

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

API 47-033-05926 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-3H  
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 4332722.249 Easting 546675.392  
Landing Point of Curve Northing 4332508.694 Easting 546481.234  
Bottom Hole Northing 4328877.004 Easting 547771.330

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 12/26/2018 Date drilling ceased 9/4/2019  
Date completion activities began 9/30/2019 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:  
SPW 10/10/2020

API 47- 033 - 05926 Farm name Stickel Well number Stickel 1210 S-3H

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"	530	New	94 lbs/ft J-55		Yes
Coal							
Intermediate 1	17.5"	13.375"	1764	New	68 lbs/ft J-55		Yes
Intermediate 2	12.25"	9.625"	2511	New	40 lbs/ft J-55		Yes
Intermediate 3							
Production	8.5	5.5	19343	New	23 lbs/ft P-11C		Yes
Tubing	5.5"	2.875"	6739	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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Drilled in						
Surface	Class A	1030	15.6	1.2	1235.2	surface	8
Coal							
Intermediate 1	Class A	1340/570	15.4/15.9	1.23/1.17	1645/668	Surface	24
Intermediate 2	Class A	835	15.6	1.18	999	Surface	8
Intermediate 3							
Production	Class A	1140/2441	14.5/14.8	1.29/1.33	1470/3246	Surface	8
Tubing	Not cemented						

Drillers TD (ft) 19376 Loggers TD (ft) \_\_\_\_\_  
 Deepest formation penetrated Marcellus Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 6472'

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 - 05926

Farm name Stickel

Well number Stickel 1210 S-3H

**PERFORATION RECORD**

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					<b>** See Attached **</b>

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 (bbbls)	Amount of Nitrogen/other (units)
			<b>*See Attached*</b>					

Please insert additional pages as applicable.

API 47- 033 - 05926 Farm name Stickel Well number Stickel 1210 S-3H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6472-6740</u> TVD	<u>6705-19376</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump  
 SHUT-IN PRESSURE Surface 3641 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST 349 hrs

OPEN FLOW Gas 19,269 mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water 912 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 <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		
					<b>** See Attached **</b>

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-3H****Preforation Record**

<b>Stage #</b>	<b>Date</b>	<b>Perforation from Depth</b>	<b>Perforation to Depth</b>	<b>Number of Perforations</b>	<b>Formation</b>
Sleeve / 1	12/20/2019	19234	19187	2	Marcellus
2	12/20/2019	19,153	18,985	49	Marcellus
3	12/21/2019	18,957	18,789	49	Marcellus
4	12/21/2019	18,761	18,593	49	Marcellus
5	12/21/2019	18,565	18,397	49	Marcellus
6	12/22/2019	18,369	18,201	49	Marcellus
7	12/22/2019	18,173	18,005	49	Marcellus
8	12/22/2019	17,977	17,809	49	Marcellus
9	12/23/2019	17,781	17,613	49	Marcellus
10	12/23/2019	17,585	17,417	49	Marcellus
11	12/23/2019	17,389	17,221	49	Marcellus
12	12/24/2019	17,193	17,025	49	Marcellus
13	12/24/2019	16,997	16,829	49	Marcellus
14	12/25/2019	16,801	16,633	49	Marcellus
15	12/25/2019	16,605	16,437	49	Marcellus
16	12/25/2019	16,409	16,241	49	Marcellus
17	12/26/2019	16,213	16,045	49	Marcellus
18	12/26/2019	16,017	15,849	49	Marcellus
19	12/26/2019	15,821	15,653	49	Marcellus
20	12/27/2019	15,625	15,457	49	Marcellus
21	12/27/2019	15,429	15,261	49	Marcellus
22	12/28/2019	15,233	15,065	49	Marcellus
23	12/28/2019	15,036	14,886	49	Marcellus
24	12/28/2019	14,859	14,733	49	Marcellus
25	12/29/2019	14,514	14,346	49	Marcellus
26	12/29/2019	14,312	14,144	49	Marcellus
27	12/30/2019	14,110	13,942	49	Marcellus
28	12/30/2019	13,910	13,736	49	Marcellus
29	12/31/2019	13,706	13,532	49	Marcellus
30	12/31/2019	13,502	13,328	49	Marcellus
31	12/31/2019	13,298	13,124	49	Marcellus
32	1/1/2020	12,957	12,789	49	Marcellus
33	1/1/2020	12,761	12,593	49	Marcellus
34	1/9/2020	12,565	12,397	49	Marcellus
35	1/10/2020	12,369	12,201	49	Marcellus
36	1/10/2020	12,173	12,005	49	Marcellus
37	1/10/2020	11,977	11,809	49	Marcellus
38	1/10/2020	11,781	11,613	48	Marcellus
39	1/10/2020	11,585	11,417	48	Marcellus
40	1/11/2020	11,389	11,221	48	Marcellus
41	1/11/2020	11,193	11,025	48	Marcellus
42	1/11/2020	10,997	10,829	48	Marcellus
43	1/12/2020	10,801	10,633	48	Marcellus
44	1/12/2020	10,605	10,437	48	Marcellus
45	1/12/2020	10,409	10,241	48	Marcellus
46	1/12/2020	10,213	10,045	48	Marcellus
47	1/13/2020	10,017	9,849	48	Marcellus
48	1/13/2020	9,821	9,653	48	Marcellus
49	1/13/2020	9,625	9,457	48	Marcellus
50	1/14/2020	9,427	9,265	48	Marcellus
51	1/14/2020	9,233	9,071	48	Marcellus
52	1/14/2020	9,039	8,877	48	Marcellus
53	1/14/2020	8,845	8,683	48	Marcellus
54	1/15/2020	8,651	8,489	48	Marcellus
55	1/15/2020	8,457	8,295	47	Marcellus
56	1/15/2020	8,263	8,101	47	Marcellus
57	1/15/2020	8,069	7,907	47	Marcellus
58	1/16/2020	7,875	7,713	47	Marcellus
59	1/16/2020	7,681	7,519	47	Marcellus
60	1/16/2020	7,487	7,325	47	Marcellus
61	1/16/2020	7,293	7,131	47	Marcellus
62	1/17/2020	7,099	6,937	47	Marcellus
63	1/17/2020	6,906	6,756	47	Marcellus
KP	1/17/2020				

