

(BOT. HL: LON:-81°57'57.1") LON:-81°58'03.4"

2670'

LAT:38°15'00"

LON:81°57'30"

5885'

LAT:38°14'01.8"

(BOTTOM HOLE: LAT:38°13'59.5")

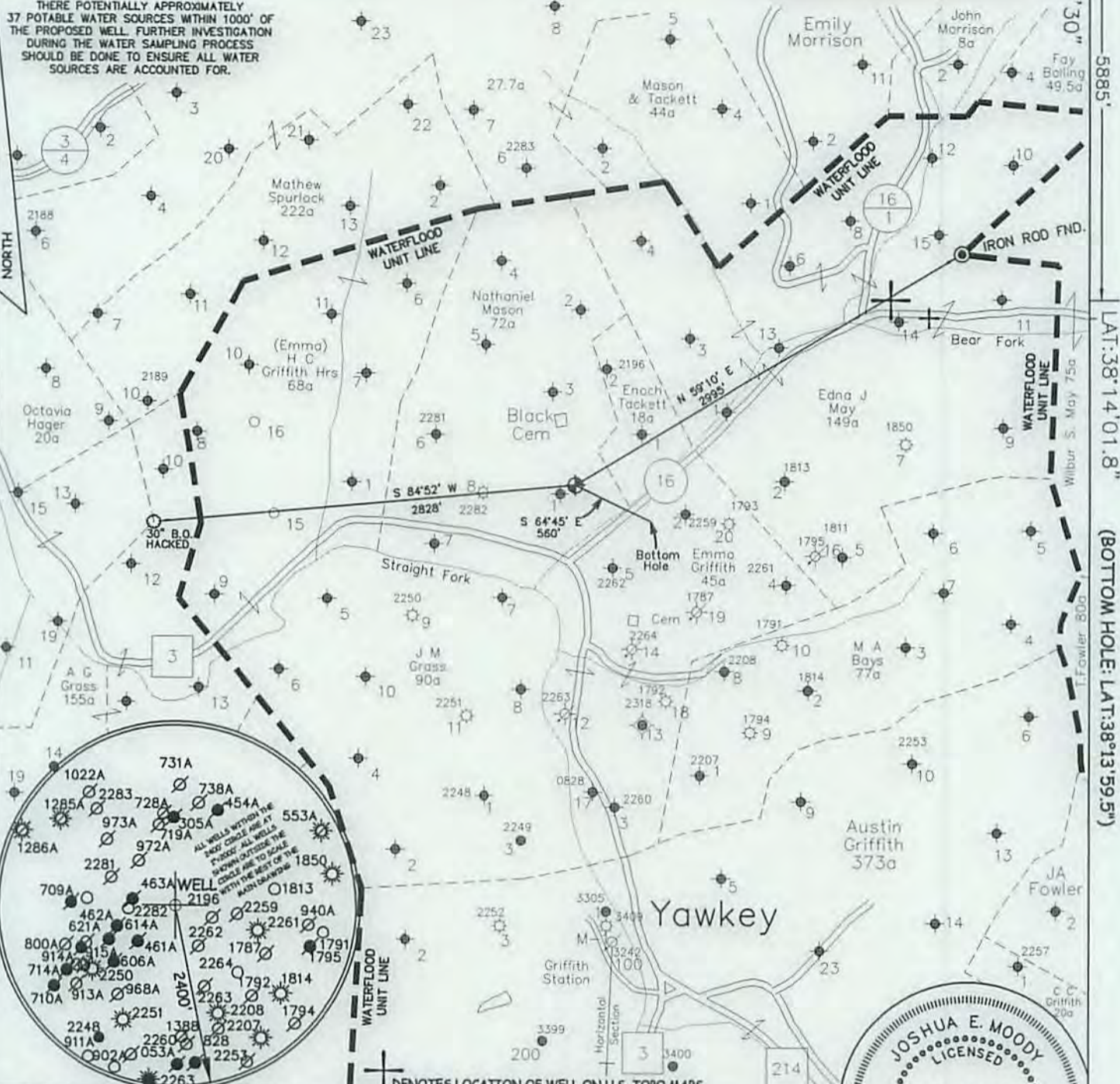
1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).  
 2 - Surface owners and adjoining information obtained from the Lincoln County Assessor's tax records.  
 3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete Title Opinion.

SURVEY NOTES

UTM Coordinates (Zone 17N-NAD 1983)	
Surface	N-4,232,213m. E-415,328m.
Bottom Hole	N-4,232,141m. E-415,482m.

LOCATION REFERENCES	
MAGNETIC BEARING	
5 72° E 102.0'	38° W.O.
5 22° W 81.2'	7° R.O.

