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

Tuesday, October 15, 2024
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD

PARKERSBURG, WV 26101

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

Side Track

HG ENERGY II APPALACHIA, LLC

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

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

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 Modification Issued: 10/15/2024

10/18/2024

WW-6B
(04/15)

API NO. 47- 4701706969
OPERATOR WELL NO. Barnes 1223 S-12H
Well Pad Name: Barnes 1223

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	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 x Oil _____ Underground Storage _____
Other _____
(b)If Gas Shallow x Deep _____
Horizontal x

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus at 7129' to 7182' and 53' in thickness. Anticipated pressure at 4314#.

JCB 10/7/2024

8) Proposed Total Vertical Depth: 7208'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 30,947'

11) Proposed Horizontal Leg Length: 22,498'

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 X

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

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WW-6B
(04/15)

API NO. 47- 4701706969
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	6988'	6988'	Lead - 40% excess, Tail - 0% Excess
Production	5 1/2"	NEW	P-110 HP	23	30947'	30947'	Lead - Yield = 1.19, Tail - yield = 1.94
Tubing							
Liners							

JOB 10/7/2024

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	13 3/8"	17.5"	.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, 40
Production	5 1/2"	8 1/2"	.415	16240	12500	Type 1/ClassA	20% excess yield = 1.19, tail yield 1.94
Tubing							
Liners							

PACKERS

Kind:				RECEIVED Office of Oil and Gas
Sizes:				OCT 15 2024
Depths Set:				WV Department of Environmental Protection

10/18/2024

WW-6B
(10/14)

API NO. 47- 4701706969
OPERATOR WELL NO. Barnes 1223 S-12H
Well Pad Name: Barnes 1223

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 7208'. Drill horizontal leg to an estimated 22,498' lateral length, 30,947' 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.

JCB 10/7/2024

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: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA17020% ExcessLead Yield=1.19Tail Yield=1.94CTS"

25) Proposed borehole conditioning procedures:

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

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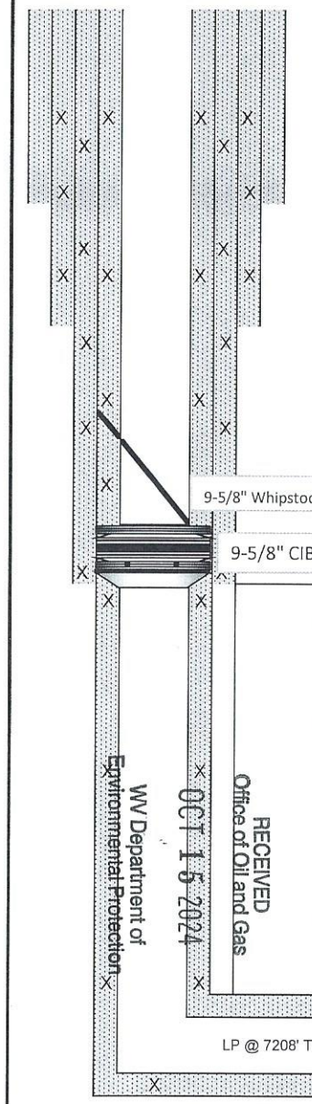
*Note: Attach additional sheets as needed.

10/18/2024

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

		1223 S-12H SHL	14204642.59N 1720606.87E
Ground Elevation	1329'	1223 S-12H LP	14203917.82N 1723278.39E
Azm	160.374°	1223 S-12H BHL	14182737.55N 1730831.18E



WELLBORE DIAGRAM	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	580		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
			Coal	610						
			Coal	900						
			Fresh Water Protection	0	1300					
	12.25"	9-5/8" 40# N-80 BTC	Little Lime/Big Lime	2290/2345	2305/2401	AIR / KCL - Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on first 2 joints then every third joint to 100' form surface	Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.395" wall thickness Burst=5750 psi
			Big Injun/Gantz	2401/2755	2495/2785					
			50 Foot/Gordon	2861/3042	2903/3122					
			Fifth	3213	3263					
			Bayard	3286	3311					
			Warren/Speechley	3594/3807	3629/3842					
			Benson / Alexander	5213 / 5474	5346 / 5604					
			Intermediate	0	TVD: 6373' MD: 6988' Inc.39 deg.					
	8.75"	5-1/2" 23# P-110 HP TXP / W461				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		Rhinestreet	6431	6719	11.5ppg-12.5ppg SOBM		Run 1 spiral centralizer every 3 joints from the 1st 5.5" long joint to the top of the curve.		
			Cashaqua	6719	6864					
			Middlesex	6864	6943					
			West River	6943	7012					
			Burkett	7012	7053					
			Tully Limestone	7053	7078					
			Hamilton	7078	7129					
	8.5" Lateral		Marcellus	7129	7182	11.5ppg-12.5ppg SOBM				
			TMD / TVD (Production)	30947	7208					
			Onondaga	7182						

