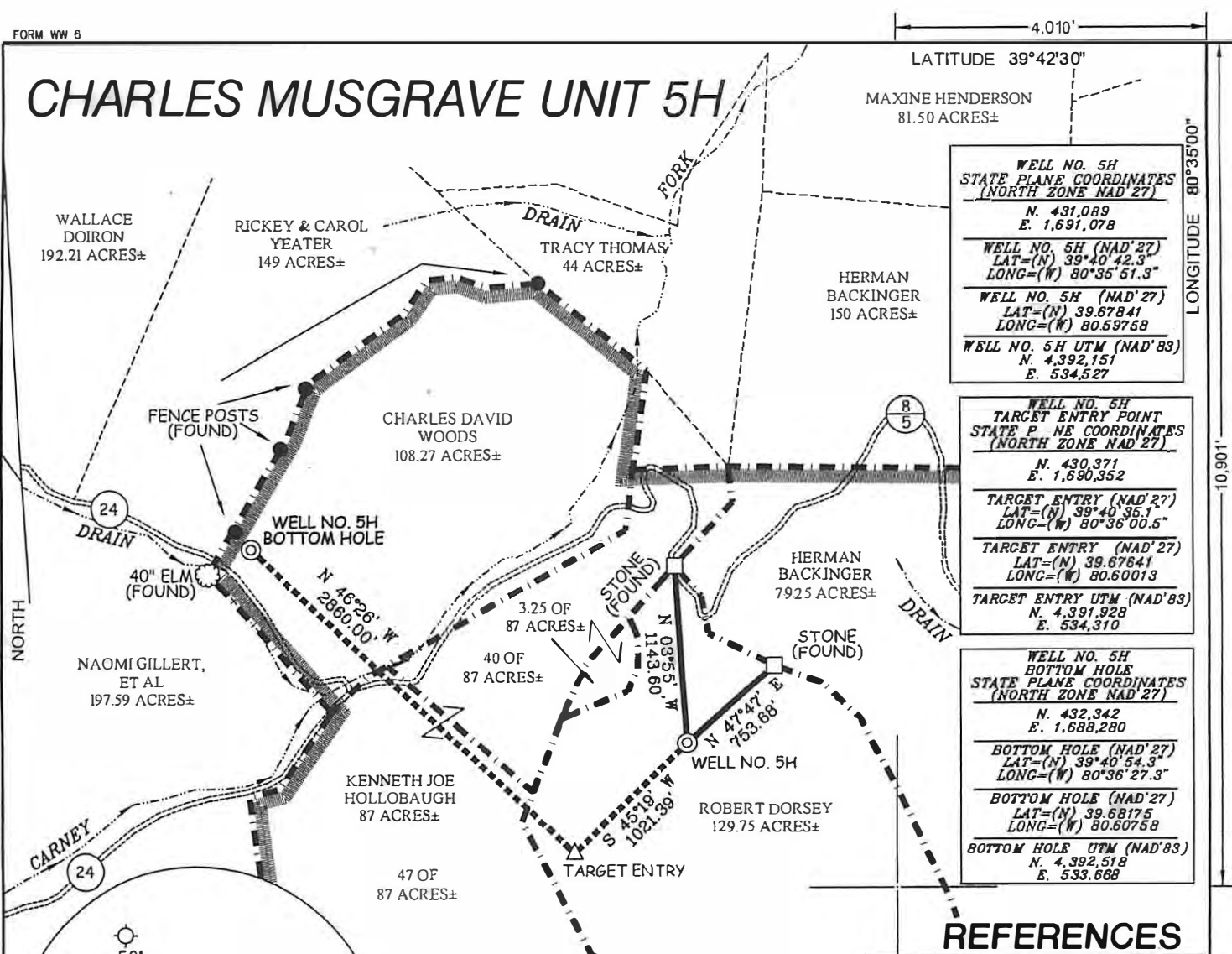
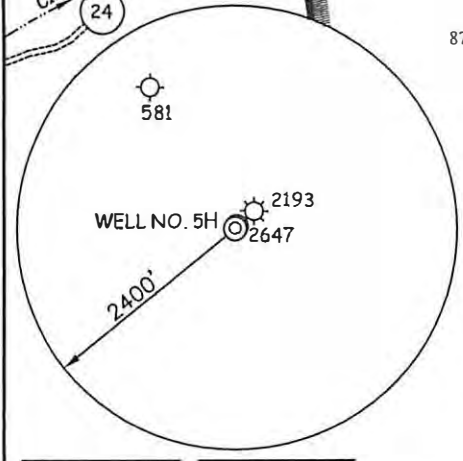


CHARLES MUSGRAVE UNIT 5H



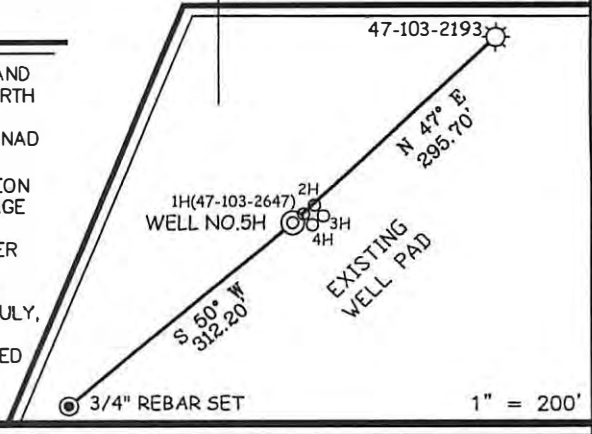
WELL NO. 5H STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 431,089 E. 1,691,078 <hr/> WELL NO. 5H (NAD'27) LAT=(N) 39°40'42.3" LONG=(W) 80°35'51.3" <hr/> WELL NO. 5H (NAD'27) LAT=(N) 39.67841 LONG=(W) 80.59758 <hr/> WELL NO. 5H UTM (NAD'83) N. 4,392,151 E. 534,527
WELL NO. 5H TARGET ENTRY POINT STATE P. NE COORDINATES (NORTH ZONE NAD '27) N. 430,371 E. 1,690,352 <hr/> TARGET ENTRY (NAD'27) LAT=(N) 39°40'42.3" LONG=(W) 80°36'00.5" <hr/> TARGET ENTRY (NAD'27) LAT=(N) 39.67841 LONG=(W) 80.60013 <hr/> TARGET ENTRY UTM (NAD'83) N. 4,391,928 E. 534,310
WELL NO. 5H BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 432,342 E. 1,688,280 <hr/> BOTTOM HOLE (NAD'27) LAT=(N) 39°40'54.3" LONG=(W) 80°36'27.3" <hr/> BOTTOM HOLE (NAD'27) LAT=(N) 39.68175 LONG=(W) 80.60758 <hr/> BOTTOM HOLE UTM (NAD'83) N. 4,392,518 E. 533,688

REFERENCES



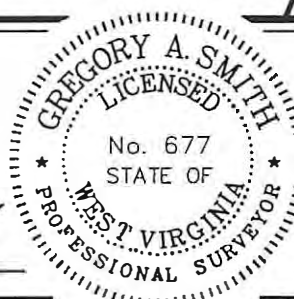
NOTES ON SURVEY

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, 2010.
4. WELL COORDINATES ESTABLISHED BY DGPS(SURVEY GRADE).



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. 677
Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE AUGUST 30 20 10
 OPERATORS WELL NO. CHARLES MUSGRAVE UNIT 5H
 API WELL NO. 47-103-02754 H
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7507P5H(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 1,344' 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 7,472' + HORIZONTAL LEG

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

04/19/2013