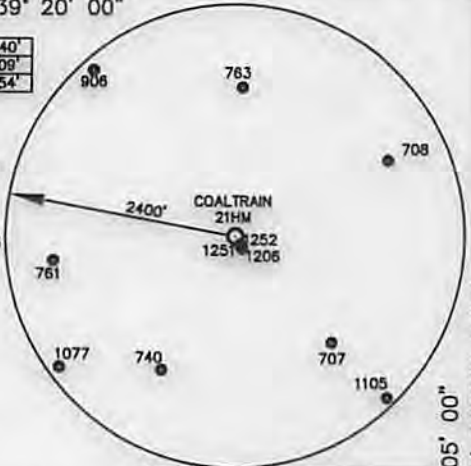


PDC MOUNTAINEER, LLC.
WELL NO. COALTRAIN 21HM

10,180' BOTTOM HOLE
LATITUDE 39° 20' 00"

NOTES:
-PLAT ORIENTATION, CORNERS, AND WELL REFERENCES ARE BASED UPON THE GRID NORTH MERIDIAN FOR THE WV STATE PLANE COORDINATE SYSTEM, NORTH ZONE NAD 83. WELL LOCATION REFERENCE TIES ARE BASED UPON THE MAGNETIC MERIDIAN.
-THERE ARE NO (O) WATER WELL(S) LOCATED WITHIN 250' OF WELL 21HM.
-THERE ARE NO (D) DWELLINGS OR AGRICULTURAL BUILDINGS WITHIN 625 FEET OF WELL 21HM
O = MONUMENT FOUND
IRON REBAR UNLESS NOTED OTHERWISE

L1	N61°43'49"E	356.40'
L2	N64°33'24"E	142.09'
L3	N67°01'21"E	671.54'



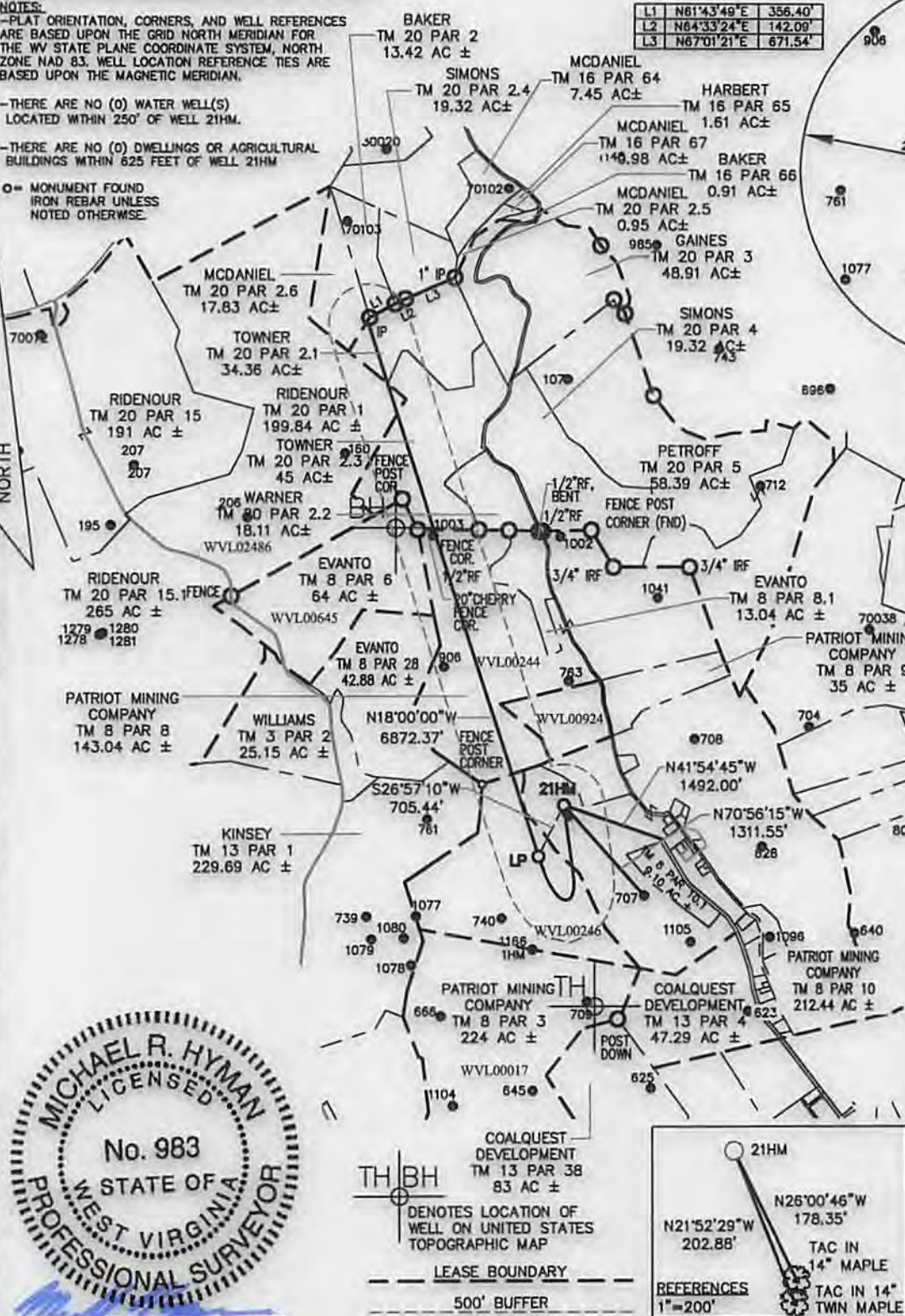
LONGITUDE 80° 05' 00"
7,233' BOTTOM HOLE
13,125' TOP HOLE