**HG Energy II Appalachia, LLC**  
**Stickel 1210 S-3H**  
**Stimulation Record**

Stage #	Date	Average Pump Rate (BPM)	Average Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Proppant (LBS)	Water (BBLs)
Sleeve / 1	12/20/2019	73.4	8633	9809	5600	264200	9538
2	12/20/2019	82.9	9,185	9,855	4,795	529,260	11,412
3	12/21/2019	81.1	9,005	9,529	5,280	468,780	10,322
4	12/21/2019	77.3	8,440	8,926	5,300	512,800	11,142
5	12/21/2019	80.4	8,831	9,569	5,140	585,520	11,855
6	12/22/2019	81.4	8,681	9,336	4,560	577,460	12,014
7	12/22/2019	80.1	8,594	8,912	4,850	577,380	12,573
8	12/22/2019	83.0	8,901	9,289	5,084	512,580	11,226
9	12/23/2019	84.0	8,800	9,250	5,020	577,360	11,731
10	12/23/2019	83.4	8,805	9,218	5,140	582,380	11,709
11	12/23/2019	81.1	8,799	9,501	5,100	577,280	13,316
12	12/24/2019	79.9	8,841	9,766	5,382	578,380	11,663
13	12/24/2019	85.6	8,927	9,566	5,240	577,300	11,606
14	12/25/2019	84.3	9,011	9,579	5,275	573,200	11,106
15	12/25/2019	80.3	8,553	9,536	5,420	577,150	11,196
16	12/25/2019	85.9	8,849	9,308	5,200	573,700	11,089
17	12/26/2019	85.1	8,880	9,377	5,210	576,920	11,098
18	12/26/2019	89.2	9,405	10,084	5,344	577,060	12,837
19	12/26/2019	88.4	9,068	9,759	5,300	569,240	11,117
20	12/27/2019	92.0	9,348	10,001	4,750	600,180	11,517
21	12/27/2019	90.6	9,205	9,751	5,874	603,640	12,626
22	12/28/2019	91.9	9,266	9,701	4,860	600,040	11,390
23	12/28/2019	93.3	9,233	9,747	4,817	602,500	11,396
24	12/28/2019	94.4	9,152	10,011	4,950	600,560	11,493
25	12/29/2019	89.4	9,353	10,698	5,020	407,100	9,948
26	12/29/2019	94.3	9,074	9,760	5,255	582,800	10,721
27	12/30/2019	93.7	9,288	9,870	4,984	600,430	12,208
28	12/30/2019	94.1	8,803	9,597	5,010	602,310	10,721
29	12/31/2019	95.1	9,373	9,930	5,710	600,920	10,679
30	12/31/2019	93.3	9,223	9,942	4,898	599,180	12,160
31	12/31/2019	91.4	9,121	10,017	5,910	641,800	10,663
32	1/1/2020	95.1	9,059	10,340	5,151	577,280	10,598
33	1/1/2020	94.0	9,092	9,881	5,843	585,580	11,848
34	1/9/2020	92.4	9,240	10,151	4,957	545,400	10,481
35	1/10/2020	91.6	9,439	10,399	5,173	577,080	11,950
36	1/10/2020	93.2	8,624	9,610	5,198	577,830	10,637
37	1/10/2020	92.0	8,545	9,417	5,660	518,220	9,936
38	1/10/2020	94.6	8,778	9,526	5,645	605,060	10,945
39	1/10/2020	92.9	8,707	10,065	5,620	600,450	10,931
40	1/11/2020	92.3	8,602	9,439	5,612	580,500	10,791
41	1/11/2020	93.2	8,509	9,489	5,652	576,580	10,570
42	1/11/2020	94.2	8,237	8,480	5,732	572,090	10,645
43	1/12/2020	93.6	8,280	8,966	5,220	577,780	10,659
44	1/12/2020	92.2	8,501	9,272	5,470	576,500	11,822
45	1/12/2020	93.1	8,674	9,983	5,335	577,940	10,696
46	1/12/2020	91.3	8,487	9,376	5,321	577,100	11,517
47	1/13/2020	91.2	8,145	8,537	5,405	546,180	11,531
48	1/13/2020	93.4	8,692	9,736	5,568	380,830	9,567
49	1/13/2020	92.8	8,164	8,815	5,199	494,520	11,103
50	1/14/2020	91.3	8,518	9,003	4,853	449,320	10,658
51	1/14/2020	90.7	7,939	8,778	5,179	558,420	11,654
52	1/14/2020	94.0	7,930	9,001	4,846	332,460	8,869
53	1/14/2020	93.5	7,699	8,345	5,078	577,600	11,589
54	1/15/2020	92.3	7,992	8,832	5,290	580,200	11,846
55	1/15/2020	97	7,903	8,692	5,420	600,120	10,906
56	1/15/2020	96.2	7,827	8,419	5,540	575,380	10,891
57	1/15/2020	95.9	7,862	8,533	5,735	579,860	10,682
58	1/16/2020	93.7	7,992	8,828	5,240	600,380	11,752
59	1/16/2020	96.1	8,341	8,855	5,770	600,860	10,875
60	1/16/2020	96.5	8,084	9,519	5,850	592,480	10,908
61	1/16/2020	91.7	7,655	8,318	5,531	600,600	10,976
62	1/17/2020	94.5	7,458	8,463	5,560	600,300	9,810
63	1/17/2020	97.5	7,646	8,689	5,490	600,020	10,264
KP	1/17/2020						

