

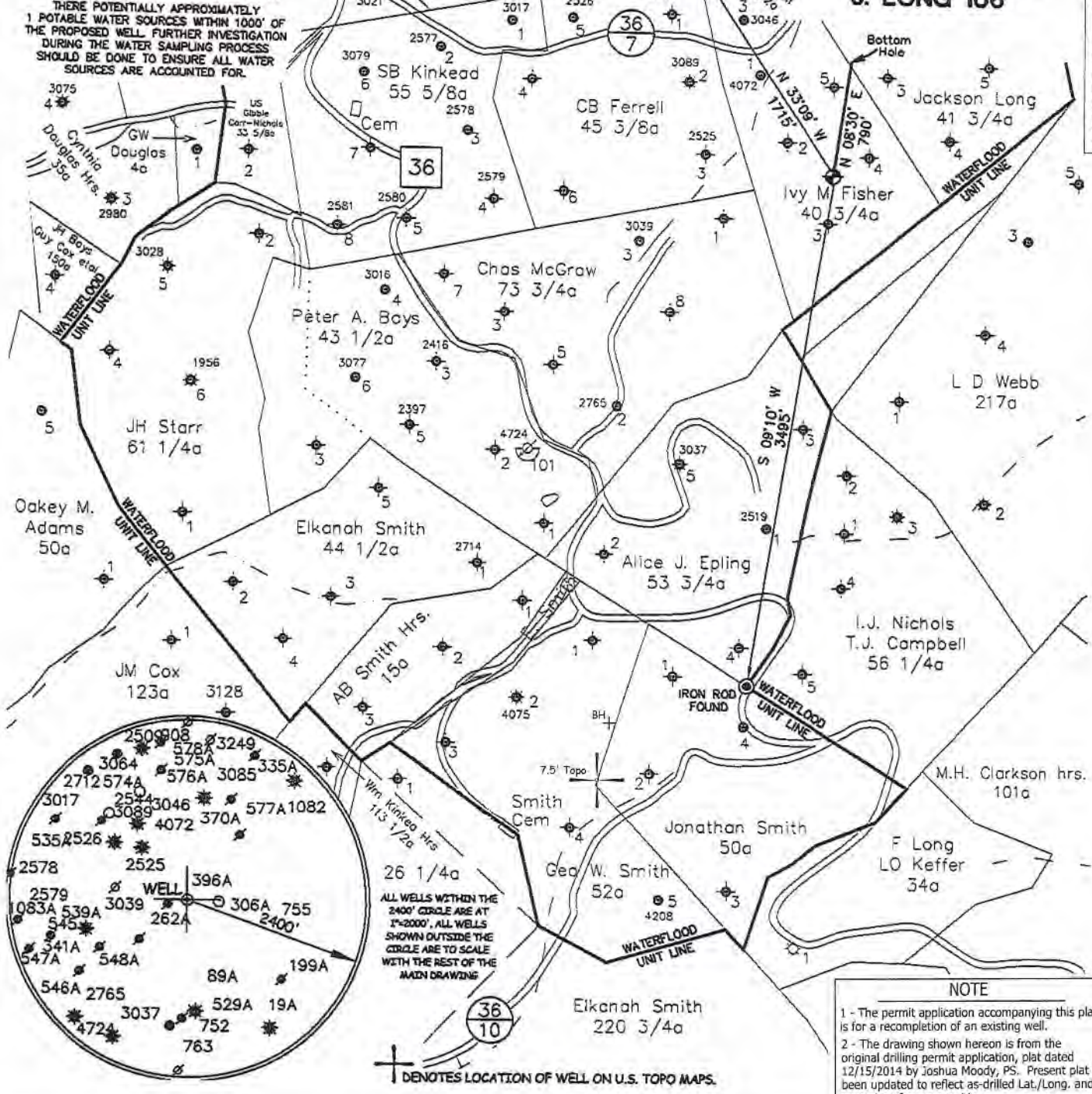
**SURVEY NOTES**

- 1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1983).
- 2 - Surface owners and adjoining information obtained from the Roane County Assessor's tax records.
- 3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete Title Opinion.
- 4 - Existing well spots from HGE or Seneca Tech, Inc. data

UTM Coordinates (Zone 17N-NAD 1983)	
Surface	N-4,285,299m. E-476,138m.
Bottom Hole	N-4,285,537m. E-476,174m.

LOCATION REFERENCES	
MAGNETIC BEARING	S 04° E 104.0' 6" HICKORY
	S 85° E 125.8' 10" HICKORY

# MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- J. LONG 106



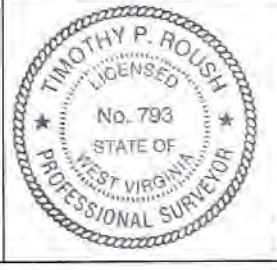
**NOTE**

- 1 - The permit application accompanying this plat is for a recompletion of an existing well.
- 2 - The drawing shown hereon is from the original drilling permit application, plat dated 12/15/2014 by Joshua Moody, PS. Present plat has been updated to reflect as-drilled Lat./Long. and current surface ownership.

