

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

API 47-041-05726 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 N2H
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 4330088.979 Easting 541233.641
Landing Point of Curve Northing 4330053 Easting 540888
Bottom Hole Northing 4334904.933 Easting 539169.357

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 1/29/2022 Date drilling ceased 8/15/2022
Date completion activities began 9/3/2022 Date completion activities ceased 1/4/2023
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:
Conrad Bryant
06/07/2024

API 47-041 - 05726 Farm name Burnside Well number Burnside 1214 N2H

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"	1090	New	94 lbs/ft J-55		Yes, 130bbls to surface
Coal							
Intermediate 1	17.5"	13.375"	2065	New	68 lbs/ft J55		Yes, 107 bbls to surface
Intermediate 2	12.25"	9.625"	4855	New	40 lbs/ft		Yes, 83 bbls to surface
Intermediate 3							
Production	8.5	5.5	24750	New	23 lbs/ft P-110HP		Yes, 253 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	2099	15.6	1.19	2498	Surface	8
Coal							
Intermediate 1	Class A	1442/788	16.0/16.4	1.16/1.12	1672.7/882.5	Surface	24
Intermediate 2	Class A	114/615/256	10.5/10.5/15.2	2.85/2.28/1.27	325/1402/325	Surface	18
Intermediate 3							
Production	Class A	685/690/3704	13.7/13.7/14.8	1.82/1.67/1.34	1246.7/1152/4963	Surface	8
Tubing							

Drillers TD (ft) ²⁴¹⁴⁶ _____ Loggers TD (ft) _____
 Deepest formation penetrated Marcellus Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) ⁶⁴⁶⁸ _____

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: centralizers run 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

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 - 05726 Farm name Burnside Well number Burnside 1214 N2H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		See Attached			

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
			See Attached					

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Please insert additional pages as applicable.

API 47- 041 - 05726 Farm name Burnside Well number Burnside 1214 N2H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6884-7118</u> TVD	<u>7242-24146</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.

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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 _____

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

06/07/2024

HG Energy II Appalachia, LLC

Lithology Record

Burnside 1214 N-2H

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	1090	set
Maxton	1335	1335	1371	1371
Little Lime	1488	1488	1513	1513
Big Lime	1533	1533	1590	1590
Big Injun	1596	1590	1712	1712
Gantz (storage)	1885	1885		1941
50' sand		1997		2017
Storage casing	2090	drill	2069	set
30' sand	2093	2093	2110	2110
Gordon Stray	2127	2127	2162	2162
Gordon Sand	2162	2162	2243	2243
Fourth Sand	2269	2269	2285	2285
Fifth Sand	2387	2386	2426	2425
Bayard	2467	2466	2499	2498
Warren	2765	2760	2803	2797
Speechley	3105	3089	3122	3105
Balltown	3231	3206	3296	3266
Benson	4471	4400	4491	4420
Inter Casing	4727	drill	4696	set
Rhinestreet	6199	6064	6408	6267
Cashaqua	6408	6267	6664	6507
Middlesex	6664	6507	6760	6592
West River	6760	6592	6892	6696
Burket	6892	6696	6916	6713
Tully	6916	6713	7068	6806
Hamilton	7068	6806	7242	6884
Marcellus	7242	6884	24146	7118

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HG Energy II Appalachia, LLC
Burnside 1214 N-2H
Perforation Record

Stage #	Date	Perforation From Depth	Perforation to Depth	Number of Perforations	Formation
Sleeve/1	9/14/2022	24063	24039	2	Marcellus
2	9/14/2022	24005	23837	32	Marcellus
3	9/15/2022	23809	23641	32	Marcellus
4	9/16/2022	23613	23445	32	Marcellus
5	9/16/2022	23417	23249	32	Marcellus
6	9/17/2022	23221	23053	32	Marcellus
7	9/17/2022	23025	22857	32	Marcellus
8	9/18/2022	22829	22661	32	Marcellus
9	9/18/2022	22633	22465	32	Marcellus
10	9/19/2022	22437	22269	32	Marcellus
11	9/23/2022	22241	22073	32	Marcellus
12	9/23/2022	22045	21877	32	Marcellus
13	9/24/2022	21849	21681	32	Marcellus
14	9/24/2022	21653	21485	32	Marcellus
15	9/25/2022	21457	21289	32	Marcellus
16	9/25/2022	21261	21093	32	Marcellus
17	9/25/2022	21065	20897	32	Marcellus
18	9/26/2022	20869	20701	32	Marcellus
19	9/26/2022	20673	20505	32	Marcellus
20	9/27/2022	20477	20309	32	Marcellus
21	9/27/2022	20281	20113	32	Marcellus
22	9/28/2022	20085	19917	32	Marcellus
23	9/28/2022	19889	19721	32	Marcellus
24	9/29/2022	19693	19525	32	Marcellus
25	9/30/2022	19497	19329	32	Marcellus
26	9/30/2022	19301	19133	32	Marcellus
27	9/30/2022	19105	18937	32	Marcellus
28	10/1/2022	18909	18741	32	Marcellus
29	10/1/2022	18713	18545	32	Marcellus
30	10/2/2022	18517	18349	32	Marcellus
31	10/2/2022	18321	18153	32	Marcellus
32	10/4/2022	18125	17957	32	Marcellus
33	10/4/2022	17929	17761	32	Marcellus
34	10/5/2022	17733	17565	32	Marcellus
35	10/5/2022	17537	17369	32	Marcellus
36	10/5/2022	17341	17173	32	Marcellus
37	10/6/2022	17145	16977	32	Marcellus
38	10/6/2022	16949	16781	32	Marcellus
39	10/7/2022	16753	16585	32	Marcellus
40	10/7/2022	16557	16389	32	Marcellus
41	10/7/2022	16361	16193	32	Marcellus
42	10/8/2022	16165	15997	32	Marcellus
43	10/8/2022	15969	15801	32	Marcellus
44	10/9/2022	15773	15605	32	Marcellus
45	10/9/2022	15577	15409	32	Marcellus
46	10/10/2022	15381	15213	32	Marcellus
47	10/10/2022	15185	15017	32	Marcellus
48	10/11/2022	14989	14821	32	Marcellus
49	10/11/2022	14793	14625	32	Marcellus
50	10/12/2022	14597	14429	32	Marcellus
51	10/12/2022	14401	14233	32	Marcellus
52	10/13/2022	14205	14037	32	Marcellus
53	10/13/2022	14009	13841	32	Marcellus
54	10/14/2022	13813	13645	32	Marcellus
55	10/14/2022	13617	13449	32	Marcellus