**HG Energy II Appalachia, LLC**  
**Stickel 1210 S-3H**  
**Lithology/Formation Information**

Formations	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			
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	4088	4078	Sandstone	
Rhinestreet	5730	5641	6011	5907	Shale	
Cashaqua	6011	5907	6228	6106	shale	
Middlesex	6228	6106	6320	6188	shale	
West River	6320	6188	6436	6289	shale	
Burket	6436	6289	6475	6320	shale	
Tully	6475	6320	6594	6409	Limestone	
Hamilton	6594	6409	6705	6472	shale	
Marcellus shale	6705	6472	19376	6740	shale	



BHL is located on topo map 6,300 feet south of Latitude: 39°07'30"  
 SHL is located on topo map 8,824 feet south of Latitude: 39°10'00"

**SEE PAGE 2 FOR PLAT DUE TO LENGTH OF LATERAL**

BHL is located on topo map 8,759 feet west of Longitude: 80°25'00"  
 SHL is located on topo map 441 feet west of Longitude: 80°27'30"

AS DRILLED  
 SURFACE HOLE LOCATION (SHL)  
 UTM 17-NAD83  
 N:4332722.249  
 E:546675.392  
 NAD27, WV NORTH  
 N:235411.194  
 E:1727692.517  
 LAT/LON DATUM-NAD83  
 LAT:39.142439  
 LON:-80.459889



AS DRILLED  
 APPROX. LANDING POINT  
 UTM 17-NAD83  
 N:4332508.694  
 E:546481.234  
 NAD27, WV NORTH  
 N:234721.013  
 E:1727043.716  
 LAT/LON DATUM-NAD83  
 LAT:39.140525  
 LON:-80.462150

AS DRILLED  
 BOTTOM HOLE LOCATION (BHL)  
 UTM 17-NAD83  
 N:4328877.004  
 E:547771.330  
 NAD27, WV NORTH  
 N:222732.985  
 E:1731078.802  
 LAT/LON DATUM-NAD83  
 LAT:39.107731  
 LON:-80.447478

