



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

PERMIT MODIFICATION APPROVAL

July 24, 2015

NORTHEAST NATURAL ENERGY LLC
707 VIRGINIA STREET EAST
CHARLESTON, WV 25301

Re: Permit Modification Approval for API Number 6101705, Well #: MIP SW

Change to shallow well, modify target formation

Oil and Gas Operator:

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

Gene Smith
Assistant Chief of Permitting
Office of Oil and Gas

Promoting a healthy environment.

07/24/2015

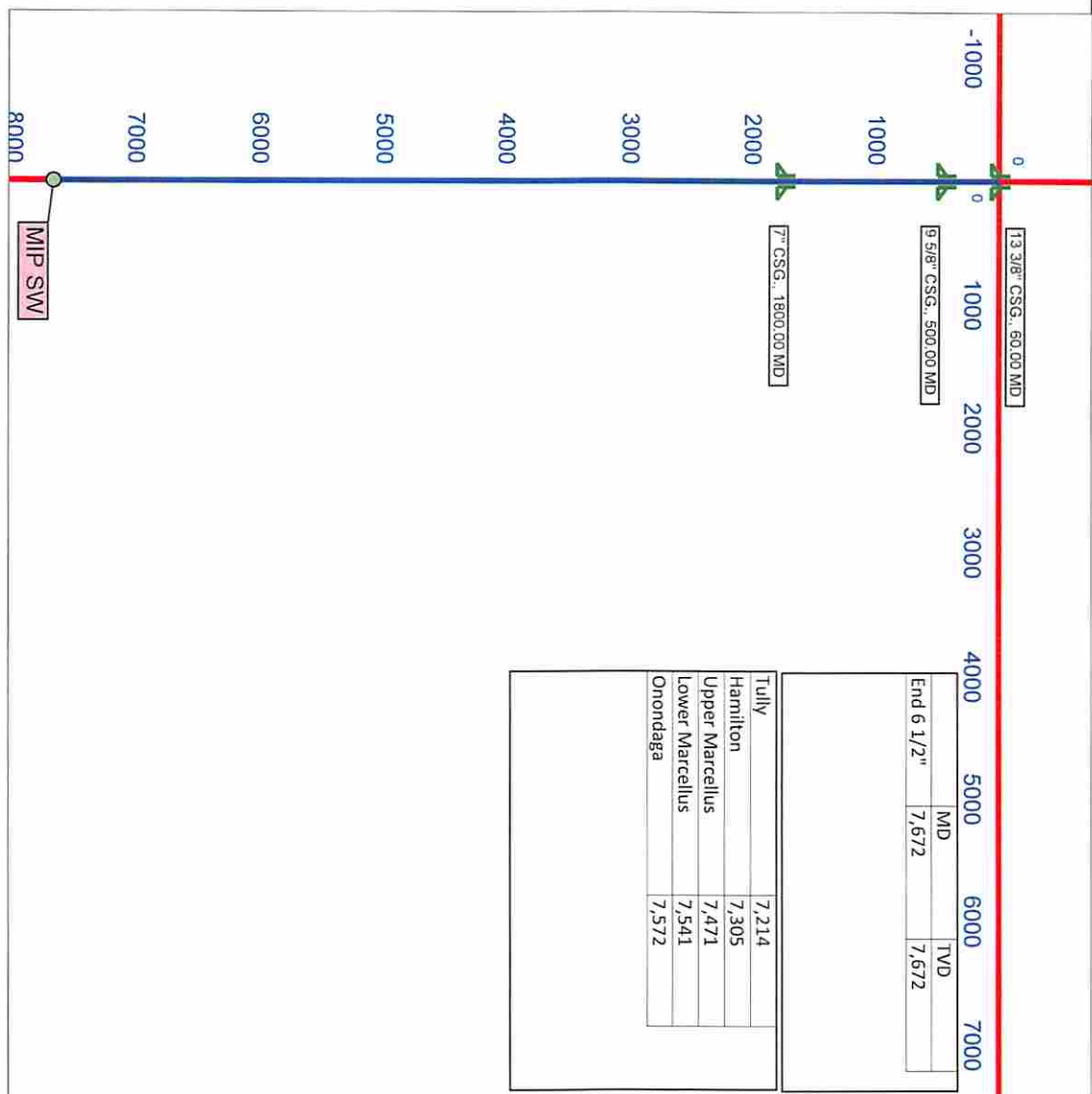
61-017 05 MD



Job Number:
 Company: Northeast Natural Energy
 Lease/Well: MIP SW
 Location: MIP
 Rig Name: Patterson 254
 State/Country: WV/ Mon
 Country: US
 API Number:

Elevation (To MSL): 1060.00 ft
 RKB: 18.00 ft
 Projection System: US State Plane 1983
 Projection Group: West Virginia Northern Zone
 Projection Datum: GRS80
 Magnetic Declination: -9.02
 Grid Convergence: -0.30608 W
 Date: Monday, July 20, 2015

True Vertical Depth



MD	TVD
End 6 1/2"	7,672
Tully	7,214
Hamilton	7,305
Upper Marcellus	7,471
Lower Marcellus	7,541
Onondaga	7,572