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56	10/14/2022	13421	13253	32	Marcellus
57	10/15/2022	13225	13057	32	Marcellus
58	10/15/2022	13029	12861	32	Marcellus
59	10/16/2022	12832	12664	32	Marcellus
60	10/16/2022	12634	12466	32	Marcellus
61	10/16/2022	12436	12268	32	Marcellus
62	10/17/2022	12238	12070	32	Marcellus
63	10/17/2022	12040	11872	32	Marcellus
64	10/17/2022	11842	11674	32	Marcellus
65	10/18/2022	11644	11476	32	Marcellus
66	10/18/2022	11446	11278	32	Marcellus
67	10/18/2022	11248	11080	32	Marcellus
68	10/19/2022	11050	10882	32	Marcellus
69	10/19/2022	10852	10684	32	Marcellus
70	10/19/2022	10654	10486	32	Marcellus
71	10/19/2022	10456	10288	32	Marcellus
72	10/20/2022	10258	10090	32	Marcellus
73	10/20/2022	10060	9892	32	Marcellus
74	10/21/2022	9862	9694	32	Marcellus
75	10/21/2022	9664	9496	32	Marcellus
76	10/22/2022	9466	9298	32	Marcellus
77	10/22/2022	9268	9100	32	Marcellus
78	10/22/2022	9070	8902	32	Marcellus
79	10/22/2022	8872	8704	32	Marcellus
80	10/23/2022	8674	8506	32	Marcellus
81	10/23/2022	8476	8308	32	Marcellus
82	10/23/2022	8278	8110	32	Marcellus
83	10/24/2022	8080	7912	32	Marcellus
84	10/24/2022	7882	7714	32	Marcellus
85	10/24/2022	7684	7516	32	Marcellus
86	10/24/2022	7486	7318	32	Marcellus

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HG Energy II Appalachia, LLC
Burnside 1214 N-2H
Stimulation Summary

Stage #	Date	Ave Pump Rate (BPM)	Ave Treatment Press (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Proppant (LBS)	Water (BBLs)
Sleeve/1	9/14/2022	77.0	9184	N/A	3720	270000	7,824
2	9/14/2022	79.0	9,651	7,404	4,807	700000	14,774
3	9/15/2022	80.0	10,081	6,985	3,906	700000	14,915
4	9/16/2022	81.0	10,152	7,479	4,780	702500	12,441
5	9/16/2022	86.0	10,158	5,850	4,719	629890	11,346
6	9/17/2022	75.0	9,810	5,813	4,231	467920	8,646
7	9/17/2022	82.0	10,197	5,910	4,102	538200	10,377
8	9/18/2022	84.0	10,238	6,433	4,714	519500	11,467
9	9/18/2022	81.0	10,098	6,537	4,920	705000	11,569
10	9/19/2022	84.0	10,231	5,221	4,546	474300	11,240
11	9/23/2022	86.0	10,076	6,974	5,707	670170	12,523
12	9/23/2022	84.0	9,987	7,102	4,452	683500	13,427
13	9/24/2022	86.0	10,173	6,352	5,241	705000	11,533
14	9/24/2022	87.0	10,300	6,987	5,741	705000	11,374
15	9/25/2022	86.0	10,220	6,265	4,710	615300	11,918
16	9/25/2022	88.0	10,238	6,695	5,123	700190	12,741
17	9/25/2022	91.0	10,207	6,528	5,306	705000	13,212
18	9/26/2022	91.0	10,169	6,038	5,440	705000	11,669
19	9/26/2022	89.0	10,254	6,868	5,734	700000	11,388
20	9/27/2022	90.0	10,297	5,969	5,969	700000	11,604
21	9/27/2022	88.0	10,047	6,195	4,531	700000	11,601
22	9/28/2022	89.0	10,052	6,121	4,596	700000	10,458
23	9/28/2022	88.0	10,256	6,899	4,789	387700	6,961
24	9/29/2022	86.0	10,007	6,073	5,859	662760	10,386
25	9/30/2022	85.0	10,322	6,125	4,293	510000	8,564
26	9/30/2022	90.0	10,222	6,102	5,399	629280	10,335
27	9/30/2022	85.0	10,086	6,218	4,960	700000	10,595
28	10/1/2022	85.0	10,552	7,117	5,329	700000	10,764
29	10/1/2022	93.0	10,461	5,215	5,777	632140	10,687
30	10/2/2022	94.0	10,252	6,050	6,007	700000	10,191
31	10/2/2022	95.0	10,411	6,811	5,129	700000	10,860
32	10/4/2022	92.0	10,205	6,596	5,092	700000	10,954
33	10/4/2022	89.0	10,272	6,439	4,951	700000	9,548
34	10/5/2022	87.0	10,274	6,711	5,196	700000	9,696
35	10/5/2022	90.0	10,322	7,090	6,838	715000	10,027
36	10/5/2022	90.0	10,285	7,555	4,944	715000	10,020
37	10/6/2022	88.0	10,129	6,463	5,200	590650	10,117
38	10/6/2022	91.0	10,209	6,405	5,239	715000	9,818
39	10/7/2022	91.0	10,257	6,410	5,523	715000	9,710
40	10/7/2022	95.0	10,347	6,742	4,731	715000	9,989
41	10/7/2022	100.0	10,180	6,945	4,688	618000	9,280
42	10/8/2022	95.0	10,304	5,670	5,215	715000	10,542
43	10/8/2022	101.0	10,282	6,434	4,926	715000	9,963
44	10/9/2022	97.0	10,394	6,085	5,258	715000	10,292
45	10/9/2022	97.0	10,277	6,625	5,216	715000	9,825
46	10/10/2022	94.0	10,211	5,652	5,170	715000	10,043
47	10/10/2022	102.0	10,450	6,518	5,265	715000	9,726
48	10/11/2022	100.0	10,141	5,660	4,855	715000	9,946
49	10/11/2022	103.0	10,629	5,974	6,117	715000	9,974
50	10/12/2022	93.0	10,016	6,759	5,122	714000	9,806
51	10/12/2022	99.0	10,204	6,428	5,697	715000	9,476
52	10/13/2022	98.0	10,071	7,095	5,134	715000	9,995
53	10/13/2022	102.0	10,423	6,915	5,697	715000	9,996
54	10/14/2022	100.0	10,150	5,672	5,021	715000	9,988

