

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

API 47-033-05924 County Harrison District Union/Freeman's Creek
Quad West Milford, WV 7.5' Pad Name Stickel 1210 Field/Pool Name Fink Kennedy
Farm name Stickel Well Number Stickel 1210 S-2H
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 4332719.147 Easting 546672.052
Landing Point of Curve Northing 4332447.078 Easting 546191.098
Bottom Hole Northing 4328652.509 Easting 547518.940

Elevation (ft) 994 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/Mud/OBM
KCL, Barite, Lime, CaCL, base oil, clay, sulfatone, safevert FLG, safevert WA

Date permit issued 10/25/2018 Date drilling commenced 12/27/2018 Date drilling ceased 9/12/2019
Date completion activities began 10/1/2019 Date completion activities ceased 2/23/2020
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 80', 315' Open mine(s) (Y/N) depths N
Salt water depth(s) ft N/A Void(s) encountered (Y/N) depths N
Coal depth(s) ft 100,450, 480 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
S Dew 10/19/2020

API 47-033 - 05924 Farm name Stickel Well number Stickel 1210 S-2H

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"	75'	New	154.5 lbs/ft		N
Surface	26"	20"	500	New	94 lbs/ft J-55		Yes
Coal							
Intermediate 1	17.5"	13.375"	1772	New	68 lbs/ft J-55		Yes
Intermediate 2	12.25"	9.625"	2537	New	40 lbs/ft J-55		Yes
Intermediate 3							
Production	8.5	5.5	20283	New	23 lbs/ft P-11C		Yes
Tubing	5.5"	2.875"	7115	New	5 lbs/ft J-55 EL		No
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	Drilled in						
Surface	Class A	1085	15.6	1.2	1297	surface	8
Coal							
Intermediate 1	Class A	1300/500	15.6/15.9	1.23/1.17	1443/516	Surface	24
Intermediate 2	Class A	835	15.6	1.18	988	Surface	8
Intermediate 3							
Production	Class A	1249/2601	14.5/14.8	1.29/1.33	1610/3458	Surface	8
Tubing	Not cemented						

Drillers TD (ft) 20309' Loggers TD (ft) _____
 Deepest formation penetrated Marcellus Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) 6485'

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 placed on the shoe joint and every other joint to surface
 13.375" casing: centralizer run every joint to 20" casing then placed every 3 joints to surface
 9.625" casing: Centralizers run every other joint to 13.375" casing then placed every 3 joints to surface
 5.5" casing: Centralizer run every joint to top of curve (KOP) then centralizers placed every 3 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 _____

API 47- 033 - 05924 Farm name Stickel Well number Stickel 1210 S-2H

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					

Please insert additional pages as applicable.

API 47- 033 - 05924 Farm name Stickel Well number Stickel 1210 S-2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6485-6731</u> TVD	<u>7099-20309</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3405 psi Bottom Hole _____ psi DURATION OF TEST 349 hrs

OPEN FLOW Gas 21,480 mcfpd Oil _____ bpd NGL _____ bpd Water 648 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 Stingray
Address 14201 Caliber Dr City Oklahoma City State OK Zip 73134

Please insert additional pages as applicable.

Completed by Diane White Telephone 304-420-1119
Signature Diane White Title _____ Date 7/29/2020

HG Energy II Appalachia, LLC
Stickel 1210 S-2H
Lithology/Formation Information

Formation	Top Depth TMD	Top Depth TVD	Bottom Depth TMD	Bottom Depth TVD	Rock Type, Type of Fluid, Gas, Oil	Oil, Gas, Water
Water shows	80	80	90	90	1" stream	Fresh Water
Water shows	310	310	315	315	1/4" stream	Fresh Water
Coals	100, 450, 480		102,455,485		Coal	
Greenbrier Big Lime	1172	1172	1272	1272	Limestone	
Pocono Big Injun	1272	1272	1350	1350	Sandstone	
Gantz	1538	1538	1600	1600	Sandstone/ Siltstone	
Fifty foot Sand	1648	1648	1700	1700	Sandstone	
Thirty foot Sand	1738	1731	1744	1744	Sandstone	
Gordon Stray sand	1785	1785	1828	1828	Sandstone	
Gordon sand	1851	1851	1928	1928	Sandstone	
5th sand	2035	2034	2065	2064	Sandstone	
Bayard sand	2129	2128	2147	2146	Sandstone	
Speechley	2745	2744	2763	2762	Sandstone/Siltstone	
Balltown	2965	2964	3005	3004	siltstone/Shale	
Benson	4138	4045	4186	4078	Sandstone	
Rhinestreet	5962	5640	6287	5919	Shale	
Cashaqua	6287	5919	6527	6124	shale	
Middlesex	6527	6124	6620	6198	shale	
West River	6620	6198	6765	6305	shale	
Burket	6765	6305	6810	6336	shale	
Tully	6810	6336	6958	6426	Limestone	
Hamilton	6958	6426	7099	6485	shale	
Marcellus shale	7099	6485	20309	6731	shale	

