

BOTTOM HOLE: LON: -80°37'56.3"

LON: -80°36'45.4"

8250

LON: 80°35'00"

3640

LAT: 39°36'54.0"

BOTTOM HOLE: LAT: 39°38'03.5"

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 & adjoiner information obtained from Wetzel Co. Assessor's Office. Lease names & line mapping provided by HGE GIS system. Ends of unit lines mapped by MLS LLC & HGE. (Zone 17 North - NAD 1927)

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)

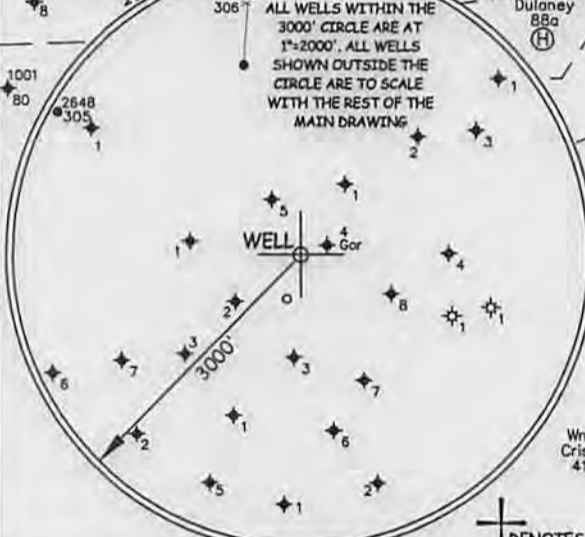
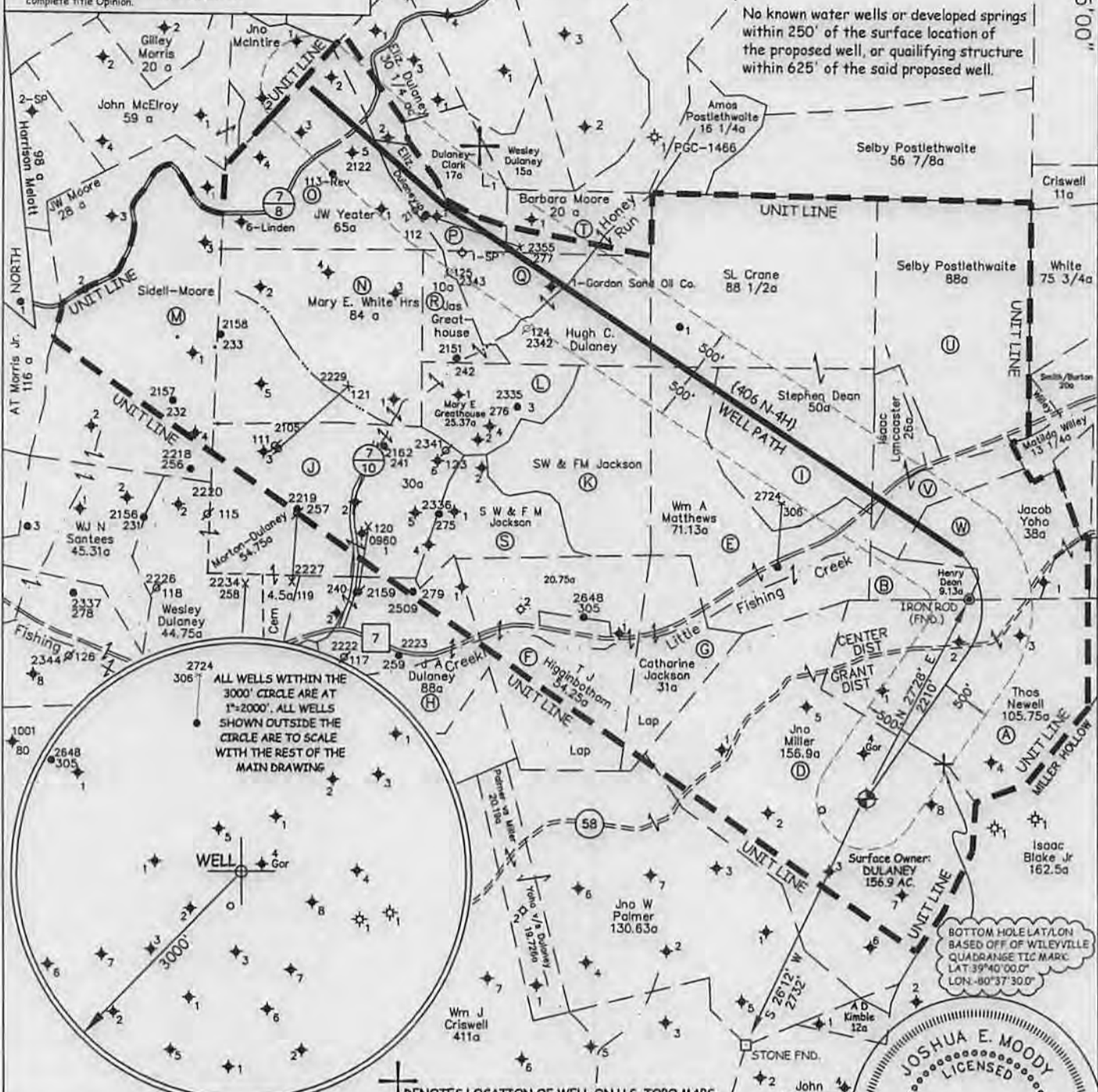
Surface N--4,385,110m.
E--533,268m.