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55	10/14/2022	102.0	10,172	5,974	5,075	715000	9,836
56	10/14/2022	105.0	10,422	6,856	5,400	715000	10,212
57	10/15/2022	103.0	10,063	6,428	5,233	715000	9,882
58	10/15/2022	108.0	9,945	6,790	5,889	715000	9,587
59	10/16/2022	106.0	10,120	6,055	5,233	715000	9,758
60	10/16/2022	101.0	9,944	6,532	5,126	715000	9,635
61	10/16/2022	106.0	10,032	7,070	4,930	715000	9,578
62	10/17/2022	104.0	9,938	6,259	4,936	715000	9,771
63	10/17/2022	107.0	9,833	6,387	5,493	715000	9,580
64	10/17/2022	105.0	9,873	6,442	5,172	715000	12,219
65	10/18/2022	106.0	9,515	6,346	5,106	715000	9,725
66	10/18/2022	108.0	9,813	6,067	5,098	715000	9,668
67	10/18/2022	110.0	9,396	5,811	5,961	715000	9,765
68	10/19/2022	106.0	9,554	6,160	5,173	715000	9,849
69	10/19/2022	108.0	9,503	5,701	5,223	715000	9,836
70	10/19/2022	105.0	9,438	5,695	3,731	606300	9,952
71	10/19/2022	107.0	8,736	6,386	3,942	715000	9,635
72	10/20/2022	108.0	9,315	7,384	5,223	715000	10,021
73	10/20/2022	108.0	8,833	5,579	5,656	686830	9,613
74	10/21/2022	107.0	8,729	4,095	4,451	715000	9,615
75	10/21/2022	104.0	8,642	6,131	4,266	715000	9,537
76	10/22/2022	108.0	8,886	5,776	5,226	715000	9,843
77	10/22/2022	102.0	8,074	6,030	4,821	715000	10,448
78	10/22/2022	108.0	9,109	6,142	4,554	715000	9,717
79	10/22/2022	108.0	8,885	6,015	4,564	715000	9,589
80	10/23/2022	109.0	9,039	6,363	4,969	718960	9,792
81	10/23/2022	108.0	8,721	N/A	5,236	715000	9,656
82	10/23/2022	105.0	8,608	6,122	4,893	715000	9,975
83	10/24/2022	105.0	8,397	6,923	5,308	715000	9,677
84	10/24/2022	109.0	8,493	5,718	5,051	715000	9,838
85	10/24/2022	109.0	8,586	6,445	4,862	715000	9,628
86	10/24/2022	109.0	9,283	5,759	4,695	715000	9,733

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1,455' to Bottom Hole

6,581' to Top Hole

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

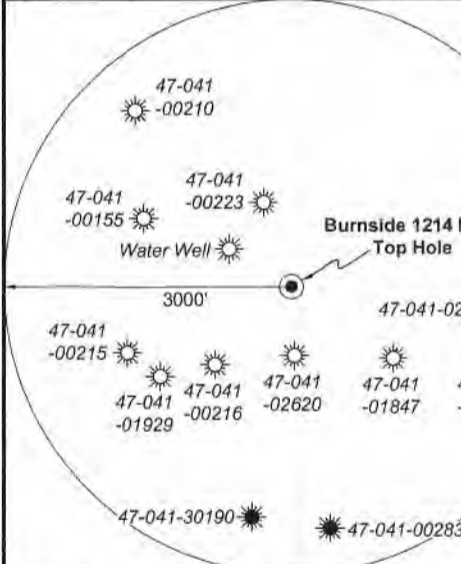
HG Energy II Appalachia, LLC
Well No. Burnside 1214 N-2H
As-Drilled



Notes:
Well No. Burnside 1214 N-2H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,206,300.26'
E: 1,775,697.37'
Landing Point Coordinates
N: 14,206,180.60'
E: 1,774,563.00'
Bottom Hole Coordinates
N: 14,222,100.60'
E: 1,768,924.80'

Tag	Bearing	Dist.	Description
L1	S 43°03' W	1,644.9'	Threaded Pipe
L2	N 69°31' W	2,199.7'	Gate Post
L3	N 56°21' W	1,242.3'	#47-041-01847
L4	N 00°42' W	664.5'	#47-041-02620

Notes: Well No. Burnside 1214 N-2H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°07'08.02" Latitude: 39°09'44.59"
Longitude: 80°31'23.52" Longitude: 80°32'48.48"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,330,088.979m N: 4,334,904.933m
E: 541,233.641m E: 539,169.357m
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.

FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-2H 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

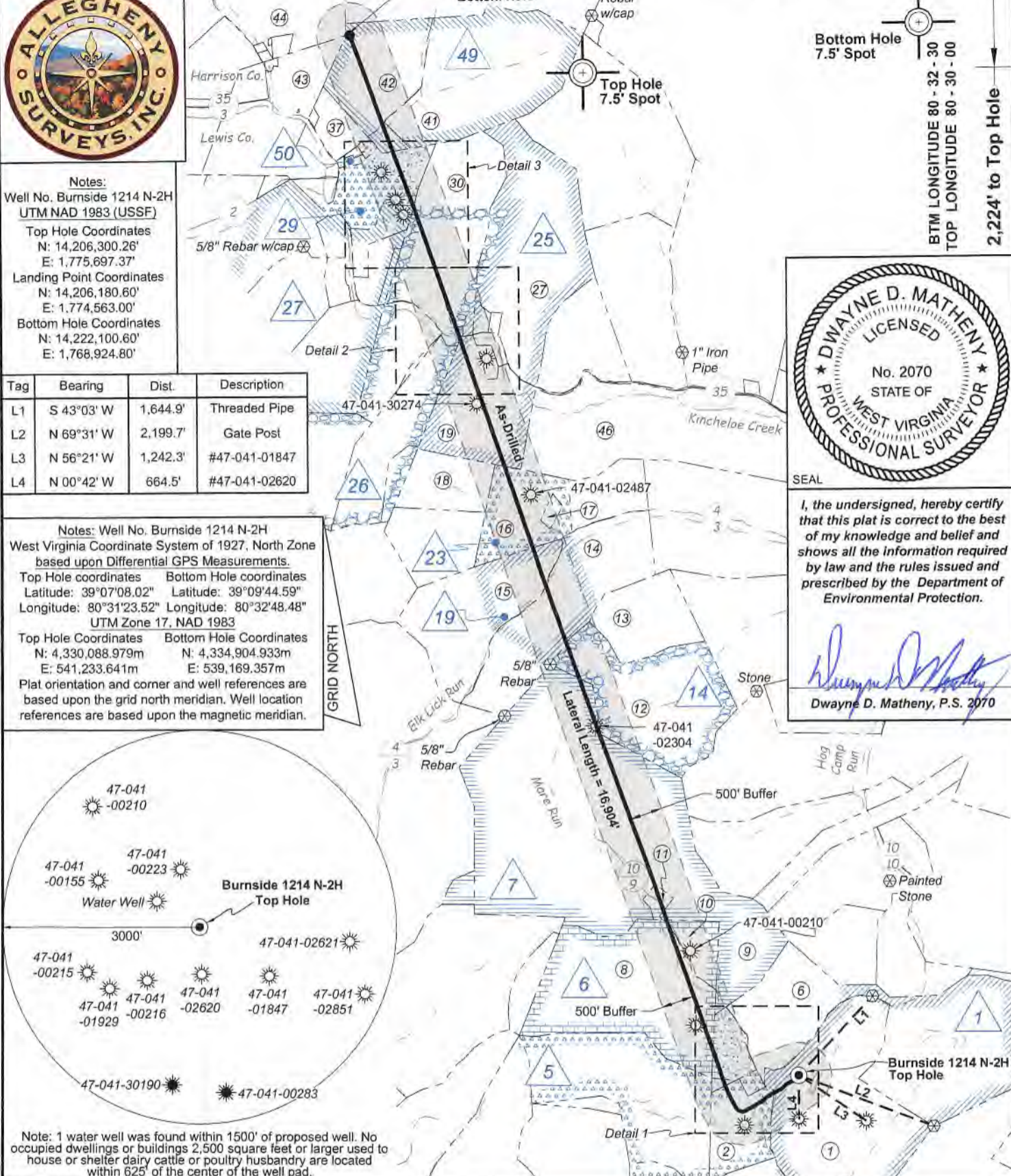
DATE: February 20 2023
OPERATOR'S WELL NO. Burnside 1214 N-2H
API WELL NO
47 - 041 - 05726
STATE COUNTY PERMIT

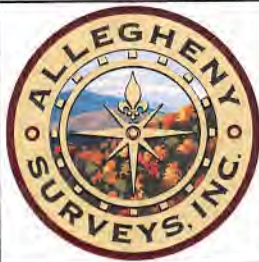
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1159.2' WATERSHED: Middle West Fork Creek
DISTRICT: Freemans Creek
SURFACE OWNER: John K. Burnside, et al
ROYALTY OWNER: J.S. Hall, et ux, et al LEASE NO: ACREAGE: 214.08
PROPOSED WORK: DRILL 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: 24,146' MD
7,118' TVD