	LESSOR	DIST-TM/PAR
A	A. W. RHODES ET UX	20-444/19.2
B	W. E. BEEGHLEY ET AL	3-7B/23
		3-7B/23.1
C	ANNA C. BARB ET AL	3-7B/27
D	CAROLINE BEEGHLEY ET AL	3-7B/31
E	MAUDIE BARB ET AL	3-7B/32.1
		3-7B/32
F	BERTHA BRINKLEY ET AL	3-7B/32
		4-7C/18.13
G	BERTHA H. NAY ET AL	4-7C/18.13
		4-7C/18.18
H	BERTHA H. NAY ET AL	4-7C/18.18
		4-7C/18.20
		4-7C/18.25
		4-7C/18.15
		4-7C/18.17
		4-7C/18.12
		4-7C/18.14
J	MYRTLE B. SMITH ET VIR	4-7C/15.4
K	JOHN S. BARB ET UX	3-7C/62
L	DELBERT WILLIAMS ET AL	3-7C/63
		3-7C/64
M	E. C. STROTHER & ET AL	3-7C/66
N	N. L. ALLMAN ET VIR	3-7C/72
		3-7C/72.1
		3-7C/71.1
		3-7C/71.2
		3-7C/70

	SURFACE OWNER	DIST-TM/PAR
1	DANNY LEE & ALICIA A. STICKEL	20-444/19.2
2	ATLANTIC COAST PIPELINE, LLC	3-7B/23
3	DEBORAH JO HEATER	3-7B/23.1
4	SHANE L. STUTLER	3-7B/27
5	JOHN J. OLDAKER, JR.	3-7B/31
6	TIMOTHY L. WOLFE	3-7B/32.1
7	TIMOTHY R. JAMES	3-7B/32
8	DAVID & DINESSIA MCDUGAL	4-7C/18.13
9	JEARLD V. ALLMAN III	4-7C/18.18
10	MICHAEL A. & CARRIE B. GRILLI	4-7C/18.20
11	STEVEN E. LOAR	4-7C/18.25
12	BERNARD & DARLENE MOORE	4-7C/18.15
13	DAVID & TAMATHA R. JONES	4-7C/18.17
14	STALNEY F. & LINDA L. WILLIAMS	4-7C/18.12
15	STANLEY F. & LINDA L. WILLIAMS	4-7C/18.14
16	*STEVEN D. BUMBARDNER	4-7C/15.4
17	VALLERIE A. SNOW	3-7C/62
18	HARRY MAXWELL EAKIN	3-7C/63
19	DELBERT F. WILLIAMS	3-7C/64
20	JOSHUA V. & MARSHA T. GARTON	3-7C/66
21	CARL V. RATLIFF	3-7C/72
22	JANET B. RINEHART	3-7C/72.1
23	BARBARA TRUMBULL SQUIRES	3-7C/71.1
24	JAMES R. & BARBARA G. SQUIRES	3-7C/71.2
25	BARBARA G. SQUIRES	3-7C/70



\* - DENOTES PARCEL WITHIN 30 FEET OF PLANNED WELL BORE

FILE #: \_\_\_\_\_ STICKEL 3H  
 DRAWING #: \_\_\_\_\_ STICKEL 3H  
 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 4, 2020  
 OPERATOR'S WELL #: \_\_\_\_\_ STICKEL 3H  
 API WELL #: \_\_\_\_\_ 47 \_\_\_\_\_ 33 \_\_\_\_\_ 05926  
 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: \_\_\_\_\_ 649.876±

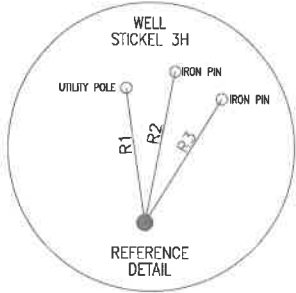
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
 CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION: \_\_\_\_\_ MARCELLUS \_\_\_\_\_ ESTIMATED DEPTH: \_\_\_\_\_ TVD: 6,740± TMD: 19,376±

