



west virginia department of environmental protection

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

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

Monday, November 27, 2023
WELL WORK PERMIT
Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD

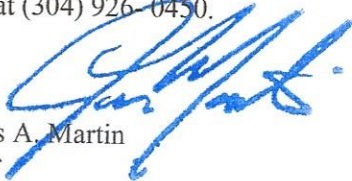
PARKERSBURG, WV 26101

Re: Permit approval for Barnes 1223 S-12H
47-017-06969-00-00

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: Barnes 1223 S-12H
Farm Name: Marilyn Barnes, et al
U.S. WELL NUMBER: 47-017-06969-00-00
Horizontal 6A New Drill
Date Issued: 11/27/2023

Promoting a healthy environment.

12/01/2023

PERMIT CONDITIONS

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

CONDITIONS

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

12/01/2023

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 Doddridge Cove Vadis 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Barnes 1223 S-12H Well Pad Name: Barnes 1223

3) Farm Name/Surface Owner: Barnes Public Road Access: SLS 29

4) Elevation, current ground: 1329' Elevation, proposed post-construction: 1335'

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

(b) If Gas Shallow Deep _____
Horizontal

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6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus at 7078' to 7182' and 104' in thickness. Anticipated pressure at 4314#.

8) Proposed Total Vertical Depth: 7155'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 26,071'

11) Proposed Horizontal Leg Length: 17,993'

12) Approximate Fresh Water Strata Depths: 150', 220', 339'

13) Method to Determine Fresh Water Depths: Nearest offset well data, (47-017-02490,47-017-02542, 2780)

14) Approximate Saltwater Depths: NA

15) Approximate Coal Seam Depths: 153'-158', 428'-438' (Surface Casing is being extended to cover the coal)

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

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

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

4701706969

WW-6B
(04/15)

API NO. 47- _____
OPERATOR WELL NO. Barnes 1223 S-12H
Well Pad Name: Barnes 1223

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	20"	New	LS	94	120'	120' ✓	Drilled In
Fresh Water	13.375"	NEW	J-55 BTC	54.5	1300'	1300' ✓	40% excess, yield = 1.18, CTS ✓
Coal							
Intermediate	9 5/8"	NEW	N-80 BTC	40	6050'	6050'	Lead - 40% excess, Tail - 0% Excess ✓
Production	5 1/2"	NEW	P-110 HP	23	26070'	26070' ✓	Lead - Yield = 1.19, Tail - yield = 1.94 ✓
Tubing							
Liners							

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Keith L. Longmire 10-16-23

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	20"	20"	.438				Drilled In
Fresh Water	17.5"	13 3/8"	.380	2730	1200	Type 1, Class A	30% excess yield = 1.20, CTS
Coal							
Intermediate	9 5/8"	12 1/4"	.395	5750		Type 1/Class A	40% excess yield = 0% Excess Lead ✓
Production	5 1/2"	8 1/2"	.415	16240 ✓	12500	Type 1/Class A	20% excess yield = 1.19, tail yield 1.94 ✓
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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 7155'. Drill horizontal leg to an estimated 17,993' lateral length, 26,071' 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.

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. Maximum pressure not to exceed 12,500 psi.

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21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 51.82 acres

22) Area to be disturbed for well pad only, less access road (acres): 6.11 acres

23) Describe centralizer placement for each casing string:

No centralizers will be used with conductor casing.
Freshwater - Bow Spring on every other joint.
Intermediate - Bow Spring on first 2 joints then every third joint to 100' from surface.
Production - Run 1 spiral centralizer every 5 joints from the top of the curve to surface. Run 1 spiral centralizer every 3 joints from the 1st 5.5' long joint to the top of the curve.

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

Conductor - N/A, Casing to be drilled in w/ Dual Rotary Rig
Fresh Water - "15.6 ppg Class A Neat 94#sK40% ExcessYield=1.18 / CTS"
Intermediate - "Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS"
Production - "Lead: 14.5 ppg POZ-PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170Tail: 14.6 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA17020% ExcessLead Yield=1.19Tail Yield=1.94CTS"

25) Proposed borehole conditioning procedures:

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

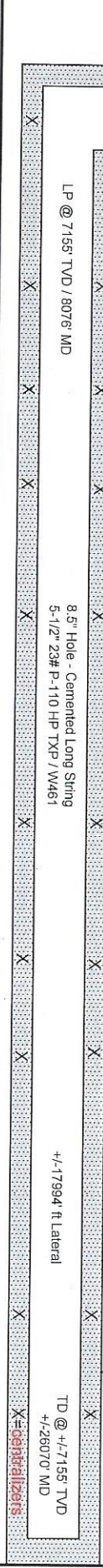
*Note: Attach additional sheets as needed.