HG ENERGY II APPALACHIA, LLC

Location: Doddridge Co., WV
Field: Doddridge
Facility: Barnes 1223 Pad

Slot: Slot 12
Well: Barnes 1223 S-12H ST01
Wellbore: Barnes 1223 S-12H ST01 PWB

Plot reference wellpath is Barnes 1223 S-12H ST01 Rev-A.0	Grid System: NAD83 / UTM Zone 17 North, US feet
True vertical depths are referenced to Precision 572 (RKB)	North Reference: Grid north
Reference wellpath measured depths are referenced to Precision 572 (RKB)	Scale: True distance
Precision 572 (RKB) to Mean Sea Level: 1355 feet	Coordinates are in feet referenced to Slot
Mean Sea Level to Ground level (At Slot: Slot 12): -1330 feet	Depths are in feet
Offset wellpath MDs are referenced to each path's default MD datum	Created by: manajchj on 2024-10-02; Database: WA_MPL_EASTERNUS_Defn

Location Information

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Barnes 1223 Pad			1720606.870	14204642.590	39°06'54.2366"N	80°43'2.1879"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot 12	0.00	0.00	1720606.870	14204642.590	39°06'54.2366"N	80°43'2.1879"W
Precision 572 (RKB) to Ground level (At Slot: Slot 12)					25ft	
Mean Sea Level to Ground level (At Slot: Slot 12)					-1330ft	
Precision 572 (RKB) to Mean Sea Level					1355ft	

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Top of Window	6918.10	35.883	86.568	6351.13	94.34	1896.24	0.88	541.83
Bottom of Window	6931.00	38.883	112.789	6361.45	92.98	1903.80	124.82	545.62
End of Rat Hole	7051.00	38.883	112.789	6454.86	63.81	1973.24	0.00	596.24
End of 3D Arc (XS)	7243.00	35.402	115.476	6607.90	16.53	2079.05	2.00	676.02
Curve KOP	7413.99	35.402	115.476	6747.27	-26.08	2168.47	0.00	745.95
End of 3D Arc (XS)	8449.79	91.736	160.374	7208.00	-725.06	2672.58	6.50	1572.81
End of Tangent (XS)	9868.91	91.736	160.374	7165.00	-2061.13	3149.01	0.00	2991.28
End of Drop (J)	9887.15	91.371	160.374	7164.51	-2078.30	3155.14	2.00	3009.51
End of Tangent (J)	10869.20	91.371	160.374	7141.00	-3003.04	3484.89	0.00	3991.28
End of Drop (J)	10883.46	91.086	160.374	7140.69	-3016.46	3489.68	2.00	4005.53
End of Tangent (J)	11869.39	91.086	160.374	7122.00	-3944.95	3820.78	0.00	4991.28
End of Drop (J)	11926.94	89.936	160.374	7121.49	-3999.15	3840.10	2.00	5048.82
End of Tangent (J)	17719.40	89.936	160.374	7128.00	-9455.09	5785.67	0.00	10841.25
End of Drop (J)	17755.85	89.207	160.374	7128.27	-9489.43	5797.91	2.00	10877.70
End of Tangent (J)	18169.40	89.207	160.374	7134.00	-9878.91	5936.80	0.00	11291.20
End of Build (J)	18238.36	90.586	160.374	7134.13	-9943.87	5959.96	2.00	11360.16
End of Tangent (J)	21869.66	90.586	160.374	7097.00	-13364.03	7179.58	0.00	14991.25
End of Build (J)	21895.99	91.112	160.374	7096.61	-13388.82	7188.42	2.00	15017.57
End of Tangent (J)	23369.88	91.112	160.374	7068.00	-14776.82	7683.37	0.00	16491.17
End of Drop (J)	23385.41	90.802	160.374	7067.74	-14791.45	7688.59	2.00	16506.71
End of Tangent (J)	27870.33	90.802	160.374	7005.00	-19015.41	9194.84	0.00	20991.16
End of Drop (J)	27887.57	90.457	160.374	7004.81	-19031.65	9200.63	2.00	21008.40
End of Tangent (J)	29620.37	90.457	160.374	6991.00	-20663.73	9782.62	0.00	22741.14
Build (J)	29634.31	90.735	160.374	6990.86	-20676.86	9787.30	2.00	22755.08
BHL	30947.54	90.735	160.374	6974.00	-21913.69	10228.35	0.00	24068.18

