THE PROPERTY OWNER FROM THE VIRGINIA DEPARTMENT OF REVENUE ON 12/04/2018.
- EXISTING CONTOURS OBTAINED FROM THE VIRGINIA DEPARTMENT OF REVENUE ON 12/04/2018.

NOTES:

- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES AND STRUCTURES.

SCALE - FEET

0 2000 4000

REFERENCE: USGS 7.5 MIN TOPOGRAPHIC QUADRANGLE CARMEN, WV DATED 2018

SCALE - FEET

0 40 80 120

20488
STATE OF
WEST VIRGINIA
Professional Engineer
Ryan Cour

**SITE DEVELOPMENT PLAN
WITH EROSION AND SEDIMENTATION CONTROLS**

HG 1214 PAD
FREEMANS CREEK DISTRICT
LEWIS COUNTY, WEST VIRGINIA

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

APPROVED: SEP 10/09/2020

CHECKED: SEP 10/08/2020

DRAWN: SEP 10/08/2020

PROJECT NO.: 4000-PA008129

DRAWING NUMBER: PA008129-001

SHEET: 2C

Penn E&R
Environmental & Remediation, Inc.
111 RYAN COURT, PITTSBURGH, PA 15206
412-722-1222

4704105709

C:\PROJECT FILES\4000-PA008129 HG 1214 WET PAD PLANS\DWG\21-03-006C-0003-0002 2020 2:59 PM

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: _____

Operator's Well Number: Burnside 1214 N-3HWell Operator: HG Energy II Appalachia, LLCWell Number: Burnside 1214 N-3H Well Pad Name: Burnside 1214 PadCounty, District, Quadrangle of Well Location: Lewis County, Freemans Creek District, Camden Quad

Answer the questions below to request a waiver from West Virginia Department of Environmental Protection for any wetlands or perennial streams which lie within one hundred feet of proposed project Limit of Disturbance (LOD), which includes any erosion and sediment control devices to be used.

This waiver shall be requested pursuant to Chapter 22 Article 6A Section 12 of West Virginia Code, which states:

§22-6A-12(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.

§22-6A-12(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.

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Dept. of Environmental Protection

4704105709

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: _____

Operator's Well Number: Burnside 1214 N-3H

Answer in the space provided, or use additional pages as necessary to fully answer the questions below:

1. Describe the proposed project location, including unique identifying names of all wetlands, and the names of perennial streams for which the waiver is sought.

Based on 7.5-minute USGS topographic mapping (see the Cover Sheet of the Burnside 1214 Pad Drawing Set), there are no perennial streams within 100 feet of the Limit of Disturbance (LOD).

The following wetlands are within 100 feet of the LOD:

Wetland A (1.936 acre total, 0.047 acre impacted)

Wetland C (0.134 acre total, 0.044 acre impacted)

2. Justify the proposed activity by describing alternatives to this project that were considered.

- a. Include a No-Action Alternative as to show "the future without the project"
- b. Location Alternatives must be shown
- c. Must demonstrate why a one hundred foot buffer cannot be maintained
- d. Describe how the proposed project is the least environmentally damaging practicable alternative

a. The No-Action Alternative for this site is the Burnside 1214 well pad not being constructed. This results in HG not utilizing acquired assets, and landowners not receiving anticipated compensation for leased land.

b. See attached figure. Location to northwest was evaluated, but was not feasible due to layout issues and landowner agreements.

c. One hundred foot buffer to wetlands cannot be maintained due to construction limits required to construct the Burnside 1214 well pad. The site and access road are limited by topographic constraints (steep slopes).

d. The proposed Burnside 1214 well pad is the least environmentally damaging practicable alternative as it avoids perennial streams, minimizes impacts to wetlands, utilizes an existing access road as much as practicable, and does not disturb any riparian buffers.

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: _____

Operator's Well Number: Burnside 1214 N-3H

- 3. Identify sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. This description should include all additional erosion and sediment control measures and devices that will be used.**

The contractor shall delineate sensitive areas, LOD, and shall install barriers where equipment may not be parked, staged, operated, or located for any purpose before construction activities commence. E&S controls will be installed as necessary during initial site access to minimize accelerated erosion and sedimentation. Perimeter controls (compost filter sock) shall be installed immediately after the site is accessed. Land clearing and grading shall commence only after all downslope E&S controls have been constructed and stabilized. E&S controls shall be maintained during all construction activities. Upon completion of construction, stabilization will be provided including seeding & mulching. Temporary controls shall be removed only once the site is stabilized. A 2' berm will be constructed around the pad to capture any discharges. A french drain will be installed on the perimeter of the pad to capture any runoff from the well pad surface. The french drain consists of 6" perforated HDPE pipe, with an impermeable liner surrounding the backfill. The french drain will flow to a catch basin located on the pad. The basin outlets through an HDPE pipe with a gate valve installed. The valve shall be closed during any drilling activity or operations, and no discharge from the pad shall occur during drilling activities.

- 4. Provide mapping, plans, specifications and design analysis for the preferred alternative to the project.**

- a. Specify in writing what additional controls, measures, devices, monitoring, etc. will be used to protect these wetlands and/or perennial streams for which the waiver is sought.

See attached Burnside 1214 Pad Drawing Set. Wetland avoidance impact minimization will be accomplished with the installation of orange construction fencing by the contractor. Efforts shall be made to limit the amount of earth disturbance within the 100 foot buffer. All E&S controls shall be inspected on a regular basis. Damaged or improperly functioning E&S controls shall be replaced immediately.

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Department of
Environmental Protection

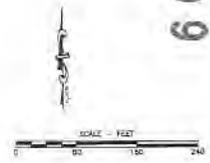


HG 1214A PAD
 ELEV: 1487.80
 CUT: 52,333 CY
 FILL: 50,183 CY
 BALANCE: 2,150 CY CUT
 CENTER:
 N89.131589 W80.529213

HG 1214B PAD
 ELEV: 1481.90
 CUT: 34,015 CY
 FILL: 32,287 CY
 BALANCE: 1,728 CY CUT
 CENTER:
 N89.132472 W80.532958

1214B-1214A 22' WIDE ACCESS ROAD
 MAX GRADE: 17.19%
 ~600 LF
 CUT: 332 CY
 FILL: 4,155 CY
 BALANCE: 3,823 FILL

22' WIDE ACCESS ROAD
 MAX GRADE: 14.89%
 ~8,800 LF
 CUT: 35,935 CY
 FILL: 35,068 CY
 BALANCE: 867 CY CUT



1214A & 1214B PRELIMINARY DESIGN
 7-16-19
 SHEET 7 OF 7

4704105709

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

1) Well Operator: HG Energy II Appalachia, L.P. 494519932 Lewis Freeman Camden 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Burnside 1214 N-3H Well Pad Name: Burnside 1214

3) Farm Name/Surface Owner: John K Burnside, et al Public Road Access: Mare Run Rd at CR 10/9

4) Elevation, current ground: 1164' Elevation, proposed post-construction: 1159'

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 6685'/6767' and 82' in thickness. Anticipated pressure at 4314#.

8) Proposed Total Vertical Depth: 6693'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 19,227'

11) Proposed Horizontal Leg Length: 11,979'

12) Approximate Fresh Water Strata Depths: 803', 950'

13) Method to Determine Fresh Water Depths: Nearest offset well data, (47-041-00283, 0210,)

14) Approximate Saltwater Depths: None found

15) Approximate Coal Seam Depths: 510', 910', 915' (Surface casing is being extended to cover the coal)

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

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

RECEIVED
Office of Oil and Gas
NOV 09 2020

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

WV Department of
Environmental Protection

B.S. 10-22-20

4704105709

WW-6B
(04/15)

API NO. 47- _____ - _____
OPERATOR WELL NO. Burnside 1214 N-3H
Well Pad Name: Burnside 1214

18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	New	LS	157.5	120'	120'	Drilled In
Fresh Water/Coal	20"	NEW	J-55	94	1050'	1050'	CTS
Intermediate 1	13 3/8"	NEW	J-55 BTC	68	2050'	2050'	CTS
Intermediate 2	9 5/8"	NEW	J-55 BTC	40	2850'	2850'	CTS
Production	5 1/2"	NEW	P-110 HP	23	19227'	19227'	CTS
Tubing							
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	30"	.500				Drilled In
Fresh Water/Coal	20"	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	3950		Type 1/Class A	Lead 40% excess, Tail 0% Excess
Production	5 1/2"	8 1/2"	.415	16240	12500	Type 1/Class A	20% excess yield = 1.19, tail yield 1.84
Tubing							
Liners							

RECEIVED
Office of Oil and Gas

NOV 09 2020

PACKERS

WV Department of
Environmental Protection

Kind:				
Sizes:				
Depths Set:				

B.S. 10-22-20

WW-6B
(10/14)

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 6693'. Drill horizontal leg to estimated 11,979' lateral length, 19,227' 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): 6.32 acres

22) Area to be disturbed for well pad only, less access road (acres): 4.12 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 - Run 1 spiral centralizer every 5 joints from the top of the curve to surface. Run 1 spiral centralizer every 3 joints from the 1st 5.5" long joint to the top of the curve.

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

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

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Department of
Environmental Protection

25) Proposed borehole conditioning procedures:

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

*Note: Attach additional sheets as needed.

HG Energy II Appalachia, LLC
Burnside 1214 Well Pad (N-1H, N-2H, N-3H, S-4H, S-5H, S-6H)
Cement Additives

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

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Dept of Environmental



1214 N-3H
Marcellus Shale Horizontal
Lewis County, WV

Ground Elevation			1214 N-3H SHL				14206309.1N 1775709.49E				
Azm			1214 N-3H LP				14206921.13N 1776399.78E				
WELLBORE DIAGRAM			1214 N-3H BHL				14218213.26N 1772414.56E				
WELLBORE DIAGRAM	HOLE	CASING	GEOLOGY	TOP	BASE	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS	
	30"	30" 157.5# LS	Conductor	0	120	AIR	N/A, Casing to be drilled in w/ Dual Rotary Rig	N/A	Ensure the hole is clean at TD.	Conductor casing = 0.5" wall thickness	
	26"	20" 94# J-55	Fresh Water	0	803, 950	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	
			Kittanning Coal	910	915						
			Fresh Water Protection	0	1050						
	17.5"	13-3/8" 68# J-55 BTC	Little Lime	1464	1482	AIR / KCL Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on every joint <i>"will also be running ACP for isolating storage zone"</i>	Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.480" wall thickness Burst=3450 psi	
			Big Lime	1509	1569						
			Injun / Gantz (Storage)	1571 / 1854	1679 / 1914						
			Intermediate 1	0	2050						
	12.25"	9-5/8" 40# J-55 BTC	Fifty / Thirty Foot	1970 / 2069	1990 / 2084	AIR / KCL Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on first 2 joints then every third joint to 100' form surface	Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.395" wall thickness Burst=3950 psi	
			Gordon Stray / Gordon	2099 / 2134	2136 / 2214						
			5th Sand	2354	2399						
			Bayard / Warren	2434 / 2729	2464 / 2764						
	8.5" Vertical	5-1/2" 23# P-110 HP CDC HTQ	Speechley	3065	3080	AIR / 9.0ppg SOBMs	<u>Lead:</u> 14.5 ppg POZ/PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170 <u>Tail:</u> 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA170 20% Excess Lead Yield=1.19 Tail Yield=1.94 CTS	Run 1 spiral centralizer every 5 joints from the top of the curve to surface.	Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.415" wall thickness Burst=16240 psi Note: Actual centralizer schedules may be changed due to hole conditions	
			Balltown	3178	3238						
			Bradford	3841	4374						
			8.5" Curve	8.5" Lateral	Benson	4362		4374			11.5ppg-12.5ppg SOBMs
					Rhinestreet	6009		6255			
					Cashaqua	6255		6355			
					Middlesex	6355		6387			
					West River	6387		6458			
Burkett					6458	6468					
Tully Limestone					6468	6576					
Hamilton					6576	6685					
Marcellus					6685	6767					
TMD / TVD (Production)					19227	6693					
Onondaga	6767										

