

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work



API 47-041-05729 County Lewis District Freeman's Creek
Quad Camden & Big Isaac 7.5' Pad Name Burnside 1214 Field/Pool Name Fink/Kennedy
Farm name Burnside Well Number Burnside 1214 S4H
Operator (as registered with the OOG) HG Energy II Appalachia, LLC
Address 5260 Dupont Rd. City Parkersburg State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4330094.368 Easting 541241.029
Landing Point of Curve Northing 4329769 Easting 540575
Bottom Hole Northing 4324347.249 Easting 542489.398

Elevation (ft) 1159 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Air/WBM(gas storage)/ OBM
Barite, Lime, CaCL, base oil, Gilsonite, Asphalt, clay, Emulsifier, sulfatone, safevert FLG, safevert WA

Date permit issued 01/20/2022 Date drilling commenced 2/2/2022 Date drilling ceased 8/4/2022
Date completion activities began 9/3/2022 Date completion activities ceased 12/29/2022
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 120' Open mine(s) (Y/N) depths N
Salt water depth(s) ft Not observed Void(s) encountered (Y/N) depths N
Coal depth(s) ft 415,496,582,952,1052 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) No

APPROVED

Reviewed by:
Thomas [Signature]
05/10/2024

API 47-041 - 05729 Farm name Burnside Well number Burnside 1214 S4H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	30"	30"	120	New	157 lbs/ft		Drilled in
Surface	26"	20"	1091	New	94 lbs/ft J-55		Yes, 65 bbls to surface
Coal							
Intermediate 1	17.5"	13.375"	2063	New	68 lbs/ft J55		Yes, 140 bbls to surface
Intermediate 2	12.25"	9.625"	4831	New	40 lbs/ft		Yes, 50 bbls to surface
Intermediate 3							
Production	8.5	5.5	26926	New	23 lbs/ft P-110HP		Yes, 91 bbls to surface
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Class A	1887	15.6	1.19	2245	Surface	8
Coal							
Intermediate 1	Class A	1464/824	16.0/16.4	1.16/1.12	1698/923	Surface	24
Intermediate 2	Class A	193/391/203	10.5/10.5/15.2	2.91/2.68/1.26	561/1048/256	Surface	18
Intermediate 3							
Production	Class A	307/379/4261	13.5/15.5/14.8	1.82/1.48/1.33	559/561/5667	Surface	8
Tubing							

Drillers TD (ft) ²⁶⁹⁵⁴ _____ Loggers TD (ft) _____
 Deepest formation penetrated Marcellus Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) ⁶²⁸⁰ _____

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
 20" casing: centralizer every 3 joints to surface
 13.375" casing: Bow spring centralizer on every joint
 9.625" casing: Bow spring on first 2 joints then every 3rd joint to 100' from surface
 5.5" casing: Centralizer run every 3 joints to top of curve (KOP) then centralizers placed every 5 joints to surface

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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API 47- 041 - 05729 Farm name Burnside Well number Burnside 1214 S4H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6717-6887</u> TVD	<u>7771-26954</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
		See Attached			

Please insert additional pages as applicable.

Drilling Contractor Patterson Drilling
Address 2198 University Drive City Lemont Furnace State PA Zip 15456

Logging Company Renegade Wireline Services
Address 191 Earnhardt Rd. City Hunker State PA Zip 15639

Cementing Company Schlumberger
Address 300 Schlumberger Dr. City Sugar Land State TX Zip 77478

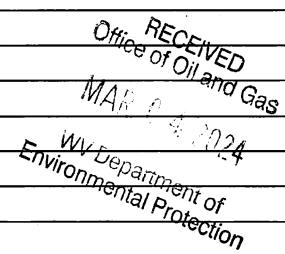
Stimulating Company Nextier
Address 8300 Route 119 North City Black Lick State PA Zip 15716

Please insert additional pages as applicable.

Completed by Diane White Telephone 304-420-1119
Signature Diane White Title _____ Date 2/29/2024

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

05/10/2024



HG Energy II Appalachia, LLC
Burnside 1214 S-4H
Perforation Record

Stage #	Date	Perforation From Depth	Perforation to Depth	Number of Perforations	Formation
Sleeve/1	10/26/2022	26877	26852	2	Marcellus
2	10/27/2022	26818	26650	32	Marcellus
3	10/27/2022	26622	26454	32	Marcellus
4	10/27/2022	26426	26258	32	Marcellus
5	10/28/2022	26230	26062	32	Marcellus
6	10/28/2022	26034	25866	32	Marcellus
7	10/28/2022	25838	25670	32	Marcellus
8	10/29/2022	25642	25474	32	Marcellus
9	10/29/2022	25446	25278	32	Marcellus
10	10/29/2022	25250	25082	32	Marcellus
11	10/30/2022	25054	24886	32	Marcellus
12	10/30/2022	24858	24690	32	Marcellus
13	10/31/2022	24662	24494	32	Marcellus
14	10/31/2022	24466	24298	32	Marcellus
15	11/1/2022	24270	24102	32	Marcellus
16	11/2/2022	24074	23906	32	Marcellus
17	11/2/2022	23878	23710	32	Marcellus
18	11/3/2022	23682	23514	32	Marcellus
19	11/3/2022	23486	23318	32	Marcellus
20	11/3/2022	23290	23122	32	Marcellus
21	11/4/2022	23094	22926	32	Marcellus
22	11/4/2022	22898	22730	32	Marcellus
23	11/5/2022	22702	22534	32	Marcellus
24	11/5/2022	22506	22338	32	Marcellus
25	11/5/2022	22310	22142	32	Marcellus
26	11/6/2022	22114	21946	32	Marcellus
27	11/6/2022	21918	21750	32	Marcellus
28	11/7/2022	21722	21554	32	Marcellus
29	11/7/2022	21526	21358	32	Marcellus
30	11/7/2022	21330	21162	32	Marcellus
31	11/8/2022	21134	20966	32	Marcellus
32	11/8/2022	20938	20770	32	Marcellus
33	11/9/2022	20742	20574	32	Marcellus
34	11/9/2022	20546	20378	32	Marcellus
35	11/10/2022	20350	20182	32	Marcellus
36	11/10/2022	20154	19986	32	Marcellus
37	11/10/2022	19958	19790	32	Marcellus
38	11/11/2022	19762	19594	32	Marcellus
39	11/11/2022	19566	19398	32	Marcellus
40	11/12/2022	19370	19202	32	Marcellus
41	11/12/2022	19174	19006	32	Marcellus
42	11/13/2022	18978	18810	32	Marcellus
43	11/13/2022	18782	18614	32	Marcellus
44	11/13/2022	18586	18418	32	Marcellus
45	11/14/2022	18390	18222	32	Marcellus
46	11/14/2022	18194	18026	32	Marcellus
47	11/14/2022	17998	17830	32	Marcellus
48	11/15/2022	17802	17634	32	Marcellus
49	11/15/2022	17606	17438	32	Marcellus
50	11/16/2022	17410	17242	32	Marcellus
51	11/16/2022	17214	17046	32	Marcellus
52	11/16/2022	17018	16850	32	Marcellus
53	11/17/2022	16823	16655	32	Marcellus
54	11/17/2022	16629	16461	32	Marcellus