Hole and Casing Sections

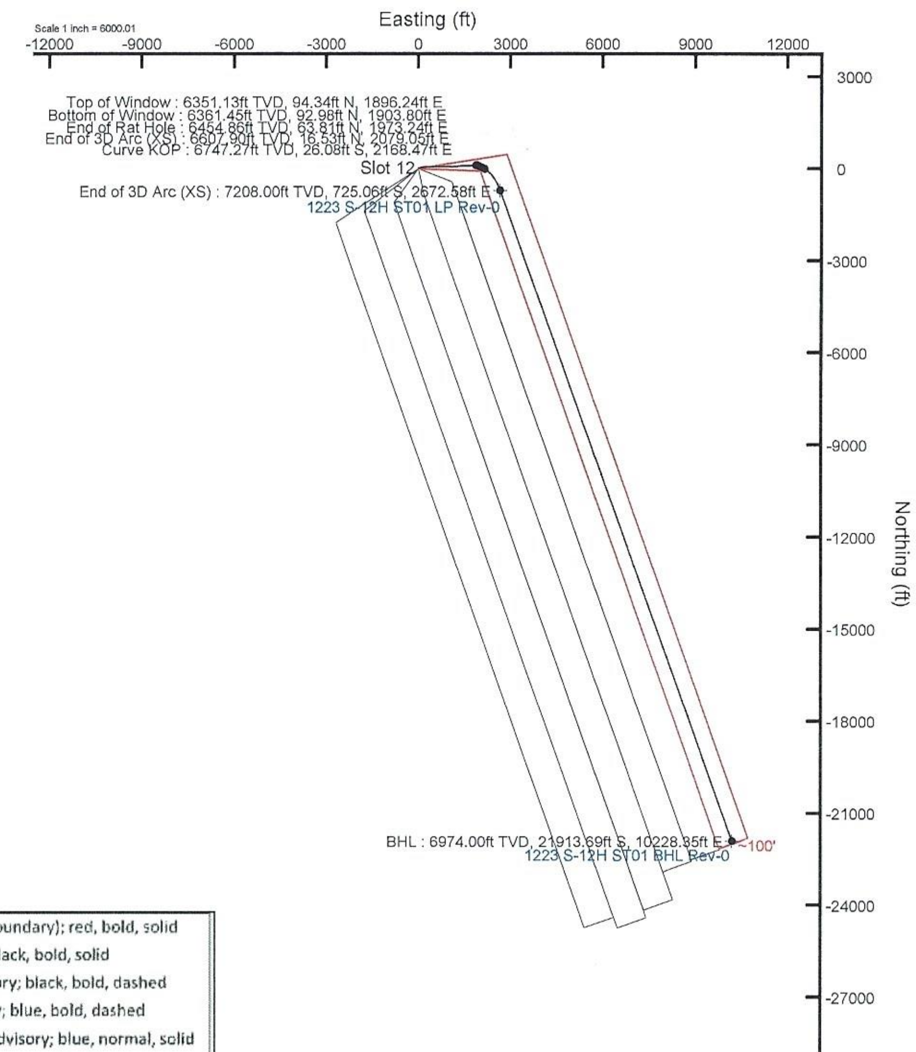
Name	Start MD (ft)	End MD (ft)	Interval (ft)	Start TVD (ft)	End TVD (ft)	Start Local N (ft)	Start Local E (ft)	End Local N (ft)	End Local E (ft)	Wellbore
18.5in Open Hole	25.00	1326.00	1301.00	25.00	1325.99	0.00	0.00	-3.75	-0.71	Barnes 1223 S-12H AWB
13.375in Casing Surface	25.00	1326.00	1301.00	25.00	1325.99	0.00	0.00	-3.75	-0.71	Barnes 1223 S-12H AWB
12.25in Open Hole	1326.00	6918.10	5592.10	1325.99	6351.13	-3.75	-0.71	94.34	1896.24	Barnes 1223 S-12H AWB
9.625in Casing Intermediate	25.00	6918.10	6893.10	25.00	6351.13	0.00	0.00	94.34	1896.24	Barnes 1223 S-12H AWB
5.5in Casing Production	25.00	6918.10	6893.10	25.00	6351.13	0.00	0.00	94.34	1896.24	Barnes 1223 S-12H AWB
8.5in Open Hole	6918.10	30947.54	24029.44	6351.13	N/A	94.34	1896.24	N/A	N/A	Barnes 1223 S-12H ST01 PWB