HG Energy II Appalachia, LLC

Stickel 1210 S-2H

Stimulation Record

Stage #	Date	Average Pump Rate (BPM)	Average Treatment Pressure (PSI)	Maximum Breakdown Pressure (PSI)	ISIP (PSI)	Proppant (LBS)	Water (BBLs)
Sleeve / 1	11/26/2019	84.8	9811	10842	3950	269500	8285
2	11/26/2019	87.5	9,648	10,889	4,400	388,500	10,537
3	11/27/2019	86.6	9,488	10,083	4,878	496,000	11,015
4	11/27/2019	87.3	9,452	10,379	5,210	584,900	11,659
5	11/28/2019	87.6	9,509	10,159	5,304	577,100	11,541
6	11/28/2019	88.8	9,619	10,136	5,340	582,100	11,762
7	11/29/2019	90.4	9,859	10,233	5,075	577,700	11,852
8	11/29/2019	89.6	9,499	10,064	4,588	576,900	11,937
9	11/29/2019	90.1	9,580	9,980	4,610	576,900	12,014
10	11/30/2019	85.5	9,750	11,040	4,875	577,100	11,466
11	11/30/2019	87.9	9,468	10,570	5,210	575,900	12,342
12	11/30/2019	83.7	9,520	10,138	4,940	418,700	10,655
13	12/1/2019	87.7	9,505	10,780	5,211	577,600	11,237
14	12/1/2019	85.5	9,499	10,783	4,481	574,600	11,141
15	12/2/2019	85.2	9,566	11,049	4,375	575,100	11,791
16	12/2/2019	87.0	9,264	9,996	4,620	576,800	11,218
17	12/2/2019	84.9	9,179	9,854	4,580	577,500	11,275
18	12/3/2019	86.8	9,191	10,105	4,887	593,100	11,450
19	12/3/2019	86.6	9,454	10,023	5,006	574,400	11,418
20	12/3/2019	81.8	9,229	10,286	4,415	597,400	12,582
21	12/4/2019	88.9	8,980	9,492	5,040	594,700	11,401
22	12/4/2019	89.8	9,250	9,780	5,160	595,000	11,516
23	12/4/2019	89.9	9,389	9,730	5,090	595,000	11,441
24	12/5/2019	90.4	9,634	10,432	4,575	216,540	8,786
25	12/5/2019	89.3	9,203	10,851	4,480	578,900	11,267
26	12/5/2019	88.6	9,315	10,250	4,518	385,400	8,626
27	12/5/2019	87.4	9,036	9,653	5,490	229,900	7,783
28	12/6/2019	90.2	8,844	10,308	5,484	489,100	10,199
29	12/6/2019	87.6	9,275	9,788	4,780	232,600	7,718
30	12/6/2019	82.6	8,975	10,206	4,780	592,460	13,195
31	12/7/2019	75.3	8,767	10,430	4,635	175,640	7,659
32	12/7/2019	84.6	8,812	10,141	4,784	575,200	11,626
33	12/7/2019	83.9	8,950	9,898	5,310	577,100	11,585
34	12/7/2019	71.6	9,027	12,456	4,470	610,100	18,020
35	12/8/2019	88.3	8,580	9,342	5,096	603,560	13,481
36	12/9/2019	88.7	9,047	9,478	4,905	610,740	13,043
37	12/9/2019	94.6	8,893	9,790	5,160	610,640	13,181
38	12/9/2019	93.6	8,862	9,171	4,942	607,200	13,117
39	12/9/2019	95.7	8,795	9,284	5,378	610,320	11,956
40	12/10/2019	97.9	9,005	9,347	5,966	609,180	1,937
41	12/10/2019	97.3	9,129	9,854	5,870	613,500	11,955
42	12/10/2019	100.8	9,445	10,752	5,260	610,600	11,800
43	12/10/2019	96.4	8,936	9,572	5,731	614,800	11,846
44	12/11/2019	100.3	9,231	10,556	5,020	609,600	11,896
45	12/11/2019	94.8	9,077	9,845	4,740	609,400	13,075
46	12/11/2019	95.2	8,693	9,481	5,360	572,020	11,640
47	12/12/2019	87.8	9,234	10,548	4,800	612,600	14,676
48	12/12/2019	94.1	8,607	9,819	5,420	612,300	11,855
49	12/12/2019	96.0	8,488	9,040	5,764	550,980	10,875
50	12/13/2019	91.9	8,763	9,454	5,060	614,200	14,086
51	12/13/2019	95.1	8,902	9,922	5,490	518,600	10,541
52	12/13/2019	94.4	8,299	8,643	5,250	608,520	11,860
53	12/14/2019	93.4	8,355	8,746	5,140	613,900	12,681
54	12/14/2019	93	8,121	8,475	5,570	606,400	11,915
55	12/15/2019	94.7	8,259	8,515	5,332	609,840	11,827
56	12/15/2019	94.5	8,432	8,918	5,310	603,520	12,907
57	12/15/2019	93.5	8,503	8,923	4,940	608,600	12,564
58	12/15/2019	91.7	8,601	9,300	4,872	608,790	14,428
59	12/16/2019	91.4	8,081	8,426	4,980	609,640	12,877
60	12/16/2019	91.6	8,125	9,430	5,020	616,480	12,372
61	12/16/2019	93.5	8,262	8,795	5,320	610,200	11,471
62	12/16/2019	94.1	8,752	9,211	5,199	609,400	12,766
63	12/17/2019	90.4	8,681	9,553	4,980	605,880	12,328
64	12/17/2019	95	8,329	10,734	5,330	458,300	11,955
65	12/17/2019	95.1	7,941	8,257	5,331	622,940	11,405
66	12/18/2019	94.9	8,071	8,471	5,260	605,980	12,085
67	12/18/2019	93.8	8,931	10,524	5,100	607,980	12,011