LP @ 6693' TVD / 7247' MD

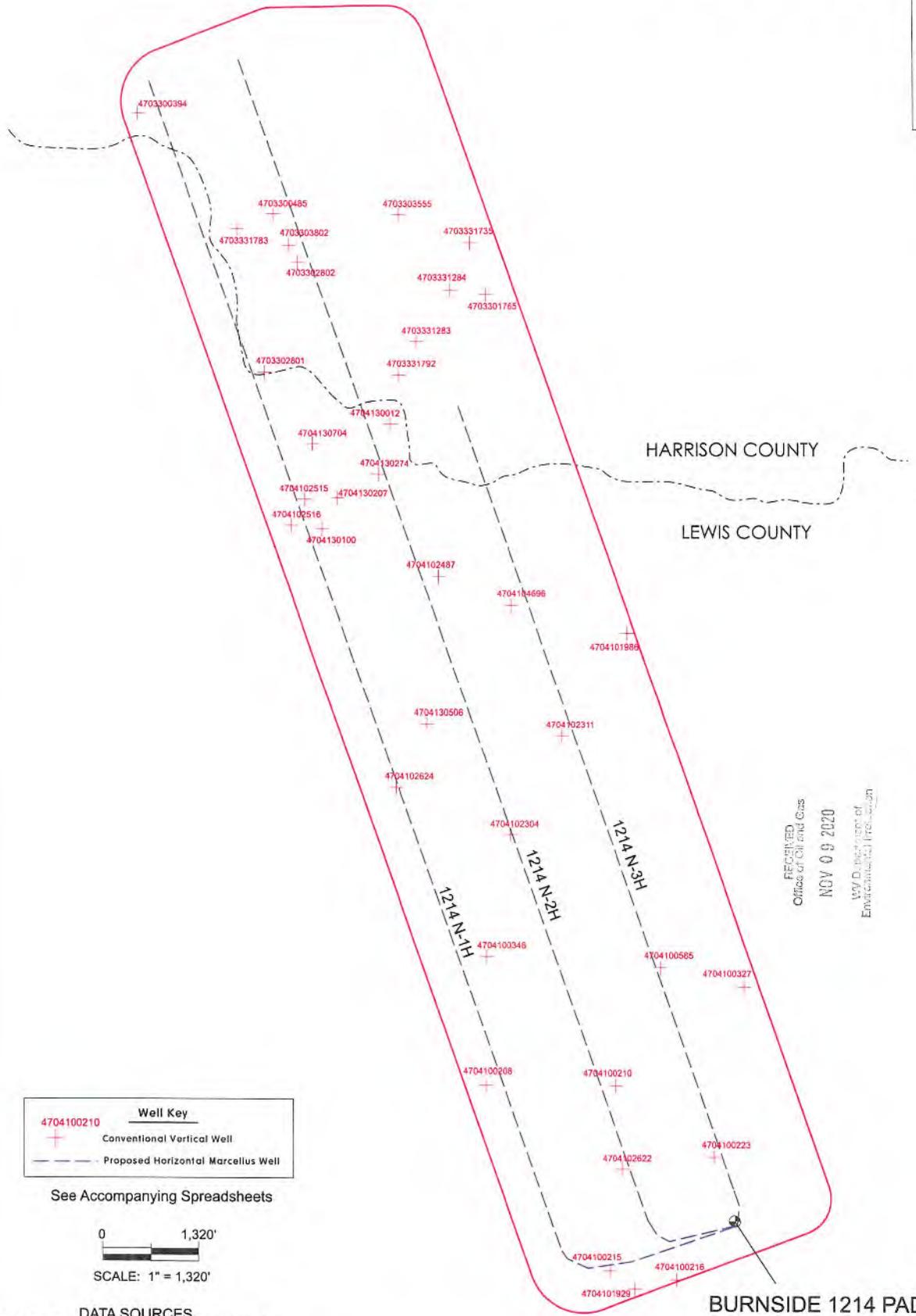
8.5" Hole - Cemented Long String
5-1/2" 23# P-110 HP CDC HTQ

+/-11980' ft Lateral

TD @ +/-6693' TVD
+/-19227' MD

X=centralizers

4704105709



HARRISON COUNTY
LEWIS COUNTY

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

Well Key	
+	Conventional Vertical Well
- - -	Proposed Horizontal Marcellus Well

See Accompanying Spreadsheets



SCALE: 1" = 1,320'

DATA SOURCES
WVGES Data Set - 2020; WVDEP Website

BURNSIDE 1214 PAD

Area of Review for:

BURNSIDE 1214 NORTH UNIT
Proposed 1214 N-1H Proposed 1214 N-2H
Proposed 1214 N-3H

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



Freeman's Creek District, Lewis County, W.Va.
& Union District, Harrison County, W.Va.

4704105709

EXISTING WELLS LOCATED WITHIN THE AREA OF REVIEW FOR:
BURNSIDE 1214 NORTH UNIT AND PROPOSED WELLS N-1H, N-2H & N-3H

CT	API	COUNTY	FARM	OPERATOR NAME	FORMATION NAME	WELL TYPE	TVD	STATUS	LATITUDE	LONGITUDE
1	4703300394	Harrison	William Booth	Diversified Resources, Inc.	Gordon	Gas	2744	ACTIVE	39.160516	-80.551546
2	4703300485	Harrison	Hitt Heirs	Pioneer Petroleum, Inc.	UNKNOWN	not available	-	PLUGGED	39.156742	-80.545025
3	4703301765	Harrison	Hall & White	Blackrock Enterprises, LLC	Hampshire Grp	Oil and Gas	2853	ABANDONED	39.153705	-80.534832
4	4703302801	Harrison	J W Wagner	Dominion Energy Transmission, Inc.	Brallier	Gas	5211	ACTIVE	39.150814	-80.545499
5	4703302802	Harrison	Central Pitts Coal Corp	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	5510	ACTIVE	39.154947	-80.543864
6	4703303555	Harrison	Robert G Burnside	Alliance Petroleum Co. Inc.	Benson	Gas	5358	ACTIVE	39.156694	-80.539005
7	4703303802	Harrison	C B McIntyre	Consolidation Coal Co.	Fourth	Dry	3046	PLUGGED	39.155581	-80.544279
8	4703331283	Harrison	W L Hall	Bradford Supply Co.	Fifth	Oil	2576	PLUGGED	39.151964	-80.538189
9	4703331284	Harrison	J A White	Bradford Supply Co.	Hampshire Grp	Gas	2645	PLUGGED	39.153878	-80.536550
10	4703331735	Harrison	Gayl Gum	South Penn Oil Co.	Hampshire Grp	Oil	2816	PLUGGED	39.155643	-80.535573
11	4703331783	Harrison	Martha A Hitt	Cassady, William	Hampshire Grp	Oil	2721	PLUGGED	39.156205	-80.546766
12	4703331792	Harrison	W L Hall	Cassady, William	Hampshire Grp	Gas	2539	PLUGGED	39.150703	-80.539039
13	4704100208	Lewis	N A Lovett	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	2664	ACTIVE	39.124252	-80.535088
14	4704100210	Lewis	N A Lovett	Dominion Energy Transmission, Inc.	Gantz	Storage	2010	ACTIVE	39.124205	-80.528801
15	4704100215	Lewis	Payne Hall	Dominion Energy Transmission, Inc.	Fifth	Storage	2370	ACTIVE	39.117271	-80.529147
16	4704100216	Lewis	Jonathan W & Helen S Foote	Dominion Energy Transmission, Inc.	Gantz	Storage	1860	ACTIVE	39.116920	-80.525927
17	4704100223	Lewis	Burnette Bailey	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	3115	ACTIVE	39.121541	-80.524108
18	4704100327	Lewis	Owen Fisher	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	2603	ACTIVE	39.127890	-80.522588
19	4704100346	Lewis	Hudson Bailey	Hope Natural Gas Company	Up Devonian	Storage	2383	PLUGGED	39.129052	-80.535006
20	4704100585	Lewis	Caroline Oldaker	Dominion Energy Transmission, Inc.	Up Devonian	Storage	2547	PLUGGED	39.128617	-80.526627
21	4704101929	Lewis	Jonathan W/Helen S Foote	Dominion Energy Transmission, Inc.	Benson	Oil and Gas	4450	ACTIVE	39.116585	-80.527939
22	4704101986	Lewis	L B Conley	Dominion Energy Transmission, Inc.	Benson	Gas	4726	ACTIVE	39.141075	-80.528117
23	4704102304	Lewis	H Bailey	Dominion Energy Transmission, Inc.	UNKNOWN	not available	-	ACTIVE	39.133583	-80.533810
24	4704102311	Lewis	W Bailey	Dominion Energy Transmission, Inc.	UNKNOWN	Gas	-	ACTIVE	39.137294	-80.531307
25	4704102487	Lewis	A R Loudin	Dominion Energy Transmission, Inc.	Benson	Gas	4782	ACTIVE	39.143209	-80.537199
26	4704102515	Lewis	Alice White	Clarence Mutchelknaus	UNKNOWN	not available	-	ACTIVE	39.146124	-80.543593
27	4704102516	Lewis	Alice White	Perkins Oil & Gas, Inc.	UNKNOWN	not available	-	PLUGGED	39.145149	-80.544277
28	4704102622	Lewis	N A Lovett	Dominion Energy Transmission, Inc.	UNKNOWN	not available	-	ABANDONED	39.121100	-80.528526
29	4704102624	Lewis	J H Bailey	Dominion Energy Transmission, Inc.	Gantz	Storage	2710	ACTIVE	39.135354	-80.539307
30	4704104696	Lewis	T J Fahey	Dominion Energy Transmission, Inc.	UNKNOWN	not available	-	PLUGGED	39.142104	-80.533709
31	4704130012	Lewis	J M Hall	Federal Oil & Gas	UNKNOWN	not available	-	PLUGGED	39.148920	-80.539486
32	4704130100	Lewis	Goff Bailey	Hope Natural Gas Company	Fifth	Gas w/ Oil Show	2771	PLUGGED	39.145004	-80.542787
33	4704130207	Lewis	Gayl Gum	Atha Supply Company	UNKNOWN	not available	-	PLUGGED	39.146164	-80.542042
34	4704130274	Lewis	W L Hall	Hope Natural Gas Company	Hampshire Grp	Oil and Gas	2567	PLUGGED	39.147034	-80.540044
35	4704130506	Lewis	Chas W Rhodes	Hope Natural Gas Company	Hampshire Grp	Oil and Gas	2689	PLUGGED	39.137753	-80.537804
36	4704130704	Lewis	Alice White	South Penn Oil (S. Penn Nat. Gas)	Hampshire Grp	Gas	2675	PLUGGED	39.148194	-80.543210