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55	11/17/2022	16435	16267	32	Marcellus
56	11/18/2022	16241	16073	32	Marcellus
57	11/18/2022	16047	15879	32	Marcellus
58	11/19/2022	15853	15685	32	Marcellus
59	11/19/2022	15659	15491	32	Marcellus
60	11/19/2022	15465	15297	32	Marcellus
61	11/20/2022	15271	15103	32	Marcellus
62	11/20/2022	15077	14909	32	Marcellus
63	11/21/2022	14883	14715	32	Marcellus
64	11/21/2022	14689	14521	32	Marcellus
65	11/21/2022	14495	14327	32	Marcellus
66	11/22/2022	14301	14133	32	Marcellus
67	11/22/2022	14107	13939	32	Marcellus
68	11/22/2022	13913	13745	32	Marcellus
69	11/23/2022	13719	13551	32	Marcellus
70	11/27/2022	13525	13357	32	Marcellus
71	11/27/2022	13331	13163	32	Marcellus
72	11/28/2022	13137	12969	32	Marcellus
73	11/28/2022	12943	12775	32	Marcellus
74	11/28/2022	12749	12581	32	Marcellus
75	11/29/2022	12555	12387	32	Marcellus
76	11/29/2022	12361	12193	32	Marcellus
77	11/29/2022	12167	11999	32	Marcellus
78	11/30/2022	11973	11805	32	Marcellus
79	11/30/2022	11779	11611	32	Marcellus
80	12/1/2022	11585	11417	32	Marcellus
81	12/1/2022	11391	11223	32	Marcellus
82	12/1/2022	11197	11029	32	Marcellus
83	12/5/2022	11003	10835	32	Marcellus
84	12/5/2022	10809	10641	32	Marcellus
85	12/6/2022	10615	10447	32	Marcellus
86	12/6/2022	10421	10253	32	Marcellus
87	12/6/2022	10227	10059	32	Marcellus
88	12/7/2022	10033	9865	32	Marcellus
89	12/7/2022	9839	9671	32	Marcellus
90	12/7/2022	9645	9477	32	Marcellus
91	12/12/2022	9451	9283	32	Marcellus
92	12/13/2022	9257	9089	32	Marcellus
93	12/13/2022	9063	8895	32	Marcellus
94	12/14/2022	8869	8701	32	Marcellus
95	12/15/2022	8675	8507	32	Marcellus
96	12/16/2022	8481	8313	32	Marcellus
97	12/17/2022	8287	8143	28	Marcellus

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HG Energy II Appalachia, LLC
Burnside 1214 S-4H
Stimulation Summary