HG Energy II Appalachia, LLC

Stickel 1210 S-2H

Peroration Record

Stage #	Date	Perforation From Depth	Perforation To Depth	Number of Perforations	Formation
Sleeve / 1	11/26/2019	20175	20130	Sleeve	Marcellus
2	11/26/2019	20,096	19,928	49	Marcellus
3	11/27/2019	19,900	19,732	49	Marcellus
4	11/27/2019	19,704	19,536	49	Marcellus
5	11/28/2019	19,508	19,340	49	Marcellus
6	11/28/2019	19,312	19,144	49	Marcellus
7	11/29/2019	19,116	18,948	49	Marcellus
8	11/29/2019	18,920	18,752	49	Marcellus
9	11/29/2019	18,724	18,556	49	Marcellus
10	11/30/2019	18,528	18,360	49	Marcellus
11	11/30/2019	18,332	18,164	49	Marcellus
12	11/30/2019	18,136	17,968	49	Marcellus
13	12/1/2019	17,940	17,772	49	Marcellus
14	12/1/2019	17,744	17,576	49	Marcellus
15	12/2/2019	17,548	17,380	49	Marcellus
16	12/2/2019	17,352	17,184	49	Marcellus
17	12/2/2019	17,156	16,988	49	Marcellus
18	12/3/2019	16,960	16,792	49	Marcellus
19	12/3/2019	16,764	16,596	49	Marcellus
20	12/3/2019	16,568	16,400	49	Marcellus
21	12/4/2019	16,372	16,204	49	Marcellus
22	12/4/2019	16,176	16,008	49	Marcellus
23	12/4/2019	15,980	15,812	49	Marcellus
24	12/5/2019	15,784	15,616	49	Marcellus
25	12/5/2019	15,588	15,420	49	Marcellus
26	12/5/2019	15,392	15,224	49	Marcellus
27	12/5/2019	15,196	15,028	49	Marcellus
28	12/6/2019	15,000	14,832	49	Marcellus
29	12/6/2019	14,804	14,636	49	Marcellus
30	12/6/2019	14,608	14,440	49	Marcellus
31	12/7/2019	14,412	14,244	49	Marcellus
32	12/7/2019	14,216	14,048	49	Marcellus
33	12/7/2019	14,020	13,852	49	Marcellus
34	12/7/2019	13,824	13,656	49	Marcellus
35	12/8/2019	13,628	13,460	49	Marcellus
36	12/9/2019	13,432	13,264	49	Marcellus
37	12/9/2019	13,236	13,068	49	Marcellus
38	12/9/2019	13,040	12,872	49	Marcellus
39	12/9/2019	12,844	12,676	49	Marcellus
40	12/10/2019	12,648	12,480	49	Marcellus
41	12/10/2019	12,452	12,284	49	Marcellus
42	12/10/2019	12,256	12,088	49	Marcellus
43	12/10/2019	12,060	11,892	49	Marcellus
44	12/11/2019	11,864	11,696	49	Marcellus
45	12/11/2019	11,668	11,500	49	Marcellus
46	12/11/2019	11,472	11,304	49	Marcellus
47	12/12/2019	11,276	11,108	49	Marcellus
48	12/12/2019	11,080	10,912	49	Marcellus
49	12/12/2019	10,883	10,715	49	Marcellus
50	12/13/2019	10,685	10,517	49	Marcellus
51	12/13/2019	10,487	10,319	49	Marcellus
52	12/13/2019	10,289	10,121	49	Marcellus
53	12/14/2019	10,091	9,923	49	Marcellus
54	12/14/2019	9,893	9,725	49	Marcellus
55	12/15/2019	9,695	9,527	49	Marcellus
56	12/15/2019	9,497	9,329	49	Marcellus
57	12/15/2019	9,299	9,131	49	Marcellus
58	12/15/2019	9,101	8,933	49	Marcellus
59	12/16/2019	8,903	8,735	49	Marcellus
60	12/16/2019	8,705	8,537	49	Marcellus
61	12/16/2019	8,507	8,339	49	Marcellus
62	12/16/2019	8,309	8,141	49	Marcellus
63	12/17/2019	8,111	7,943	49	Marcellus
64	12/17/2019	7,913	7,745	49	Marcellus
65	12/17/2019	7715	7547	49	Marcellus
66	12/18/2019	7517	7349	49	Marcellus
67	12/18/2019	7319	7151	49	Marcellus