1223 S-12H
Marcellus Shale Horizontal
Doddridge County, WV

Ground Elevation	1329'	1223 S-12H SHL	14204642.59N 1720606.87E
Azim	160.574°	1223 S-12H LP	14204613.27N 1723151.28E
WELLBORE DIAGRAM		1223 S-12H BHL	14187650.45N 1729133.54E

HOLE	CASING	GEOLOGY	TOP	BASE	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
20"	20" 94# 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.	Surface casing = 0.438" wall thickness
17.5"	13-3/8" 54.5# J-55 BTC	Coal Coal Coal Fresh Water Protection	580 610 900 0	1300	AIR	15.6 ppg Class A Neat 94#/sk 40% Excess Yield=1.18 / CTS	Bow Spring on every other joint	Once casing is at setting depth. Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.380" wall thickness Burst=2730 psi
12.25"	9-5/8" 40# N-80 BTC	Little Lime/Big Lime Big Injun/Gantz 50 Foot/Gordon Fith Bayard Warren/Speechley Benson / Alexander	2290/2345 2401/2755 2861/3042 3213 3286 3594/3807 5213 / 5474	2305/2401 2495/2785 2903/3122 3263 3311 3629/3842 5346 / 5604	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 zero% Excess. CTS	Bow Spring on first 2 joints then every third joint to 100' from surface	Once casing is at setting depth. Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.395" wall thickness Burst=5750 psi
8.75"		Intermediate	0		AIR / 9.0ppg SOBM	Lead: 14.5 ppg POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170 Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA170 20% Excess Lead Yield=1.19 Tail Yield=1.94 CTS	Run 1 spiral centralizer every 5 joints from the top of the curve to surface.	Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.415" wall thickness Burst=16240 psi Note: Actual centralizer schedules may be changed due to hole conditions
8.5" Curve	5-1/2" 23# P-110 HP TXP / W461	Rhinestreet Cashagua Middlesex West River Burkett Tully Limestone Hamilton Marcellus TMD / TVD (Production)	6106 6431 6719 6864 6943 7012 7053 7078 26070	6431 6719 6864 6943 7012 7053 7078 7182	11.5ppg-SOBM				
8.5" Lateral		Onondaga	7182		11.5ppg-SOBM				



WW-9
(4/16)

API Number 47 - 4701706969
Operator's Well No. Barnes 1223 S-12H

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) Fink Creek Quadrangle Vadis 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 _____)

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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

Subscribed and sworn before me this 9th day of October, 2023

[Handwritten Signature]

Notary Public

My commission expires 11/2/2023



12/01/2023

HG Energy II Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 51.82 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

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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: [Signature]

Comments: Pre-seed/mulch as soon as reasonably possible per regulation. Upgrade E&S if needed per WV DEP E&S manual.

Title: Oil & Gas Inspector Date: 10-16-23

Field Reviewed? (V) Yes () No

HG Energy II Appalachia, LLC

Site Safety Plan

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**Barnes 1223 Well Pad
3160 Saint Clara Rd, Alum Bridge
Doddridge County, WV 26321**