**MAP OF  
H.G. ENERGY, LLC  
-WATERFLOOD UNIT-  
EMMA GRIFFITH 145**



JOB # 14-023  
 DRAWING # 15HG LC 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 PRESCRIBED 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 3/10/15  
 OPERATOR'S WELL  
 EMMA GRIFFITH # 145

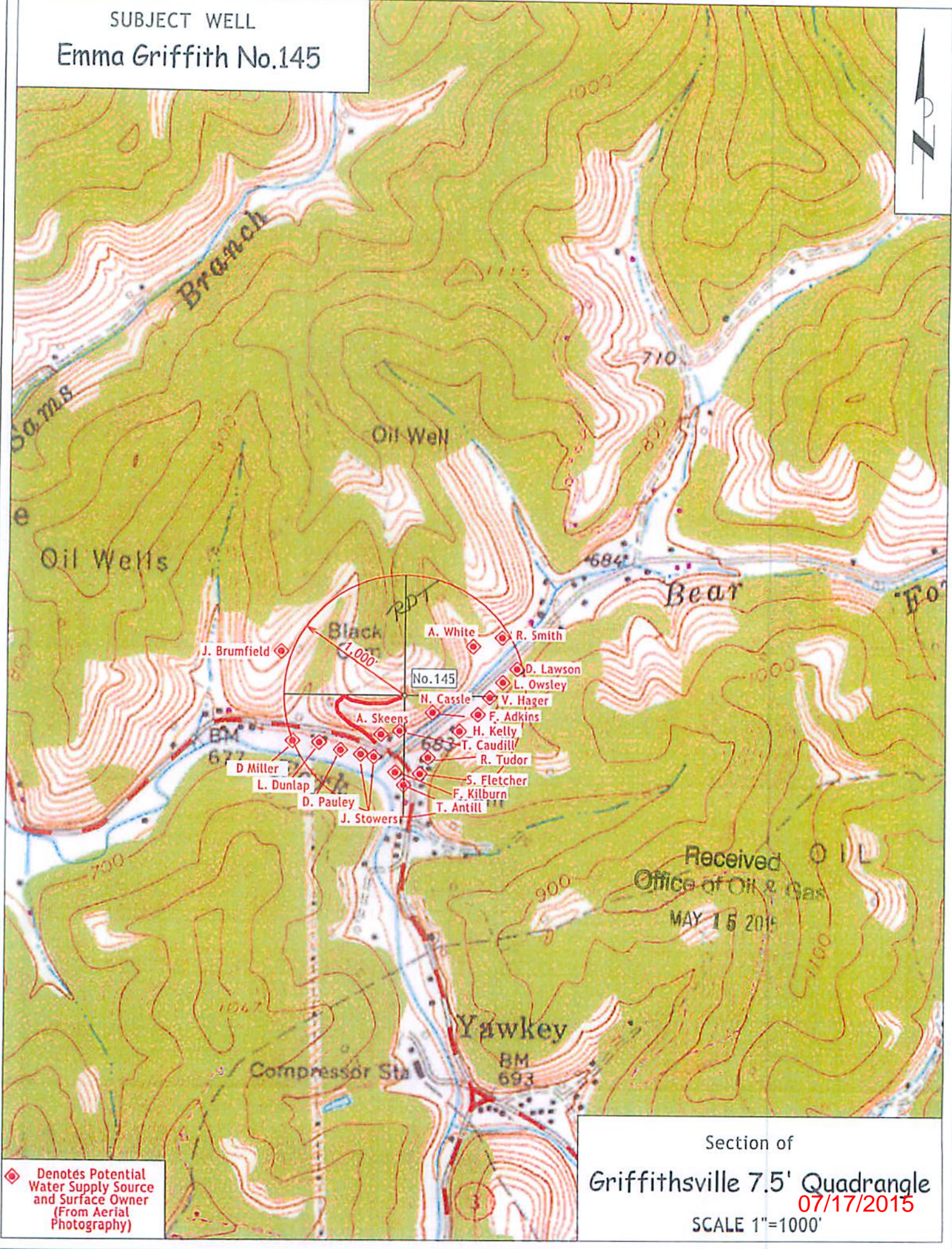
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  HORIZONTAL   
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 800' WATERSHED STRAIGHT & BEAR FORK API WELL # 47 - 043 - 03497S  
 DISTRICT DUVAL COUNTY LINCOLN STATE COUNTY PERMIT

SURFACE OWNER JOSHUA D. BRUMFIELD ACREAGE 42.72 ACRES +/-  
 OIL & GAS ROYALTY OWNER HG ENERGY, LLC ET AL LEASE ACREAGE 113 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 (S 64°45' E 560')  
 PLUG & ABANDON  CLEAN OUT & REPLUG   
 TARGET FORMATION BEREA ESTIMATED DEPTH TVD=2,455' MD=2,984'  
 WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT D. WHITE  
 ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD  
 PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

07/17/2015

SUBJECT WELL  
Emma Griffith No.145



- J. Brumfield
- A. White
- R. Smith
- D. Lawson
- L. Owsley
- N. Cassle
- V. Hager
- F. Adkins
- H. Kelly
- T. Caudill
- R. Tudor
- S. Fletcher
- F. Kilburn
- T. Antill
- A. Skeens
- D. Miller
- L. Dunlap
- D. Pauley
- J. Stowers

Received  
Office of Oil & Gas  
MAY 15 2015

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

Section of  
Griffithsville 7.5' Quadrangle  
07/17/2015  
SCALE 1"=1000'