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 3H PAGE 2 OF 2



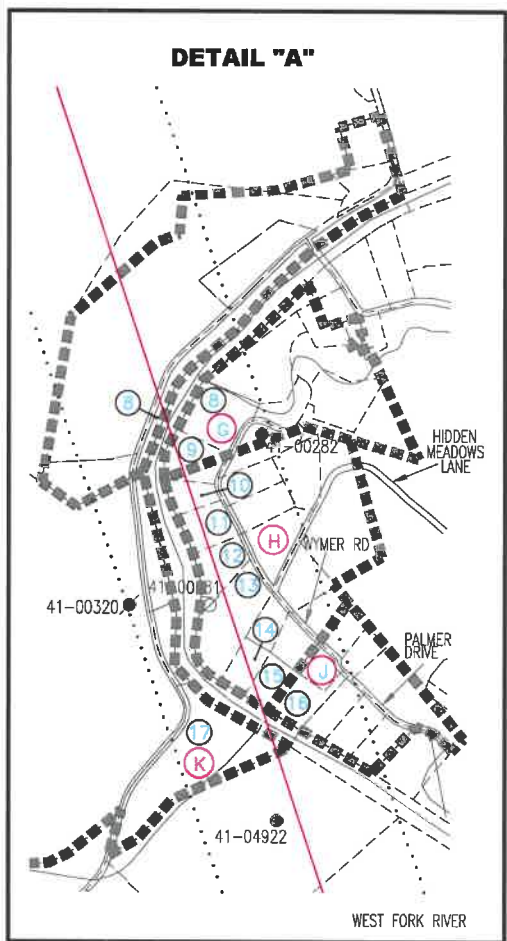
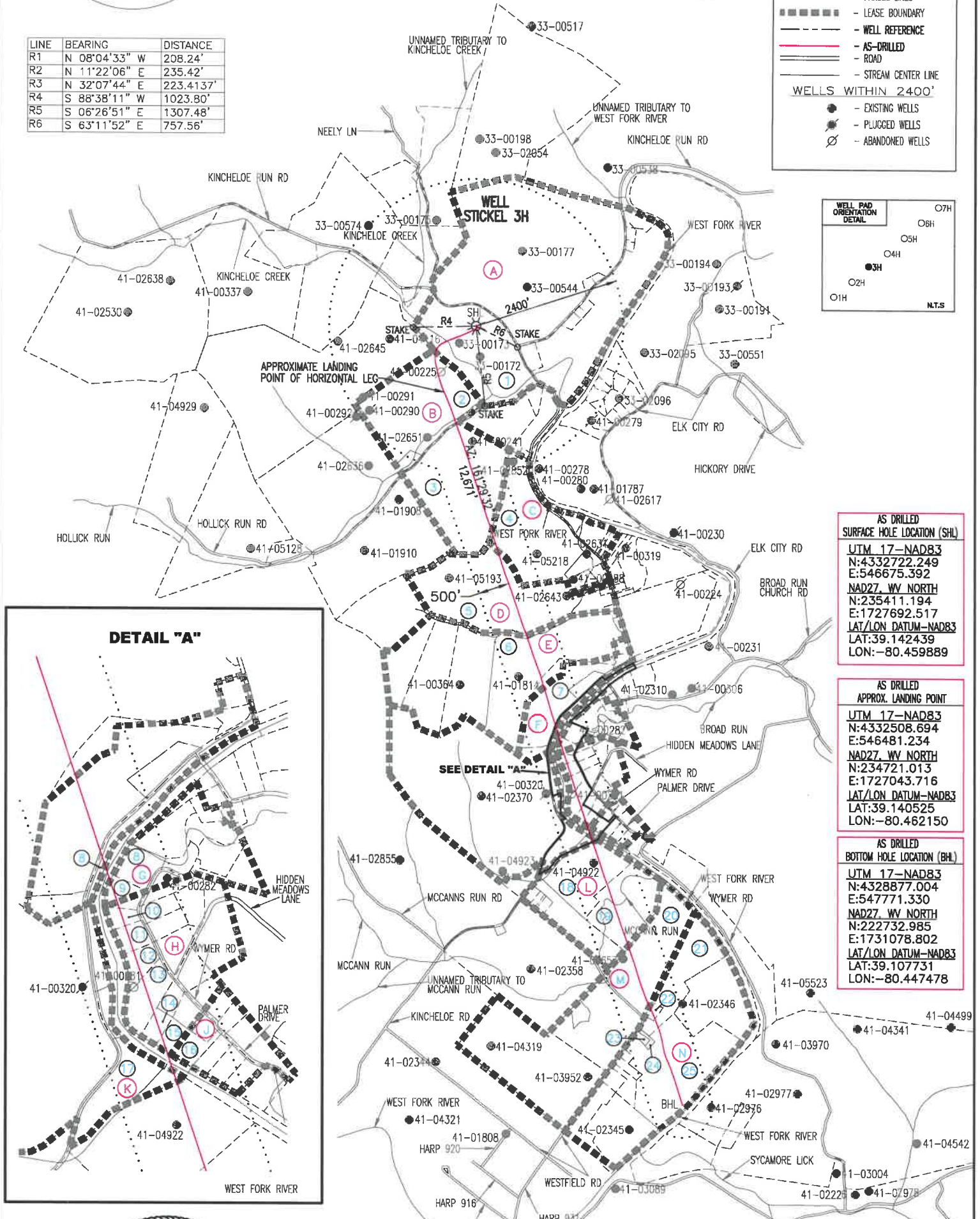
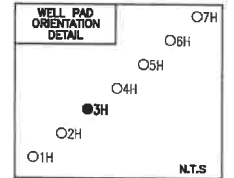
LINE	BEARING	DISTANCE
R1	N 08°04'33" W	208.24'
R2	N 11°22'06" E	235.42'
R3	N 32°07'44" E	223.4137'
R4	S 88°38'11" W	1023.80'
R5	S 06°26'51" E	1307.48'
R6	S 63°11'52" E	757.56'