SOURCE: WVGES DATASET (2020) and WVDEP WEBSITE AND FIELD SURVEYS
UPDATED 10/23/2020

YELLOW DENOTES WELL WITH TVD > 4,500' GREEN DENOTES SURVEYED WELLS

WV Department of
 Environmental Protection
 NOV 09 2020
 Original Document

4704105709

4704105709

PROPOSAL TO DRILL WITHIN DOMINION TRANSMISSION STORAGE FIELD

RECEIVED
Office of Oil and Gas

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

NOV 09 2020

WELL NAME: Burnside 1214 N-3H

WV Department of
Environmental Protection

Well # Burnside 1214 N-3H

DISTRICT/COUNTY/STATE: Freemans Creek / Lewis / WV

Submitted



JOSH HINTON
HG ENERGY, LLC

DATE

10-19-2020

Approved



Dominion Energy Transmission

DATE

10/21/2020

Approved



Dominion Energy Transmission

DATE

10/21/2020

Comments:

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

WW-9
(4/16)

API Number 47 - _____ - _____
Operator's Well No. Burnside 1214 N-3H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy II Appalachia, LLC OP Code 494501907

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

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: NA

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

Proposed Disposal Method For Treated Pit Wastes:

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

Will closed loop system be used? If so, describe: Yes, cuttings and fluids will be collected in a closed loop system, re-used or hauled to an approved disposal site or landfill.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Vertical - Air, Air/KCL, Air/SOBM, Horizontal - SOBMM

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

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

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

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

-Landfill or offsite name/permit number? See Attached

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

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

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

Company Official Signature Diane White
Company Official (Typed Name) Diane White
Company Official Title Agent

RECEIVED
Office of Oil and Gas

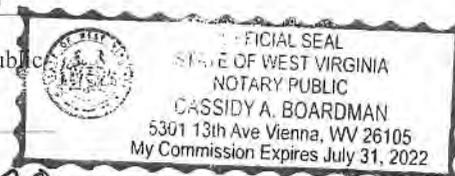
NOV 09 2020

WV Department of
Environmental Protection

Subscribed and sworn before me this 15th day of October, 2020

Cassidy A. Boardman Notary Public

My commission expires 7/31/2022



B.S. 10-22-20

HG Energy II Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 6.32 Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Hay 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Maintain E&S controls through the drilling and completion process

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Barry Stultz

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

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

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Department of
Environmental Protection

Title: Oil & Gas Inspector

Date: 10-22-20

Field Reviewed?

Yes

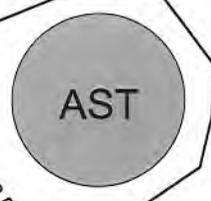
No

Reclamation Plan For:
BURNSIDE 1214 PAD



Katrina K. Rowe
 TM 5C, Parcel 34
 42 Ac.

BURNSIDE 1214 PAD



N-3H(SL) S-6H(SL)
 N-2H(SL) S-5H(SL)
 N-1H(SL) S-4H(SL)

John Kent Burnside
 TM 6C, Parcel 3.2
 111.52 Ac.

RECEIVED
 Office of Oil and Gas
 NOV 09 2020
 WV Department of Environmental Protection

Fill Area



Cut Area



~600' of Proposed
 Access Road
 (See Construction
 Plan for Detail)

Mare Run Road

Cut Area

John Kent Burnside
 TM 6C, Parcel 3.2
 111.52 Ac.

NOTE
 REFER TO THE WVDEP
 EROSION AND SEDIMENT CONTROL
 FIELD MANUAL VER. MAY 2012 FOR
 BMPs CONTROLLING EROSION AND
 SEDIMENT FROM SOIL-DISTURBING
 OPERATIONS.



Notes:

- REQUESTED PERMIT IS FOR DRILLING NEW HORIZONTAL WELLS.
- LOCATION AND ACCESS ROADS WILL BE CONSTRUCTED AS SHOWN ON THE ENGINEERED DRAWINGS WHICH ACCOMPANY THIS PERMIT APPLICATION. REFERENCE IS HEREBY MADE TO THOSE PLANS FOR MORE DETAIL ON E&S MEASURES TO BE TAKEN TO ENSURE COMPLIANCE WITH WVDEP RECLAMATION STANDARDS.
- ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
- NO DRILL PIT WILL BE CONSTRUCTED AND A CLOSED LOOP SYSTEM WILL BE UTILIZED TO HANDLE DRILL CUTTINGS.
- DRAWING NOT TO SCALE.

HG Energy II Appalachia, LLC

Site Safety Plan

**Burnside 1214 Well Pad
Weston
Lewis County, WV 26452**

October 2020: Version 1

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

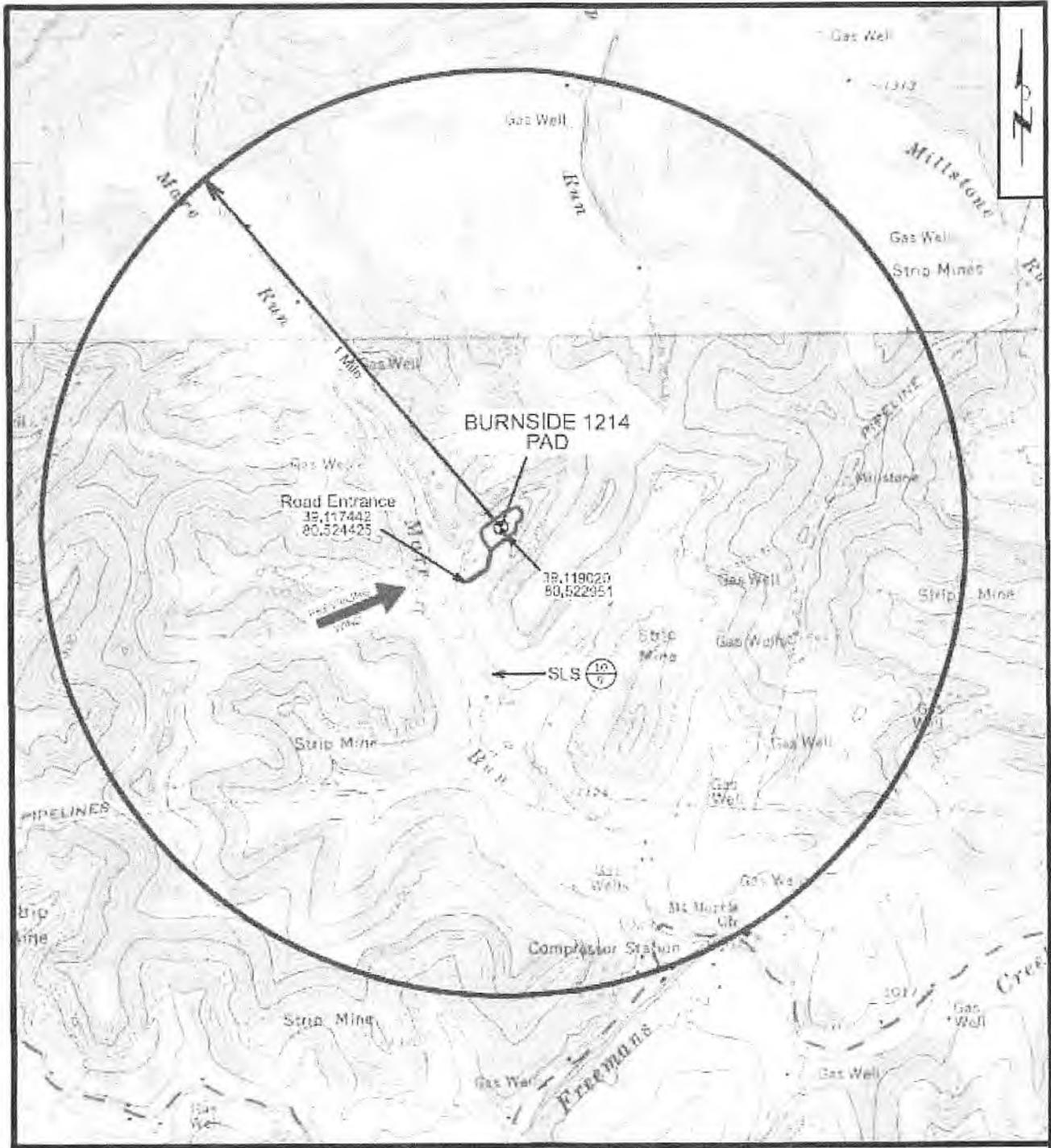
HG Energy II Appalachia, LLC

5260 Dupont Road
Parkersburg, WV 26101

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

B.S. 10-22-20

Topographic Map – (38-8 5.7.b2)



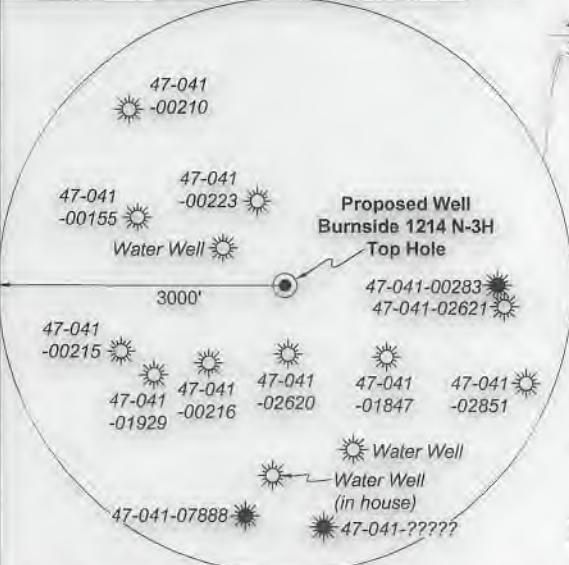
HG Energy II Appalachia, LLC
Well No. Burnside 1214 N-3H



Notes:
Well No. Burnside 1214 N-3H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,206,309.10'
E: 1,775,709.49'
Landing Point Coordinates
N: 14,206,921.13'
E: 1,776,399.78'
Bottom Hole Coordinates
N: 14,218,213.26'
E: 1,772,414.56'

Tag	Bearing	Dist.	Description
L1	S 42°57' W	1,630.2'	Threaded Pipe
L2	N 69°11' W	2,191.5'	Gate Post
L3	N 55°42' W	1,237.2'	#47-041-01847
L4	N 00°21' E	673.3'	#47-041-02620
L5	N 48°26' E	922.5'	Landing point

Notes: Well No. Burnside 1214 N-3H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°07'08.11" Latitude: 39°09'05.98"
Longitude: 80°31'23.37" Longitude: 80°32'04.41"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,330,091.674m N: 4,333,720.069m
E: 541,237.334m E: 540,233.038m
Plat orientation and corner and well references are
based upon the grid north meridian. Well location
references are based upon the magnetic meridian.



Note: 3 water well was found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.

FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-3H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: October 13 2020
OPERATOR'S WELL NO. Burnside 1214 N-3H
API WELL NO. 474
47 - 041 - 05701
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1159' WATERSHED: Middle West Fork Creek
DISTRICT: Freemans Creek
SURFACE OWNER: John K. Burnside, et al
ROYALTY OWNER: J.S. Hall, et al, et al LEASE NO: ACREAGE: 214.08
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 19,227' MD 6,693' TVD

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

9,798' to Bottom Hole

6,568' to Top Hole

TOP LATITUDE 39 - 07 - 30
BTM LATITUDE 39 - 10 - 00

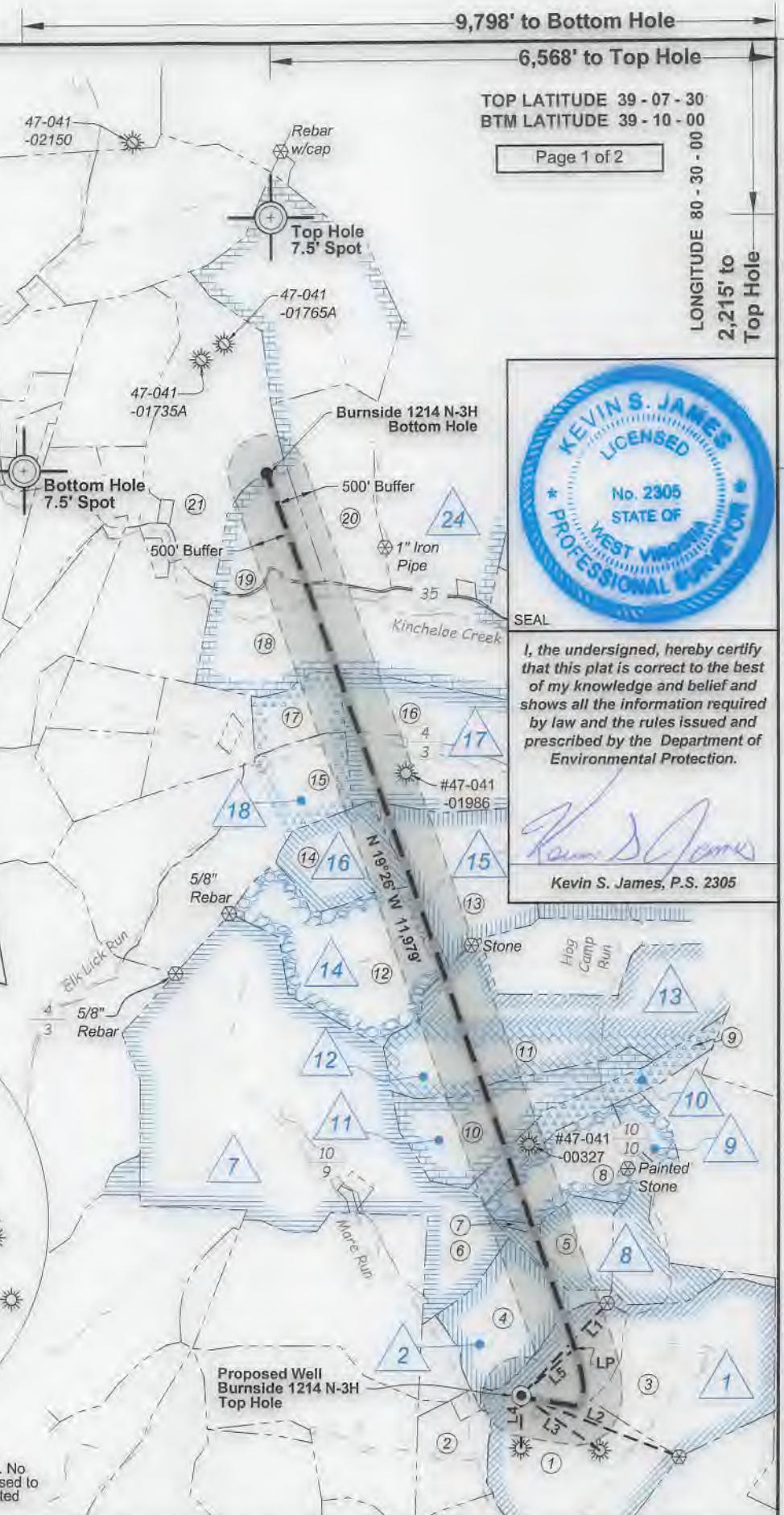
Page 1 of 2

LONGITUDE 80 - 30 - 00
2,215' to Top Hole
5,464' to Bottom Hole



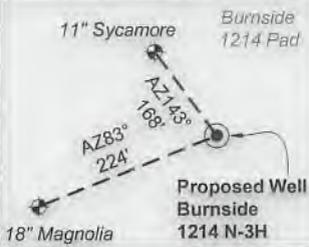
SEAL
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.
Kevin S. James
Kevin S. James, P.S. 2305

GRID NORTH





**Well Location References
Not to Scale**



ID	Lease
1	J.S. Hall, et ux
2	W.J. Grant, et al
7	Hudson Bailey
8	Lowman E. Garrett, et al
9	Silas E. Gochenour, et al
10	Will E. Morris, et al
11	C.M. Garrett, et al
12	Ira L. Queen, et al
13	Clara Queen, et vir, et al
14	John L. Burnside, et al
15	W.T. Highland, et al
16	W.G. Bailey
17	Lizzie B. Conley
18	Ruth Bailey
24	Oma G. Hall, et al

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.)

Lewis Co. - Freeman Creek Dist.				
No.	TM / Par	Owner	Bk / Pg	Ac.
1	6C / 3.2	John K. Burnside, et al	W1 / 392	115.00
2	5C / 41	HG Energy II Appalachia	740 / 377	23.90
3	6C / 3	Phillip E. Burnside, et al	666 / 38	87.20
4	5C / 34	Karina K. Rowe	572 / 209	42.00
5	5C / 49	Edward E. Garrett, et al	429 / 245	28.50
6	5B / 18	Mike Ross Inc.	659 / 215	271.43
7	5C / 47	James C. Garrett, et al	621 / 578	1.80
8	6B / 8	James C. Garrett, et al	621 / 578	47.00
9	6B / 6	James C. Garrett, et al	621 / 578	30.00
10	5B / 39	Edward E. Garrett, et al	429 / 245	55.00
11	6B / 5	James C. Garrett, et al	621 / 578	136.00
12	5B / 38	John K. Burnside, et al	W1 / 393	75.00
13	5B / 36	Edward E. Garrett, et al	429 / 245	64.00
14	5B / 37	John K. Burnside, et al	W1 / 393	36.00
15	5B / 32	John & Rhonda Myers	652 / 73	76.64
16	5B / 35	Ruth U. Theofield Living Trust Agreement October 24, 2018	740 / 840	96.69
17	5B / 34	Mark D. Griffith	652 / 69	20.49
Harrison Co. - Union-Outside Dist.				
No.	TM / Par	Owner	Bk / Pg	Ac.
18	442 / 8.3	William Coffindaffer, et ux (LE)	1585 / 819	114.79
19	442 / 7.1	Stephanie Stalnaker	1674 / 1254	43.24
20	442 / 7	Michael A. & Sarah G. Weaver	1592 / 1189	61.10
21	442 / 6	J.C. & Karen Lynn Hayhurst	1592 / 1194	97.01

FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-3H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: October 13 2020
OPERATOR'S WELL NO. Burnside 1214 N-3H
API WELL NO. H44
47 - 041 - 05701
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1159' WATERSHED: Middle West Fork Creek
DISTRICT: Freemans Creek
SURFACE OWNER: John K. Burnside, et al
ROYALTY OWNER: J.S. Hall, et al, et al LEASE NO: ACREAGE: 214.08

Btm: Big Isaac
QUADRANGLE: Top: Camden
COUNTY: Lewis
ACREAGE: 115.00

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 6,693' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 19,227' MD

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

WW-6A1
(5/13)

Operator's Well No. Burnside 1214 N-3H

**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

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Department of
Environmental Protection

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

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

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

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

Well Operator: HG Energy II Appalachia, LLC

By: Diane White *Diane White*

Its: Accountant

**HG Energy II Appalachia, LLC
Burnside 1214 N-3H Lease Chain**

1214N Tract	LEGACY LEASE NUMBER	TAX MAP	LEASE NUMBER	GRANTOR/LESSOR	GRANTEE/LESSEE	ROYALTY	DEED BOOK	PAGE				
1	FK053143	03-006C-0003-0000 03-006C-0003-0001 03-005C-0042-0000	Q101021000	J. S. HALL AND CORA A. HALL, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	42	94				
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	85	127				
				HOPE NATURAL GAS COMPANY	RESERVE GAS COMPANY	ASSIGNMENT	79	370				
				RESERVE GAS COMPANY	HOPE NATURAL GAS COMPANY	CONFIRMATORY DEED	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	WVSOS					
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				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				
				DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	AMENDED AND RESTATED PARTIAL ASSIGNMENT	723	527				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499				
				2	FK061776	03-005C-0034-0000	Q100936000	W. J. GRANT AND ADDIE J. GRANT, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	209	438
								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	WVSOS									
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS									
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				
DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS									
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723					499				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734					558				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736					220				
								LOMAN E. GARRETT AND VIRGINIA G. GARRETT, HIS WIFE; CHARLES M. GARRETT, JR. AND HILDA L. GARRETT, HIS WIFE; JOHN E. GARRETT AND HELEN HALL GARRETT, HIS WIFE; AND, JOSEPH R. GARRETT AND RUTH G. GARRETT, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	217	101
								FRANK MCCLUNG, WIDOWER; DORTHY MCCLUNG; GARNETTA MCCLUNG; MARY STOUT AND HENRY STOUT, HER HUSBAND; WILDA L. BERG AND HENRY B. BERG, HER HUSBAND; HAROLD O. MCCLUNG; KENNETH E. MCCLUNG AND EVELYN MCCLUNG, HIS WIFE; AND KATHRYN L. WARE AND DENCIL L. WARE, HER HUSBAND	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	221	100

RECEIVED
 Office of Oil and Gas
 NOV 09 2020
 WV Department of
 Environmental Protection

4704105709

8

FK063041
FK064315
FK064889
FK071789

03-005B-0040-0000
03-006B-0009-0000
06-006C-0001-0000

Q100359000
Q100596000
Q100860000

VA Department of
Environmental Protection

NOV 09 2020

RECEIVED
Office of Oil and Gas

MABEL LITTON AND C. C. LITTON, HER HUSBAND; GLADYS I. LEGGETT AND WALLACE E. LEGGETT, HER HUSBAND; ELZA H. WAYBRIGHT AND JANET M. WAYBRIGHT, HIS WIFE; RAYMOND LLOYD WAYBRIGHT AND INEZ WAYBRIGHT, HIS WIFE; RALPH WAYBRIGHT AND INA WAYBRIGHT, HIS WIFE; ORAL R. WAYBRIGHT AND AUDREY F. WAYBRIGHT, HIS WIFE; WILMA T. SHEETS, WIDOW, WILMA T. SHEETS (GUARDIAN FOR JUDITH BELL); DOLLIE FAUBER AND R. L. FAUBER, HER HUSBAND; AILEEN S. MCCUNE AND J. F. MCCUNE, HER HUSBAND; DESSIE LEGGETT AND WILLIE LEGGETT, HER HUSBAND; W. A. MORRIS AND CLARA MORRIS, HIS WIFE; LAURA PARSONS, LLOYD T. MORRIS AND MILDRED MORRIS, HIS WIFE; O. J. EDWARDS, WIDOWER; PAUL EDWARDS AND ROSE ANN EDWARDS, HIS WIFE; JESSIE COX AND RAYMOND COX, HER HUSBAND; WOODROW EDWARDS AND DORIS R. EDWARDS, HIS WIFE; THURMAN L. EDWARDS AND MARGUERETTE EDWARDS, HIS WIFE; CECIL MORRIS AND ELEANOR MORRIS, HIS WIFE; PHILIP EDWARDS AND JUANITA EDWARDS, HIS WIFE; FLODIE LOVE AND OTIS LOVE, HER HUSBAND; W. J. EDWARDS AND MILDRED EDWARDS, HIS WIFE; GERTRUDE ILES AND RUDOLPH ILES, HER HUSBAND; MAPLE LONAS AND JOSEPH LONAS, HER HUSBAND; SADIE R. CARR AND E.R. CARR, HER HUSBAND; SELAH WYATT AND H. L. WYATT, HER HUSBAND; JUDITH BALL AND JOLONE BALL, HER HUSBAND; CURTIS R. SHEETS AND FRANCES SHEETS, HIS WIFE; AND NELLIE C. SHEETS

HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	225	149
SOUTH PENN OIL COMPANY (LEASE NO. 71789)	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	277	532
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		WVSOS
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS
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
DOMINON TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	220
SILAS E. GOCHENOUR AND EMZY GOCHENOUR	RESERVE GAS COMPANY	NOT LESS THAN 1/8	68	273
RESERVE GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	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		WVSOS
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS
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
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	220
WILL E. MORRIS AND CAMELLA MORRIS, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	209	432
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		WVSOS
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS
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	139

Q100278000

Q100356000

03-006B-0004-0000
03-005B-0036-0000

FK061784

10

4704105709

4704105709

				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723		499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734		558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736		220
11	FK062880 FK062963	03-005B-0039-0000	Q100289000 Q100695000	RUBY L. KLINGER (ALSO KNOWN AS RUBY KALLAS) AND ROBERT E. KLINGER, HER HUSBAND; HELEN L. LANG AND JUNIOR A. LANG, HER HUSBAND; JOSEPHINE TRAVIS AND RAYMOND TRAVIS, HER HUSBAND; AND, HAROLD E. OLDAKER, SINGLE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	216		238
				CHARLES M. GARRETT AND DELPHIA GARRETT, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	216		329
				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		WVSOS	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS	
				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	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723		499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734		558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736		220
12	FK053127	p/o 03-006B-0005-0000 p/o 03-006B-0039-0000	Q100382000	IRA L. QUEEN AND EFFIE QUEEN	FRED RICH	NOT LESS THAN 1/8	40		110
				T.N. BARNSDALL, SOUTHERN OIL COMPANY, FRED S. RICH, AND W.S. MOWRIS	RESERVE GAS COMPANY	ASSIGNMENT	85		106
				HOPE NATURAL GAS COMPANY AND RESERVE GAS COMPANY	CRUDE OIL COMPANY	ASSIGNMENT	55		456
				CRUDE OIL COMPANY	HOPE NATURAL GAS COMPANY AND RESERVE GAS COMPANY	ASSIGNMENT	55		315
				RESERVE GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	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		WVSOS	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS	
				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	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723		499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734		558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736		220
13	FK062406	p/o 03-006B-0005-0000	Q100939000	CLARA E. QUEEN AND G. L. QUEEN, HER HUSBAND; L. EARL GARRETT AND VIRGINIA G. GARRETT, HIS WIFE; JOHN E. GARRETT, SINGLE; JOSEPH R. GARRETT AND RUTH G. GARRETT, HIS WIFE; CHARLES M. GARRETT, JR. AND HILDA W. GARRETT, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	215		275
				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		WVSOS	
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS	
				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	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723		499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734		558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736		220
				JOHN L. BURNSIDE AND GRACE BURNSIDE, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	185		338

RECEIVED
 Office of Oil and Gas
 WV Department of Environmental Protection
 NOV 09 2020

14	FK058271	03-006B-0038-0000	Q100681000	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	WVSOS					
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				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					
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	220				
				15	FK053261	03-006B-0004-0000 03-005B-0036-0000	Q100487000	W. T. HIGHLAND AND DESSIE HIGHLAND, HIS WIFE; G. B. HIGHLAND; HATTIE THOMPSON AND ARTHUR THOMPSON, HER HUSBAND; HOMER HIGHLAND AND LILLIE HIGHLAND, HIS WIFE; AND, CARRIE HIGHLAND	RESERVE GAS COMPANY	NOT LESS THAN 1/8	65	335
RESERVE GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	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	WVSOS									
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS									
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	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									
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723					499				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734					558				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736					220				
16	FK053095	03-005B-0037-0000	Q100766000					W. G. BAILEY	J. W. TRACY	NOT LESS THAN 1/8	39	116
								J. W. TRACY	FRED S. RICH	ASSIGNMENT	44	532
								FRED S. RICH AND M. B. RICH, HIS WIFE; GEORGE H. CORNWALL AND MARY D. CORNWALL, HIS WIFE; J. M. REED AND ELLA REED, HIS WIFE; AND W. I. GOBLE AND L. M. GOBLE, HIS WIFE	CRUDE OIL COMPANY	ASSIGNMENT	52	176
								CRUDE OIL COMPANY	HOPE NATURAL GAS COMPANY AND RESERVE GAS COMPANY	ASSIGNMENT	55	456
				CRUDE OIL COMPANY	HOPE NATURAL GAS COMPANY AND RESERVE GAS COMPANY	ASSIGNMENT	55	315				
				RESERVE GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	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	WVSOS					
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				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	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									
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499								
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558								
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	220								
17	FK065219	03-005B-0035-0000 p/o 03-006B-0002-0000	Q100725000	LIZZIE B. CONLEY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	227	305				
				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	WVSOS					
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				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	PARTIAL ASSIGNMENT (32%)	712	848				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	717	1				

RECEIVED
 Office of Oil & Gas
 NOV 09 2020
 WV Department of Environmental Protection

4704105709

				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	722	170
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	220
18	FK058323	03-005B-0034-0000 p/o 03-005B-0032-0000	Q100931000 Q09876000	RUTH N. BAILEY, SINGLE	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	302	433
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	425	127
				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
				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	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	723	499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	734	558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	736	220
24	FK097991	20-0442-0007-0000 20-0442-0007-0001 20-0442-0007-0002 20-0442-0008-0000 20-0442-0008-0001 20-0442-0008-0003 20-0422-0032-0000	Q100844000	OMA G. HALL, SINGLE; MARIE P. HALL, WIDOW; EVELYN H. TAYLOR, WIDOW; BERTHA H. MILLER AND A.D. MILLER, HER HUSBAND; CHARLES R. HALL, SINGLE; HELEN M. HALL, SINGLE; PAMELA H. SHANKLIN AND WM. M. SHANKLIN, JR., HER HUSBAND; GERTRUDE BEALL AND BLAIR B. BEALL, HER HUSBAND; HELEN MCCOY, SINGLE; AND, ADA B. HALL, WIDOW	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1032	683
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG DEVELOPMENT COMPANY	ASSIGNMENT	1143	921
				CNG DEVELOPMENT COMPANY	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1169	820
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				DOMINION TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	1081
25	FK108082	p/o 20-0442-0004-0001 p/o 20-0442-0005-0000 p/o 20-0442-0006-0000 20-0442-0006-0001 20-0442-0006-0002 03-005A-0016-0000 03-005A-0016-0001 03-005A-0016-0002	Q100929000 Q102330001 1-10-1	W. L. HALL, HARRIET A. HALL, AND ABIGAL HALL	HARNE & COMPANY	NOT LESS THAN 1/8	103	313
				W. L. HALL, HARRIET A. HALL, AND ABIGAL HALL	HARNE & COMPANY	NOT LESS THAN 1/8	118	541
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG DEVELOPMENT COMPANY	ASSIGNMENT	1143	921
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT	1522	33
				DOMINON TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT OF FARMOUT AGREEMENT	1524	491
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	HARRISON 1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	LEWIS 684	57
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1576	125
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1584	942
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	ASSIGNMENT	1600	692
				DOMINION ENERGY TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	HARRISON 1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	LEWIS 723	499
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	HARRISON 1621	1295
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	LEWIS 734	558
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	HARRISON 1637	1081
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	LEWIS 736	220

WV Department of Environmental Protection
 Office of Oil and Gas
 NOV 9 2020
 RECEIVED

4704105709



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

4704105709

November 5, 2020

Kelly Kees
WV DEP
Division of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Drilling Under Roads – Burnside 1214 N-3H
Freemans Creek District, Lewis County
West Virginia

Dear Ms. Kees:

HG Energy II Appalachia, LLC, is submitting the attached application for a new well work permit for the Burnside 1214 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 Burnside 1214 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 dwhite@hgenergyllc.com or 304-420-1119.

Very truly yours,

Diane White

Diane C. White

Enclosures

RECEIVED
Office of Oil and Gas

NOV 09 2020

WV Department of
Environmental Protection

WW-6AC
(1/12)

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

Date of Notice Certification: 11/01/2020

API No. 47- _____
Operator's Well No. Burnside 1214 N-3H
Well Pad Name: Burnside Well Pad

Notice has been given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>541237.3</u>
County: <u>Lewis</u>		Northing: <u>4330091.7</u>
District: <u>Freemans Creek</u>	Public Road Access: <u>Mare Run Road / CR 10/9</u>	
Quadrangle: <u>Camden WV 7.5's</u>	Generally used farm name: <u>Burnside</u>	
Watershed: <u>Middle West Fork Creek</u>		

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY <input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED <input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED <input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION <input checked="" type="checkbox"/> 5. PUBLIC NOTICE <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		RECEIVED Office of Oil and Gas NOV 09 2020 WV Department of Environmental Protection	OOG OFFICE USE ONLY <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input checked="" type="checkbox"/> RECEIVED <input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED <input checked="" type="checkbox"/> RECEIVED <input checked="" type="checkbox"/> RECEIVED <input checked="" type="checkbox"/> RECEIVED
--	--	--	---

Required Attachments:

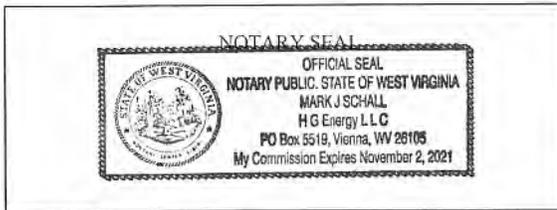
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication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

WW-6AC
(1/12)

Certification of Notice is hereby given:

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

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



Subscribed and sworn before me this 1st day of November, 2020.