South - North

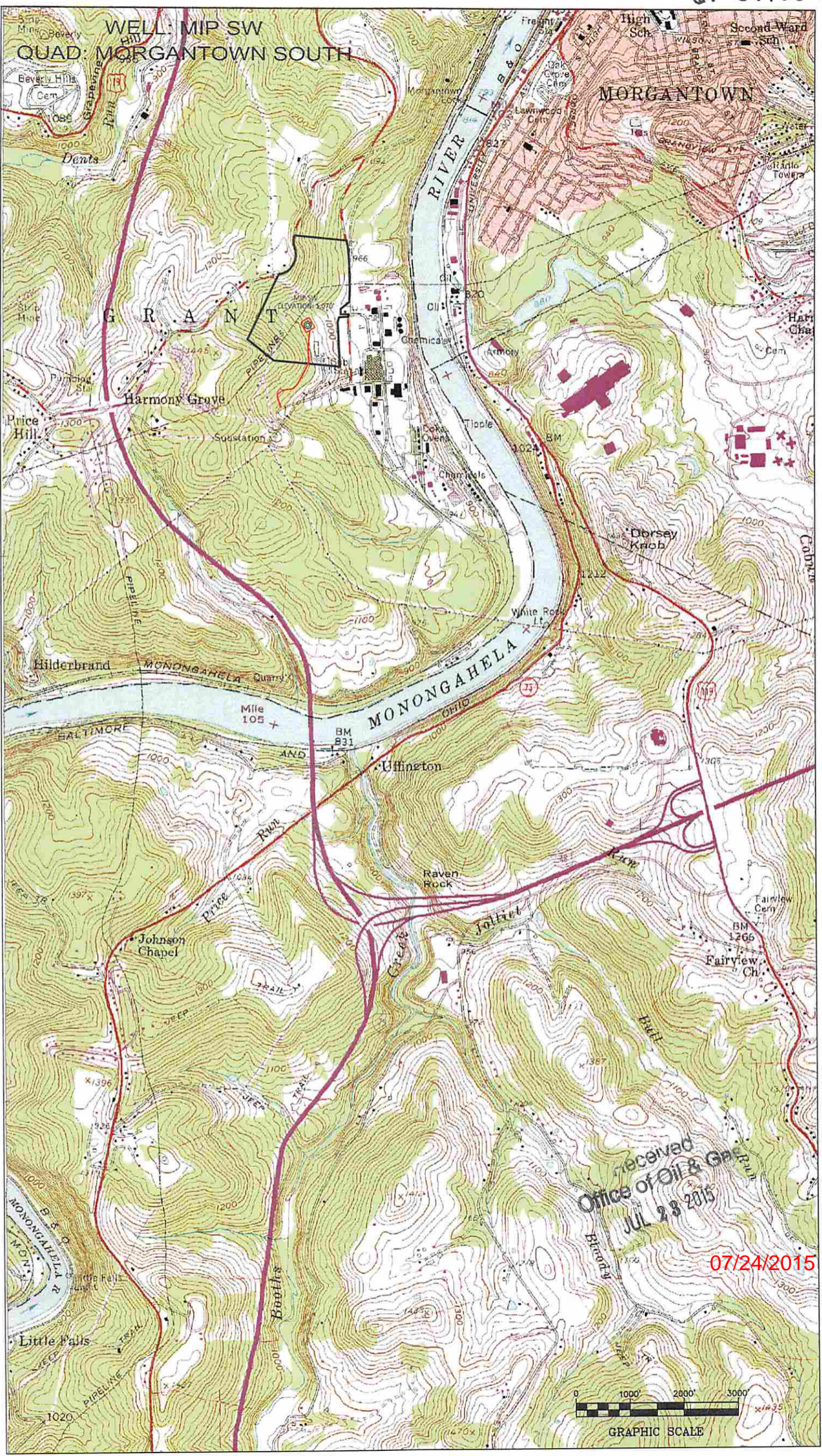


Received
 JUL 21 2015
 Office of Oil and Gas
 WV Dept. of Environmental Protection

07/24/2015

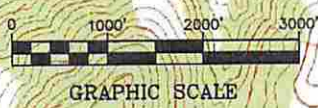
Vertical Section (1000 Ft/Div) VSP: 0.00°