Bottom Hole N--4,387,244m.
E--531,570m.

NAD83
LOCATION REFERENCES
N 41°54' W 545' 5/8" REBAR
S 21°13' E 190' SPIKE

LAT: 39°37'30"
**REVISED 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.



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

BOTTOM HOLE LAT/LON BASED OFF OF WILEYVILLE QUADRANGLE TIC MARK
LAT: 39°40'00.0"
LON: -80°37'30.0"



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 5/07/14
OPERATOR'S WELL # 406 N-4H

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 1369' WATERSHED NORTH FOR, FISHING CREEK API WELL # 47 - 103 - 03026
DISTRICT GRANT COUNTY WETZEL STATE COUNTY PERMIT

QUADRANGLE BIG RUN 7.5'

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= 7,230' MD= 17,053'
WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT MIKE KIRSCH
ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

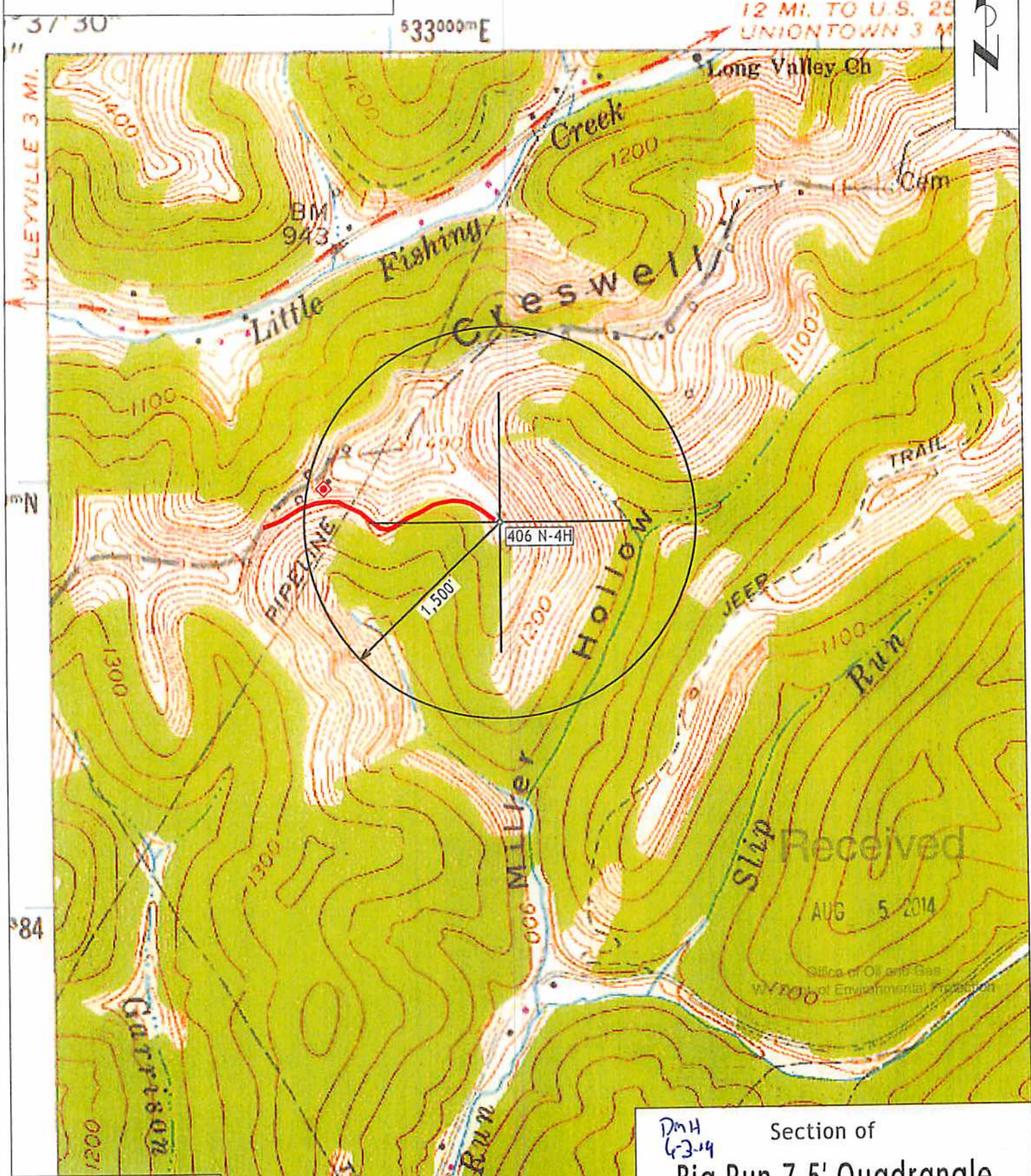
FORM WW-6

LEASE # 107748-00

09/05/2014

SUBJECT WELL
Mary A. Miller 406 N-4H

OF THE INTERIOR AL SURVEY



◆ Denotes Potential Water Supply Source
(From Aerial Photography)

DMH
6-3-14
Section of
Big Run 7.5' Quadrangle
SCALE 1"=1000'