

(BOTTOM HOLE: 80°39'31.4")

LON: -80°40'35.2"

LAT: 39°37'30"

LON: 80°40'00"

15,132'

LAT: 39°35'00.5"

(BOTTOM HOLE: 39°34'22.2")

1 - Well Site and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM 61N North (Zone 17 North - NAD 1983).

2 - Surface owners and adjacent information obtained from the Wetzel 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.

UTM Coordinates (Zone 17N-NAD 1983)

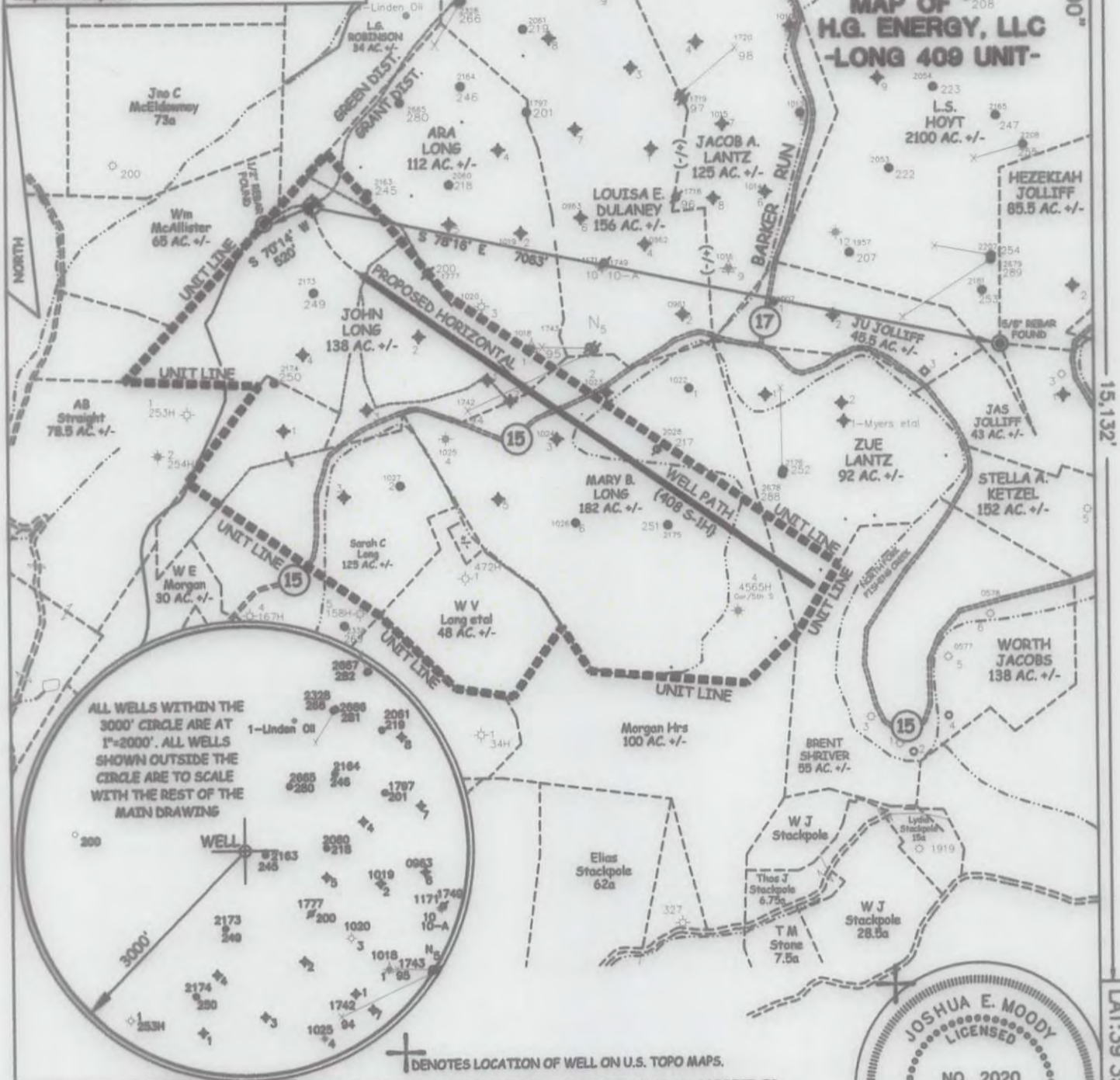
Surface N-4,381,567m.  
E-527,801m.

Bottom Hole N-4,380,412m.  
E-529,328m.

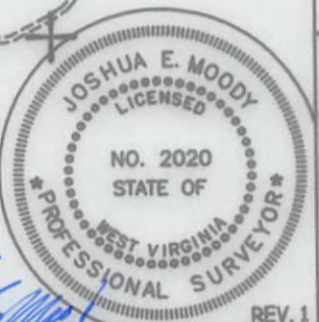
LOCATION REFERENCES

NAD 1983  
N 80°13' E 234' SPIKE  
S 86°30' E 174' SPIKE

MAP OF  
H.G. ENERGY, LLC  
-LONG 409 UNIT-



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



JOB # 12-025  
DRAWING # 12HG409FOLDER  
SCALE 1" = 1500'  
MINIMUM DEGREE OF ACCURACY SUB-METER  
PROVEN SOURCE OF ELEV. SUBMETER 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 1/31/13  
OPERATOR'S WELL # 408 S-1H