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

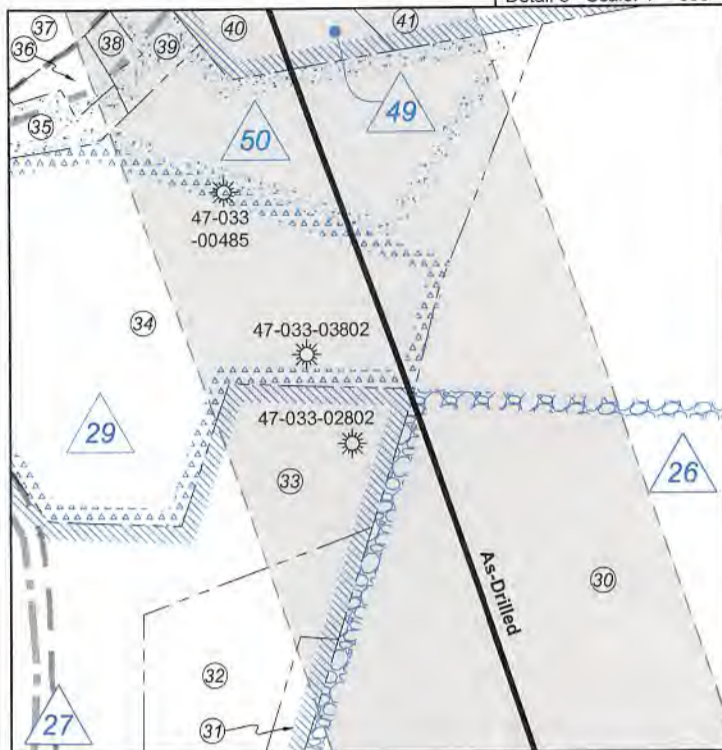


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.
Dwayne D. Matheny
Dwayne D. Matheny, P.S. 2070

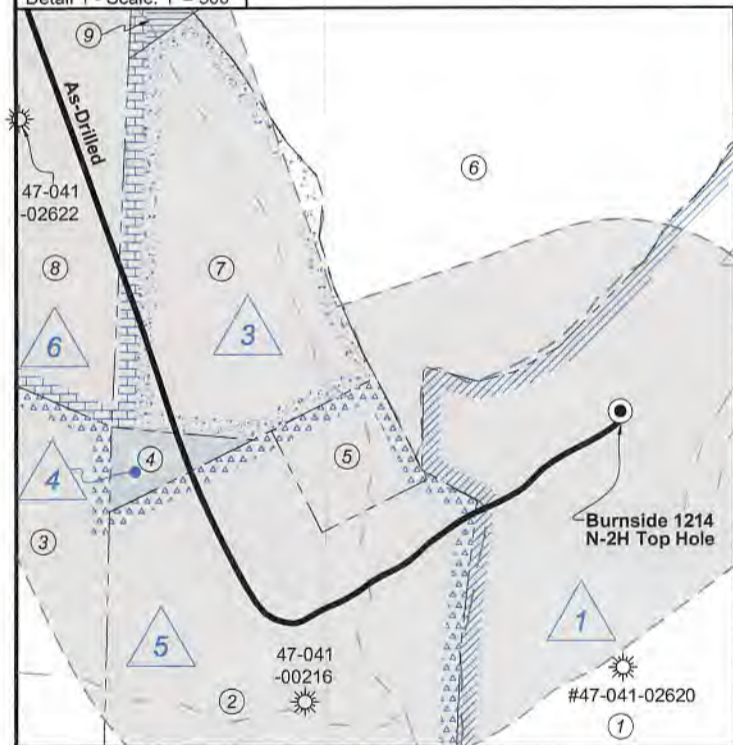




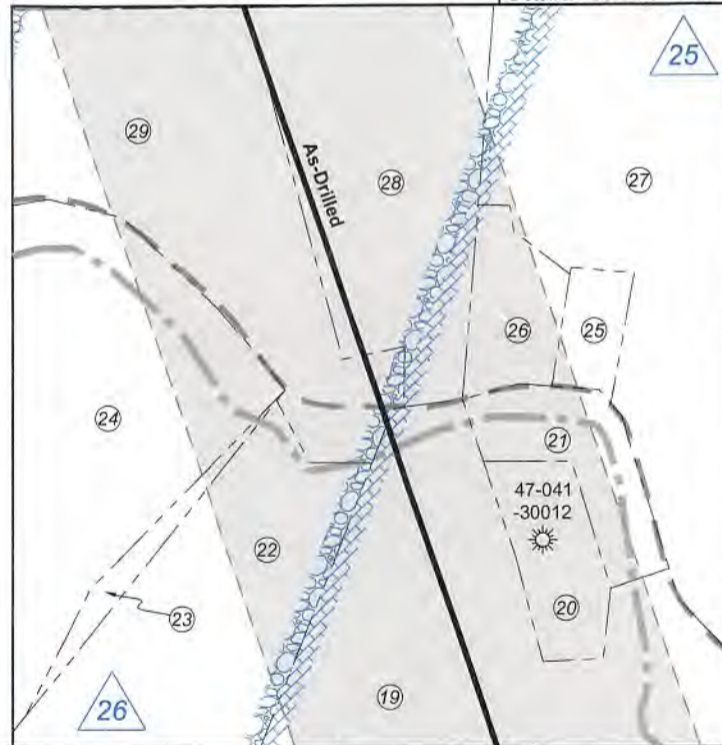
Detail 3 - Scale: 1' = 500"



Detail 1 - Scale: 1' = 500"



Detail 2 - Scale: 1' = 500"



FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-2H 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 N-2H
API WELL NO
47 - 041 - 05726
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

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

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

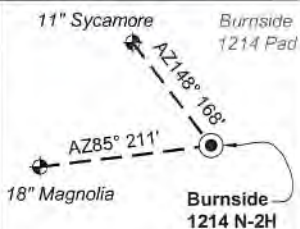
PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 24,146' MD 7,118' TVD

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



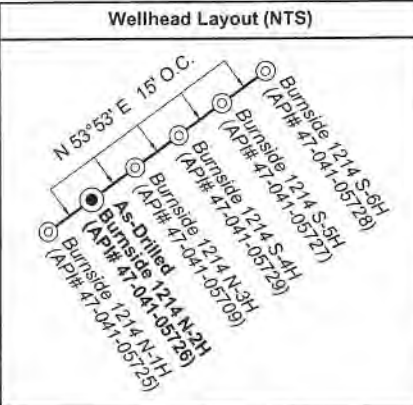
Well Location References
Not to Scale



ID	Lease
1	J.S. Hall, et ux
3	Zina L. Kershner, et vir
4	M.I. Metheny, et vir
5	Blonda S. Hall, et al
6	N.A. Lovett, et ux
7	Hudson Bailey, et ux
14	John L. Burnside, et ux
19	W.T. Rhodes, et al
23	Ara R. Loudin, et al
25	Fern M. White, et al
26	J.A. White, et ux
27	Guffey Oil & Gas Royalties, Inc., et al
29	Mark E. Hitt, et al
49	James K. Coffindaffer, et al
50	Mark E. Hitt, et al