October 2023: Version 1

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

HG Energy II Appalachia, LLC

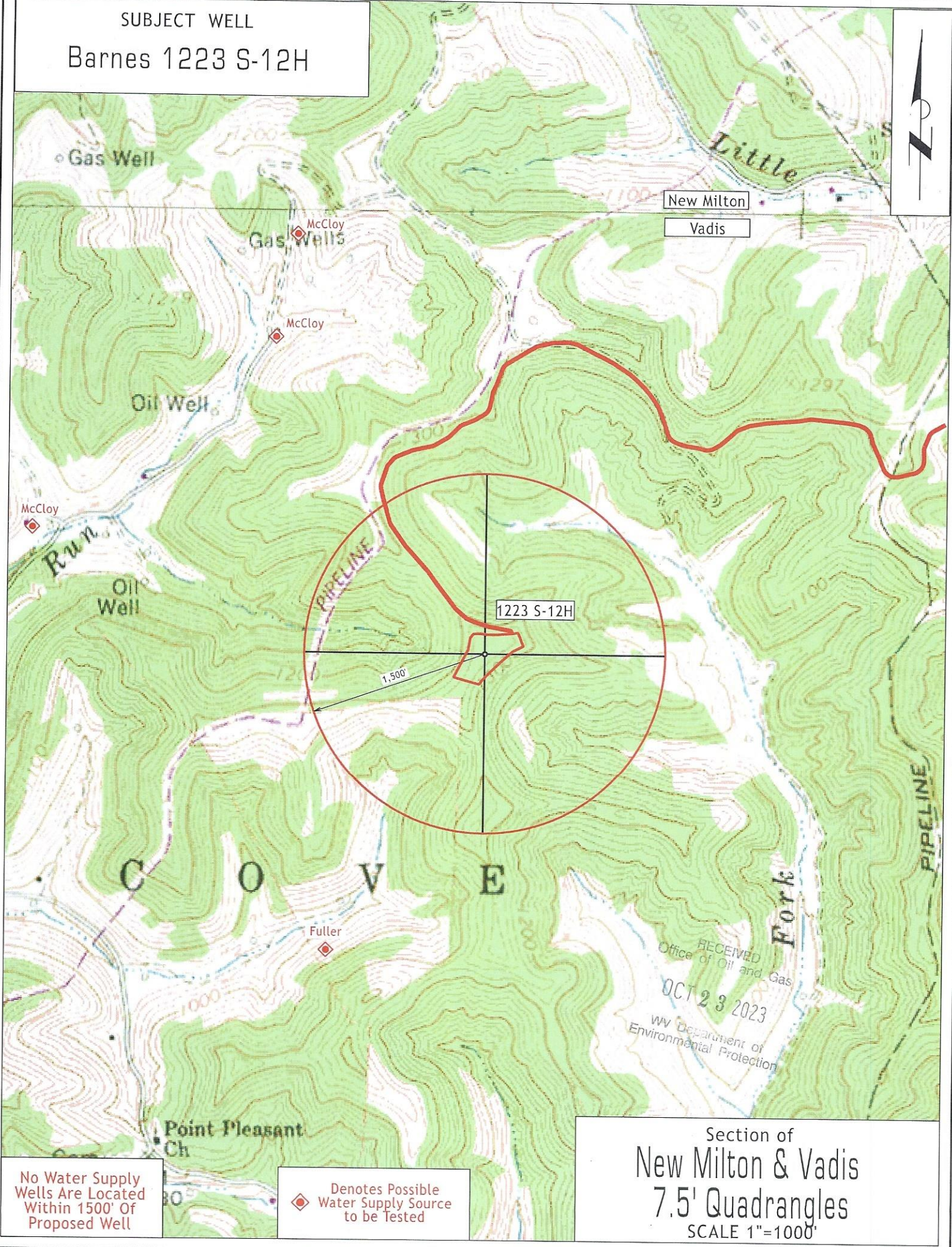
5260 Dupont Road

Parkersburg, WV 26101

Kenneth L. Greigold
10-16-23

12/01/2023

SUBJECT WELL
Barnes 1223 S-12H



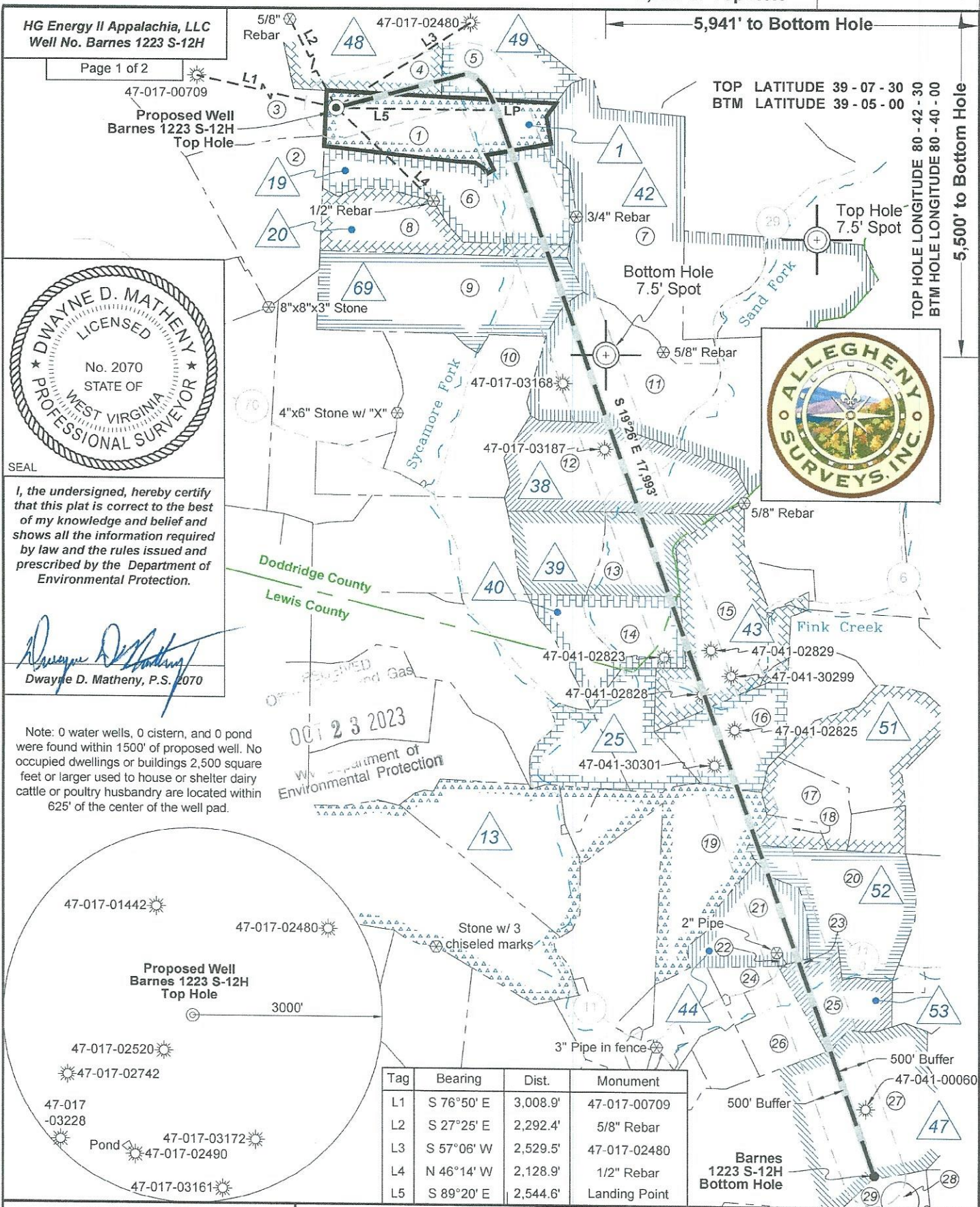
No Water Supply Wells Are Located Within 1500' Of Proposed Well