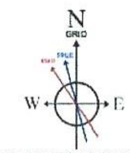
Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

Targets

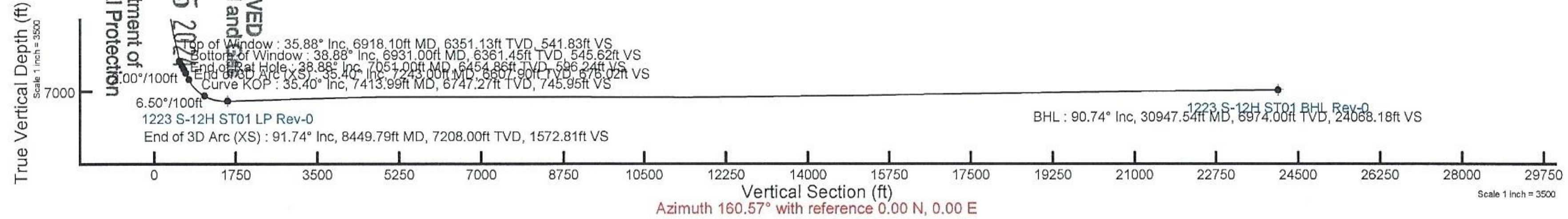
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
1223 S-12H ST01 BHL Rev-0	30947.54	6974.00	-21913.69	10228.35	1730831.18	14182737.55	39°03'17.3112"N	80°40'53.3922"W
1223 S-12H ST01 LP Rev-0	8449.79	7208.00	-725.06	2672.58	1723278.39	14203917.82	39°08'46.9886"N	80°42'28.3008"W





User specified HDGM Dip: 65.67° Field: 51318 nT
Magnetic North is 7.81 degrees West of True North (at 9/6/2024)
Grid North is 0.18 degrees East of True North
To correct azimuth from True to Grid subtract 0.18 degrees
To correct azimuth from Magnetic to Grid subtract 7.99 degrees

— (red)	Do not cross (any limiting boundary); red, bold, solid
—	Lease boundary, advisory; black, bold, solid
- - -	Regulatory boundary, advisory; black, bold, dashed
- - -	Geologic boundary, advisory; blue, bold, dashed
—	Geologic target boundary, advisory; blue, normal, solid
—	Driller's target boundary, advisory; green, normal, solid
- - -	Other type of boundary, advisory; green, bold, dashed