USER: kpoth

LAYOUT: 21HM

PLOT DATE/TIME: 10/16/2013 - 8:46am

CAD FILE: R:\050-4915 PDC - Asbujit Coaltrain Well Pad Wendel Rd in Taylor CitySurvey\050-4915 CLTRAIN 20HM-23HM.dwg



WELL NO. 21HM
TOP HOLE
STATE PLANE COORDINATES
(NAD 27 NORTH ZONE)
N: 290975.955
E: 1827215.845
LAT: 39°17'50.572"
LON: 80°06'37.204"
UTM COORDINATES
(NAD 83-METER)
N: 4350155.372
E: 576714.809

WELL NO. 21HM
LAUNCH POINT
STATE PLANE COORDINATES
(NAD 27 NORTH ZONE)
N: 290347.135
E: 1826896.099
LAT: 39°17'44.336"
LON: 80°06'41.217"
UTM COORDINATES
(NAD 83-METER)
N: 4349962.170
E: 576620.573

STATE PLANE COORDINATES
(NAD 27 NORTH ZONE)
N: 296883.146
E: 1824772.420
LAT: 39°18'48.790"
LON: 80°07'08.802"
UTM COORDINATES
(NAD 83-METER)
N: 4351942.696
E: 575940.462



Michael R. Hyman, P.S. 983

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

FILE NO. 050-4915
SCALE: 1"=2000'
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 OCTOBER 2, 2013
OPERATOR'S WELL NO. COALTRAIN NO. 21HM
API WELL NO. 47 - 91 - 01288 HCA
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL (IF "GAS"), PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1267.91' 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: 876.51 AC±
OIL & GAS ROYALTY OWNER: GLEN C. LAREW ET AL LEASE NO. WVL00017 WVL00244 WVL00246 WVL00643 WVL00647 WVL00924 WVL02486



PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PERFORATE NEW FORMATION PLUG OFF OLD FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