### LEGEND

- TOPO MAP POINT
- WELL
- ALL ARE POINTS UNLESS OTHERWISE NOTED.
- MINERAL TRACT BOUNDARY
- LESSORS
- SURFACE OWNERS
- PARCEL LINES
- LEASE BOUNDARY
- WELL REFERENCE
- AS-DRILLED
- ROAD
- STREAM CENTER LINE

**WELLS WITHIN 2400'**

- EXISTING WELLS
- PLUGGED WELLS
- ABANDONED WELLS



**AS DRILLED  
SURFACE HOLE LOCATION (SHL)**

UTM 17-NAD83  
N:4332722.249  
E:546675.392  
NAD27 WV NORTH  
N:235411.194  
E:1727692.517  
LAT/LON DATUM-NAD83  
LAT:39.142439  
LON:-80.459889

**AS DRILLED  
APPROX. LANDING POINT**

UTM 17-NAD83  
N:4332508.694  
E:546481.234  
NAD27 WV NORTH  
N:234721.013  
E:1727043.716  
LAT/LON DATUM-NAD83  
LAT:39.140525  
LON:-80.462150

**AS DRILLED  
BOTTOM HOLE LOCATION (BHL)**

UTM 17-NAD83  
N:4328877.004  
E:547771.330  
NAD27 WV NORTH  
N:222732.985  
E:1731078.802  
LAT/LON DATUM-NAD83  
LAT:39.107731  
LON:-80.447478



- 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.
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**MAY 4, 2020**