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HG Energy II Appalachia, LLC
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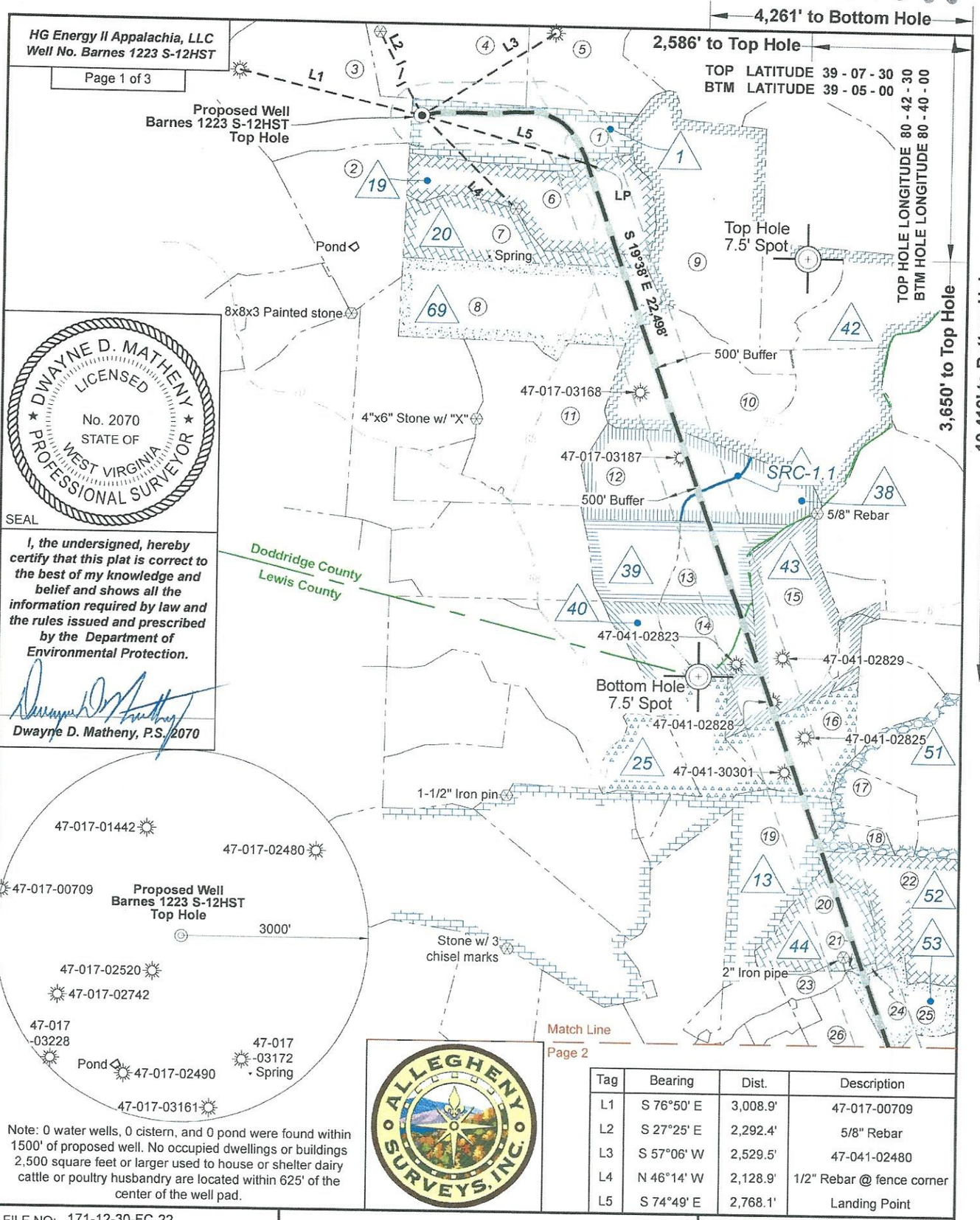

Stone w/ 3 chisel marks

2" Iron pipe

Tag	Bearing	Dist.	Description
L1	S 76°50' E	3,008.9'	47-017-00709
L2	S 27°25' E	2,292.4'	5/8" Rebar
L3	S 57°06' W	2,529.5'	47-041-02480
L4	N 46°14' W	2,128.9'	1/2" Rebar @ fence corner
L5	S 74°49' E	2,768.1'	Landing Point

SEAL

DWAYNE D. MATHENY
LICENSED
No. 2070
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

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, 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.

ALLEGHENY SURVEYS, INC.

FILE NO: 171-12-30-FC-22
DRAWING NO: Barnes 1223 S-12HST 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 3 20 24
OPERATOR'S WELL NO. Barnes 1223 S-12HST

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: 1,330' WATERSHED: Fink Creek
DISTRICT: Cove
QUADRANGLE: Vadis
COUNTY: Doddridge
SURFACE OWNER: Marilyn Barnes, et al
ACREAGE: 10/18/2024
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) BH & LP MOD
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,208' TVD 30,948' MD

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

4701706969

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

ALLEGHENY SURVEYS, INC.