BHL is located on topo map 7,021 feet south of Latitude: 39° 07' 30"
 SHL is located on topo map 8,834 feet south of Latitude: 39° 10' 00"

SEE PAGE 2 FOR PLAT DUE TO LENGTH OF LATERAL

BHL is located on topo map 9,568 feet west of Longitude: 80° 25' 00"
 SHL is located on topo map 452 feet west of Longitude: 80° 27' 30"

AS DRILLED
 SURFACE HOLE LOCATION (SHL)
 UTM 17-NAD83
 N:4332719.147
 E:546672.052
 NAD27, WV NORTH
 N:235401.194
 E:1727681.386
 LAT/LON DATUM-NAD83
 LAT:39.142411
 LON:-80.459928

AS DRILLED
 APPROX. LANDING POINT
 UTM 17-NAD83
 N:4332447.078
 E:546191.098
 NAD27, WV NORTH
 N:234534.674
 E:1726088.261
 LAT/LON DATUM-NAD83
 LAT:39.139985
 LON:-80.465512

AS DRILLED
 BOTTOM HOLE LOCATION (BHL)
 UTM 17-NAD83
 4328652.509
 E:547518.940
 NAD27, WV NORTH
 N:222010.082
 E:1730238.314
 LAT/LON DATUM-NAD83
 LAT:39.105722
 LON:-80.450413



	LESSOR	DIST-TM/PAR
A	A. W. RHODES ET UX	20-444/19.2
B	W. E. BEEGHLEY ET AL	3-7B/23
C	W. E. BEEGHLEY ET AL	3-7B/23
		3-7B/23.2
		3-7B/23.1
D	GEORGE W. NEELY ET AL	3-7B/21
E	CAROLINE BEEGHLEY ET AL	3-7B/31
F	MAUDIE BARB ET AL	3-7B/18
		3-7B/19
		3-7B/32.1
G	JOHN S. BARB ET UX	3-7C/61
H	MAE BARBE ET AL	3-7C/60
J	DELBERT WILLIAMS ET AL	3-7C/63
		3-7C/65
		3-7C/58
K	C. W. SMITH & ET AL	3-7C/57
L	E. C. STROTHER & ET AL	3-7C/66
		3-7C/66.2
		3-7C/66.1
M	N. L. ALLMAN ET VIR	3-7C/69.1
		3-7C/68
		3-7C/68.1