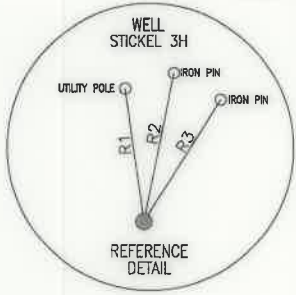


**AS DRILLED**

**PLAT STICKEL**

**3H**

**PAGE 2 OF 2**



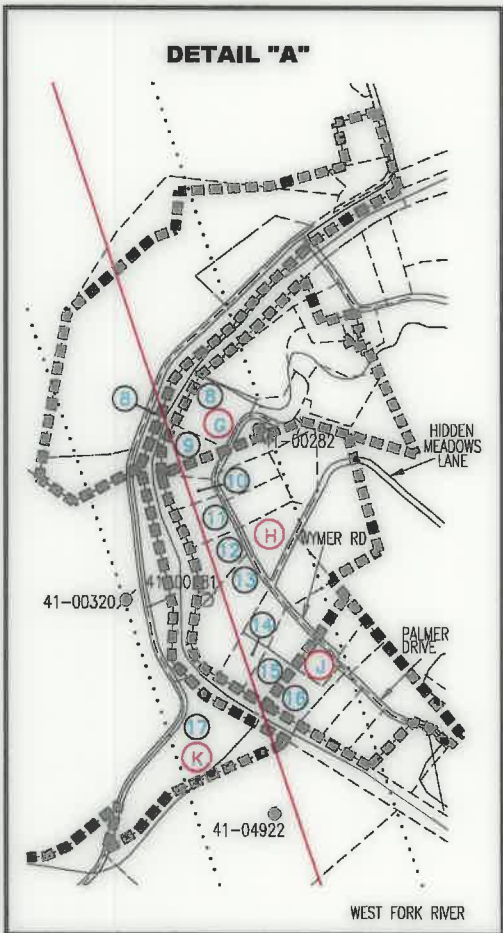
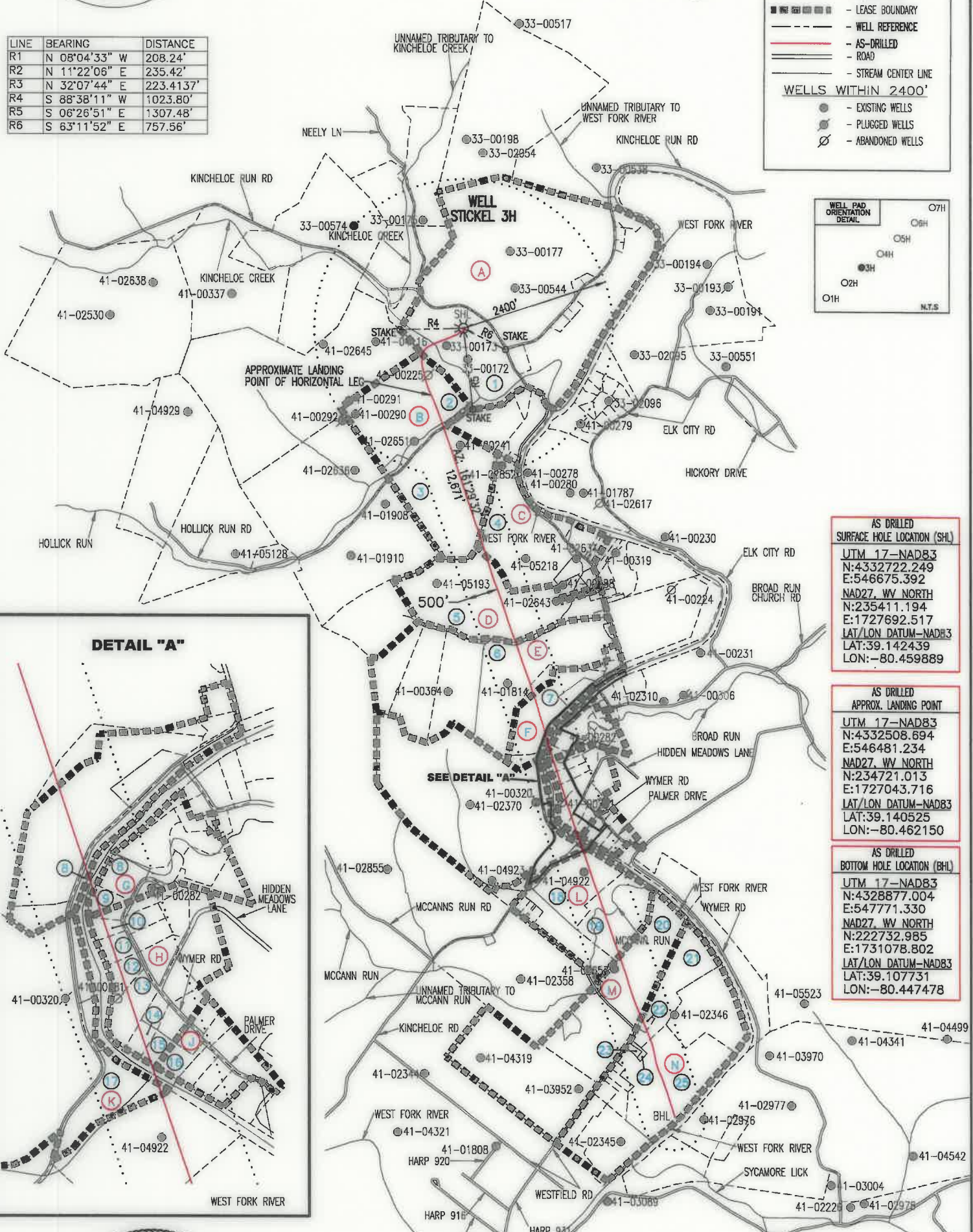
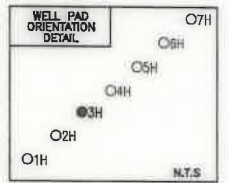
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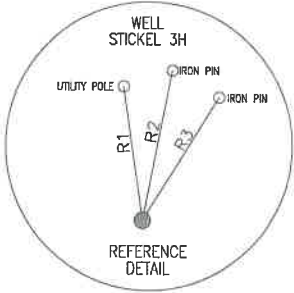