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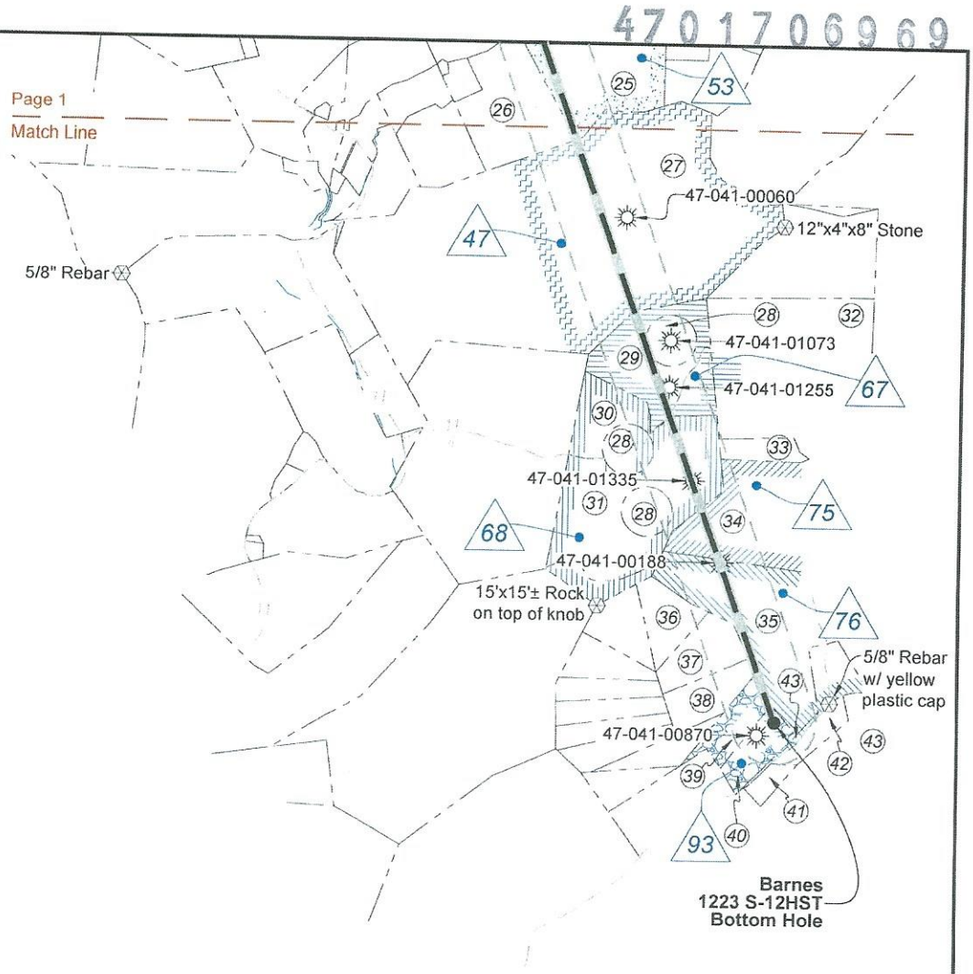
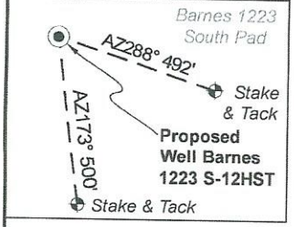
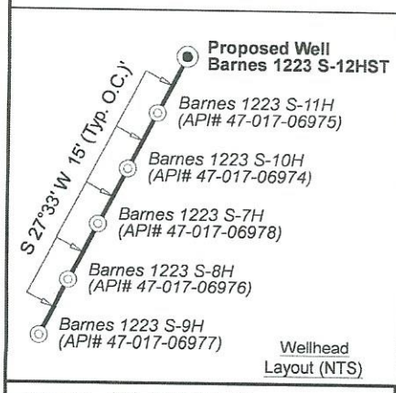


Well Location References
Not to Scale



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.)



Wellhead Layout (NTS)

West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.	UTM Zone 17, NAD 1983 Plat orientation and corner and well references are based upon the grid north meridian. Well location references are based upon the magnetic meridian.	
Notes: Well No. Van Wie 1223 S-12HST WVCS 1927, North Zone	Notes: Well No. Van Wie 1223 S-12HST UTM NAD 1983 (USSF)	Notes: Well No. Van Wie 1223 S-12HST UTM NAD 1983 (Meters)
Top Hole Coordinates	Top Hole Coordinates	Top Hole Coordinates
Lat: 39°06'53.92"	N: 14,204,642.59'	N: 4,329,583.721m
Lon: 80°43'02.82"	E: 1,720,606.87'	E: 524,442.023m
Landing Point Coordinates	Landing Point Coordinates	Landing Point Coordinates
Lat: 39°06'46.67"	N: 14,203,917.82'	N: 4,329,362.810m
Lon: 80°42'28.95"	E: 1,723,278.39'	E: 525,256.304m
Bottom Hole Coordinates	Bottom Hole Coordinates	Bottom Hole Coordinates
Lat: 39°03'16.99"	N: 14,182,737.55'	N: 4,322,907.051m
Lon: 80°40'54.04"	E: 1,730,831.18'	E: 527,558.399m