Stage #	Date	Ave Pump Rate (BPM)	Ave Treatment Press (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Proppant (LBS)	Water (BBLs)
Sleeve/1	10/26/2022	75.0	9625	12243	4637	270000	7,590
2	10/27/2022	80.0	10,120	7,119	5,065	700000	15,608
3	10/27/2022	81.9	10,150	6,405	4,468	700000	15,602
4	10/27/2022	85.0	10,289	6,189	4,861	705000	13,865
5	10/28/2022	84.4	10,210	6,439	5,442	702500	13,439
6	10/28/2022	85.0	10,378	5,945	4,954	705000	13,050
7	10/28/2022	87.0	10,394	5,513	5,017	705000	12,920
8	10/29/2022	85.0	10,234	6,357	5,872	705000	13,591
9	10/29/2022	83.0	10,386	5,152	5,242	725000	11,242
10	10/29/2022	80.0	10,155	7,160	6,246	705500	10,596
11	10/30/2022	82.0	10,230	7,256	4,600	705000	10,431
12	10/30/2022	82.0	10,100	7,386	5,230	705500	10,873
13	10/31/2022	86.0	10,363	7,113	4,905	705000	10,749
14	10/31/2022	86.0	10,330	6,471	5,004	705000	10,764
15	11/1/2022	87.0	10,402	6,486	6,667	705500	10,435
16	11/2/2022	83.0	10,215	6,515	5,429	699500	11,694
17	11/2/2022	90.0	10,700	6,713	5,794	680000	10,058
18	11/3/2022	83.0	10,400	6,253	6,300	680000	10,425
19	11/3/2022	85.0	9,400	6,189	6,006	681000	10,269
20	11/3/2022	86.0	10,529	6,259	6,223	680000	10,365
21	11/4/2022	89.0	10,364	6,375	6,123	680200	10,328
22	11/4/2022	87.0	10,430	6,241	5,599	680000	10,440
23	11/5/2022	88.0	10,456	6,200	6,044	680000	10,517
24	11/5/2022	87.0	10,334	5,889	6,315	679900	10,545
25	11/5/2022	88.0	10,161	5,661	5,021	680000	10,393
26	11/6/2022	90.0	10,409	5,216	5,773	680800	10,301
27	11/6/2022	90.0	10,147	5,987	4,936	680000	10,299
28	11/7/2022	94.0	10,243	6,225	5,418	680000	10,272
29	11/7/2022	90.0	10,479	6,421	5,774	680300	10,373
30	11/7/2022	88.0	10,190	5,481	5,572	680000	10,471
31	11/8/2022	90.5	10,437	5,800	4,680	680000	10,366
32	11/8/2022	87.0	10,151	5,782	4,410	680000	10,585
33	11/9/2022	89.0	10,380	6,160	5,527	680000	10,410
34	11/9/2022	88.0	10,211	5,789	5,284	680000	11,681
35	11/10/2022	90.5	10,162	6,160	5,442	680000	10,483
36	11/10/2022	93.0	10,360	5,823	4,331	681010	10,394
37	11/10/2022	90.0	10,080	6,440	4,856	680000	11,128
38	11/11/2022	94.0	10,043	6,735	4,868	680000	11,167
39	11/11/2022	92.0	9,867	6,648	4,283	680000	11,420
40	11/12/2022	93.0	10,244	5,805	5,414	687300	10,405
41	11/12/2022	89.7	10,180	5,881	4,918	680000	10,300
42	11/13/2022	87.9	10,109	6,256	4,884	625320	9,725
43	11/13/2022	93.0	10,195	6,090	5,499	649070	9,951
44	11/13/2022	95.2	10,162	4,920	4,862	680000	10,269
45	11/14/2022	98.8	10,013	6,701	5,224	680000	10,290
46	11/14/2022	97.0	10,172	5,800	5,188	680000	10,491
47	11/14/2022	96.0	9,943	6,254	4,640	700000	11,468
48	11/15/2022	97.0	10,099	5,760	4,309	700000	11,393
49	11/15/2022	98.0	10,049	5,753	4,960	700000	10,406
50	11/16/2022	95.0	10,115	6,503	4,585	680000	10,378
51	11/16/2022	99.0	10,276	6,317	5,582	680000	10,358
52	11/16/2022	96.0	9,953	5,932	4,616	680000	10,410
53	11/17/2022	101.0	10,272	6,525	4,957	680000	10,383

54	11/17/2022	101.0	10,100	5,602	4,622	680000	10,552
55	11/17/2022	94.0	10,151	7,105	4,590	680000	11,416
56	11/18/2022	96.0	10,130	6,601	5,387	680000	10,335
57	11/18/2022	98.0	10,027	6,817	4,992	680000	11,014
58	11/19/2022	98.0	9,989	6,776	4,571	680000	10,657
59	11/19/2022	100.0	10,190	6,032	5,244	680000	10,217
60	11/19/2022	99.0	10,029	7,061	4,218	680000	10,532
61	11/20/2022	101.0	10,194	6,670	6,917	680000	10,282
62	11/20/2022	98.0	9,644	6,044	5,112	680000	10,551
63	11/21/2022	100.0	10,341	6,630	4,284	680000	10,487
64	11/21/2022	102.0	10,098	6,473	5,160	680000	10,317
65	11/21/2022	103.0	10,219	7,189	4,719	670000	10,159
66	11/22/2022	99.0	10,054	7,154	4,503	670000	10,135
67	11/22/2022	102.0	9,963	6,079	5,077	670000	10,220
68	11/22/2022	96.0	9,707	5,974	5,120	670000	10,130
69	11/23/2022	104.0	10,105	6,063	4,807	670000	10,274
70	11/27/2022	91.0	10,135	6,473	4,917	670000	10,107
71	11/27/2022	100.0	9,953	6,834	5,021	675000	10,279
72	11/28/2022	103.0	10,158	6,643	5,307	675000	10,358
73	11/28/2022	103.0	10,119	6,352	5,543	670000	10,108
74	11/28/2022	106.0	10,045	6,125	4,936	668400	10,204
75	11/29/2022	101.0	9,758	6,218	5,589	670000	10,093
76	11/29/2022	100.0	10,001	6,090	5,166	670000	10,868
77	11/29/2022	104.0	10,189	6,974	5,259	670100	10,335
78	11/30/2022	104.0	9,698	7,066	4,418	670000	10,184
79	11/30/2022	104.0	9,973	6,064	5,324	670000	10,387
80	12/1/2022	104.0	9,710	6,038	5,246	678800	10,125
81	12/1/2022	101.0	9,261	6,567	5,079	670000	10,338
82	12/1/2022	104.0	10,041	6,370	4,843	670000	9,996
83	12/5/2022	107.0	9,589	7,095	4,223	670000	10,080
84	12/5/2022	97.0	9,712	6,706	4,275	670500	10,030
85	12/6/2022	109.0	9,655	6,641	4,756	670000	10,479
86	12/6/2022	105.0	9,606	5,886	4,370	670000	10,263
87	12/6/2022	107.0	8,980	5,858	5,291	670000	10,024
88	12/7/2022	108	9,049	5,756	6,042	670000	10,063
89	12/7/2022	108	9,108	5,654	4,855	670000	10,316
90	12/7/2022	106	9,422	5,115	5,812	670000	9,857
91	12/12/2022	104	9,392	7,189	4,978	670000	10,254
92	12/13/2022	107	9,380	5,672	6,645	670000	10,045
93	12/13/2022	106	9,324	6,567	5,284	670000	10,107
94	12/14/2022	104	9,345	6,605	5,702	670000	10,428
95	12/15/2022	107	9,220	6,617	5,480	670000	10,044
96	12/16/2022	108	9,194	6,276	4,633	670000	9,990
97	12/17/2022	108	9,017	5,707	6,011	675000	10,173