WELL: MIP SW
QUAD: MORGANTOWN SOUTH



received
Office of Oil & Gas
JUL 23 2015

07/24/2015



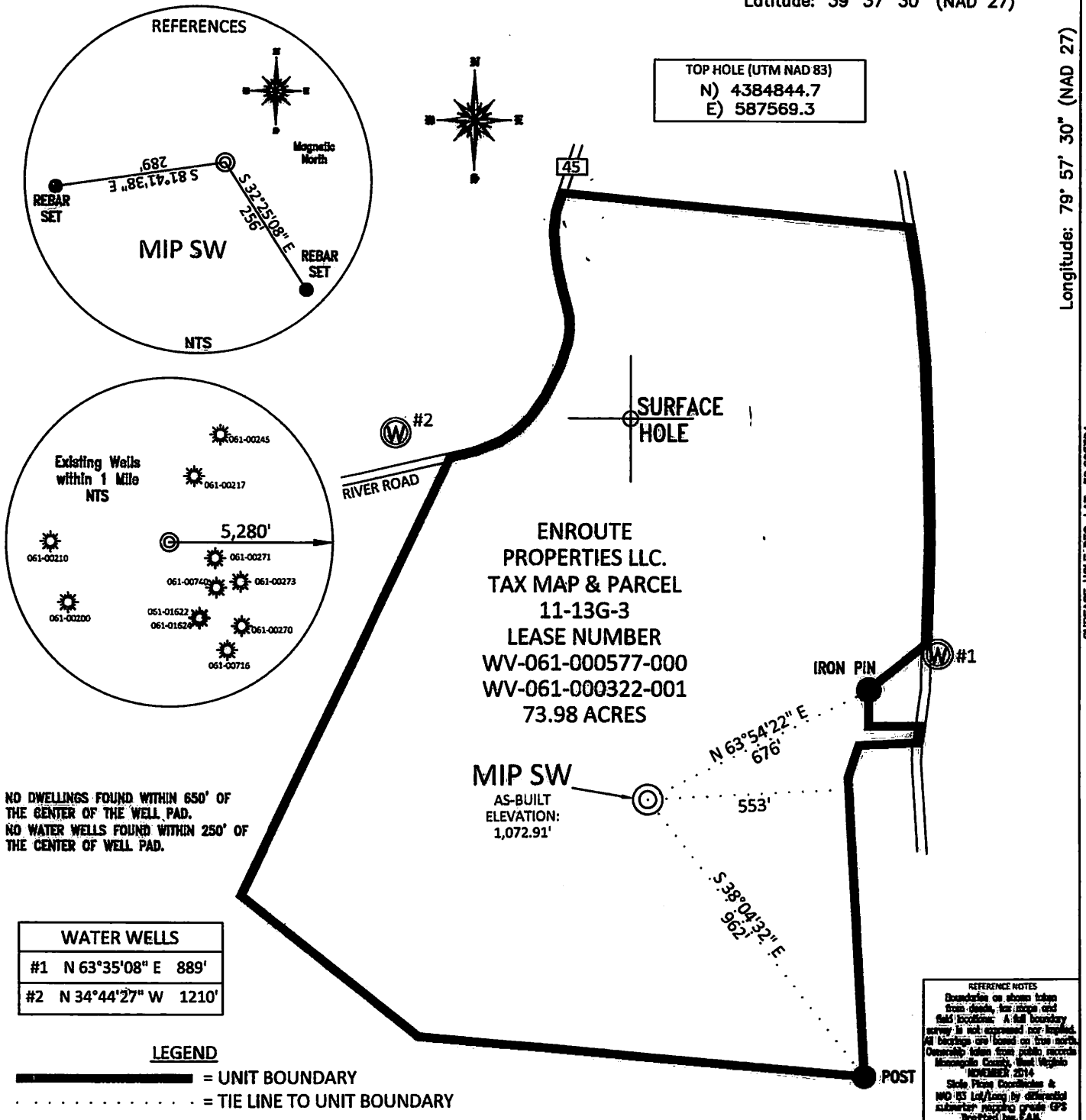
SURFACE HOLE DEC. LONG: 79.980133
 SURVEYED LONG: 79° 58' 48.8"

