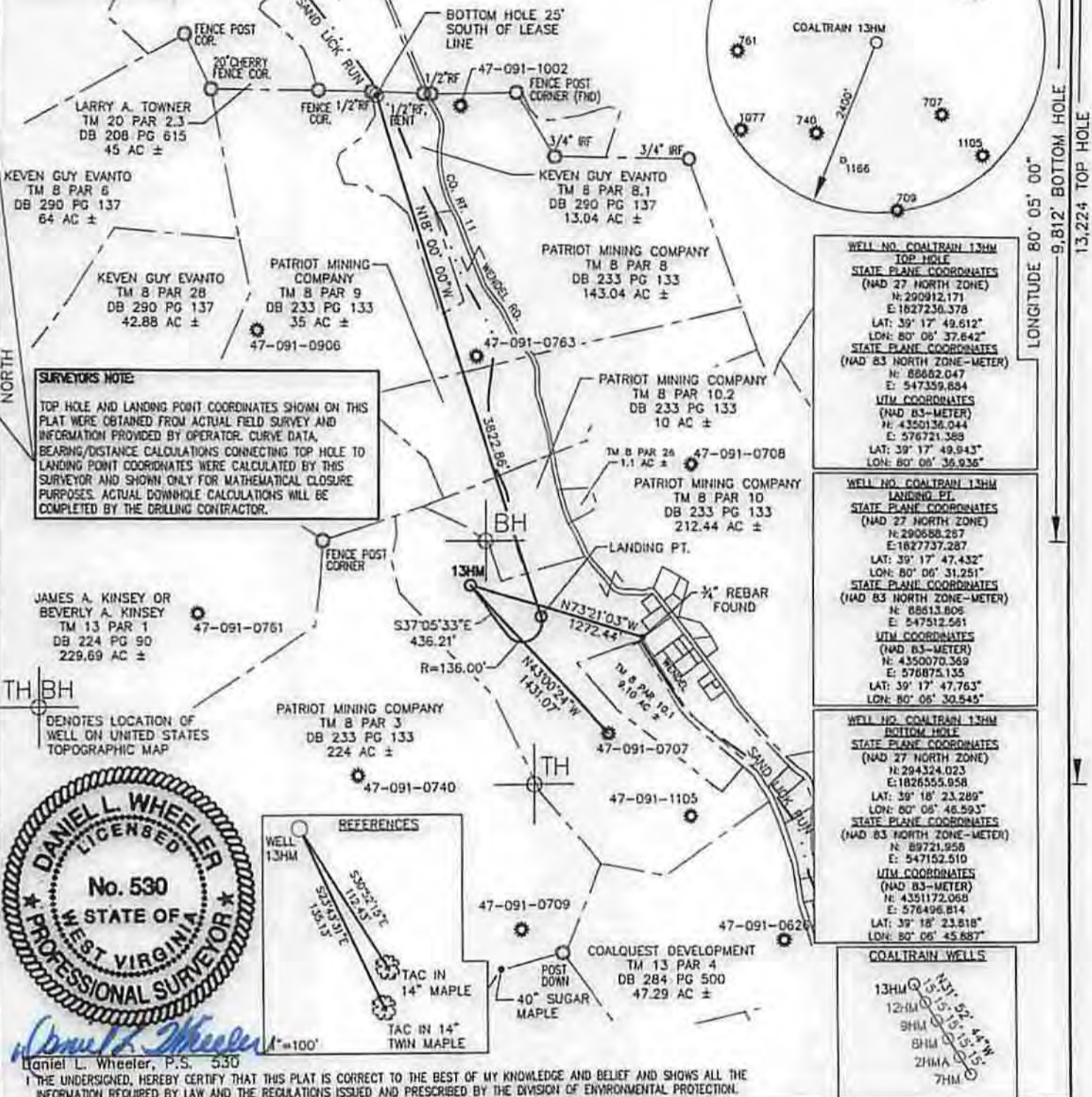


**PDC MOUNTAINEER, LLC
WELL NO. COALTRAIN 13HM**

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 13HM.



SURVEYOR'S 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.

**WELL NO. COALTRAIN 13HM
TOP HOLE**
STATE PLANE COORDINATES (NAD 27 NORTH ZONE)
N: 290912.171
E: 1827230.378
LAT: 39° 17' 49.612"
LON: 80° 06' 37.642"
STATE PLANE COORDINATES (NAD 83 NORTH ZONE-METER)
N: 88662.047
E: 547359.684
UTM COORDINATES (NAD 83-METER)
N: 4350136.044
E: 576721.368
LAT: 39° 17' 49.943"
LON: 80° 06' 36.936"

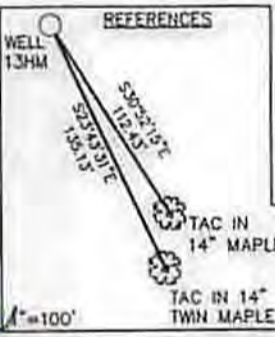
**WELL NO. COALTRAIN 13HM
LANDING PT.**
STATE PLANE COORDINATES (NAD 27 NORTH ZONE)
N: 290658.267
E: 1827737.287
LAT: 39° 17' 47.432"
LON: 80° 06' 31.251"
STATE PLANE COORDINATES (NAD 83 NORTH ZONE-METER)
N: 88613.806
E: 547512.561
UTM COORDINATES (NAD 83-METER)
N: 4350070.369
E: 576875.135
LAT: 39° 17' 47.763"
LON: 80° 06' 30.545"

**WELL NO. COALTRAIN 13HM
BOTTOM HOLE**
STATE PLANE COORDINATES (NAD 27 NORTH ZONE)
N: 294324.023
E: 1826555.958
LAT: 39° 18' 23.289"
LON: 80° 06' 46.593"
STATE PLANE COORDINATES (NAD 83 NORTH ZONE-METER)
N: 89721.958
E: 547152.510
UTM COORDINATES (NAD 83-METER)
N: 4351172.068
E: 576496.814
LAT: 39° 18' 23.818"
LON: 80° 06' 45.887"



DANIEL L. WHEELER
LICENSED
No. 530
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

Daniel L. Wheeler, P.S. 530



FILE NO. 050-4286	DATE DECEMBER 29, 2012
SCALE: 1"=1000'	OPERATOR'S WELL NO. COALTRAIN NO. 13HM
MINIMUM DEGREE OF ACCURACY: 1 in 2500	API WELL NO. CANCELLED
PROVEN SOURCE OF ELEVATION: OPUS SURVEY GRADE GPS	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: 413.52 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 / 12,850' 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