Mark J. Schall Notary Public

My Commission Expires 11/2/2021

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

REGEN
Office of Oil & Gas

NOV 09 2020

WV Department of
Environmental Protection

WW-6A
(9-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. Burnside 1214 N-3H
Well Pad Name: Burnside 1214

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: 10/21/20 **Date Permit Application Filed:** 11/03/20

Notice of:

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

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

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

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

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

SURFACE OWNER(s) ✓
 Name: John & Phillip Burnside (pad, road, water)
 Address: 645 Mare Run Road
Weston, WV 26452

Name: _____
 Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
 Name: _____
 Address: _____

Name: _____
 Address: _____

SURFACE OWNER(s) (Impoundments or Pits)
 Name: _____
 Address: _____

COAL OWNER OR LESSEE
 Name: NA
 Address: _____

COAL OPERATOR
 Name: NA
 Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
 Name: Karina Rowe ✓
 Address: 1148 Mare Run Road
Weston, WV 26452

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

*Please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

WW-6A
(8-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. Burnside 1214 N-3H
Well Pad Name: Burnside 1214

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
NOV 09 2009
WV Department of Environmental Protection

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

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

WW-6A
(8-13)

4704105709
API NO. 47-
OPERATOR WELL NO. Burnside 1214 N-3H
Well Pad Name: Burnside 1214

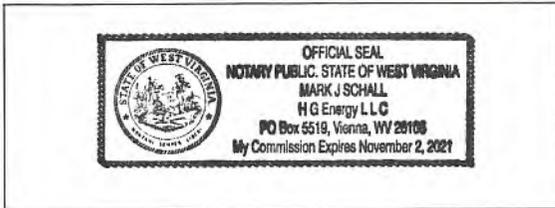
Notice is hereby given by:

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 depprivacyofficer@wv.gov.



Subscribed and sworn before me this 20th day of October, 2020.

Mark J. Schall Notary Public

My Commission Expires 11/2/2021

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Dept. of Environment and Natural Resources



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

4704105709

October 21, 2020

Karina Rowe
1148 Mare Run Road
Weston, WV 26452

RE: Burnside 1214 N-3H Well Work Permit Application - Notification
Freemans Creek District, Lewis County
West Virginia

Dear Ms. Rowe:

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
NOV 09 2020
WV Department of
Environmental Protection



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

4704105709

October 21, 2020

John and Phillip Burnside
645 Mare Run Road
Weston, WV 26452

RE: Burnside 1214 N-3H Well Work Permit Application - Notification
Freemans Creek District, Lewis County
West Virginia

Dear Sirs:

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

REC'D
Office of
NGV
WV
Environ.



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

4704105709

October 21, 2020

Dominion Energy Transmission
Attn: Ron Walden
925 White Oaks Blvd
Bridgeport, WV 26330

RE: Burnside 1214 N-3H Well Work Permit Application - 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,

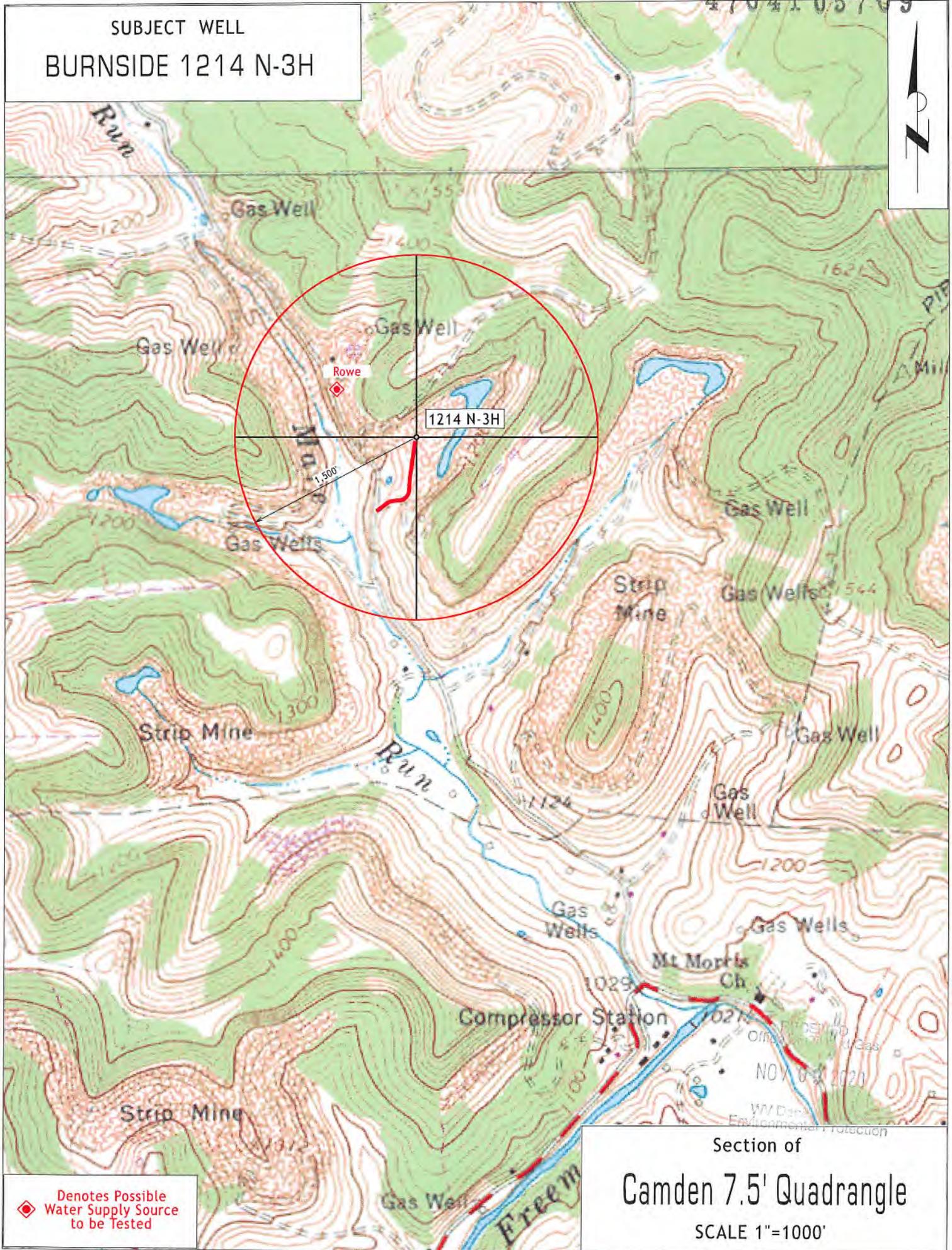
Diane White

Diane C. White

Enclosures

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

SUBJECT WELL
BURNSIDE 1214 N-3H



◆ Denotes Possible Water Supply Source to be Tested

Section of
Camden 7.5' Quadrangle
SCALE 1"=1000'

NOV 6 2020
WV Dept. Environmental Protection

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: 10/21/2020 **Date of Planned Entry:** 10/28/2020

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

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

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

Notice is hereby provided to:

SURFACE OWNER(s)

Name: John and Phillip Burnside (pad, royalty owner)

Address: 645 Mare Run Road
Weston, WV 26452

Name: _____

Address: _____

Name: _____

Address: _____

COAL OWNER OR LESSEE

Name: NA

Address: _____

MINERAL OWNER(s)

Name: Bertha & Eric Benedum Cynthia Sumpter

Address: 604 Mare Run Road 3297 Sycamore Lick Road
Weston, WV 26542 Jane Lew, WV 26378

*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: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>39.119010 & 80.522974</u>
County: <u>Lewis</u>	Public Road Access: <u>Mare Run Road / CR10/9</u>
District: <u>Freeman's Creek</u>	Watershed: <u>Middle West Fork Creek</u>
Quadrangle: <u>Camden WV 7.5'</u>	Generally used farm name: <u>Burnside</u>

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

Notice is hereby given by:

Well Operator: HG Energy II Appalachia, LLC

Telephone: 304-420-1119

Email: dwhite@hgenergyllc.com

Address: 5260 Dupont Road
Parkersburg, WV 26101

Facsimile: 304-863-3172

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



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

4704105709

October 20, 2020

RE: Burnside 1214 N-1H thru S-6H
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

Enclosures

RECEIVED
Office of Oil and Gas
NOV 03 2020
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

WW-6A4
(1/12)

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

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

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

Date of Notice: 10/20/2020 **Date Permit Application Filed:** 11/03/2020

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

HAND DELIVERY CERTIFIED MAIL
RETURN RECEIPT REQUESTED

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

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

Name: John and Phillip Burnside
Address: 645 Mare Run Road
Weston, WV 26452

Name: _____
Address: _____

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>541237.3</u>
County:	<u>Lewis</u>	UTM NAD 83 Northing:	<u>4330091.7</u>
District:	<u>Freemans Creek</u>	Public Road Access:	<u>Mare Run Road/CR 10/9</u>
Quadrangle:	<u>Camden WV 7.5'</u>	Generally used farm name:	<u>Burnside</u>
Watershed:	<u>Middle West Fork Creek</u>		

This Notice Shall Include:

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

Notice is hereby given by:

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

Authorized Representative: Diane White
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com
Facsimile: 304-863-3172

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WW-6A5
(1/12)

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: 10/20/2020 **Date Permit Application Filed:** 11/03/2020

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

- CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)

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

Name: <u>John and Phillip Burnside</u>	Name: _____
Address: <u>645 Mare Run Road</u>	Address: _____
<u>Weston, WV 26452</u>	_____

Notice is hereby given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>541237.3</u>	_____
County: <u>Lewis</u>		Northing: <u>4330091.7</u>	_____
District: <u>Freemans Creek</u>	Public Road Access:	<u>Mare Run Road / CR 10/9</u>	_____
Quadrangle: <u>Camden WV 7.5'</u>	Generally used farm name:	<u>Burnside</u>	_____
Watershed: <u>Middle West Fork Creek</u>			

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

HG Energy II Appalachia, LLC
List of Frac Additives by Chemical Name and CAS #
Burnside 1214 Well Pad (N-1H to N-3H, S-4H to S-6H)

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

RECEIVED
Office of Oil and Gas
NOV 09 2020

WV Department of Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Byrd E. White, III
Secretary of Transportation/
Commissioner of Highways

November 6, 2020

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

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Burnside 1214 Pad, Lewis County
Burnside 1214 N-3H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #07-2020-0357 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 0.931.

