

(BOT. HL: LON: -81°16'27.2") | LON: -81°16'28.7" 7030'

LAT: 38°45'00"

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

LON: 81°15'00"

12410'

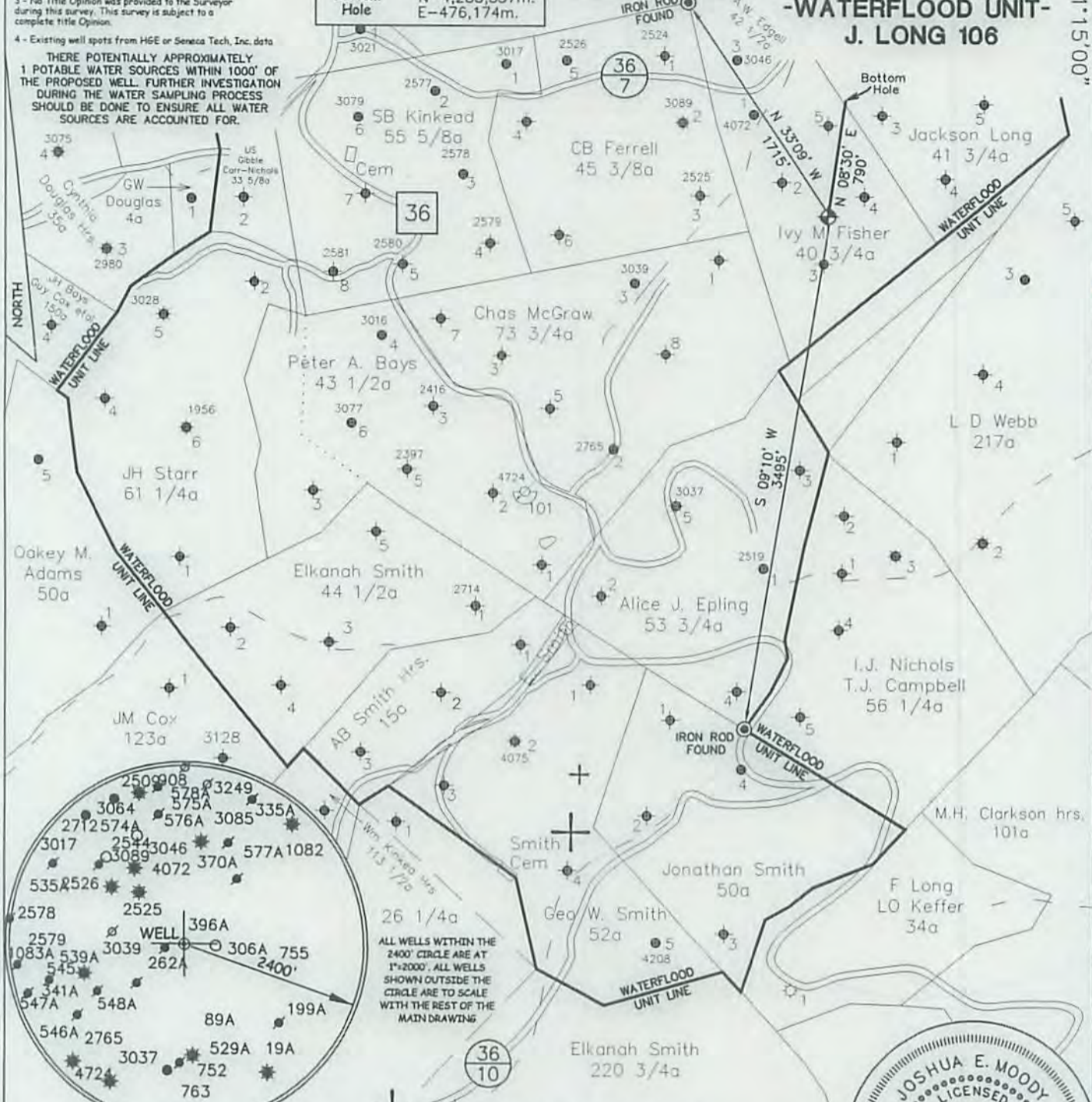
LAT: 38°42'57.3"

(BOTTOM HOLE: LAT: 38°43'05.0")

- 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 1927).
 - 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
- 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.

