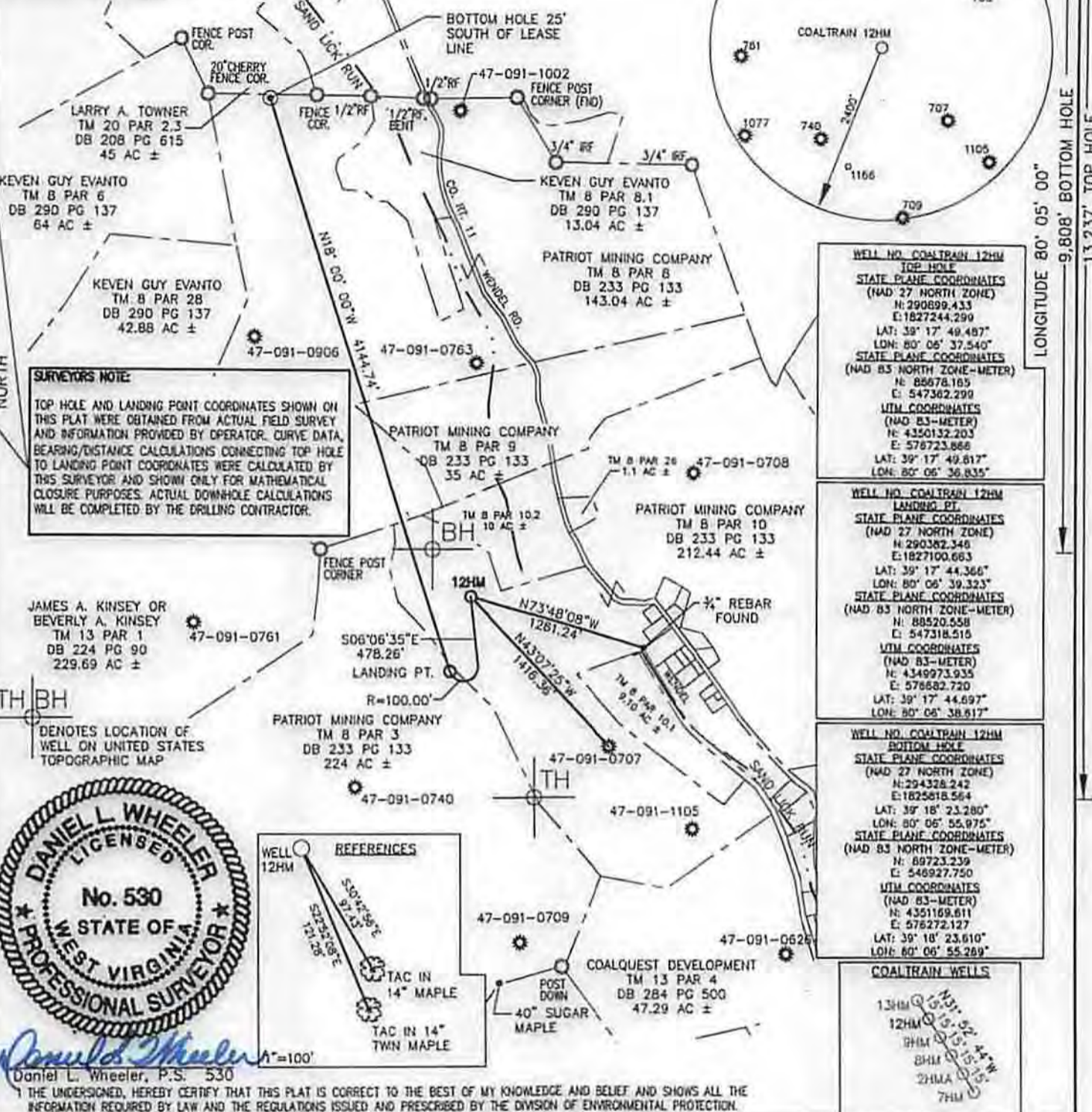


PDC MOUNTAINEER, LLC
WELL NO. COALTRAIN 12HM

NOTES:
 -PLAT ORIENTATION, CORNERS, AND WELL REFERENCES ARE BASED UPON THE GRID NORTH MERIDIAN FOR THE WV STATE PLANE COORDINATE SYSTEM, NORTH ZONE NAD 27. WELL LOCATION REFERENCE TIES ARE BASED UPON THE MAGNETIC MERIDIAN.
 -THERE APPEARS TO BE NO WATER WELLS LOCATED WITHIN 1000' OF WELL 12HM.