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

Very Truly Yours,

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

Cc: Diane White
HG Energy, LLC.
CH, OM, D-7
File

RECEIVED
Office of Oil and Gas
NOV 09 2020
WV Department of
Environmental Protection

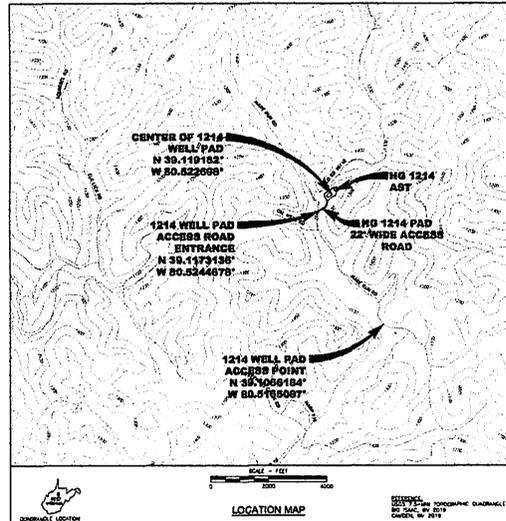
CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS HG 1214 WELL PAD

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

FREEMANS CREEK DISTRICT LEWIS COUNTY WEST VIRGINIA

CONSTRUCTION SEQUENCE

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



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

PREPARED BY
PENN ENVIRONMENTAL & REMEDIATION, INC.
111 RYAN COURT
PITTSBURGH, PA 15205
(412) 722-1222

Estimated Gross Material Balance (CY)			
Final Development - Original Action	Cut	Fill	Stockpile
1214 Well Pad	2,413	3,129	-710
1214 Well Pad Access Road	1,945	1,218	727
Totals	4,358	4,347	-17
Est. Swell Factor (20%)			4
Total Site Balance			21
Stripped Topsoil (Lbms of Earthwork)			3,046
Est. Swell Factor (20%)			609
Est. Topsoil Stockpile Volume (Lbms of CY)			3,655
Minimum Total Stockpile Capacity Required (CY)			3,676

Note:
1 Material balance for est. gross earthwork quantities only
2 Topsoil est. volume based on 6 inches average depth
3 Material balance and aggregate quantities based on estimates and may not be representative of actual quantities
4 Estimate do not reflect contractor pay volumes

Estimated Gravel Quantities			
	1214	1214	TOTAL
	Access Road	Well Pad	
# of 18" Concrete Pipes (ft)	2,011	13,084	15,095
# of 24" x 18" Concrete Pipes (ft)	134	943	1,077
Estimated Pad Access Road # of Floor Stock Length (ft)			856
Estimated Well Pad # of Floor Stock Length (ft)			1291
TOTAL Estimated # of Concrete Floor Stock Length (ft)			2,248
Estimated Pad Access Road Limit of Disturbance (Acres)			2.20
Estimated 1214 Well Pad Limit of Disturbance (Acres)			4.12
TOTAL Estimated Limit of Disturbance (Acres)			6.32
Well Pad Mean Soil Construction Elevation (ft)			1160.00
Well Area Subgrade Elevation (Top of Soil Control Subgrade) (ft)			1150.20
Well Area Surface Elevation (ft)			1159.37

APPROVED
WVDEP OOG
12/11/2020

WELL #	LAT.	LONG.
W-1H	N 39.11920821	W 80.52284532
N-2H	N 39.11920820	W 80.52284863
N-3H	N 39.11903339	W 80.52283111
S-4H	N 39.11902685	W 80.52287740
S-5H	N 39.11902657	W 80.52301659
S-6H	N 39.11899616	W 80.52302697

WELL ELEVATIONS 1159.37
UTM83-177

	LATITUDE	LONGITUDE
1214 WELL PAD ACCESS POINT	N 39.1066184°	W 80.5165087°
1214 WELL PAD ACCESS ROAD ENTRANCE	N 39.1173138°	W 80.5244678°

RECORD OWNER	RECORD LOT #	RECORD AREA OF LOT	AREA WITHIN LOD
JOHN KENT BURNSIDE	21-03-006C-0003-0002	111.52	8.22
MADE RUN ROAD D.R. 10/9	N/A	N/A	0.10
TOTAL LIMIT OF DISTURBANCE			6.32 AC

THIS DRAWING IS FOR INFORMATION ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION OR FOR ANY OTHER PURPOSE. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF ALL DATA. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF ALL DATA. THE USER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR VERIFYING THE ACCURACY OF ALL DATA.

REVISION	DATE	DESCRIPTION



TITLE SHEET

HG 1214 PAD
FREEMANS CREEK DISTRICT
LEWIS COUNTY, WEST VIRGINIA

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

APPROVED	SEP 15/20/2020
CHECKED	SEP 16/20/2020
DRAWN	SEP 16/20/2020
PROJECT NO.	1000-PA001129
DRAWING NUMBER	PAD08129-001
SHEET	1

WEST VIRGINIA CALL BEFORE YOU DIGI

Dial 811 or 800.245.4848

1. SERVICE UTILITIES ARE NOT SHOWN ON THE PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, IDENTIFYING AND RELOCATING AS NECESSARY TO PREVENT DAMAGE TO UTILITIES.

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

S:\PROJECT FILES\1000-PA001129 HG 1214 WELL PAD -- TITLE SHEET.dwg, 10/12/2020 11:16 AM

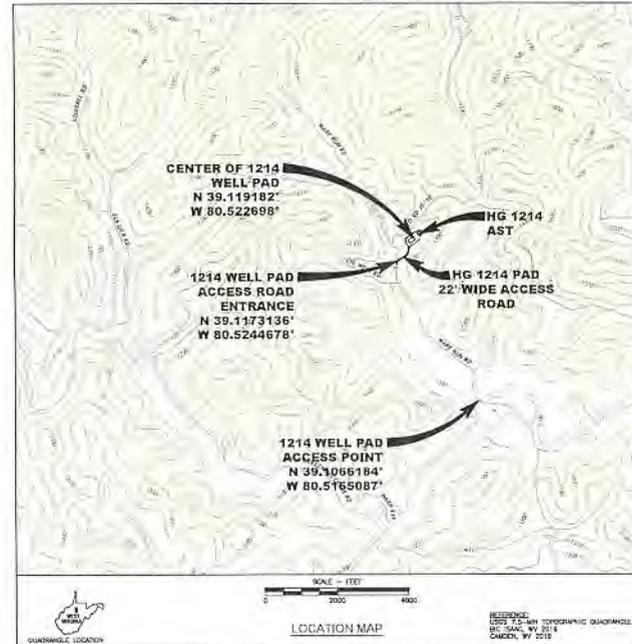
CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS HG 1214 WELL PAD

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

FREEMANS CREEK DISTRICT LEWIS COUNTY WEST VIRGINIA

CONSTRUCTION SEQUENCE

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



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

PREPARED BY
PENN ENVIRONMENTAL & REMEDIATION, INC.
111 RYAN COURT
PITTSBURGH, PA 15205
(412) 722-1222

Est. Soil Factor	Volume (cu yd)	Est. Soil Factor	Volume (cu yd)
1214 Well Pad	2,413	2,120	-710
1214 Well Pad Access Road	1,945	1,210	-727
Totals	4,358	3,330	-1,027
Est. Soil Factor	(20%)		4
Total Site Volume			21
Graded Topsoil (Subsoil Equivalent)			3,046
Est. Soil Factor	(20%)		609
Est. Topsoil Stockpile Volume (Volume C)			3,655
Minimum Total Stockpile Capacity Required (5%)			3,676

Notes:
1. Material volume is not gross netton quantities only.
2. Topsoils volume based on 6" average average depth.
3. Material volume and aggregate quantities are estimates and may not be representative of actual quantities.
4. Estimates are not subject to contractor pay volume.

Estimated Gravel Quantities	1214 Well Pad	1214 Well Pad	TOTAL
1214 Well Pad	2,211	13,281	15,492
1214 Well Pad Access Road	1,134	925	2,059
Estimated Final Gravel Road & Filter Stock Length (LF)			952
Estimated Well Pad & Filter Stock Length (LF)			1,561
TOTAL Estimated 3" Compact Filter Stock Length (LF)			2,513
Estimated Pad Access Road Limit of Disturbance (Area)			2.25
Estimated 1214 Well Pad Limit of Disturbance (Area)			4.12
TOTAL Estimated Limit of Disturbance (Area)			6.37
Well Pad Pad Post-Construction Footprint (F)			1160.00
Well Area Site Area (Square Footage) (F)			1150.00
Well Area Site Area (Square Feet)			1150.00

WELL #	LAT.	LONG.
N-1H	N 39.1190821	W 80.5228453
N-2H	N 39.1190580	W 80.5228882
N-3H	N 39.1190339	W 80.5229311
S-4H	N 39.1190098	W 80.5229740
S-5H	N 39.1189857	W 80.5230169
S-6H	N 39.1189616	W 80.5230597

WELL ELEVATIONS: 1150.37
UTM85-17F

	LATITUDE	LONGITUDE
1214 WELL PAD ACCESS POINT	N 39.1066184°	W 80.5165087°
1214 WELL PAD ACCESS ROAD ENTRANCE	N 39.1173136°	W 80.5244678°

RECORD OWNER	RECORD LOT #	RECORD AREA OF LOT	AREA WITHIN LCO
JOHN KENT BURNSIDE	21-03-006C-0003-0002	111.32	6.22
WARE RUN ROAD D.R. 10/3	N/A	N/A	0.10
TOTAL LIMIT OF DISTURBANCE			6.32 AC

THIS DRAWING IS COPYRIGHTED. THE DRAWING IS A TRADE SECRET AND ONLY CONTAINED TO THE REGISTERED FIRM OR PROPRIETOR, OR WHICHEVER IS DESIGNATED BY THE REGISTERED FIRM. ENVIRONMENTAL & REMEDIATION, INC. IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE REGISTERED FIRM. THE REGISTERED FIRM IS NOT RESPONSIBLE FOR ANY DAMAGE TO PROPERTY OR PERSONS ARISING FROM THE USE OF THIS DRAWING. THE REGISTERED FIRM IS NOT RESPONSIBLE FOR ANY DAMAGE TO PROPERTY OR PERSONS ARISING FROM THE USE OF THIS DRAWING. THE REGISTERED FIRM IS NOT RESPONSIBLE FOR ANY DAMAGE TO PROPERTY OR PERSONS ARISING FROM THE USE OF THIS DRAWING.

REVISION	DATE	DESCRIPTION



TITLE SHEET
HG 1214 PAD
FREEMANS CREEK DISTRICT
LEWIS COUNTY, WEST VIRGINIA
PREPARED FOR
HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

APPROVED: MEP 10/08/2020
CHECKED: MEP 10/08/2020
DRAWN: SMH 10/08/2020
PROJECT No.: 1000-PA008129
DRAWING NUMBER: PA008129-001
SHEET 1

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

WEST VIRGINIA **811** CALL BEFORE YOU DIG!
Dial 811 or 800.245.4848
When Using in West Virginia