◆ Denotes Possible Water Supply Source to be Tested

Section of
New Milton & Vadis
7.5' Quadrangles
SCALE 1"=1000'

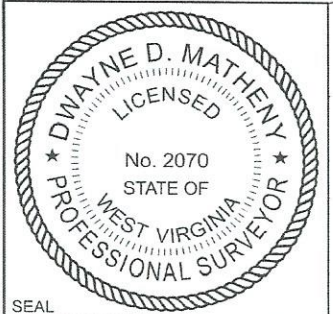
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12/01/2023



HG Energy II Appalachia, LLC
Well No. Barnes 1223 S-12H

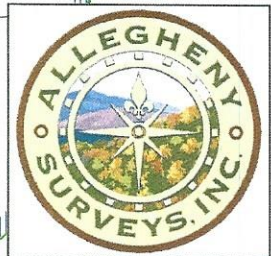
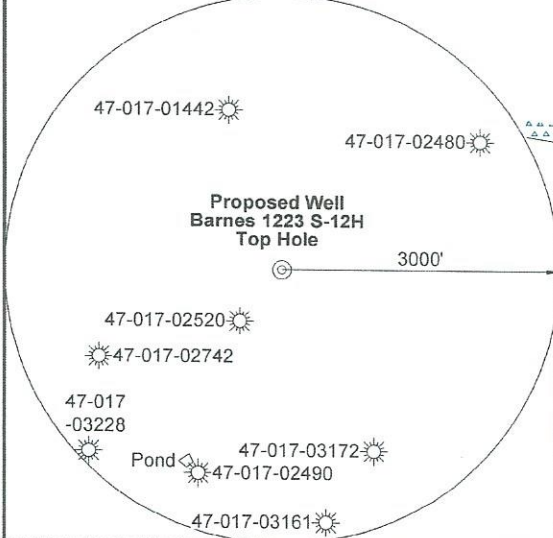
Page 1 of 2
47-017-00709



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

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

Note: 0 water wells, 0 cistern, and 0 pond were found within 1500' 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.



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FILE NO: 171-12-30-FC-22
DRAWING NO: Barnes 1223 S-12H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

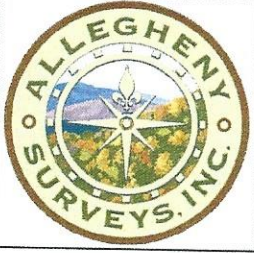
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: September 21 2023
OPERATOR'S WELL NO. Barnes 1223 S-12H
API WELL NO
47 - 017 - 06969
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1,329' WATERSHED: Fink Creek
DISTRICT: Cove
SURFACE OWNER: Marilyn Barnes, et al
ROYALTY OWNER: Carolyn Rastle Bass, et al LEASE NO: ACREAGE: 123
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: 26,071' MD 7,155' TVD

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



Notes: Well No. Barnes 1223 S-12H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,204,642.59'
E: 1,720,606.87'
Landing Point Coordinates
N: 14,204,613.27'
E: 1,723,151.28'
Bottom Hole Coordinates
N: 14,187,650.45'
E: 1,729,133.54'

Notes: Well No. Barnes 1223 S-12H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°06'53.92" Latitude: 39°04'05.62"
Longitude: 80°43'02.82" Longitude: 80°41'15.35"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,329,583.721m N: 4,324,404.506m
E: 524,442.023m E: 527,040.957m
Plat orientation and corner and well references are based upon the grid north meridian. Well location references are based upon the magnetic meridian.

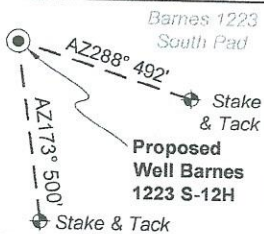
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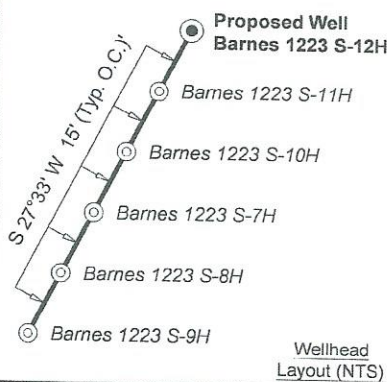
ID	Lease
1	Carolyn Rastle Bass
13	William H. Hall & Mary E. Hall
19	Carolyn Rastle Bass
20	Maxine Cole Rastle
25	HG Energy II Appalachia, LLC
38	HG Energy II Appalachia, LLC
39	HG Energy II Appalachia, LLC
40	HG Energy II Appalachia, LLC
42	Leopold Krenn, et ux
43	HG Energy II Appalachia, LLC
44	G.C. Starcher, et al
47	Lydia Starcher, et al
48	Norma C. Bowyer
49	Wilma Rastle Reed, et vir
51	HG Energy II Appalachia, LLC
52	Dollie Means, et al
53	N.N. Wiseman, et ux, et al
69	Ivah R. Schmidt, et vir, et al

Well Location References
Not to Scale



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.)