-THERE APPEARS TO BE NO WATER WELLS LOCATED WITHIN 1000' OF WELL 12HM.



SURVEYORS NOTE:
 TOP HOLE AND LANDING POINT COORDINATES SHOWN ON THIS PLAT WERE OBTAINED FROM ACTUAL FIELD SURVEY AND INFORMATION PROVIDED BY OPERATOR. CURVE DATA, BEARING/DISTANCE CALCULATIONS CONNECTING TOP HOLE TO LANDING POINT COORDINATES WERE CALCULATED BY THIS SURVEYOR AND SHOWN ONLY FOR MATHEMATICAL CLOSURE PURPOSES. ACTUAL DOWNHOLE CALCULATIONS WILL BE COMPLETED BY THE DRILLING CONTRACTOR.

JAMES A. KINSEY OR BEVERLY A. KINSEY
 TM 13 PAR 1
 DB 224 PG 90
 229.69 AC ±



Daniel L. Wheeler, P.S. 530

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.

WELL NO. COALTRAIN 12HM
TOP HOLE
 STATE PLANE COORDINATES
 (NAD 27 NORTH ZONE)
 N: 290899.433
 E: 1827244.290
 LAT: 39° 17' 49.497"
 LON: 80° 06' 37.540"
 STATE PLANE COORDINATES
 (NAD 83 NORTH ZONE-METER)
 N: 86678.185
 E: 547362.290
 UTM COORDINATES
 (NAD 83-METER)
 N: 4350132.203
 E: 576723.866
 LAT: 39° 17' 49.617"
 LON: 80° 06' 36.835"

WELL NO. COALTRAIN 12HM
LANDING PT.
 STATE PLANE COORDINATES
 (NAD 27 NORTH ZONE)
 N: 290382.348
 E: 1827100.663
 LAT: 39° 17' 44.366"
 LON: 80° 06' 39.325"
 STATE PLANE COORDINATES
 (NAD 83 NORTH ZONE-METER)
 N: 88520.558
 E: 547318.515
 UTM COORDINATES
 (NAD 83-METER)
 N: 4349973.935
 E: 576682.720
 LAT: 39° 17' 44.697"
 LON: 80° 06' 38.617"

WELL NO. COALTRAIN 12HM
BOTTOM HOLE
 STATE PLANE COORDINATES
 (NAD 27 NORTH ZONE)
 N: 294328.242
 E: 1825818.564
 LAT: 39° 18' 23.280"
 LON: 80° 06' 55.975"
 STATE PLANE COORDINATES
 (NAD 83 NORTH ZONE-METER)
 N: 89723.239
 E: 546927.750
 UTM COORDINATES
 (NAD 83-METER)
 N: 4351169.611
 E: 576272.127
 LAT: 39° 18' 23.610"
 LON: 80° 06' 55.269"



FILE NO. 050-4286
 SCALE: 1"=1000'
 MINIMUM DEGREE OF ACCURACY: 1 in 2500
 PROVEN SOURCE OF ELEVATION: OPUS SURVEY GRADE GPS

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

DATE JANUARY 4, 2012
 OPERATOR'S WELL NO. COALTRAIN NO. 12HM
 API WELL NO. **CANCELLED**
 47 - 091 - 01273 #6A
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL (IF "GAS"), PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: 1273' WATER SHED: SAND LICK RUN OF SIMPSON CREEK
 DISTRICT: COURTHOUSE COUNTY: TAYLOR
 QUADRANGLE: GRAFTON 7.5' ACREAGE: 212.44 AC ±
 SURFACE OWNER: PATRIOT MINING COMPANY, INC. LEASE ACREAGE: 614.48 AC ±
 OIL & GAS ROYALTY OWNER: GLEN C. LAREW ET AL LEASE NO.



PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PERFORATE NEW FORMATION PLUG OFF OLD FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION: MARCELLUS SHALE ESTIMATED DEPTH: 7,760' TVD / 13,000' MD

WELL OPERATOR: PDC MOUNTAINEER, LLC DESIGNATED AGENT: JAMES A HAGA
 ADDRESS: 120 GENESIS BOULEVARD ADDRESS: 120 GENESIS BOULEVARD
 BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

08/15/2014