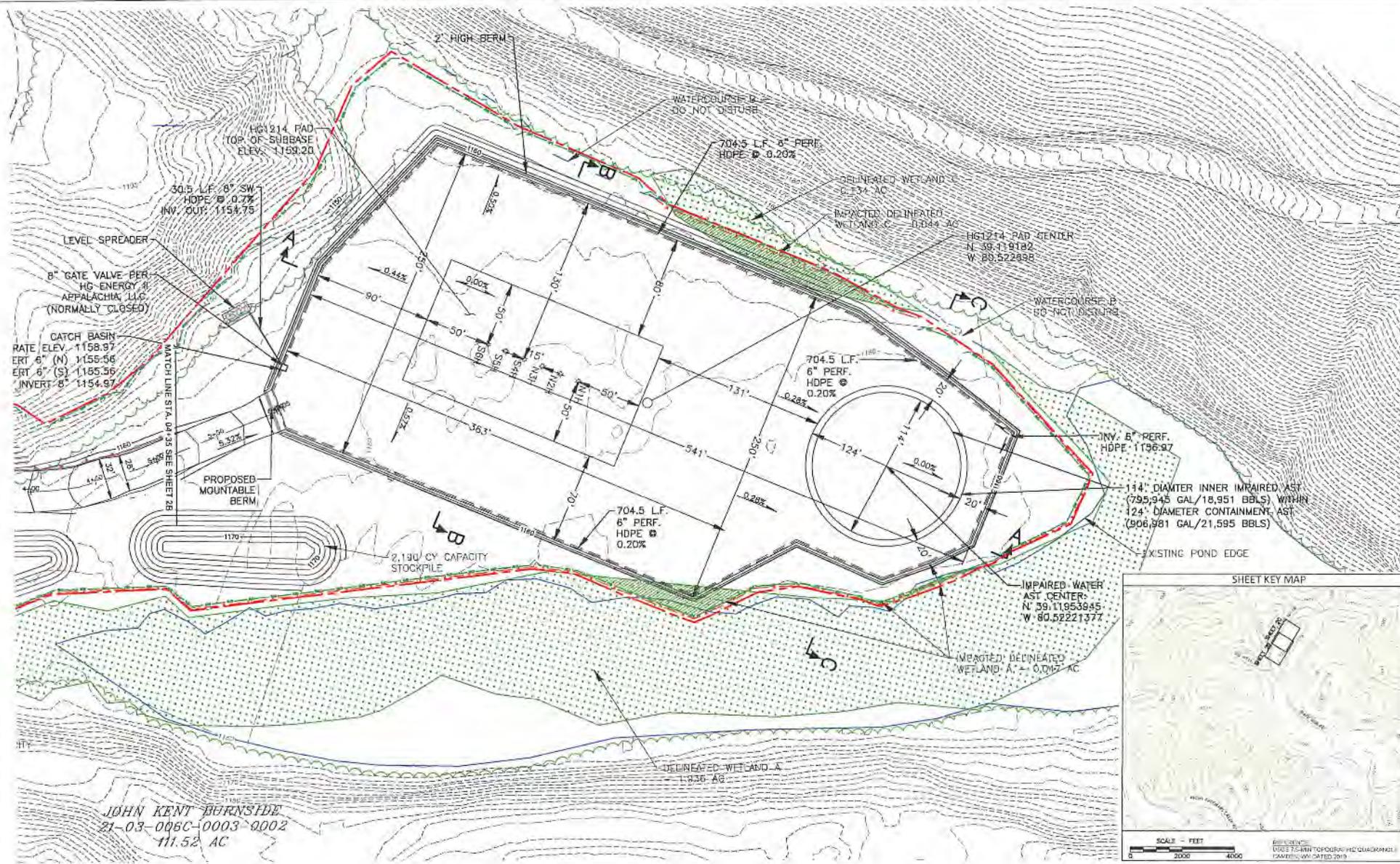
B.S. 10-22-20

1. SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING, AND REPAIRING AS NECESSARY TO ENSURE CONTINUAL SERVICE.

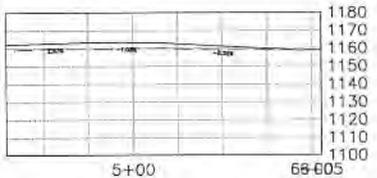
4704105709

S:\PROJECT FILES\1000-PA008129 HG_1214_WELL_PAD\DRAWINGS\PA008129 HG 1214 WELL PAD - TITLE SHEET.DWG:10/12/2020 11:16 AM

C:\USERS\SHEN\DESKTOP\PA00B129 HD 1214 WELL PAD_PLANS.DWG, 10/12/2020, 11:07 AM



JOHN KENT BURNSIDE
 21-03-006C-0003-0002
 11.52 AC



1214 ACCESS ROAD PROFILE



LEGEND

- WEST VIRGINIA GENERAL NOTES:**
 1. ALL PROPOSED ELEVATIONS SHOWN ON PLAN SHEETS REFLECT PROPOSED SUBBASE ELEVATIONS.
 2. REFERENCE THIS SHEET WITH THE CONSTRUCTION NOTES AND DETAILS.
 3. CONTRACTOR SHALL CONTACT WEST VIRGINIA UTILITIES PROTECTION SERVICES (WVUPS) A MINIMUM OF 3 DAYS PRIOR TO LOCATION WORK. LOCATIONS MUST BE IDENTIFIED AND OTHER RELIGIOUS OR PROTECTED BY CONTRACTOR PRIOR TO BEGINNING WORK AT THE SITE.
 4. SITE SHALL BE CONSTRUCTED IN ACCORDANCE WITH WELL DRILLING PERMITS. CONTRACTOR RESPONSIBLE TO OBTAIN ALL OTHER NECESSARY PERMITS/APPROVALS REQUIRED TO CONSTRUCT SITE INCLUDING BUT NOT LIMITED TO FEDERAL, STATE, AND LOCAL REQUIREMENTS.
 5. NO GEOTECHNICAL OR SOIL STABILITY ANALYSIS WAS PERFORMED FOR THIS SITE. CONTRACTOR IS RESPONSIBLE TO CONDUCT PROPER AND SOUNDING PROBEES BASED ON FIELD CONDITIONS TO PREPARE SURFACES FOR FILL PLACEMENT ON SUCH SLOPES. PERMITS ARE NOT RESPONSIBLE FOR SLIPS, SLIDES, OR OTHER MOVEMENT RESULTING FROM CONSTRUCTION.
 6. EROSION CONTROL AND SEDIMENTATION CONTROLS SHALL BE INSTALLED PRIOR TO EARTHWORK. SITE CONSTRUCTION SHALL FOLLOW WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL, EDITION MAY 2012.
 7. CLEAR AND GRUB WORK AREA, REMOVE AND STOCKPILE AVAILABLE TOPSOIL FROM LIMIT OF DISTURBANCE TO A LOCATION DESIGNATED BY HG ENERGY II APPALACHIA, LLC.
 8. RE-EMBRANKMENT FILL SHALL BE PLACED ON FROZEN MATERIAL. FILL MATERIAL SHALL BE FREE OF ORGANIC MATTER, ROCKS, FROZEN SOIL, OR OTHER OBSTRUCTIVE MATERIAL.
 9. CUT/SLOPE SHALL BE CONSTRUCTED TO A MAXIMUM SLOPE OF 2H:1V UNLESS NOTED OTHERWISE.
 10. FILL MATERIAL SHALL BE PLACED IN LIFTS OR LAYERS OVER THE LENGTH OF THE FILL. LIFT THICKNESS OF THE SOIL SHALL BE AS THIN AS THE SUITABLE RANDOM EXCAVATED MATERIAL WILL PERMIT. TYPICAL 3-12 INCHES THICK. THE SIZE OF ROCK LIFTS SHALL NOT EXCEED 36 INCHES. THE ROCK SHALL NOT BE GREATER IN ANY DIMENSION THAN 18 INCHES. CONSTRUCTION SHALL BE STOPPED BY CONSTRUCTION EQUIPMENT, SHEEP'S FOOT OR PAW HOLLIN, DEPENDING ON MATERIAL, WITH COMPACTOR TO VISIBLE NON-ADHESION OF THE EMBANKMENT MATERIAL. EACH LIFT COMPACTOR EFFORT SHALL NOT EXCEED OPTIMAL MOISTURE LIMITS. EACH LIFT SHALL BE COMPACTED TO A MINIMUM PROCTOR DENSITY OF AT LEAST 95% BEFORE BEGINNING THE NEXT LIFT. GC TESTING SHALL BE PERFORMED AT A RATE OF 1 TEST/1000 LIFT.
 11. CONTRACTOR SHALL MAINTAIN ACCESS ROAD IN ACCORDANCE WITH USUAL PRACTICE. ADDITIONAL COVER MATERIAL PLACEMENT REQUIRED IN AREA OF UTILITY LINES.
 12. CONTRACTOR SHALL DEVELOP MATERIAL MANAGEMENT (EXCESS CUT/FILL, TOPSOIL, STOCKPILES, GRAVEL, SAND) WITH HG ENERGY II APPALACHIA, LLC PRIOR TO MOBILIZATION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER EROSION AND SEDIMENTATION CONTROLS, BOTH ON SITE AND OFF SITE.
 13. ALL SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED AND THE VEGETATIVE COVER HAS ACHIEVED A MINIMUM PROCTOR DENSITY. ANY AREAS NOT ACHIEVING A 70% VEGETATIVE COVER SHALL BE RESEEDED AND MOWED WITHIN 24 HOURS OF REJECTION.
 14. SECONDARY CONTAINMENT SHALL BE PROVIDED DURING DRILLING PROCESS. A LEAK AND MUD SYSTEM WITH BERAL SHALL BE INSTALLED PRIOR TO DRILLING AND WATER BOWL. SECONDARY CONTAINMENT SHALL BE IMPROVED OFFSITE IN ACCORDANCE WITH REGULATIONS.
REFERENCES:
 1. PROPERTY BOUNDARIES & OWNER INFORMATION OBTAINED VIA MY PROPERTY VIEWER WWW.APV.VIC/PROPERTY/
 2. EXISTING CONTOURS OBTAINED FROM Salspace Solutions ON 12/04/2019.
 THIS DRAWING IS UNREGISTERED. THE DRAWING IS A TRUSTED SERVICE AND THE DRAWING SHALL BE RECEIVED FOR HIS PERSONAL USE. WITHOUT THE SIGNATURE WITHIN CONSENT OF PENN ENVIRONMENTAL & RECREATION, INC. IT MUST NOT BE COPIED NOR MADE AVAILABLE TO THIRD PARTIES. HOLDING CONTRACTING FOR MADE AVAILABLE TO THIRD PARTIES ANY LEGAL USE OF THE DRAWING OR THIRD PARTIES FOR REUSE IS NOT RESPONSIBLE FOR CONSTRUCTION OF A GROUND FOR WORK. ACTION THIS DRAWING MUST BE RETURNED TO REQUEST OF THE COMPANY.

REFERENCES:
 1. PROPERTY BOUNDARIES & OWNER INFORMATION OBTAINED VIA MY PROPERTY VIEWER WWW.APV.VIC/PROPERTY/
 2. EXISTING CONTOURS OBTAINED FROM Salspace Solutions ON 12/04/2019.
 THIS DRAWING IS UNREGISTERED. THE DRAWING IS A TRUSTED SERVICE AND THE DRAWING SHALL BE RECEIVED FOR HIS PERSONAL USE. WITHOUT THE SIGNATURE WITHIN CONSENT OF PENN ENVIRONMENTAL & RECREATION, INC. IT MUST NOT BE COPIED NOR MADE AVAILABLE TO THIRD PARTIES. HOLDING CONTRACTING FOR MADE AVAILABLE TO THIRD PARTIES ANY LEGAL USE OF THE DRAWING OR THIRD PARTIES FOR REUSE IS NOT RESPONSIBLE FOR CONSTRUCTION OF A GROUND FOR WORK. ACTION THIS DRAWING MUST BE RETURNED TO REQUEST OF THE COMPANY.

REVISION	DATE	DESCRIPTION

SCALE - FEET
 0 40 80 120
SITE DEVELOPMENT PLAN
 WITH EROSION AND SEDIMENTATION CONTROLS
 HG 1214 PAD
 FREEMANS CREEK DISTRICT
 LEWIS COUNTY, WEST VIRGINIA
 PREPARED FOR
 HG ENERGY II APPALACHIA, LLC
 PARKERSBURG, WEST VIRGINIA

APPROVED: MEP 10/08/2020
 CHECKED: MEP 10/08/2020
 DRAWN: SMH 10/08/2020
 PROJECT No.: 4000-PA00B129
 DRAWING NUMBER
 PA00B129-001
 SHEET 2C

B.S. 10-22-20