Doddridge Co. (Cove Dist.)				
No.	TM / Par	Owner	Bk / Pg	Ac.
1	10 / 16	Marilyn Barnes, et al	W28 / 552	76.10
2	9 / 27	Willard L. Fuller, III	215 / 149	89.00
3	9 / 20	Clyde W. Marsh, et al	W36 / 152	149.00
4	9 / 21	Carolyn R. Bass, et al	239 / 151	120.00
5	10 / 16.1	Richard E. Spracklen	A41 / 714	74.90
6	10 / 17	Marilyn Barnes, et al	W28 / 552	90.00
7	14 / 2	Miriam N. & Ailee Hershberger, Jr.	488 / 622	153.55
8	9 / 28	Maxine S. Rastle	A58 / 287	53.63
9	14 / 1	Maxine S. Rastle	A58 / 287	129.04
10	13 / 17	Maxine S. Rastle	A58 / 287	116.18
11	14 / 2.2	Michael E. Dayhoff	429 / 259	128.50
12	14 / 3	Keith A. Tatro	W56 / 172	101.37
13	14 / 4.1	James & Mary Donnelly	222 / 564	41.20
14	14 / 5.1	Allen Smith	514 / 134	35.46
Lewis Co. (Freemans Creek Dist.)				
No.	TM / Par	Owner	Bk / Pg	Ac.
15	1D / 11	Wayne N. Weiss	W65 / 637	89.24
16	1D / 14	Alice R. Taylor, et al	745 / 851	54.90
17	1D / 15	Dawn C. Lozina, et al	726 / 836	28.96
18	1D / 17	Dawn C. Lozina, et al	726 / 836	11.04
19	1D / 16	Maxine S. Cole Rastle	W55 / 570	99.40
20	2E / 1	Dawn C. Lozina, et al	726 / 836	83.00
21	1E / 51	Stephen C. Schertz	778 / 688	46.00
22	1E / 50	Mark H. Schulte	722 / 936	0.49
23	1E / 52	Mark H. Schulte	722 / 936	1.19
24	1E / 48	Stephen C. Schertz	778 / 688	8.60
25	1E / 53	Elton R. Ross	W20 / 443	36.00
26	1E / 54	Stephen C. Schertz	778 / 688	31.90
27	1E / 44	James R. Radcliff	595 / 26	231.00
28	2E / 22.3	David N. & Rebecca E. King	638 / 776	19.50
29	2E / 22.2	David N. & Rebecca E. King	638 / 776	20.00

FILE NO: 171-12-30-FC-22
DRAWING NO: Barnes 1223 S-12H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: September 21 2023
OPERATOR'S WELL NO. Barnes 1223 S-12H
API WELL NO
47 - 017 - 06969
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1,329' WATERSHED: Fink Creek QUADRANGLE: Vadis
DISTRICT: Cove COUNTY: Doddridge
SURFACE OWNER: Marilyn Barnes, et al ACREAGE: 126.01/2023
ROYALTY OWNER: Carolyn Rastle Bass, et al LEASE NO: ACREAGE: 123
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7,155' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 26,071' 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. Barnes 1223 S-12H

**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

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Environmental Protection

* Co-tenancy utilization - At least 75% of the Royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-tenancy Modernization and Majority Protection Act.

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

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

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

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

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

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12/01/2023

69		02-0014-0001-0000		IVAH R. SCHMIDT AND HARVEY B. SCHMIDT, HER HUSBAND; HENRY ALBERS AND ETHEL ALBERS, HIS WIFE; CLARA T. WANSTREET AND HENRY B. WANSTREET, HER HUSBAND; JOHN A. ALBERS AND MARY O. ALBERS, HIS WIFE; FRANCIS H. MEANS AND ENDA M. MEANS, HIS WIFE; BEN C. NUCKOLLS AND RUBY G. NUCKOLLS, HIS WIFE; MARGARET RASTLE, WIDOW; CLARK P. BRAYSON AND VICTORIA A. BRAYSON, HIS WIFE; EVIE E. BODE AND FLORENCE L. BODE, HIS WIFE; WALTER E. BODE AND NOLA J. BODE, HIS WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8			
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED		58	353
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT		143	345
				HOPE NATURAL GAS COMPANY	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		135	583
				HOPE NATURAL GAS COMPANY	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		328	398
				HOPE NATURAL GAS COMPANY	CONSOL ENERGY HOLDINGS LLC XVI	ASSIGNMENT		332	570
				HOPE NATURAL GAS COMPANY	CONSOL GAS COMPANY	MERGER/NAME CHANGE		245	1
				HOPE NATURAL GAS COMPANY	CNX GAS COMPANY	MERGER/NAME CHANGE		293	252
				HOPE NATURAL GAS COMPANY	HG ENERGY II APPALACHIA LLC	ASSIGNMENT		293	252
				HOPE NATURAL GAS COMPANY	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8		508	457
				HOPE NATURAL GAS COMPANY	SOUTH PENN NATURAL GAS CO	ASSIGNMENT		23	157
				HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT		53	162
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT		54	178
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS TRANSMISSION CORPORATION	CONFIRMATORY DEED		143	345
				HOPE NATURAL GAS COMPANY	CNG TRANSMISSION CORPORATION	ASSIGNMENT		135	583
				HOPE NATURAL GAS COMPANY	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS	
				HOPE NATURAL GAS COMPANY	CNX GAS COMPANY LLC	MERGER/NAME CHANGE		WVSOS	
				HOPE NATURAL GAS COMPANY	NOBLE ENERGY, INC.	MEMORANDUM OF FARMOUT AGREEMENT		323	187
				HOPE NATURAL GAS COMPANY	CNX GAS COMPANY LLC AND NOBLE ENERGY INC	LIMITED PARTIAL ASSIGNMENT (50%)		337	446
				HOPE NATURAL GAS COMPANY	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	NOT LESS THAN 1/8		394	646
				HOPE NATURAL GAS COMPANY	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)		424	234
				HOPE NATURAL GAS COMPANY	NOBLE ENERGY, INC.	ASSIGNMENT		377	212
				HOPE NATURAL GAS COMPANY	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT		449	468
				HOPE NATURAL GAS COMPANY	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE		WVSOS	
				HOPE NATURAL GAS COMPANY	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT		454	483
				HOPE NATURAL GAS COMPANY	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT		475	576
				HOPE NATURAL GAS COMPANY	HG ENERGY II APPALACHIA, LLC	FARMOUT AGREEMENT		479	1
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	ASSIGNMENT (68%)		434	401
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	MINERAL DEED		434	401
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	MINERAL DEED		434	401
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	MINERAL DEED		740	746
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	MINERAL DEED		740	746
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	MINERAL DEED		740	746
				HOPE NATURAL GAS COMPANY	HG Energy II Appalachia, LLC	NOT LESS THAN 1/8		24	364
				HOPE NATURAL GAS COMPANY	SOUTH PENN NATURAL GAS CO	ASSIGNMENT		156	570
				HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT		106	494
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED		294	89
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT		127	425
				HOPE NATURAL GAS COMPANY	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		51	795
				HOPE NATURAL GAS COMPANY	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		58	362
				HOPE NATURAL GAS COMPANY	CNX GAS COMPANY LLC	MEMORANDUM OF FARMOUT AGREEMENT		672	154