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



JOB # 14-033
 DRAWING # 14CLOVER FOLDER
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEV. MAPPING GRADE GPS

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



**WEST VIRGINIA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,
OFFICE OF OIL AND GAS**

MOODY LAND SURVEYING, LLC
ST. MARYS, WV 26170



JOSHUA E. MOODY, P.S. 2020
 DATE 12/15/14
 OPERATOR'S WELL
J. LONG # 106

WEST VIRGINIA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1038' WATERSHED RUSH CREEK OF HENRY'S FORK API WELL # 47-087-047675
 DISTRICT SMITHFIELD COUNTY ROANE STATE WV COUNTY ROANE PERMIT 047675
 QUADRANGLE LOONEYVILLE 7.5'

SURFACE OWNER WILLIE KING ACREAGE 40.16 ACRES +/-
 OIL & GAS ROYALTY OWNER MYRTLE LONG BROOKS ET AL LEASE ACREAGE 42.00 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (N 08°30' E 790')
 PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION BIG INJUN ESTIMATED DEPTH TVD=2,200' MD=2,740'
 WELL OPERATOR H.G. ENERGY, LLC ADDRESS 5260 DuPONT ROAD
 ADDRESS PARKERSBURG, WV 26101 ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101

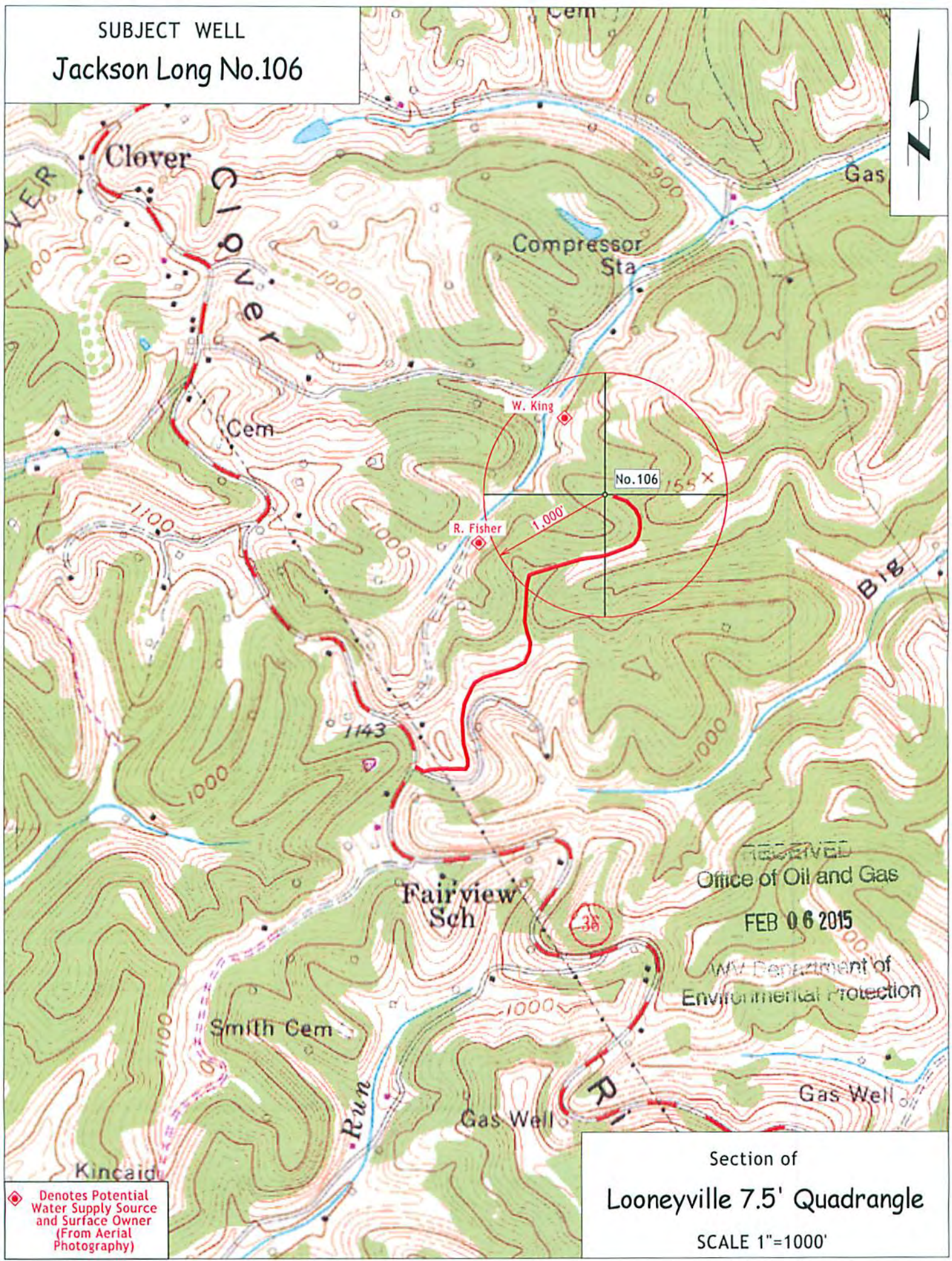
FORM WW-6

WV Department of Environmental Protection

04/03/2015

COUNTY NAME PERMIT

SUBJECT WELL
Jackson Long No.106



◆ Denotes Potential Water Supply Source and Surface Owner (From Aerial Photography)

RECEIVED
Office of Oil and Gas
FEB 06 2015
WV Department of Environmental Protection

Section of
Looneyville 7.5' Quadrangle
SCALE 1"=1000'