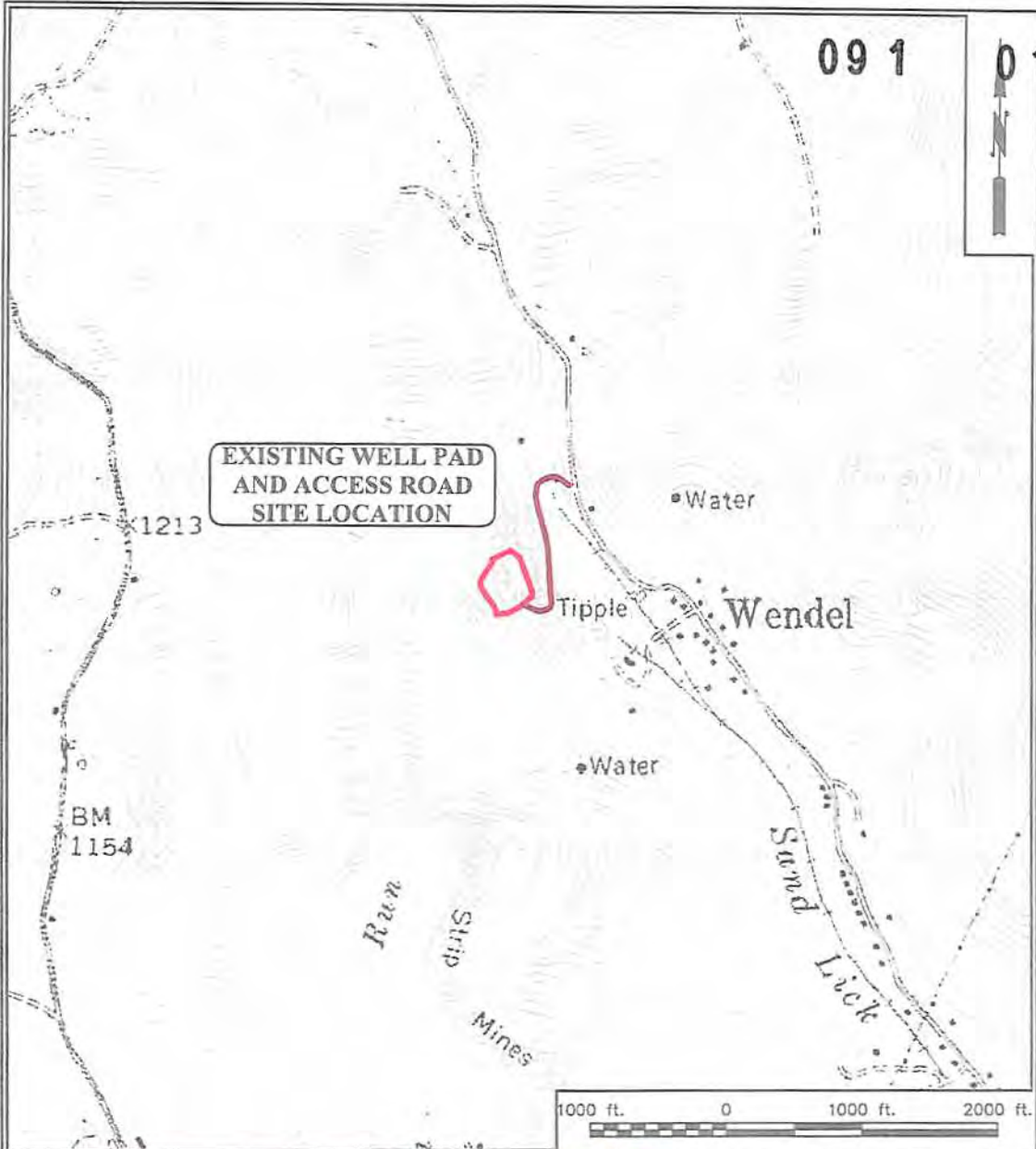
PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION: MARCELLUS SHALE ESTIMATED DEPTH: 7,675' TVD / 15,660' MD

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

04/04/2014

09 1

0 1 2 8 8



CAD FILE: R:\000-4910 PDC - Asphalt Condition WA Pad Revised Rd in Taylor County\Drawings\4910-Topo-B11-Map.dwg
 PLOT DATE/TIME: 3/21/2014 9:45 AM

**EXISTING WELL PAD
AND ACCESS ROAD
SITE LOCATION**

THRASHER

THE THRASHER GROUP INC.
 CIVIL • ENVIRONMENTAL • CONSULTING • FIELD SERVICES
 600 WHITE OAKS BOULEVARD, BRIDGEPORT, WV 26330
 PHONE (304) 624-4108 • FAX (304) 624-7831



PDC MOUNTAINEER, LLC

PDC MOUNTAINEER

COALTRAIN WELL PAD AND ACCESS ROAD
 SITE TOPOGRAPHIC LOCATION MAP

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03/21/2014

COURT HOUSE DISTRICT, TAYLOR COUNTY, WV