

BOTTOM HOLE
WELL NO. WV 512385
STATE PLANE COORDINATES
(SOUTH ZONE)
 N. 282,877
 E. 1,696,167
 LAT=(N) 37.77214
 LONG=(W) 82.05118

EQT PRODUCTION COMPANY (COLE & CRANE-ISLAND CREEK) WELL NO. WV 512385

HEARTWOOD
 FORESTLAND FUND
 24,418.08 ACRES±
 (SURFACE)

N 79°35' E
 536.30'
 N 37°32' W
 7000.00'

ISLAND CREEK
 COAL CO. LEASE
 60,000 AC.±

SURFACE
 BOUNDARY

NOTES ON SURVEY

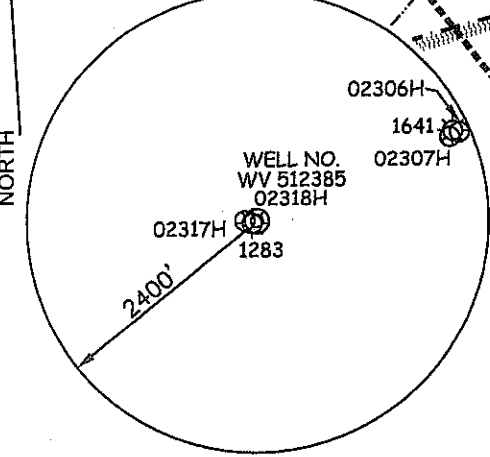
1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 08/06/09.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A MAP SHOWING "PROPERTY OF COLE & CRANE REAL ESTATE TRUST" DATED JANUARY 1925 BY W.G. McCALL, ENGINEER.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF LOGAN COUNTY IN JUNE, 2009.
5. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).
6. ORIGINAL PLAT DATED 08/10/09 REVISED 03/04/10 TO EXTEND HORIZONTAL LEG & CHANGE BOTTOM HOLE COORDINATES, ETC.

COLE AND CRANE
 REAL ESTATE TRUST
 19,801.944 ACRES±

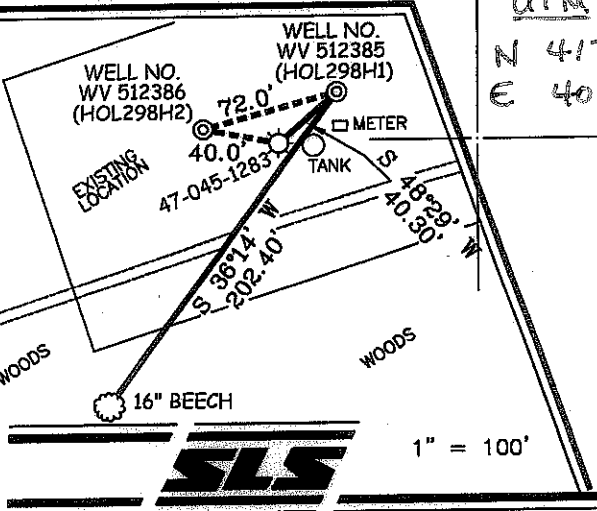
N 74°32' E 6467.54'
 APPROXIMATE LEASE BOUNDARY

COLE & CRANE REAL
 ESTATE TRUST LEASE
 13,292.15 AC.±

COLE AND CRANE
 REAL ESTATE TRUST
 19,801.944 ACRES±



REFERENCES



UTM NAD83
 N 4179373.35
 E 408736.44

EXISTING WELL
 A.P.I. #47-045-1283
 STATE PLANE COORDINATES
 (SOUTH ZONE)

N. 277,296
 E. 1,700,405

LAT=(N) 37.75694
 LONG=(W) 82.03630

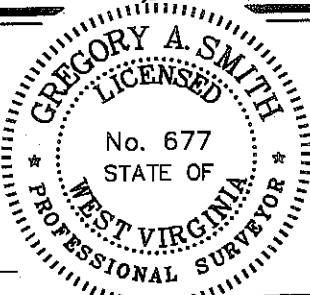
WELL NO. WV 512385
 STATE PLANE COORDINATES
 (SOUTH ZONE)

N. 277,326
 E. 1,700,431

LAT=(N) 37.75702
 LONG=(W) 82.03621

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 MARCH 04, 20 10
 OPERATORS WELL NO. WV 512385
 API WELL NO. 47-045-0238H
 STATE COUNTY PERMIT
 Revised

CANCELLED

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



MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 3796P512385R (283-46)
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 1000'

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

LOCATION: ELEVATION 980' WATERSHED PINE CREEK
 DISTRICT ISLAND CREEK COUNTY LOGAN QUADRANGLE HOLDEN 7.5'
 SURFACE OWNER COLE & CRANE REAL ESTATE TRUST ACREAGE 19,801.944±
 ROYALTY OWNER COLE & CRANE REAL ESTATE TRUST (13,292.15 AC.±) & ISLAND CREEK CORPORATION (60,000 AC.±)
 PROPOSED WORK: LEASE NO. 080574/080662
 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 LOWER HURON
 ESTIMATED DEPTH 4,460' (TOTAL VERTICAL DEPTH)

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 1710 PENNSYLVANIA AVENUE CHARLESTON, WV 25302
 ADDRESS 1710 PENNSYLVANIA AVENUE CHARLESTON, WV 25302 02/10/2012

COUNTY NAME PERMIT