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13	FK054822 FK079060 FEE	03-001D-0008-0001 03-001D-0007-0000 03-001E-0012-0000	Q101029000	RECEIVED Office of Oil and Gas OCT 23 2023 WV Department of Environmental Protection											
51	FK078560 FEE	03-001D-0015-0000 03-001D-0017-0000 03-002D-0008-0000 03-002D-0009-0000	N/A												
52	FK055278 FK067373	03-002E-0001-0000	Q100677001 Q100315000												
44	FK055806	NO CTO 266127000	Q100391000												
				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	MERGER/NAME CHANGE		722	170						
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	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						
				OTHO MEANS AND OMIE MEANS, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8		99	68						
				SOUTH PENN OIL COMPANY	SOUTH PENN NATURAL GAS CO	ASSIGNMENT		156	570						
				HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	CONFIRMATORY DEED		166	494						
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT		294	89						
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		425	127						
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		51	795						
				DOMINION TRANSMISSION, INC.	DOMINION TRANSMISSION, INC.	LIMITED PARTIAL ASSIGNMENT (50%)		684	57						
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)		712	848						
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	ASSIGNMENT		717	1						
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	MERGER/NAME CHANGE		722	170						
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	ASSIGNMENT (68%)		736	220						
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	MERGER/NAME CHANGE		736	220						
				G.C. STARCHER ET AL	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8		169	169						
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED		294	89						
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT		425	127						
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		51	795						
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		9	628						
				DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)		684	57						
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)		712	848						
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT		722	170						
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE		736	220						
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)		736	220						
				HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8		169	169						
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED		294	89						
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS SUPPLY CORPORATION	ASSIGNMENT		425	127						
				CNG TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE		51	795						
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE		9	628						
				DOMINION TRANSMISSION, INC.	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)		684	57						
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)		712	848						
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT		722	170						
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE		736	220						
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)		736	220						
				HOPE NATURAL GAS COMPANY	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8		168	211						

12/01/2023

/ 53	FK05106	03-001E-0052-0000 03-001E-0053-0000	Q100490000
/ 47	FK06125 HG10001 HG10002	p/o 03-002E-0044-0000	Q100990000 Department of Environmental Protection OCT 23 2023

HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC.	CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC	CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT (68%)	294 425 51 9 684 712 717 722 WVSOS 736 220
LYDIA STARCHER, SINGLE; D. O. MEANS AND CORA MEANS, HIS WIFE; MINNIE M. BRADFORD AND R. D. BRADFORD, HER HUSBAND; ELYSON M. LASURE AND SIMON LASURE, HER HUSBAND; C. W. RADCLIFF, WIDOWER; OPAL WOOFER AND OTIS M. WOOFER, HER HUSBAND; J. B. MEANS; CLARICE PRATT AND HARLEY PRATT, HER HUSBAND; ELLA METZ, WIDOW; OLEY U. CAMPBELL AND A. B. CAMPBELL, HER HUSBAND; OLEY U. CAMPBELL, GUARDIAN OF LORETTA MAE MEANS; JAMES G. MEANS; WILLIAM A. MEANS, SINGLE; FRANCIS M. MEANS AND EDRIE E. MEANS, HIS WIFE; MARGARET F. FARBER AND SAMUEL H. FARBER, HER HUSBAND; NORMA O. DONALD AND R. W. DONALD, HER HUSBAND; PEARL WHITE AND VIRGIL A. WHITE, HER HUSBAND; VIRGIL C. RADCLIFF AND CATHERINE E. RADLFF, HIS WIFE, SARAH I. WALLICK AND ELMORE W. WALLICK, HER HUSBAND; MILDRED MCINTYRE AND JAMES W. MCINTYRE, HER HUSBAND; EDITH ELLEN KIDWELL AND FRANCIS J. KIDWELL, HER HUSBAND; OPAL BRADY AND WOODROW W. BRADY, HER HUSBAND; ROY I. MEANS AND IRENE E. MEANS, HIS WIFE; AGNES E. MEANS, SINGLE; ARLE TETER AND CLARENCE TETER, HER HUSBAND; O. R. MEANS AND VADA MEANS, HIS WIFE; BEULAH TUCKER AND G. B. TUCKER, HER HUSBAND; MARGARET MEANS, WIDOW; MARGARET ANN YARBROUGH; MYRA R. MCBRIDE, COMMITTEE OF GRACE MEANS, AN INCOMPETENT PERSON; AND NORA O. BARNES AND THOMAS G. BARNES, HER HUSBAND	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT ASSIGNMENT (68%)	236 294 425 51 9 672 684 712 717 722 WVSOS 723 734 736 141 89 127 795 628 154 57 848 1 170 499 558 220

12/01/2023



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

4701706963

October 5, 2023

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

RECEIVED
Office of Oil and Gas

OCT 23 2023

WV Department of
Environmental Protection

RE: Drilling Under Roads – Barnes 1223 S-12H
Cove District, Doddridge County
West Virginia

Dear Mr. Blevins:

HG Energy II Appalachia, LLC, is submitting the attached application for a new well work permit for the Barnes 1223 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 Barnes 1223 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

12/01/2023

WW-PN
(11-18-2015)

4701706969

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Office of Oil and Gas
OCT 23 2023
WV Department of
Environmental Protection

**Horizontal Natural Gas Well Work Permit
Application Notice By Publication**

Notice is hereby given:

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

Paper: The Herald Record Newspaper ✓

Public Notice Date: Wednesday, September 13th & Wednesday, September 20th, 2023

The following applicant intends to apply for a horizontal natural well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads or utilizes more than two hundred ten thousand gallons of water in any thirty day period.

Applicant: HG Energy II Appalachia, LLC ✓ **Well Number:** Barnes 1223 S-12H ✓

Address: 5260 Dupont Road
Parkersburg, WV 26101

Business Conducted: Natural gas production.

Location –

State: West Virginia ✓ County: Doddridge ✓
District: Cove ✓ Quadrangle: Vadis 7.5' ✓
UTM Coordinate NAD83 Northing: 4329583.7 ✓
UTM coordinate NAD83 Easting: 524442.0 ✓
Watershed: Fink Creek

Coordinate Conversion:

To convert the coordinates above into longitude and latitude, visit: http://tagis.dep.wv.gov/convert/llutm_conus.php

Electronic notification:

To receive an email when applications have been received or issued by the Office of Oil and Gas, visit <http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx> to sign up.

Reviewing Applications:

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to DEP.comments@wv.gov.

Submitting Comments:

Comments may be submitted online at <https://apps.dep.wv.gov/oog/comments/comments.cfm>, or by letter to Permit Review, Office of Oil and Gas, 601 57th Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: www.dep.wv.gov/oil-and-gas/pages/default.aspx

12/01/2023

OCT 23 2023

WV Department of
Environmental Protection

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

4701706969

Date of Notice Certification: 10/09/2023

API No. 47-

Operator's Well No. Barnes 1223 S-12H

Well Pad Name: Barnes

Notice has been given:

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

State:	West Virginia	UTM NAD 83	Easting:	524442.0
County:	Doddridge		Northing:	4329583.7
District:	Cove	Public Road Access:	WV18 and CR29	
Quadrangle:	Vadis WV 7.5s	Generally used farm name:	Barnes	
Watershed:	Fink Creek			

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY		OOG OFFICE USE ONLY
<input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED		<input checked="" type="checkbox"/> RECEIVED
<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"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION		<input checked="" type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 5. PUBLIC NOTICE		<input checked="" type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		<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.

12/01/2023

WW-6AC
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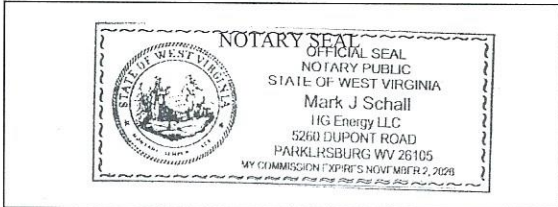
OCT 23 2023

WV Department of
Environmental Protection
4701706969

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@hgeneryllc.com</u>



Subscribed and sworn before me this 9th day of October, 2023

Mark J Schall Notary Public

My Commission Expires 11/2/2023

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.