	SURFACE OWNER	DIST-TM/PAR
1	DANNY LEE & ALICIA A. STICKEL	20-444/19.2
2	ATLANTIC COAST PIPELINE, LLC	3-7B/23
3	GARY LEE & PATRICIA S. HEATER	3-7B/23.2
4	DEBRA J. HEATER	3-7B/23.1
5	JOHN J. OLDAKER, JR.	3-7B/21
6	JOHN J. OLDAKER, JR.	3-7B/31
7	JOHN J. OLDAKER, JR.	3-7B/18
8	JOHN J. OLDAKER, JR.	3-7B/19
9	TIMOTHY L. WOLFE	3-7B/32.1
10	LYNWOOD L. & DONNA S. WOLFE	3-7C/61
11	GERALD F. POSTLETHWAIT	3-7C/60
12	VALLERIE A. SNOW	3-7C/62
13	HARRY MAXWELL EAKIN	3-7C/63
14	ROBERT GARTON, JR.	3-7C/65
15	RANDALL D. & THELMA M. SHAFFER	3-7C/59
16	MARINDA M. SKINNER	3-7C/58.1
17	MARINDA M. SKINNER	3-7C/58.2
18	ELIZABETH D. & JOHN M. GRIFFITH	3-7C/58
19	JERRY L. WOLFE	3-7C/57
20	JOSHUA V. & MARSHA T. GARTON	3-7C/66
21	WESLEY A. & KATELYN M. GARTON	3-7C/66.2
22	JOSHUA V. & MARSHA T. GARTON	3-7C/66.1
23	RONDEL R. JEFFERIES	3-7C/69.1
24	JOSEPH K. & NORMA J. LUZADER	3-7C/68
25	JOSHUA V. GARTON & MARSHA TAYLOR	3-7C/68.1

FILE #: _____
 DRAWING #: STICKEL 2H
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
 Signed: _____
 R.P.E.: _____ L.L.S.: P.S. No. 2346



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 57TH STREET
 CHARLESTON, WV 25304



DATE: MAY 1, 2020
 OPERATOR'S WELL #: STICKEL 2H
 API WELL #: 47 33 05924
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: MIDDLE WEST FORK CREEK ELEVATION: 994'±

COUNTY/DISTRICT: HARRISON / UNION QUADRANGLE: WEST MILFORD, WV 7.5'

SURFACE OWNER: DANNY LEE & ALICIA A. STICKEL ACREAGE: 35.00±

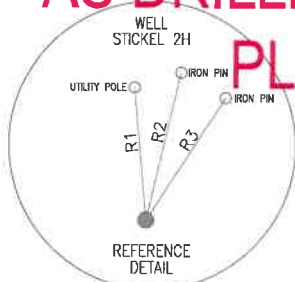
OIL & GAS ROYALTY OWNER: A. W. RHODES ET UX ACREAGE: 851.409±

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,731'± TMD: 20,309'±

WELL OPERATOR HG ENERGY II APPALACHIA, LLC DESIGNATED AGENT DIANE C. WHITE
 Address 5260 DUPONT ROAD Address 5260 DUPONT ROAD
 City PARKERSBURG State WV Zip Code 26101 City PARKERSBURG State WV Zip Code 26101