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HG Energy II Appalachia, LLC
Lithology Record
Burnside 1214 S-4H

Formation	Top MD	Top TVD	Base MD	Base TVD
coal	415	415	418	418
coal	496	496	499	499
coal	582	582	586	586
Gas sand	682	682	802	802
Salt sand	882	882	1281	1281
coal	952	952	955	955
Coal	1052	1052	1056	1056
Surface casing	1130	drill	1091	set
Maxton	1335	1335	1372	1372
Little Lime	1488	1488	1510	1510
Big Lime	1533	1533	1590	1590
Big Injun	1596	1596	1710	1710
Gantz (storage)	1883	1883	1941	1941
50' sand	1996	1996	2020	2020
Storage casing Drill to	2090	drill	1063	set
30' sand	2090	2090	2111	2111
Gordon Stray	2122	2122	2163	2163
Gordon Sand	2163	2163	2242	2242
Fourth Sand	2253	2253	2281	2280
Fifth Sand	2388	2387	2420	2419
Bayard	2466	2465	2494	2493
Warren	2764	2759	2803	2797
Speechley	3104	3089	3123	3107
Balltown	3232	3210	3296	3271
Bradford	3972	3874	4074	3963
Benson	4565	4401	4586	4421
Inter Casing	4860	drill	4831	set
Rhinestreet	6472	6080	6785	6326
Cashaqua	6785	6326	7084	6533
Middlesex	7084	6533	7221	6613
West River	7221	6613	7437	6713
Burket	7437	6713	7480	6730
Tully	7480	6730	7771	6817
Hamilton	7771	6817	8068	6887
Marcellus	8068	6887	26954	6717

RECEIVED
Office of Oil and Gas
MAR 04 2024
WV Department of
Environmental Protection

05/10/2024

2,565' to Bottom Hole

6,556' to Top Hole

TOP LATITUDE 39 - 07 - 30
BTM LATITUDE 39 - 05 - 00

BTM LONGITUDE 80 - 30 - 00
TOP LONGITUDE 80 - 30 - 00

2,206' to Top Hole

5,913' to Bottom Hole

HG Energy II Appalachia, LLC
Well No. Burnside 1214 S-4H
As-Drilled

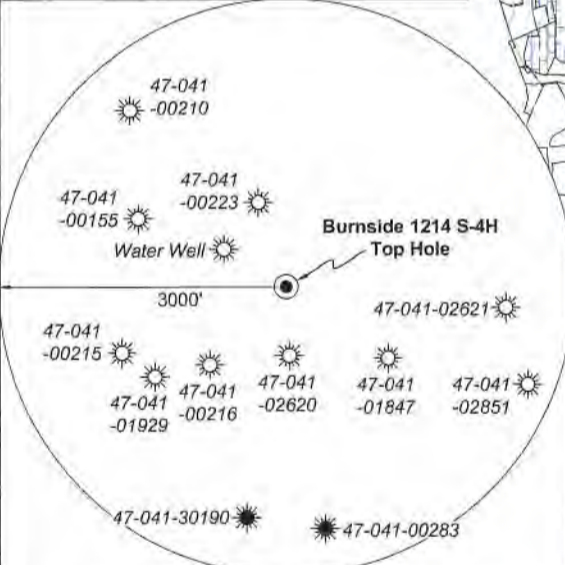
Page 1 of 2

Notes:
Well No. Burnside 1214 S-4H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,206,317.94'
E: 1,775,721.61'
Landing Point Coordinates
N: 14,205,250.90'
E: 1,773,537.80'
Bottom Hole Coordinates
N: 14,187,462.60'
E: 1,779,817.30'

