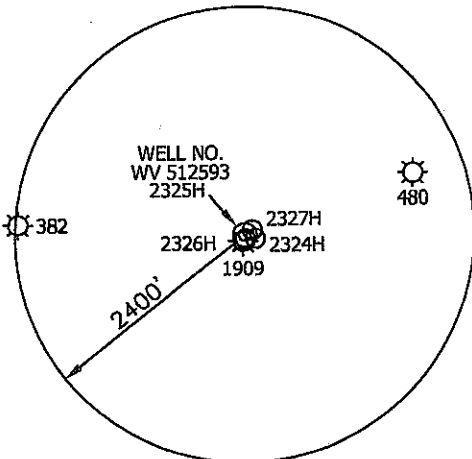


PARDEE LAND COMPANY LEASE 18,000 ACRES± WELL NO. WV 512593

BOTTOM HOLE
WELL NO. WV 512593
PARDEE & CURTIN
REALTY, LLC
1,742.85 ACRES±

WELL NO. WV 512593
STATE PLANE COORDINATES
SOUTH ZONE (NAD'27)
N. 293,042
E. 1,794,670
LAT=(N) 37.80262
LONG=(W) 81.71067
UTM (NAD'83)
N. 4,184,166
E. 437,452

WELL NO. WV 512593
STATE PLANE COORDINATES
SOUTH ZONE (NAD'27)
N. 287,290
E. 1,798,659
LAT=(N) 37.78691
LONG=(W) 81.69672
UTM (NAD'83)
N. 4,182,413
E. 438,668

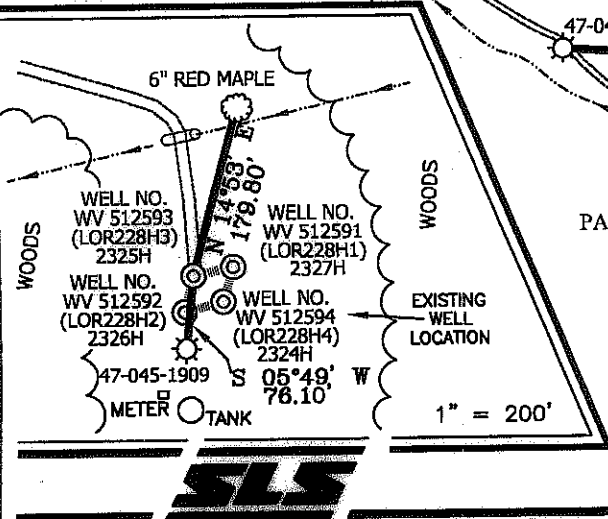


EXISTING WELL
A.P.I. 47-045-1909
STATE PLANE COORDINATES
SOUTH ZONE (NAD'27)
N. 287,214
E. 1,798,662

LAT=(N) 37.78670
LONG=(W) 81.69670

PARDEE & CURTIN
REALTY, LLC
2,936 ACRES±
(SURFACE)

REFERENCES



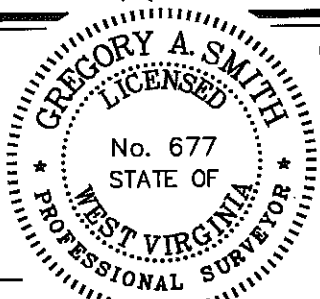
NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 08/19/09.
3. LEASE BOUNDARY DOES NOT APPEAR WITHIN THE SCOPE OF THIS PLAT.
4. SURFACE OWNER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF LOGAN COUNTY IN JULY, 2010.
5. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).
6. ORIGINAL PLAT DATED 09/03/09 REVISED 11/29/10 TO ROTATE & EXTEND HORIZONTAL LEG, CHANGE BOTTOM HOLE COORDINATES & ADD UTM COORDINATES, ETC.

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 NOVEMBER 29, 20 10

OPERATORS WELL NO. WV 512593

API WELL NO. 47-045-02325H

CANCELLED REVISED

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. 3906P512593R (283-61)
PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE)
SCALE 1" = 1000'

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 1,614' WATERSHED DAVY BRANCH OF BUFFALO CREEK

DISTRICT TRIADELPHIA COUNTY LOGAN QUADRANGLE LORADO 7.5'

SURFACE OWNER PARDEE & CURTIN REALTY, LLC ACREAGE 2,936±

ROYALTY OWNER PARDEE MINERALS, LLC LEASE ACREAGE 18,000±

PROPOSED WORK: LEASE NO. 004107

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 LOWER HURON/SILTSTONE
ESTIMATED DEPTH 4,870' (TOTAL VERTICAL DEPTH)

WELL OPERATOR EQT PRODUCTION COMPANY
ADDRESS 1710 PENNSYLVANIA AVENUE
CHARLESTON, WV 25302

DESIGNATED AGENT REX C. RAY
ADDRESS 1710 PENNSYLVANIA AVENUE
CHARLESTON, WV 25302 09/21/2012

COUNTY NAME

PERMIT