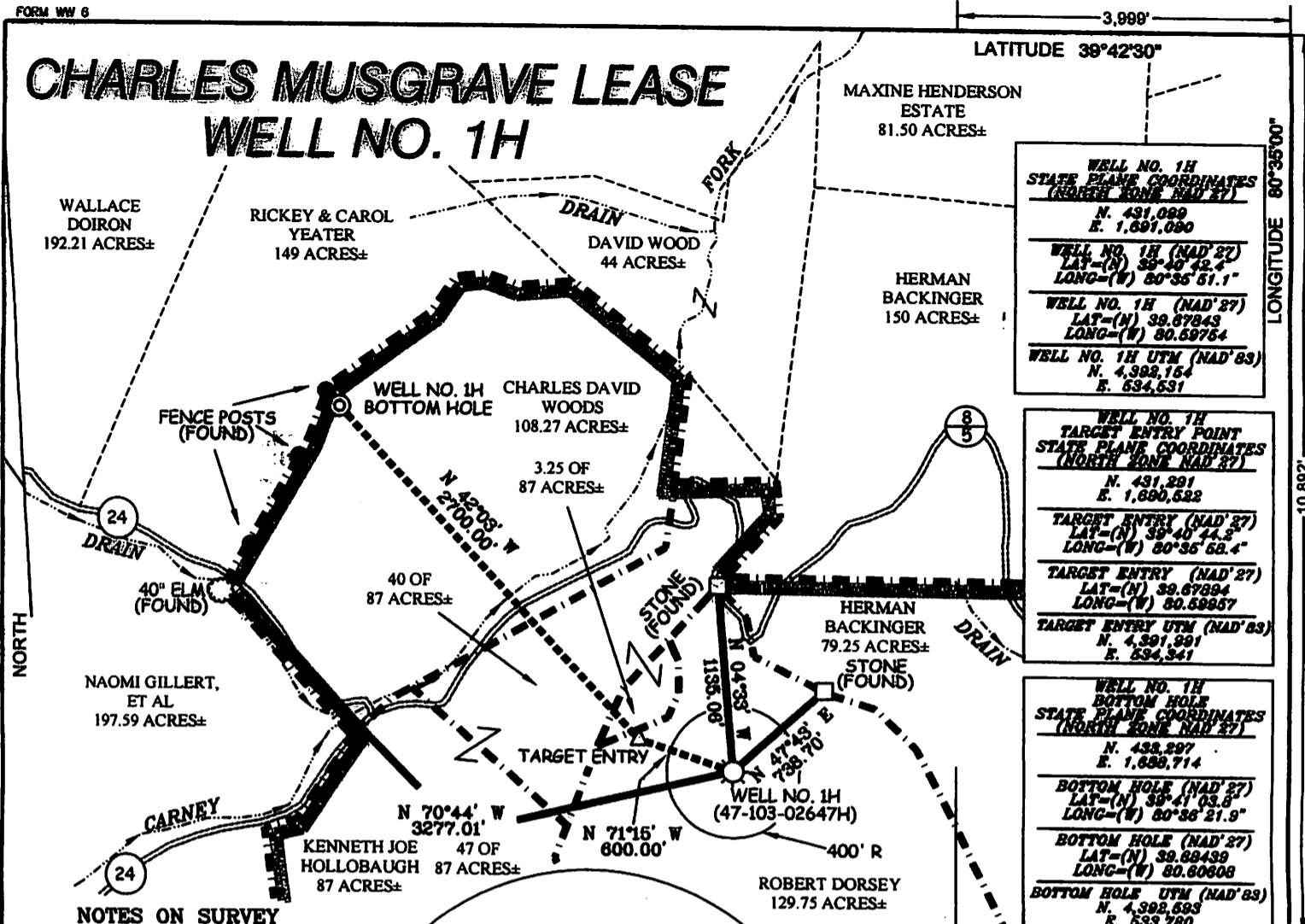


CHARLES MUSGRAVE LEASE WELL NO. 1H



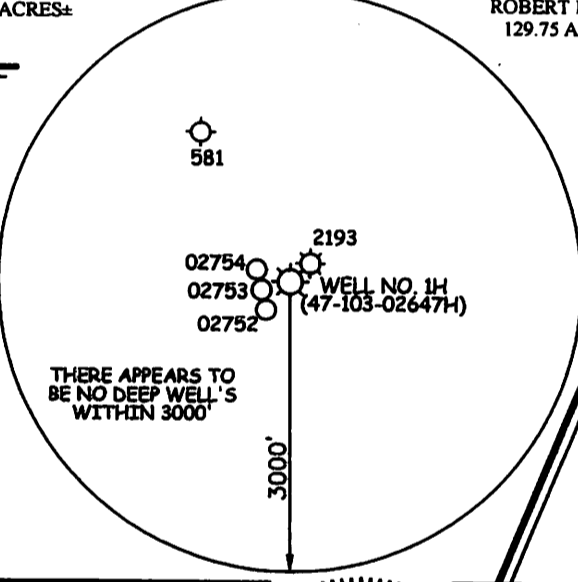
WELL NO. 1H STATE PLANE COORDINATES (NORTH ZONE NAD '27)
N. 431,080 E. 1,091,090
WELL NO. 1H (NAD '27) LAT=(N) 39°40' 42.4" LONG=(W) 80°35' 51.1"
WELL NO. 1H (NAD '27) LAT=(N) 39.67843 LONG=(W) 80.59754
WELL NO. 1H UTM (NAD '83) N. 4,392,154 E. 634,531

WELL NO. 1H TARGET ENTRY POINT STATE PLANE COORDINATES (NORTH ZONE NAD '27)
N. 431,281 E. 1,090,522
TARGET ENTRY (NAD '27) LAT=(N) 39°40' 44.2" LONG=(W) 80°35' 53.4"
TARGET ENTRY (NAD '27) LAT=(N) 39.67894 LONG=(W) 80.59857
TARGET ENTRY UTM (NAD '83) N. 4,391,991 E. 634,341

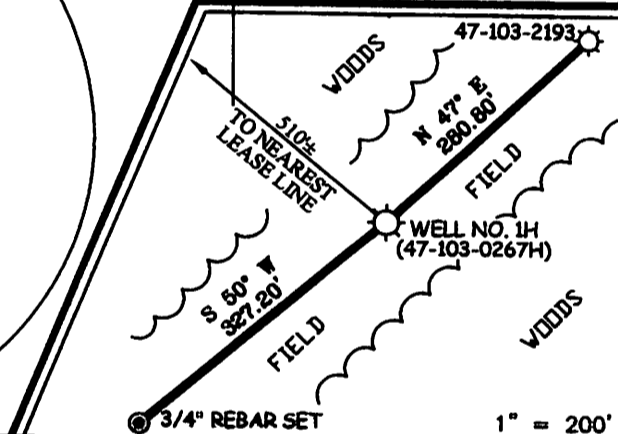
WELL NO. 1H BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27)
N. 432,297 E. 1,088,714
BOTTOM HOLE (NAD '27) LAT=(N) 39°41' 03.8" LONG=(W) 80°36' 21.9"
BOTTOM HOLE (NAD '27) LAT=(N) 39.68439 LONG=(W) 80.60808
BOTTOM HOLE UTM (NAD '83) N. 4,392,593 E. 633,780

NOTES ON SURVEY

1. TIES TO WELLS, REFERENCES, AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 142 PAGE 50 AND ADJOINING DEEDS.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF WETZEL COUNTY IN JULY, 2012.
4. WELL COORDINATES ESTABLISHED BY DGPS(SURVEY GRADE).