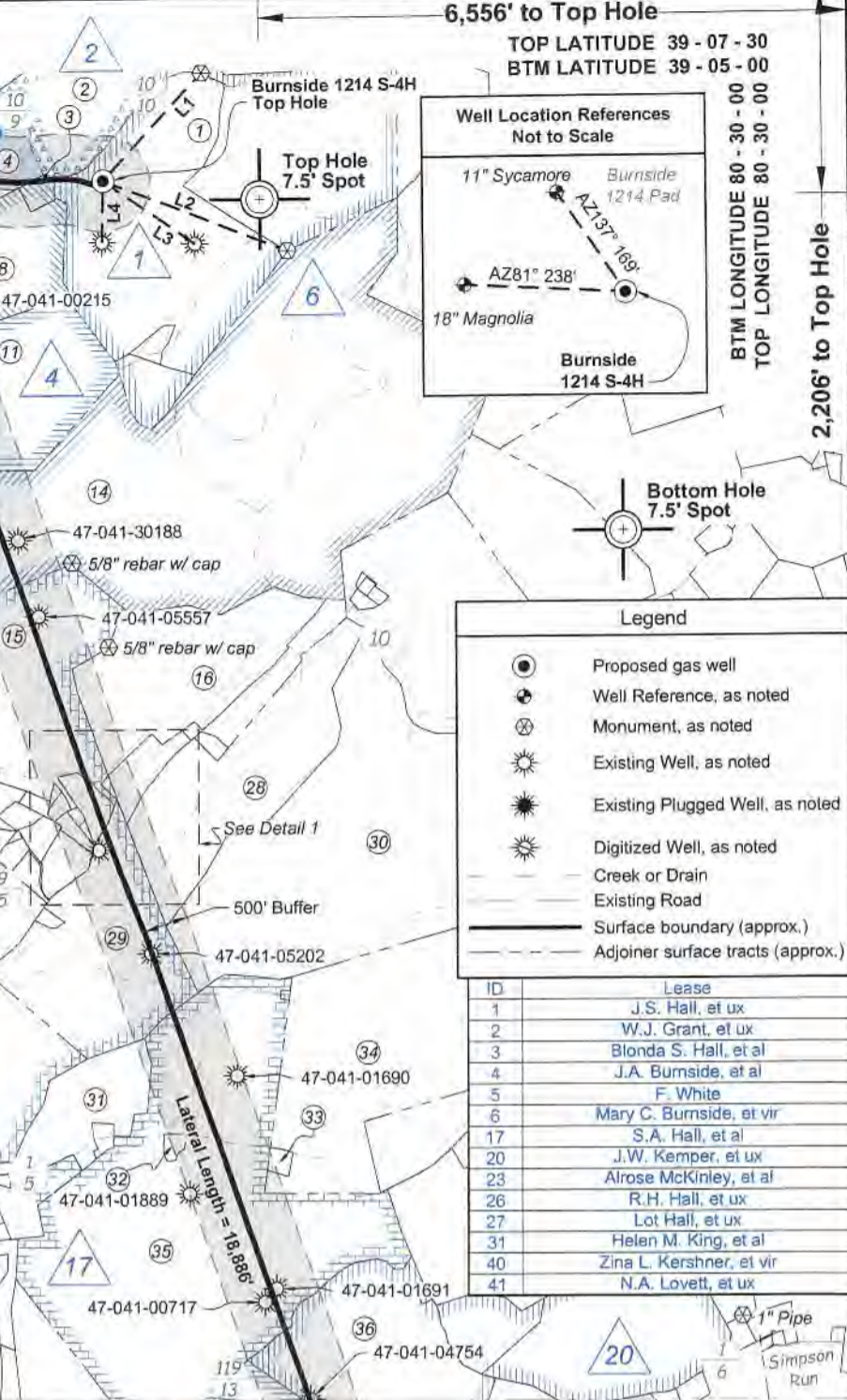


Tag	Bearing	Dist.	Description
L1	S 42°51' W	1,615.4'	Threaded Pipe
L2	N 68°52' W	2,183.3'	Gate Post
L3	N 55°02' W	1,232.3'	#47-041-01847
L4	N 01°22' E	682.3'	#47-041-02620

Notes: Well No. Burnside 1214 S-4H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°07'08.19" Latitude: 39°04'01.54"
Longitude: 80°31'23.21" Longitude: 80°30'32.53"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,330,094.368m N: 4,324,347.249m
E: 541,241,029m E: 542,489,398m
Plat orientation and corner and well references are
based upon the grid north meridian. Well location
references are based upon the magnetic meridian.



Note: 1 water well was 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.



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.)
- Adjoinder surface tracts (approx.)

ID	Lease
1	J.S. Hall, et ux
2	W.J. Grant, et ux
3	Blonda S. Hall, et al
4	J.A. Burnside, et al
5	F. White
6	Mary C. Burnside, et vir
17	S.A. Hall, et al
20	J.W. Kemper, et ux
23	Aloise McKinley, et al
26	R.H. Hall, et ux
27	Lot Hall, et ux
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41	N.A. Lovett, et ux

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

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



FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 S-4H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

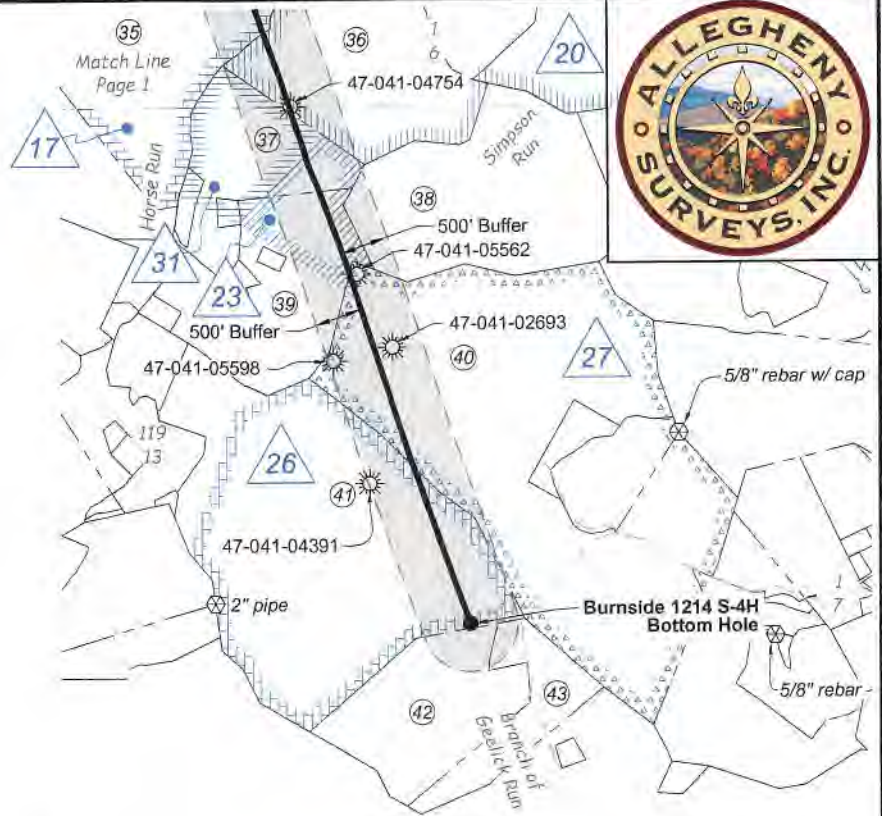
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: February 20 2023
OPERATOR'S WELL NO. Burnside 1214 S-4H
API WELL NO
47 - 041 - 05729
STATE COUNTY PERMIT