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 / 41	Phillip E. Burnside	766 / 831	23.90
3	5C / 37	Phillip E. Burnside	766 / 831	83.75
4	5C / 36	Phillip E. Burnside	766 / 831	0.71
5	5C / 41.1	Mike Ross, Inc., et al	676 / 133	2.09
6	5C / 34	Karina K. Rowe	572 / 209	42.00
7	5C / 35	Robert S. Glotfelty	399 / 241	14.77
8	5C / 32	Robert S. Glotfelty	399 / 241	94.40
9	5B / 18	Mike Ross Inc.	659 / 215	279.97
10	5C / 33	John W. & Joyce M. Hall	567 / 82	12.30
11	5C / 51	Melissa A. & Lester Bleigh	748 / 284	3.03
12	5B / 38	Phillip E. Burnside	666 / 503	75.00
13	5B / 37	Phillip E. Burnside	666 / 503	36.00
14	5B / 32	John & Rhonda Myers	652 / 73	76.64
15	5B / 31	Mark D. Griffith, et ux	652 / 69	64.04
16	5B / 33	Kelly Joanne Burrows Bowie	622 / 463	33.49
17	5B / 33.1	Christa Burrows, et al	F30 / 856	3.01
18	5B / 28	Kelly Joanne Burrows Bowie	622 / 463	21.25
19	5A / 16.1	Charles D. & Samantha L. Brosius	710 / 356	49.90
20	5A / 16.2	Charles D. & Samantha L. Brosius	701 / 233	3.00
21	5A / 16	Charles D. & Samantha L. Brosius	701 / 233	2.85
22	5A / 15	Brian K. & Debra D. Lough	728 / 285	43.77
23	5A / 14	Dawna Jo Burnside	762 / 219	1.00
24	5A / 13	Dawna Jo Burnside	762 / 219	27.00

Harrison Co. - Union-Outside Dist.				
No.	TM / Par	Owner	Bk / Pg	Ac.
25	442 / 6.2	Dawna Jo & Emir E. Mussad	1466 / 913	0.95
26	442 / 6.1	Ruth Burnside (LE)	1268 / 1168	1.79
27	442 / 6	J.C. & Karen L. Hayhurst	1592 / 1194	97.01
28	442 / 4.1	Karen L. Hayhurst & Dawna J. Mussad	W198 / 657	8.73
29	442 / 5	Brian K. & Debra D. Lough	1610 / 675	13.69
30	422 / 29	Karen L. Hayhurst & Dawna J. Mussad	W198 / 657	48.47
31	442 / 3	Brian K. & Debra D. Lough	1623 / 961	2.00
32	442 / 2	Brian K. & Debra D. Lough	1623 / 963	9.13
33	442 / 1	Central Pittsburgh Coal Corp.	943 / 764	10.00
34	422 / 28	James P. Winski	1216 / 300	38.19
35	422 / 27	Gerald & Vicky Hall	1616 / 1220	1.20
36	422 / 26	Charles G. Dennison	W156 / 747	1.00
37	422 / 24.1	Matthew C. & Shana L. Gould	1599 / 1102	9.00
38	422 / 24	Charles G. & Ruby N. Dennison	1140 / 648	0.25
39	422 / 25	Charles G. & Ruby N. Dennison	1140 / 648	1.15
40	422 / 30.1	Robert H. Richards, Jr., et al	W186 / 1340	3.53
41	422 / 30	Dewain Titus, Jr.	1173 / 1045	89.47
42	422 / 22	Dewain Titus, Jr.	1173 / 1045	43.00
43	421 / 44	Matthew C. & Shana L. Gould	1468 / 1020	51.21
44	421 / 43.1	Schuyler & Pamela J. Hughes	1336 / 276	42.40
45	422 / 12	Mary J. Short & Lou A. Baker	1323 / 663	105.44
46	442 / 8.3	William Coffindaffer, et ux (LE)	1585 / 819	114.79



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.)

FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-2H 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 N-2H
API WELL NO
47 — 041 — 05726
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 7,118' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 24,146' 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

1,455' to Bottom Hole

6,581' to Top Hole

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

Bottom Hole
7.5' Spot

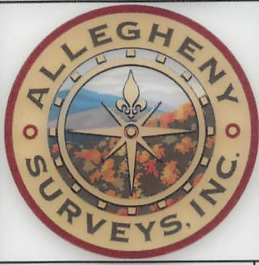
BTM LONGITUDE 80 - 32 - 30
TOP LONGITUDE 80 - 30 - 00

2,224' to Top Hole

1,559' to Bottom Hole

HG Energy II Appalachia, LLC
Well No. Burnside 1214 N-2H
As-Drilled

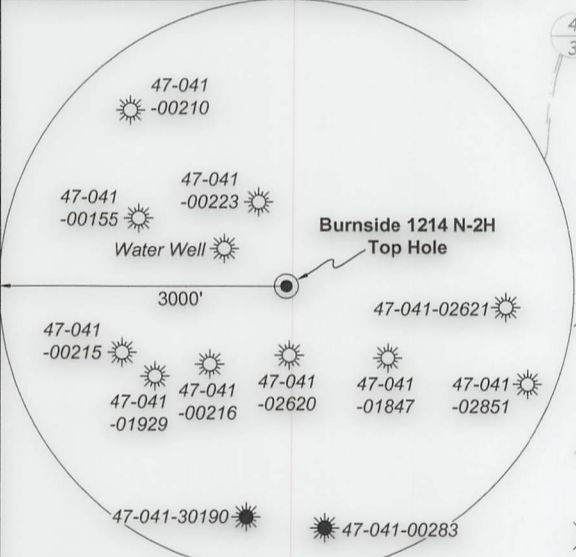
Page 1 of 3



Notes:
Well No. Burnside 1214 N-2H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,206,300.26'
E: 1,775,697.37'
Landing Point Coordinates
N: 14,206,180.60'
E: 1,774,563.00'
Bottom Hole Coordinates
N: 14,222,100.60'
E: 1,768,924.80'