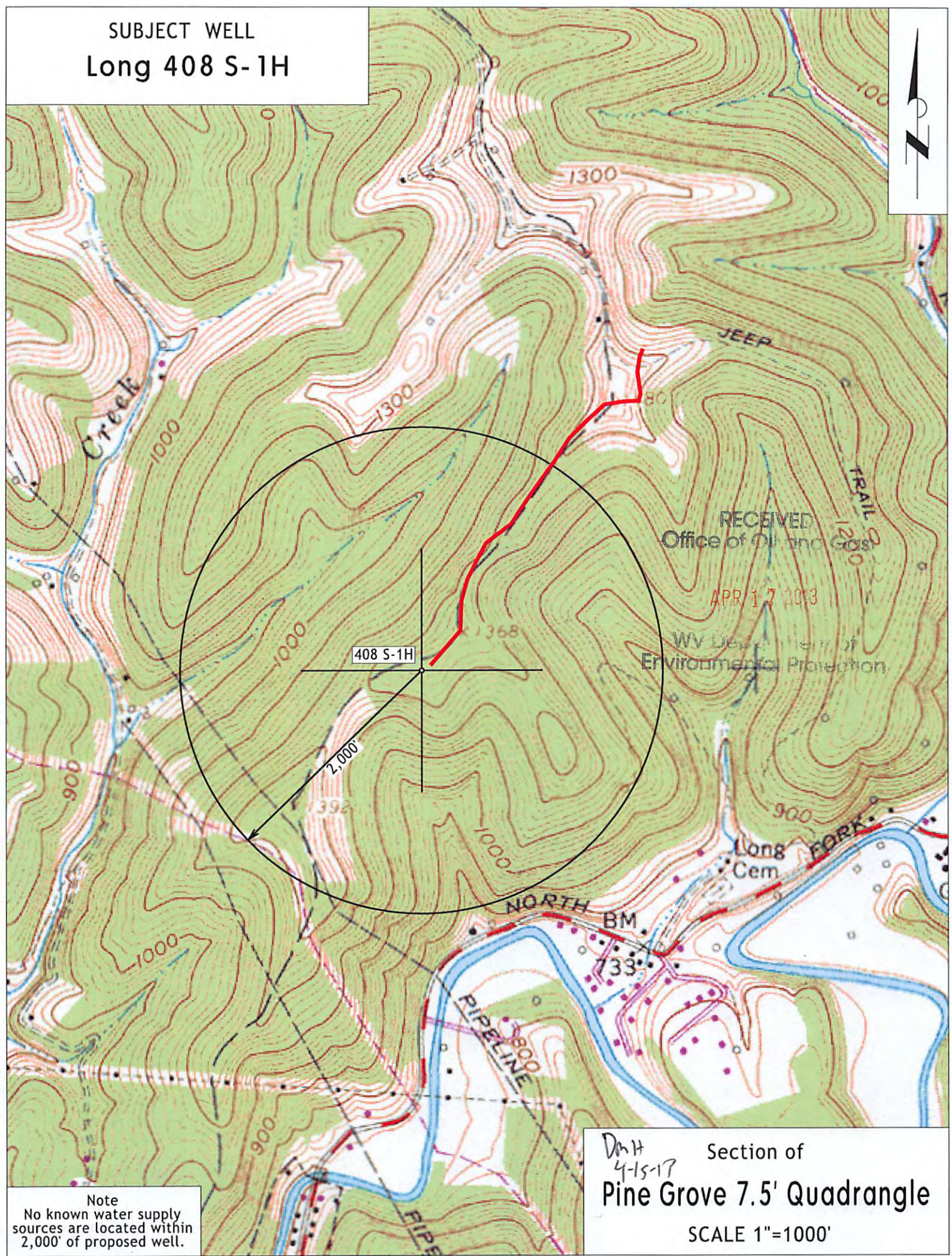
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  HORIZONTAL   
(IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW  API WELL # **HGA 2887**  
LOCATION: ELEVATION 1340' WATERSHED NORTH FOR, FISHING CREEK 47 - 103  
DISTRICT GRANT COUNTY WETZEL STATE COUNTY PERMIT  
QUADRANGLE PINE GROVE 7.5'

SURFACE OWNER FRANCIS D. & FREEDA M. BROWN (surface hole) ACREAGE 103 ACRES +/-  
OIL & GAS ROYALTY OWNER ROBERT B. MYERS ET AL LEASE ACREAGE 419 ACRES +/-  
PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION   
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
PLUG & ABANDON  CLEAN OUT & REPLUG   
TARGET FORMATION MARCELLUS  
WELL OPERATOR H.G. ENERGY, LLC  
ADDRESS 5260 DuPONT ROAD PARKERSBURG, WV 26101  
ESTIMATED DEPTH TVD= 7,396' MD= 13,163'  
DESIGNATED AGENT MIKE KIRSCH  
ADDRESS 5260 DuPONT ROAD PARKERSBURG, WV 26101  
LEASE # 31950-50 et al



SUBJECT WELL  
Long 408 S-1H



RECEIVED  
Office of Oil and Gas  
APR 17 2013  
WV Department of  
Environmental Protection

Note  
No known water supply  
sources are located within  
2,000' of proposed well.

DmH  
4-15-17  
Section of  
**Pine Grove 7.5' Quadrangle**  
SCALE 1"=1000'