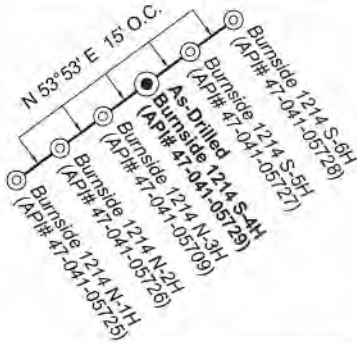
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1159.2' WATERSHED: Middle West Fork Creek
DISTRICT: Freemans Creek
SURFACE OWNER: John K. Burnside, et al
ROYALTY OWNER: J.S. Hall, et ux, et al LEASE NO: ACREAGE: 214.08
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,717' TVD
ESTIMATED DEPTH: 26,954' MD

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

05/10/2024



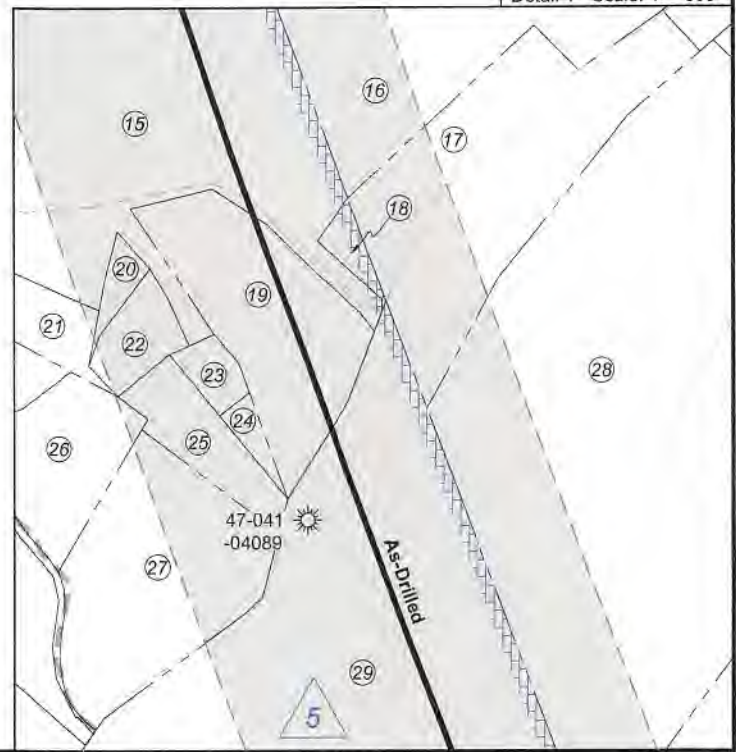
Wellhead Layout (NTS)



Lewis Co. - Freeman Creek Dist.

No.	TM / Par	Owner	Bk / Pg	Ac.
1	6C / 3.2	John K. Burnside, et al	666 / 44	115.00
2	5C / 34	Karina K. Rowe	572 / 209	42.00
3	5C / 41.1	Mike Ross, Inc. and Waco Oil & Gas	676 / 133	2.09
4	5C / 35	Robert S. Glotfelty	339 / 241	14.77
5	5C / 36	Phillip E. Burnside	766 / 831	0.71
6	5C / 32	Robert S. Glotfelty	399 / 241	94.40
7	5C / 37	Phillip E. Burnside	766 / 831	83.75
8	5C / 41	Phillip E. Burnside	766 / 831	23.90
9	5C / 40	Phillip E. Burnside, et al	666 / 503	6.50
10	5C / 39	Phillip E. Burnside, et al	666 / 503	47.00
11	5C / 44	John K. & Reta L. Burnside	631 / 778	51.00
12	5C / 45	Phillip E. Burnside	666 / 503	121.42
13	5C / 46	Phillip E. Burnside	666 / 503	60.00
14	6C / 4	James M. Evans III, et al	657 / 228	294.00
15	5D / 60	William R. Fultineer, et al	627 / 496	74.71
16	6C / 6	Equitable Gas	216 / 185	65.55
17	5D / 63	Donald R. & Pamela J. Spinks	574 / 573	8.00
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20	5D / 60.17	Jason & Mandy Starcher	677 / 696	0.38
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22	5D / 60.16	Jason & Mandy Starcher	677 / 696	1.00
23	5D / 61.1	Randall & Agnes Starcher	440 / 500	0.52
24	5D / 60.8	Marie L. Sprouse	W9 / 190	0.31
25	5D / 61	Lillie M. Sprouse	W9 / 190	1.66
26	5D / 60.15	Jeremy Bruffey	715 / 454	2.86
27	5D / 60.14	Jeremy Bruffey	715 / 454	5.86
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30	6D / 3	James H. Hall Trust	WB H / 147	194.50
31	5D / 57	John Thomas Garrett, et al	728 / 296	28.70
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33	6D / 5.1	Brooks D. & Mary L. Hall	361 / 739	1.51
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38	6E / 12	James E. Gray, et al	735 / 51	90.50
39	6E / 1.7	Patricia A. & Joel S. Harris	721 / 670	61.20
40	6E / 11.1	Heartwood Forestland Fund VII	666 / 124	235.87
41	6E / 4	Heartwood Forestland Fund VII	666 / 124	171.06
42	6E / 10	Heartwood Forestland Fund VII	666 / 124	51.75
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Detail 1 - Scale: 1" = 500"



FILE NO: 236-36-12-19

DRAWING NO: Burnside 1214 S-4H 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: February 20, 2023

OPERATOR'S WELL NO. Burnside 1214 S-4H

API WELL NO

47 - 041 - 05729
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: 1159.2' WATERSHED: Middle West Fork Creek

