

**BOTTOM HOLE
WELL NO. WV 513401
STATE PLANE COORDINATES
(SOUTH ZONE)**

N. 618,223
E. 2,252,708

LAT=(N) 38.69447
LONG=(W) 80.11461

UTM, NAD83

N. 4,283,256
E. 577,015

GAS RIGHT DEED 28 LEASE 14,650 ACRES ± WELL NO. WV 513401

**LANDING POINT
WELL NO. WV 513401
STATE PLANE COORDINATES
(SOUTH ZONE)**

N. 614,590
E. 2,253,959

LAT=(N) 38.68446
LONG=(W) 80.11034

UTM, NAD83

N. 4,282,149
E. 577,396

**WELL NO. WV 513401
STATE PLANE COORDINATES
(SOUTH ZONE)**

N. 613,825
E. 2,253,290

LAT=(N) 38.68237
LONG=(W) 80.11271

UTM, NAD83

N. 4,281,916
E. 577,192

LEASE # 190028

**BOTTOM HOLE
WELL NO.
WV 513401**

STONE FOUND

STONE FOUND

PENN VIRGINIA
OPERATING CO. LLC
9743.586 ACRES ±

COASTAL FOREST
RESOURCES
12,070.039 ACRES ±

REFERENCES

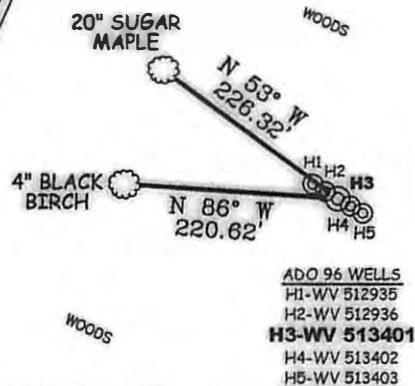
NOTES ON SURVEY

1. T TO WELLS A CORNERS A BASED ON GRID NORTH FOR T WV STATE PLANE COORDINATE S T SOUTH ZONE NAD '27.
2. TIES TO R EA 8 ON M NORTH 05/14/10.
3. LEASE a N SHOWN HEREON TAKEN FROM DIED BOOK 241 PAGE 408.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM T ASSESSOR A COUNTY CLERK RECORDS OF RANDOLPH COUNTY IN JULY, 2010.
5. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

THERE APPEAR TO BE NO KNOWN PERMITTED WELLS WITHIN 2,400'.

WELL NO. WV 513401

2,400'

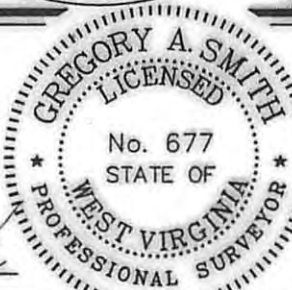


1" = 200'

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 13, 20

OPERATORS WELL NO. v 513401

API WELL NO. 47-083-01232H
STATE CANCELLED PERMIT

MINIMUM DEGREE OF ACCURACY 1/2500
FILE NO. 6985P513401 (296-44)
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE)
SCALE 1" = 2000'

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



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

LOCATION: ELEVATION 3,420' WATERSHED BEAR RUN AND LICK RUN OF BEECH RUN
DISTRICT MIDDLE FORK COUNTY RANDOLPH QUADRANGLE ADOLPH 7.5'

SURFACE OWNER ACREAGE 12,070.04±
ROYALTY OWNER EQT PRODUCTION COMPANY LEASE ACREAGE 14,650±
PROPOSED WORK: LEASE NO. 190028

DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
ADDRESS 1710 PENNSYLVANIA AVENUE ADDRESS 1710 PENNSYLVANIA AVENUE
CHARLESTON, V 25302 CHARLESTON, V 25302

COUNTY NAME PERMIT