

BOTTOM HOLE: LON: -80°38'17.6"

LON: -80°36'45.6"

8260

LON: 80°35'00"

3610

LAT: 39°36'54.3"

BOTTOM HOLE: LAT: 39°37'50.8"

**SURVEY NOTES**

1 - Well ties and Latitude and Longitude were measured by DGPS (5m-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1983).

2 - Surface owners & adjacent information obtained from Wetzel Co. Assessor's Office. Lease names, & line mapping provided by HGE GTS system. Ends of unit lines mapped by MLS LLC & HGE.

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-4,385,118m.  
E-533,265m.

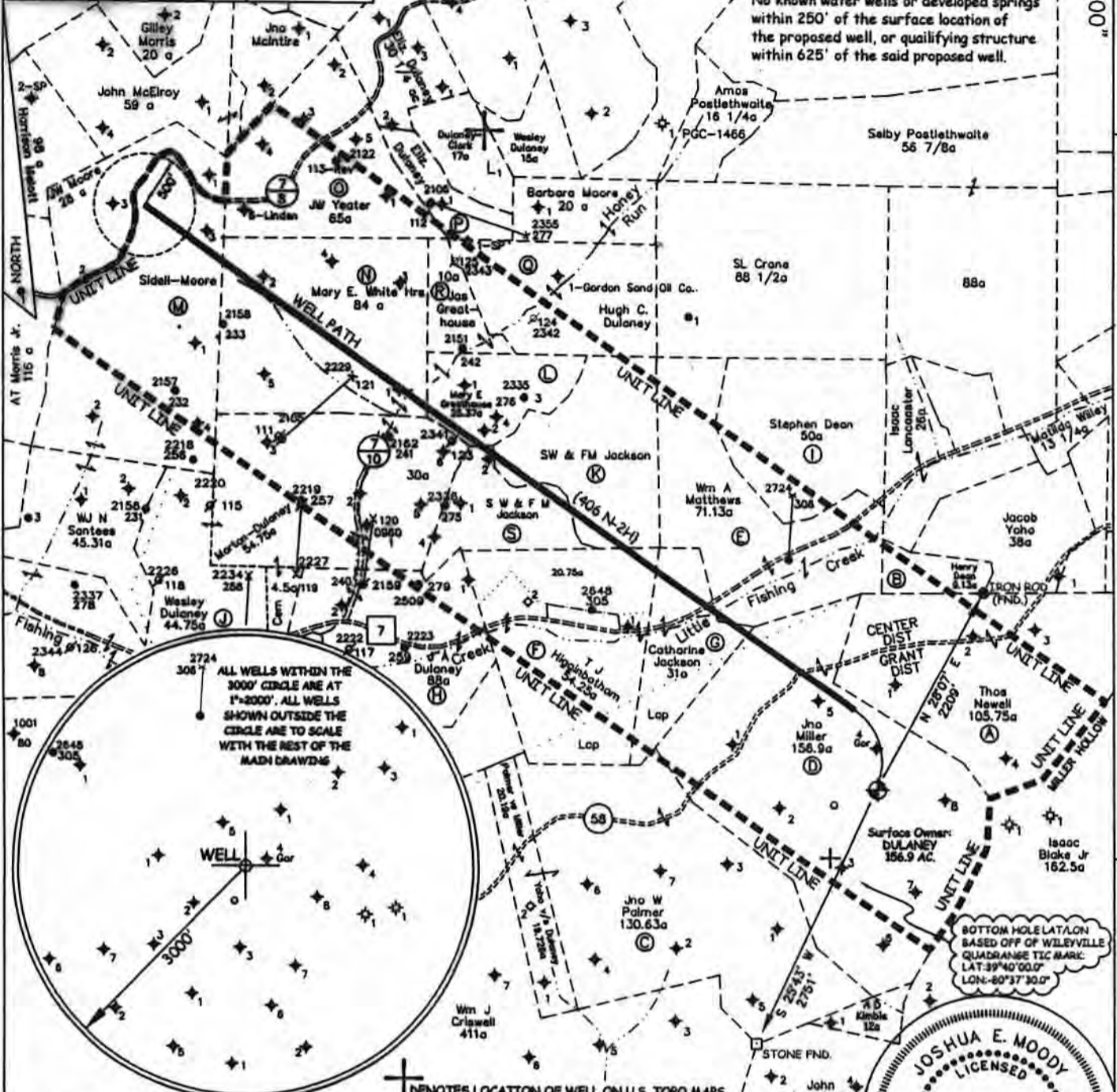
Bottom Hole N-4,386,851m.  
E-531,063m.

**NAD83 LOCATION REFERENCES**

N 42°57' W 517' 5/8" REBAR  
S 21°31' E 220' SPZKE

LAT: 39°37'30"  
**MAP OF**  
**H.G. ENERGY, LLC**  
**-MILLER 406 UNIT-**

No known water wells or developed springs within 250' of the surface location of the proposed well, or qualifying structure within 625' of the said proposed well.



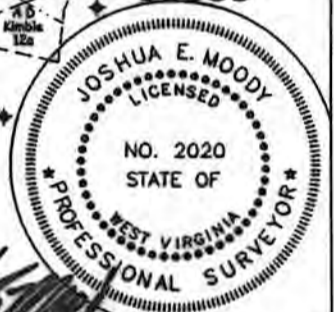
JOB # 13-001  
DRAWING # 13HG405B 406B  
SCALE 1" = 1500'  
MINIMUM DEGREE OF ACCURACY 1/200'  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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 1/27/14  
OPERATOR'S WELL # 406 N-2H

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_ HORIZONTAL  **CANCELLED**  
(IF "GAS") PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
LOCATION: ELEVATION 1369' WATERSHED NORTH FOR, FISHING CREEK  
DISTRICT GRANT COUNTY WETZEL 47 - 103 - 0298646A  
QUADRANGLE BIG RUN 7.5' STATE COUNTY PERMIT

SURFACE OWNER DALE K. DULANEY (surface hole) ACREAGE 156.9 AC. +/-  
OIL & GAS ROYALTY OWNER ARTHUR MILLER et al LEASE ACREAGE 156.9 AC. +/-  
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 ESTIMATED DEPTH TVD= 7,080' MD= 16,212'  
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH  
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD  
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

FORM WW-6 LEASE # 107748-00

03/13/2015