5. PLAT REVISED 05/30/13 TO SHOW CHANGES OF TOP HOLE FROM SHALLOW TO DEEP AND TO UPDATE SPOT CIRCLE, SURFACE OWNERSHIP, AND D. AGENT. REVISED REF. BOX 06/03/13. NO FIELD WORK WAS PERFORMED FOR THESE CHANGES.



REFERENCES



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. *C. Victor Moyers*
849



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE DECEMBER 14, 20 10
REVISED DATE MAY 30, 20 13
OPERATORS WELL NO. CHARLES MUSGRAVE 1H
API WELL NO. 47-103-02647 **REVISED**
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7507P1R2(340-09)
PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE) SCALE 1" = 1,000'

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,349' WATERSHED MILLER RUN & CARNEY FORK
DISTRICT CENTER COUNTY WETZEL QUADRANGLE LITTLETON 7.5'

SURFACE OWNER ROBERT DORSEY ACREAGE 129.75±
ROYALTY OWNER CHARLES E. MUSGRAVE, ET AL LEASE ACREAGE 129.75, 87, & 108.27±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
ESTIMATED DEPTH TD 7,584' / THD 10,356'

WELL OPERATOR GRENADIER ENERGY PARTNERS, LLC DESIGNATED AGENT DIANNA STAMPER-CT CORP.
ADDRESS 1610 WOODSTEAD COURT, SUITE 330 ADDRESS 707 VIRGINIA ST. EAST 15TH FL
THE WOODLANDS, TX 77380 CHARLESTON, WV 25301

06/21/2013

COUNTY NAME
PERMIT