6140'

Latitude: 39° 37' 30" (NAD 27)

Longitude: 79° 57' 30" (NAD 27)

SURFACE HOLE DEC. LAT: 39.608784
 SURVEYED LAT: 39° 38' 51.7"

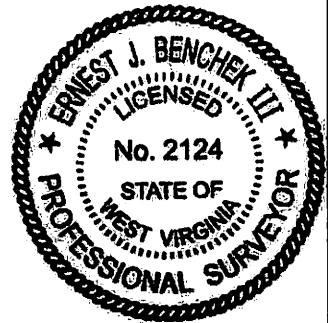


FILE #: NNE004
 DRAWING #: 2453
 SCALE: 1"=400'
 MINIMUM DEGREE OF ACCURACY: 1/200
 PROVEN SOURCE SUBMETER MAPPING OF ELEVATION: GRADE GPS

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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed:

L.L.S. #2124 : Ernest J. Benchek III



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP
 OFFICE OF OIL & GAS
 601 5TH STREET
 CHARLESTON, WV 25304

Well Type: Oil Waste Diposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: UPPER MONONGAHELA RIVER

COUNTY/DISTRICT: MONONGALIA/GRANT

SURFACE OWNER: ENROUTE PROPERTIES LLC.

OIL & GAS ROYALTY OWNER: ENROUTE PROPERTIES LLC.

LEASE NUMBERS: _____

TARGET FORMATION: ONONDAGA

WELL OPERATOR : NORTHEAST NATURAL ENERGY LLC

ADDRESS: 707 VIRGINIA STREET - SUITE 1200

CITY: CHARLESTON STATE: WV ZIP CODE: 25301

DATE: JULY 21, 2015

OPERATOR'S WELL #: MIP SW

API WELL # 47 61 017051004
 STATE COUNTY PERMIT

AS-BUILT
 ELEVATION : 1,072.91'

QUADRANGLE: MORGANTOWN SOUTH

ACREAGE: 73.98 +/- 07/24/2015

ACREAGE: 73.98 +/-

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

ESTIMATED DEPTH: TVD: 7,672' TMD: 7,672'

DESIGNATED AGENT : JOHN ADAMS

ADDRESS: 707 VIRGINIA STREET - SUITE 1200

CITY: CHARLESTON STATE: WV ZIP CODE: 25301