AS DRILLED PLAT



STICKEL 2H PAGE 2 OF 2

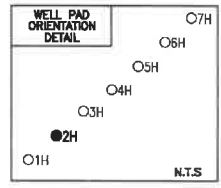
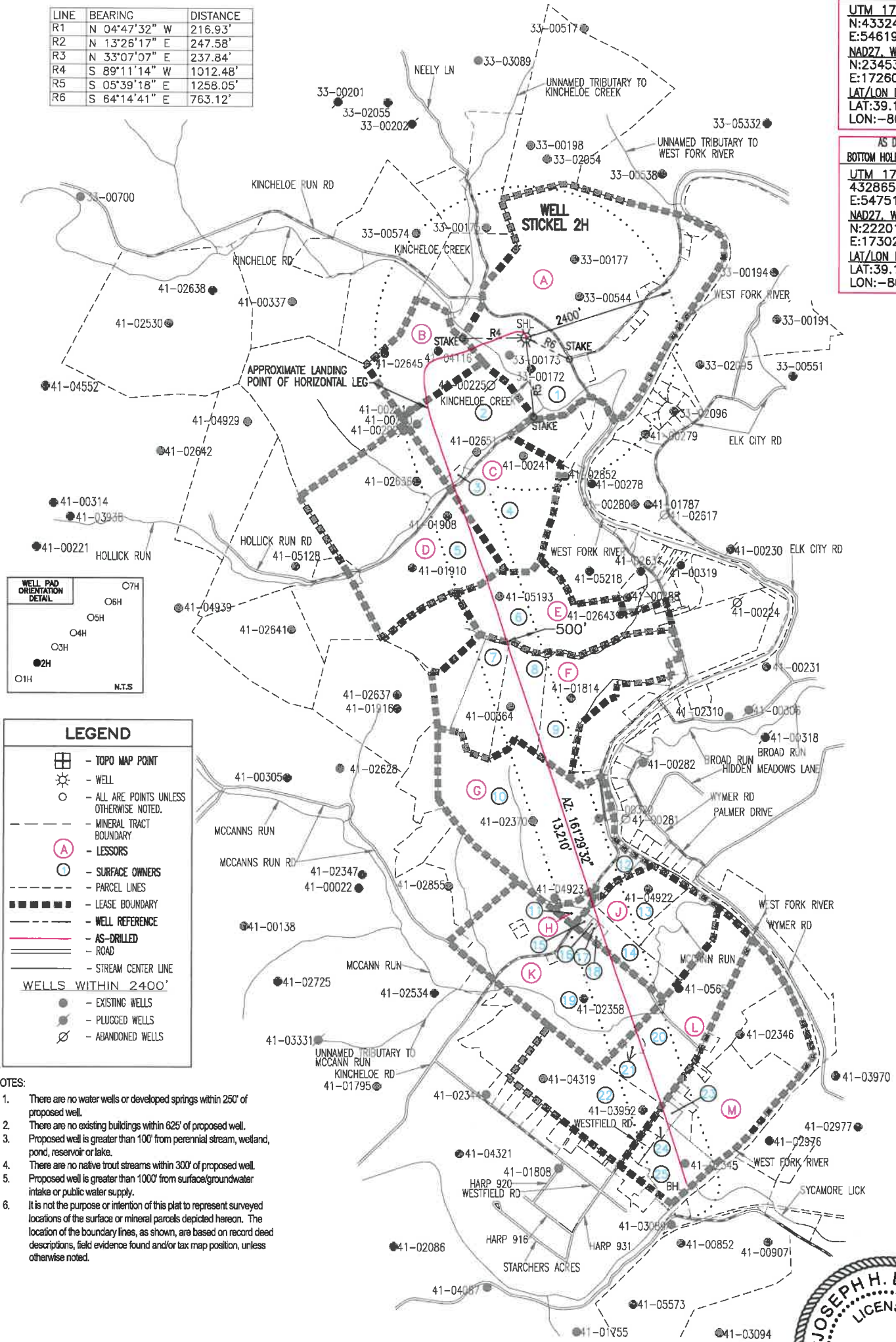


AS DRILLED
SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83
N:4332719.147
E:546672.052
NAD27, WV NORTH
N:235401.194
E:1727681.386
LAT/LON DATUM-NAD83
LAT:39.142411
LON:-80.459928

AS DRILLED
APPROX. LANDING POINT
UTM 17-NAD83
N:4332447.078
E:546191.098
NAD27, WV NORTH
N:234534.674
E:1726088.261
LAT/LON DATUM-NAD83
LAT:39.139985
LON:-80.465512

AS DRILLED
BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83
4328652.509
E:547518.940
NAD27, WV NORTH
N:222010.082
E:1730238.314
LAT/LON DATUM-NAD83
LAT:39.105722
LON:-80.450413

LINE	BEARING	DISTANCE
R1	N 04°47'32" W	216.93'
R2	N 13°26'17" E	247.58'
R3	N 33°07'07" E	237.84'
R4	S 89°11'14" W	1012.48'
R5	S 05°39'18" E	1258.05'
R6	S 64°14'41" E	763.12'



LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- LESSORS (A)
- SURFACE OWNERS (B)
- PARCEL LINES (C)
- LEASE BOUNDARY (D)
- WELL REFERENCE (E)
- AS-DRILLED (F)
- ROAD (G)
- STREAM CENTER LINE (H)

WELLS WITHIN 2400'

- EXISTING WELLS (I)
- PLUGGED WELLS (J)
- ABANDONED WELLS (K)

- NOTES:**
- There are no water wells or developed springs within 250' of proposed well.
 - There are no existing buildings within 625' of proposed well.
 - Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 - There are no native trout streams within 300' of proposed well.
 - Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
 - It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.