# AS DRILLED

## PLAT STICKEL

### 3H

## PAGE 2 OF 2



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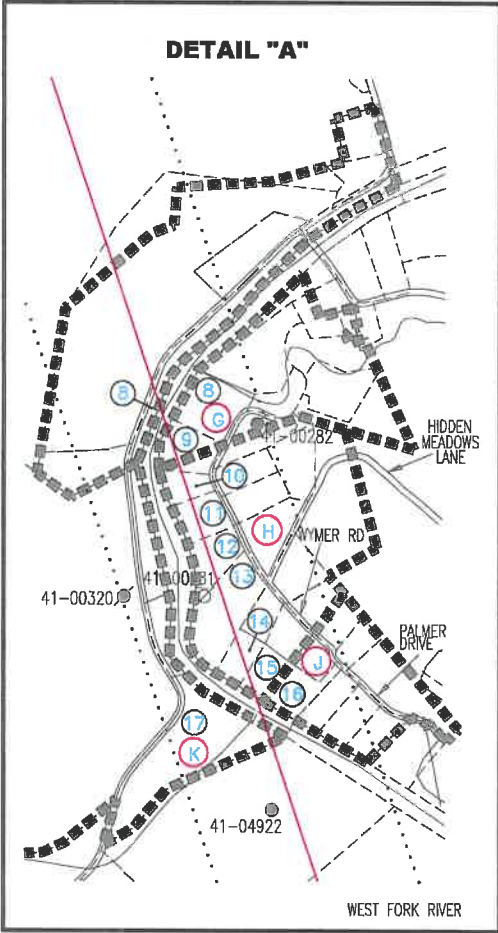
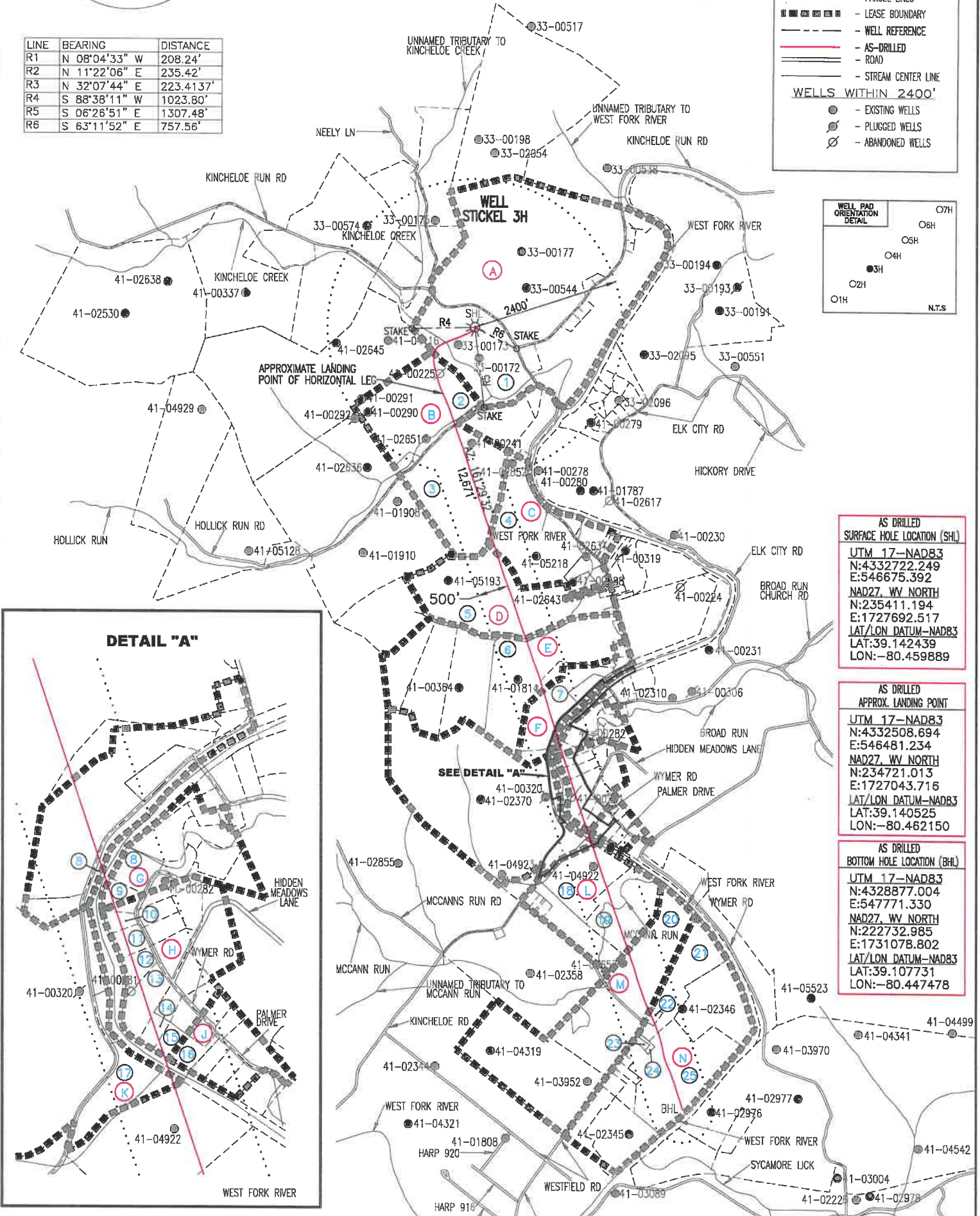
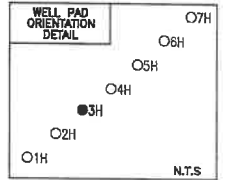


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