Tag	Bearing	Dist.	Description
L1	S 43°03' W	1,644.9'	Threaded Pipe
L2	N 69°31' W	2,199.7'	Gate Post
L3	N 56°21' W	1,242.3'	#47-041-01847
L4	N 00°42' W	664.5'	#47-041-02620

Notes: Well No. Burnside 1214 N-2H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°07'08.02" Latitude: 39°09'44.59"
Longitude: 80°31'23.52" Longitude: 80°32'48.48"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,330,088.979m N: 4,334,904.933m
E: 541,233.641m E: 539,169.357m
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.

FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-2H 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 N-2H
API WELL NO
47 - 041 - 05726
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: Top: Camden
COUNTY: Lewis
ACREAGE: 115.00

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: 24,146' MD 7,118' TVD

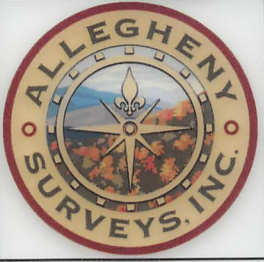
WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

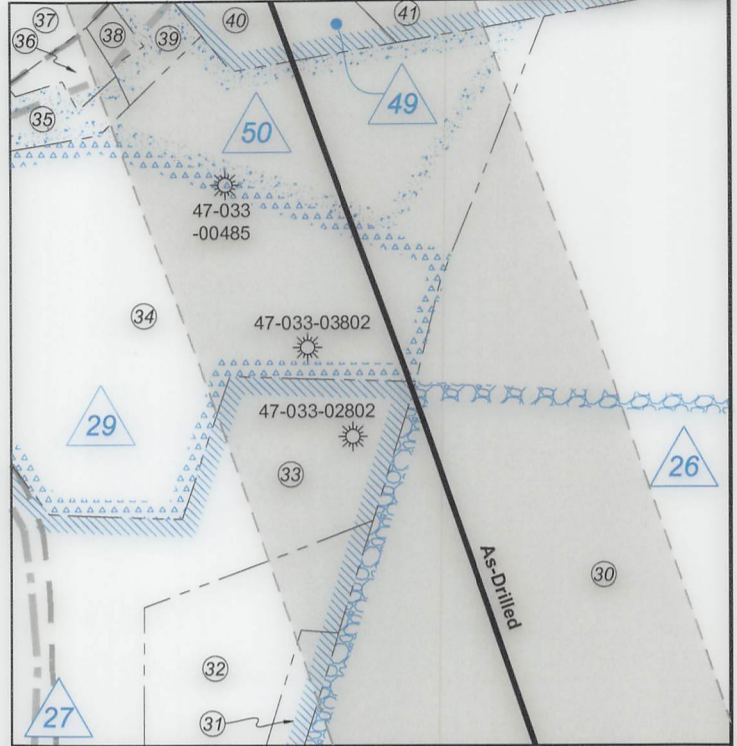


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

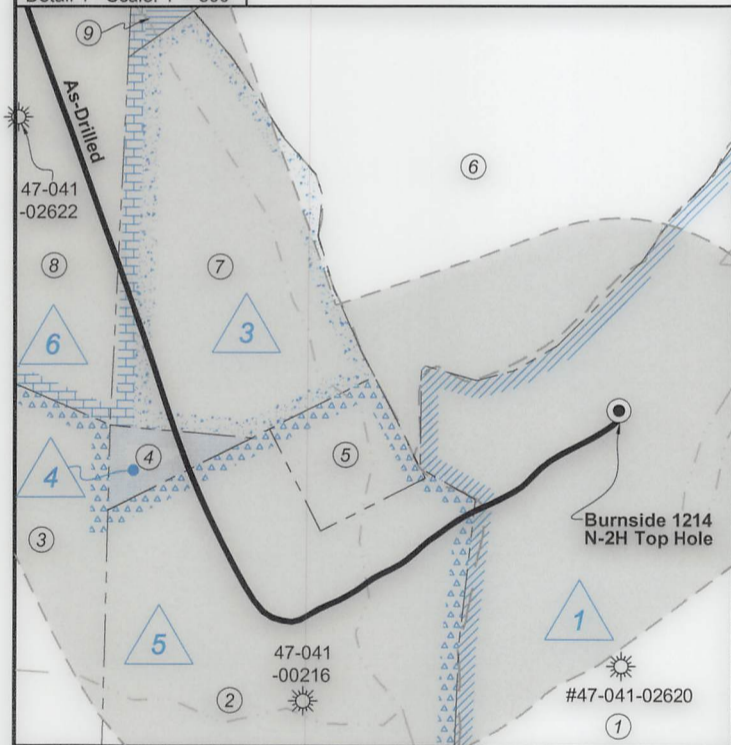
Dwayne D. Matheny, P.S. 2070



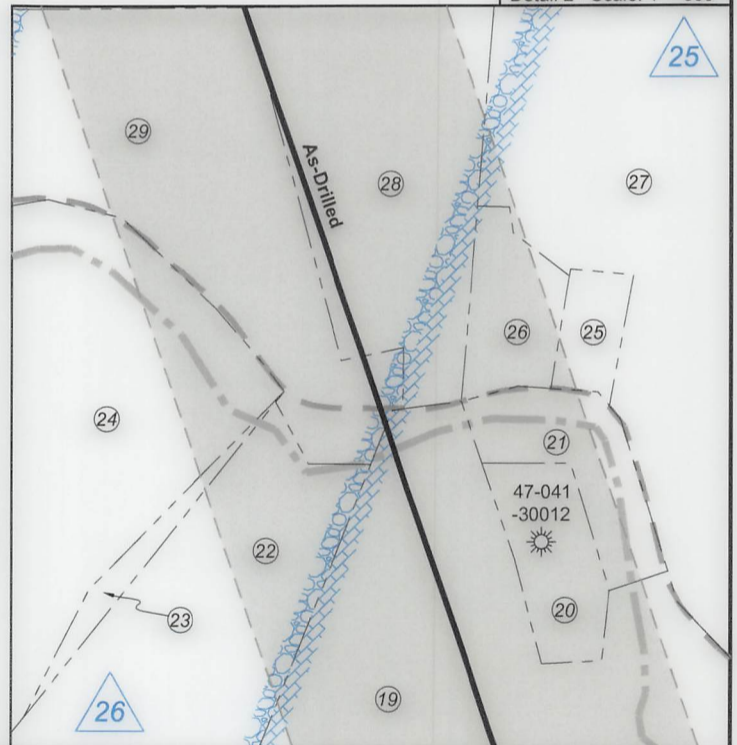
Detail 3 - Scale: 1' = 500"



Detail 1 - Scale: 1' = 500"



Detail 2 - Scale: 1' = 500"



FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-2H 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 N-2H
API WELL NO
47 - 041 - 05726
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

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

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: 7,118' TVD
24,146' MD

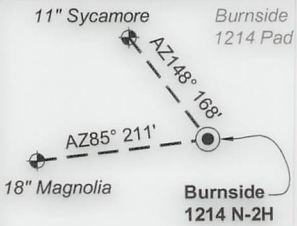
WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

06/07/2024



Well Location References
Not to Scale



Lewis Co. - Freeman Creek Dist.

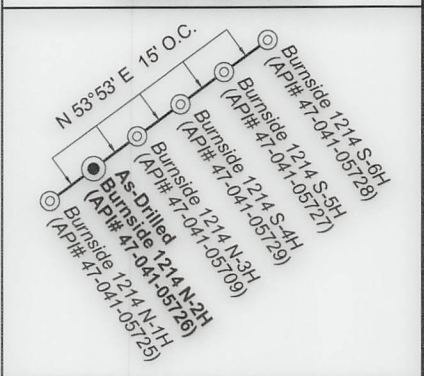
No.	TM / Par	Owner	Bk / Pg	Ac.
1	6C / 3.2	John K. Burnside, et al	666 / 44	115.00
2	5C / 41	Phillip E. Burnside	766 / 831	23.90
3	5C / 37	Phillip E. Burnside	766 / 831	83.75
4	5C / 36	Phillip E. Burnside	766 / 831	0.71
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15	5B / 31	Mark D. Griffith, et ux	652 / 69	64.04