FILE NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY \_\_\_\_\_  
 PROVEN SOURCE OF ELEVATION DGPS Survey  
 (Sub-Meter Mapping Grade)

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) *[Signature]*  
 TIMOTHY P. ROUSH PS 793



WEST VIRGINIA  
 Division of Environmental Protection  
 Office of Oil and Gas  
 601 57th Street  
 Charleston, West Virginia 25301

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

LOCATION: ELEVATION 1,038' WATERSHED Rush Run  
 DISTRICT Smithfield COUNTY Roane  
 QUADRANGLE Looneyville 7.5'

SURFACE OWNER Willie King ACREAGE 40.16 Ac.  
 OIL & GAS ROYALTY OWNER Myrtle Long Brooks, et al. LEASE ACREAGE 42 Ac.  
 LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
 STIMULATE  PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
 FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Big Injun ESTIMATED DEPTH 2,555' MD  
 WELL OPERATOR H.G. Energy LLC. DESIGNATED AGENT Diane White  
 ADDRESS 5260 DuPont Road ADDRESS 5260 DuPont Road  
 Parkersburg, WV 26101 Parkersburg, WV 26101

DATE July 24, 2020  
 FARM Jackson B. Long No.106  
 API WELL NO. 47 - 087 - 04767



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THERE POTENTIALLY APPROXIMATELY 1 POTABLE WATER SOURCES WITHIN 1000' OF THE PROPOSED WELL. FURTHER INVESTIGATION DURING THE WATER SAMPLING PROCESS SHOULD BE DONE TO ENSURE ALL WATER SOURCES ARE ACCOUNTED FOR.

SURVEY NOTES

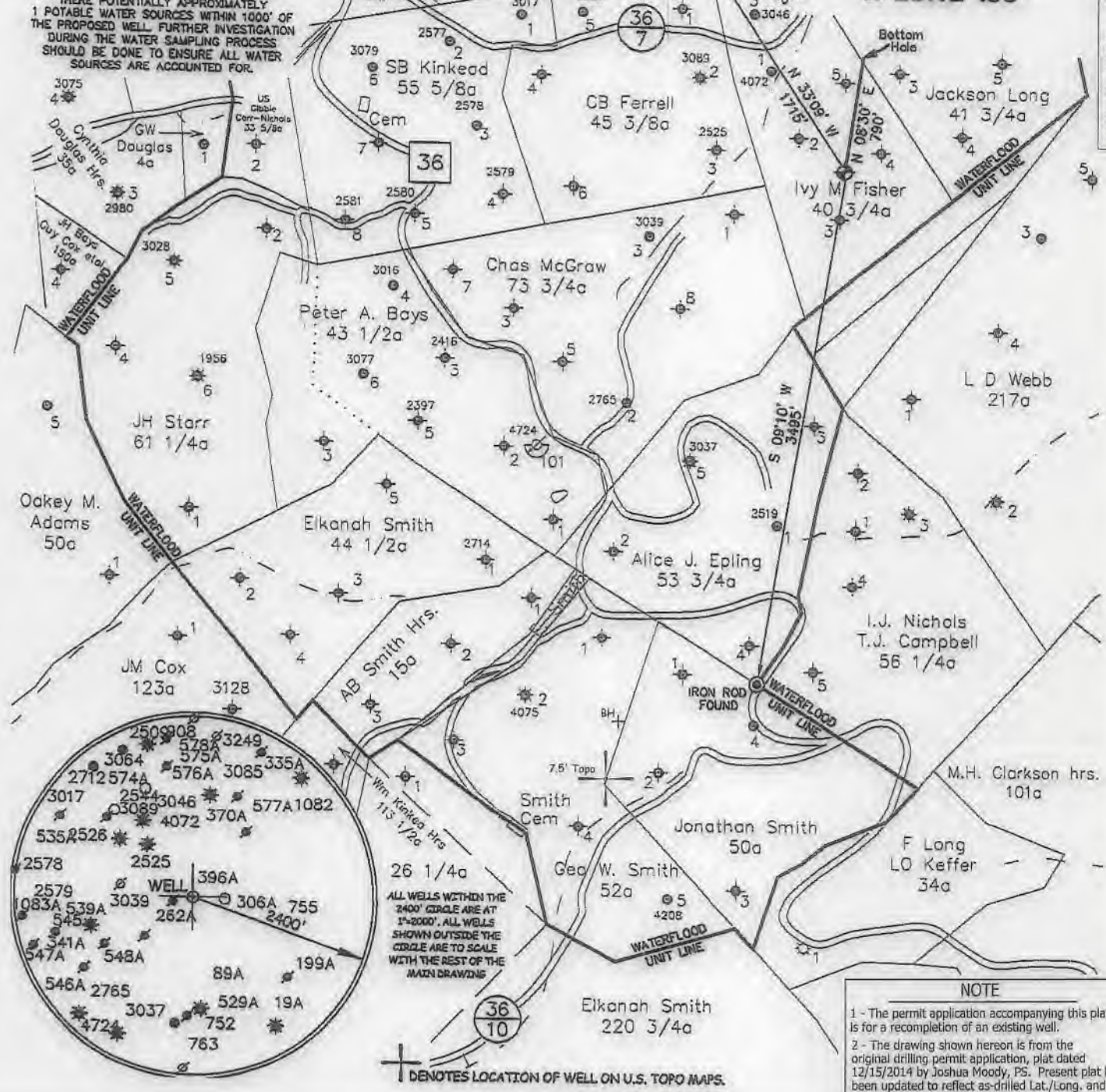
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MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- J. LONG 106



ALL WELLS WITHIN THE 2400' CIRCLE ARE AT 1"=2000'. ALL WELLS SHOWN OUTSIDE THE CIRCLE ARE TO SCALE WITH THE REST OF THE MAIN DRAWING

+ DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.

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(SIGNED) TIMOTHY P. ROUSH PS 793



WEST VIRGINIA Division of Environmental Protection Office of Oil and Gas 601 57th Street Charleston, West Virginia 25301



DATE July 24, 2020 FARM Jackson B. Long No.106 API WELL NO. 47 - 087 - 04767 SR

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WELL OPERATOR HG Energy LLC. DESIGNATED AGENT Diane White ADDRESS 5260 DuPont Road ADDRESS 5260 DuPont Road Parkersburg, WV 26101