QUADRANGLE: Camden

DISTRICT: Freemans Creek

COUNTY: 05/10/2024

SURFACE OWNER: John K. Burnside, et al

ACREAGE: 115.00

ROYALTY OWNER: J.S. Hall, et ux, et al

LEASE NO: ACREAGE: 214.08

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,717' TVD 26,954' MD

WELL OPERATOR: HG Energy II Appalachia, LLC

DESIGNATED AGENT: Diane C. White

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

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2,565' to Bottom Hole

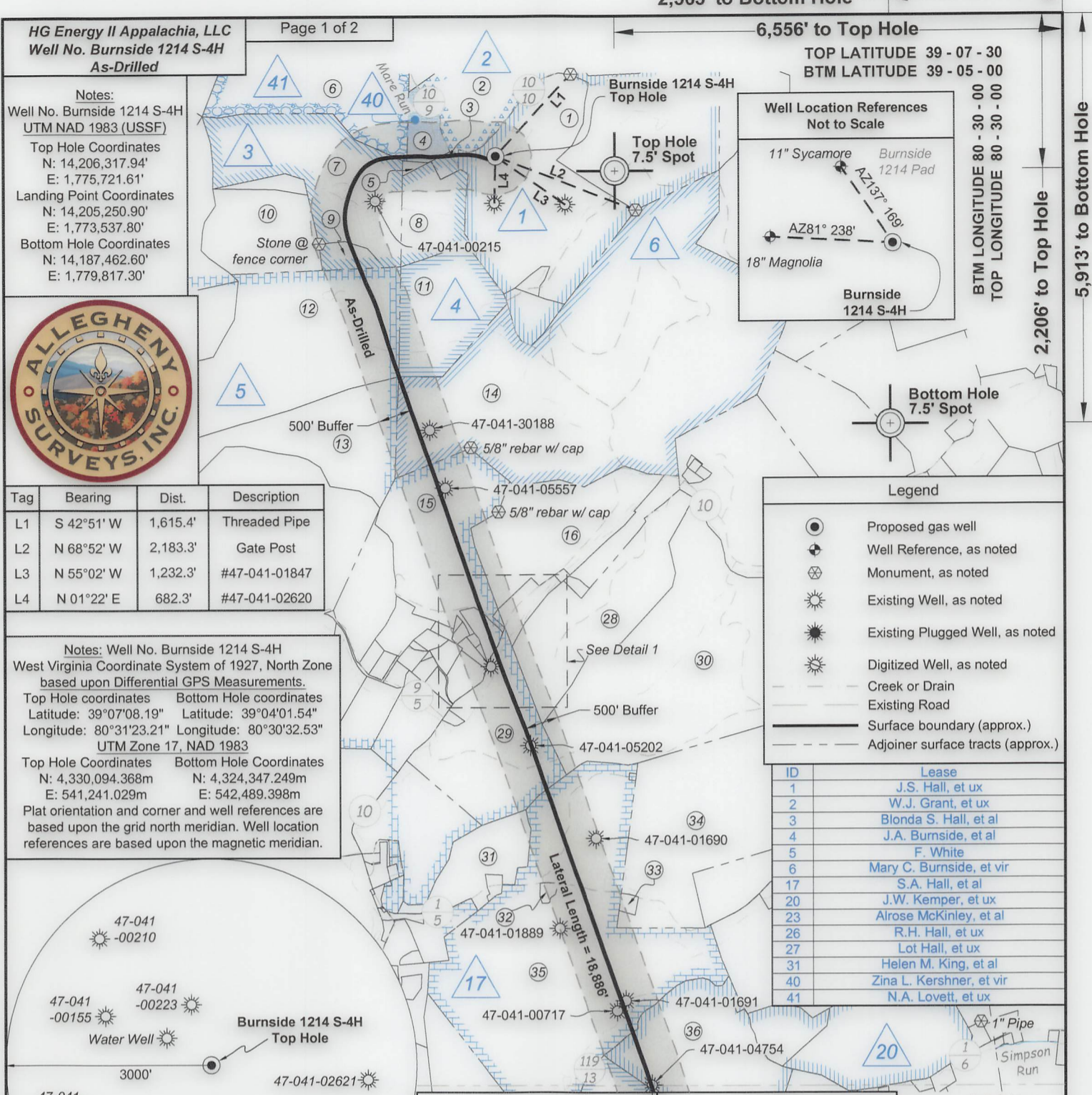
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TOP LATITUDE 39 - 07 - 30
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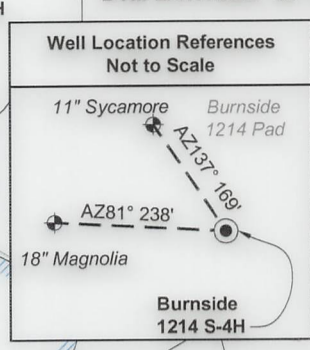
2,206' to Top Hole



HG Energy II Appalachia, LLC
Well No. Burnside 1214 S-4H
As-Drilled

Page 1 of 2

Notes:
Well No. Burnside 1214 S-4H
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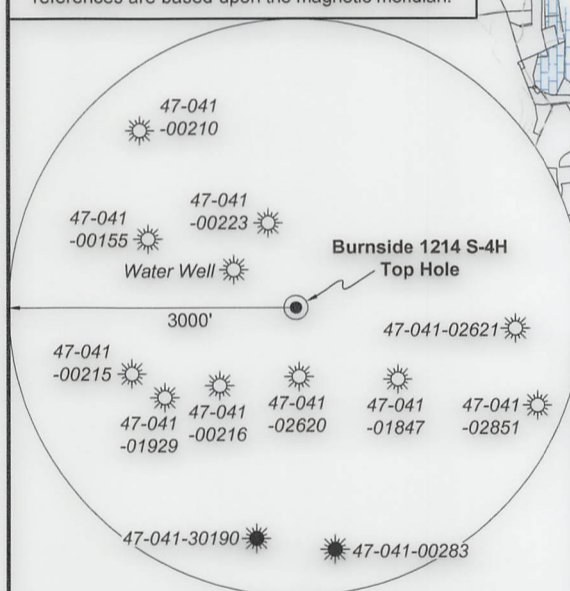
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Legend