FILE NO: 171-12-30-FC-22
DRAWING NO: Barnes 1223 S-12HST 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 3 20 24
OPERATOR'S WELL NO. Barnes 1223 S-12HST

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: 1,330' WATERSHED: Fink Creek
DISTRICT: Cove
QUADRANGLE: Vadis
COUNTY: Doddridge
ACREAGE: 16.10
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) BH & LP MOD
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,208' TVD 30,948' MD

10/18/2024

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

4701706969

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

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	9 / 28	Maxine S. Rastle	A58 / 287	53.63
8	14 / 1	Maxine S. Rastle	A58 / 287	129.04
9	14 / 2	Miriam N. & Atlee Hershberger, Jr.	488 / 622	153.55
10	14 / 2.2	Michael E. Dayhoff	429 / 259	128.50
11	13 / 17	Maxine S. Rastle	A58 / 287	116.18
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	1E / 51	Stephen C. Schertz	778 / 688	46.00
21	1E / 50	Mark H. Schulte	722 / 936	0.49
22	2E / 1	Dawn C. Lozina, et al	726 / 836	83.00
23	1E / 48	Stephen C. Schertz	778 / 688	8.60
24	1E / 52	Mark H. Schulte	722 / 936	1.19
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
30	2E / 22.6	David N. & Rebecca E. King	638 / 776	12.50
31	2E / 22	William M. & William B. Vavrek	642 / 361	58.62
32	2E / 18	David N. & Rebecca E. King	638 / 776	32.00
33	2E / 21	We-R-Farmers, LLC	753 / 303	5.00
34	2E / 23	We-R-Farmers, LLC	753 / 303	40.00
35	2F / 14.1	We-R-Farmers, LLC	753 / 303	55.00
36	2F / 2	John S. & Nancy J. Riley	327 / 244	10.50
37	2F / 3	John S. & Nancy J. Riley	546 / 70	12.00
38	2F / 9	Marites & Christian M. Spencer	781 / 167	10.50
39	2F / 12	Marites & Christian M. Spencer	781 / 167	8.50
40	2F / 13	Marites & Christian M. Spencer	781 / 167	8.50
41	2F / 17.1	John & Donna Ramzy	609 / 255	3.20
42	2F / 17.2	Joshua D. Hardbarger	698 / 822	5.86
43	2F / 17	William J. & Deborah J. Rogers	573 / 119	54.93

ID	Lease
1	Carolyn Rastle Bass, et al
13	William H. Hall & Mary E. Hall
19	Carolyn Rastle Bass, et al
20	Maxine Cole Rastle, et al
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
51	HG Energy II Appalachia, LLC
52	Dollie Means, et al
53	N.N. Wiseman, et ux, et al
67	Dayna Laverne Smith, et al
68	Albert & Margaret Ralston, et al
69	Ivah R. Schmidt, et vir, et al
75	Moore H. & Emma H. Newlon, et al
76	James F. Carder, dba Jim's Oil & Gas
93	Dennis Scott Reese
SRC-1.1	State of West Virginia, Department of Highways

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OIL AND GAS DIVISION

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4701706969

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

September 30, 2024

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

RE: Barnes 1223 S-12H Drill Permit Revision Request – (47-041-06969)
Cove District, Doddridge County
West Virginia

Dear Mr. Blevins -

Per our discussions, enclosed are revised forms (survey plat, mylar, WW-6B, well plans, and casing schematic) and a check for expedited service for the 1223 S-12H well work permit revision request. We ask the permit to be approved for modification to reflect the revisions in the enclosures. We have adjusted the landing point, as well as the bottom hole location to reflect drilling a new lateral (offset) to the lost wellbore that we plugged back.

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

Very truly yours,

Diane White

Diane C. White

Enclosures

cc: Ken Greynolds – WV DEP State Inspector

RECEIVED
Office of Oil and Gas
OCT 15 2024
WV Department of
Environmental Protection

10/18/2024