12/01/2023

WW-6A
(9-13)

4701706969
API NO. 47-
OPERATOR WELL NO. Barnes 1223 N1H to S12H
Well Pad Name: Barnes 1223

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: 10/13/23 Date Permit Application Filed: 10/19/23

RECEIVED
Office of Oil and Gas

OCT 23 2023

WV Department of
Environmental Protection

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: Carolyn Bass
Address: 832 Elizabeth Avenue
Salem, VA 24153

Name: Marilyn Barnes
Address: 771 Barbours Creek Road
New Castle, VA 24127

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

Name: James Cava
Address: 190 Ridgeway Drive
Bridgeport, WV 26330

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: NA
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: NA
Address: _____

*Please attach additional forms if necessary

12/01/2023

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.depr.wv.gov/oil-and-gas/pages/default.aspx.

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Office of Oil and Gas
Department of Environmental
Protection
OCT 23 2023
WV Department of
Environmental Protection

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

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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.

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Office of Oil and Gas
OCT 23 2023**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**WV Department of
Environmental Protection

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

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.**

12/01/2023

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.

OCT 23 2023

Permit Denial or Condition

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

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

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

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

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API NO. 47-
OPERATOR WELL NO. Barnes 1223 N1H to S12H
Well Pad Name: Barnes 1223

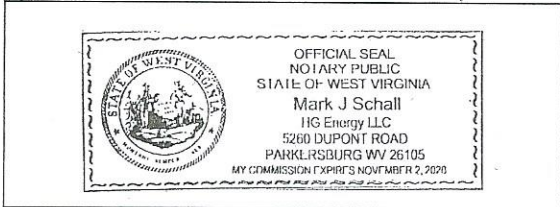
Notice is hereby given by:

Well Operator: HG Energy II Appalachia, LLC
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com *Diane White*

Address: 5260 Dupont Road
Parkersburg, WV 26101
Facsimile: 304-863-3172

Oil and Gas Privacy Notice:

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



Subscribed and sworn before me this 9th day of October, 2023.

[Signature] Notary Public

My Commission Expires 11/2/2026

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Office of Oil and Gas

OCT 23 2023

WV Department of
Environmental Protection

12/01/2023

**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: 10/03/2023 **Date of Planned Entry:** 10/10/2023

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: Marilyn Barnes ✓
Address: 771 Barbour's Creek Road
New Castle, VA 24127

Name: Carolyn Bass ✓
Address: 812 Elizabeth Avenue
Salem, VA 24153

Name: James L Marsh ✓
Address: 10153 Webster Road
Summersville, WV 26651

COAL OWNER OR LESSEE

Name: NA
Address: _____

MINERAL OWNER(s)

Name: **See Attached Sheet**
Address: _____

*please attach additional forms if necessary

RECEIVED
Office of Oil and Gas
OCT 23 2023
WV Department of
Environmental Protection

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>39.115066 / 80.717274</u>
County: <u>Doddridge</u>	Public Road Access: <u>SLS 29</u>
District: <u>Cove</u>	Watershed: <u>Fink Creek</u>
Quadrangle: <u>Vadis</u>	Generally used farm name: <u>Barnes</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: <u>HG Energy II Appalachia, LLC</u>	Address: <u>5260 Dupont Road</u>
Telephone: <u>304-420-1119</u>	<u>Parkersburg, WV 26101</u>
Email: <u>dwhite@hgenergyllc.com</u> <i>Diane White</i>	Facsimile: <u>304-863-3172</u>

Oil and Gas Privacy Notice:

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

12/01/2023

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: 09/29/2023 **Date Permit Application Filed:** 10/15/2023

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: Carolyn Bass
Address: 832 Elizabeth Avenue
Salem, VA 24153

Name: Marilyn Barnes James Marsh
Address: 771 Barbours Creek Rd 10153 Webster Road
New Castle VA 24127 Summersville, WV 26651

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Office of Oil and Gas
OCT 23 2023
WV Department of Environmental Protection

Notice is hereby given:

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

State: West Virginia UTM NAD 83 Easting: 524442.0
County: Doddridge Northing: 4329583.7
District: Cove Public Road Access: SLS 29
Quadrangle: Vadis WV 7.5' Generally used farm name: Barnes
Watershed: Fink Creek

This Notice Shall Include:

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

Notice is hereby given by:

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

Authorized Representative: Diane White *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.

12/01/2023



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Alanna J. Keller, P.E.
Deputy Secretary of Transportation
Deputy Commissioner of Highways

Jimmy Wriston, P. E.
Secretary of Transportation
Commissioner of Highways

October 5, 2023

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 Barnes 1223 Pad, Doddridge County
Barnes 1223 S-12H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2021-0824 which has been issued to HG Energy II Appalachia, LLC for access to the State Road for a well site located off Doddridge County Route 29 SLS MP 3.01.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a DISTRICT WIDE 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 March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

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

RECEIVED
Office of Oil and Gas
OCT 23 2023
WV Department of
Environmental Protection

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

E.E.O./AFFIRMATIVE ACTION EMPLOYER

12/01/2023

HG Energy II Appalachia, LLC
List of Frac Additives by Chemical Name and CAS #
Barnes 1223 Well Pad (N-1H thru S-12H)

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

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WW-6A7
(6-12)

OPERATOR: HG Energy II Appalachia, LLC WELL NO: Barnes 1223 S-12H

PAD NAME: Barnes 1223

REVIEWED BY: Diane White SIGNATURE: Diane White

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

Well Restrictions

At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR

DEP Waiver and Permit Conditions

At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR

DEP Waiver and Permit Conditions

At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR

DEP Waiver and Permit Conditions

At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

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