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Harrison Co. - Union-Outside Dist.

No.	TM / Par	Owner	Bk / Pg	Ac.
25	442 / 6.2	Dawna Jo & Emir E. Mussad	1466 / 913	0.95
26	442 / 6.1	Ruth Burnside (LE)	1268 / 1168	1.79
27	442 / 6	J.C. & Karen L. Hayhurst	1592 / 1194	97.01
28	442 / 4.1	Karen L. Hayhurst & Dawna J. Mussad	W198 / 657	8.73
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30	422 / 29	Karen L. Hayhurst & Dawna J. Mussad	W198 / 657	48.47
31	442 / 3	Brian K. & Debra D. Lough	1623 / 961	2.00
32	442 / 2	Brian K. & Debra D. Lough	1623 / 963	9.13
33	442 / 1	Central Pittsburgh Coal Corp.	943 / 764	10.00
34	422 / 28	James P. Winski	1216 / 300	38.19
35	422 / 27	Gerald & Vicky Hall	1616 / 1220	1.20
36	422 / 26	Charles G. Dennison	W156 / 747	1.00
37	422 / 24.1	Matthew C. & Shana L. Gould	1599 / 1102	9.00
38	422 / 24	Charles G. & Ruby N. Dennison	1140 / 648	0.25
39	422 / 25	Charles G. & Ruby N. Dennison	1140 / 648	1.15
40	422 / 30.1	Robert H. Richards, Jr., et al	W186 / 1340	3.53
41	422 / 30	Dewain Titus, Jr.	1173 / 1045	89.47
42	422 / 22	Dewain Titus, Jr.	1173 / 1045	43.00
43	421 / 44	Matthew C. & Shana L. Gould	1468 / 1020	51.21
44	421 / 43.1	Schuyler & Pamela J. Hughes	1336 / 276	42.40
45	422 / 12	Mary J. Short & Lou A. Baker	1323 / 663	105.44
46	442 / 8.3	William Coffindaffer, et ux (LE)	1585 / 819	114.79

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6	N.A. Lovett, et ux
7	Hudson Bailey, et ux
14	John L. Burnside, et ux
19	W.T. Rhodes, et al
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26	J.A. White, et ux
27	Guffey Oil & Gas Royalties, Inc., et al
29	Mark E. Hitt, et al
49	James K. Coffindaffer, et al
50	Mark E. Hitt, et al

Wellhead Layout (NTS)



Legend

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

FILE NO: 236-36-12-19
DRAWING NO: Burnside 1214 N-2H 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 N-2H
API WELL NO
47 - 041 - 05726
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

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

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: 7,118' TVD
24,146' 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