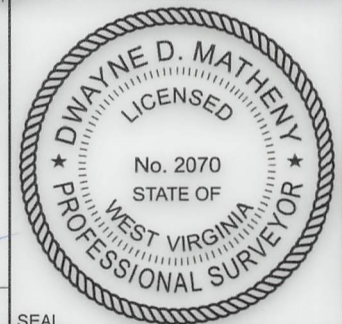
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- Surface boundary (approx.)
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Dwayne D. Matheny
Dwayne D. Matheny, P.S. 2070



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MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

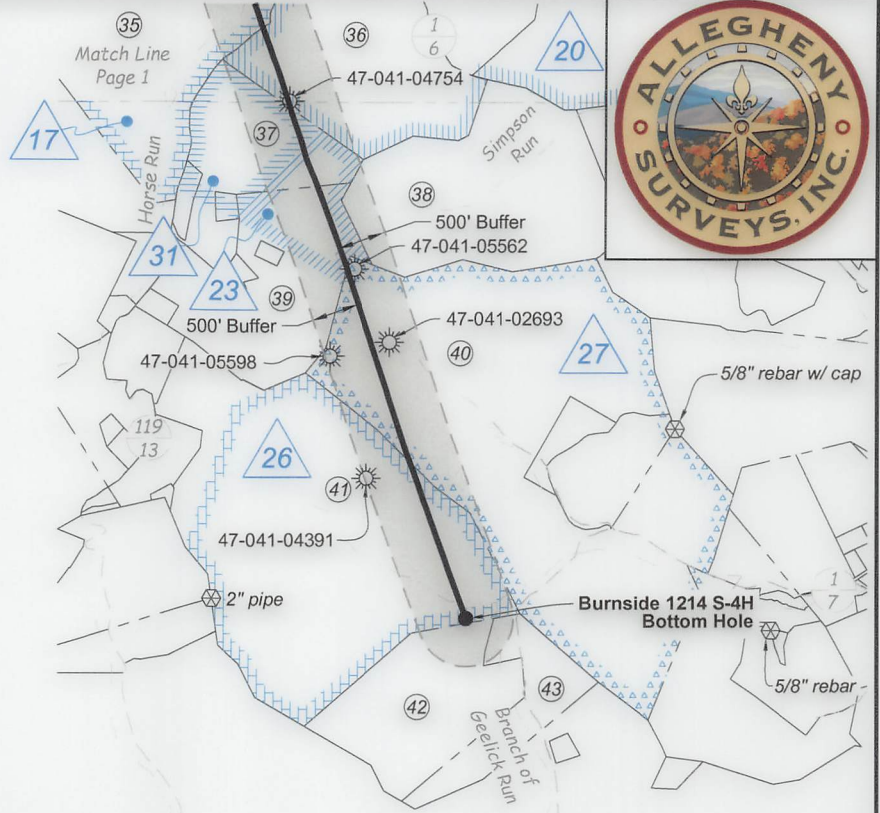
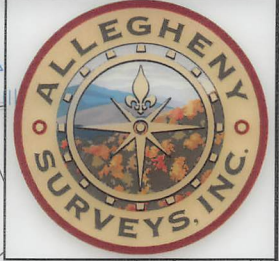
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: February 20 2023
OPERATOR'S WELL NO. Burnside 1214 S-4H
API WELL NO
47 - 041 - 05729
STATE COUNTY PERMIT

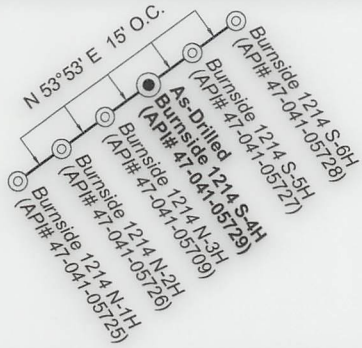
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1159.2' WATERSHED: Middle West Fork Creek
DISTRICT: Freemans Creek
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ROYALTY OWNER: J.S. Hall, et ux, et al LEASE NO: ACREAGE: 214.08
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 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 26,954' MD

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

05/10/2024



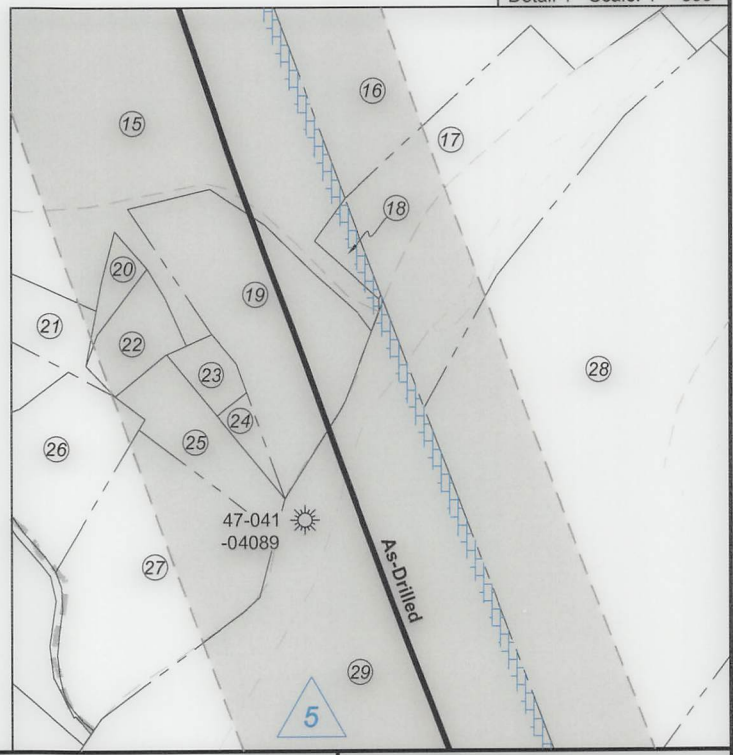
Wellhead Layout (NTS)



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QUADRANGLE: Camden
COUNTY: Putnam
ACREAGE: 115.00

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