MAY 1, 2020

AS DRILLED PLAT

STICKEL 2H PAGE 2 OF 2

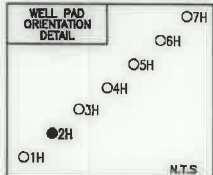
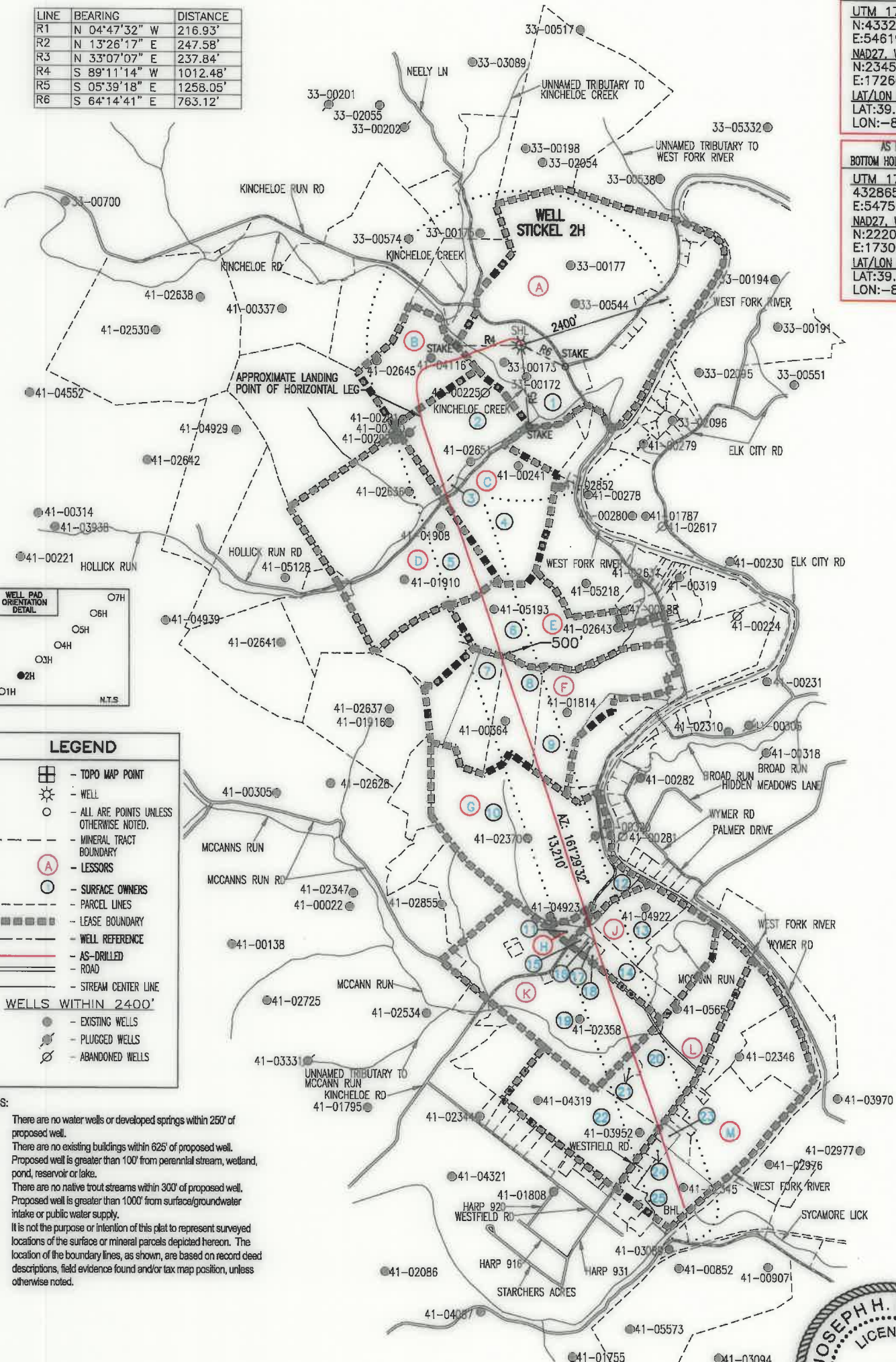
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MAY 1, 2020

