

LATITUDE 39°15'00" | -1,234'

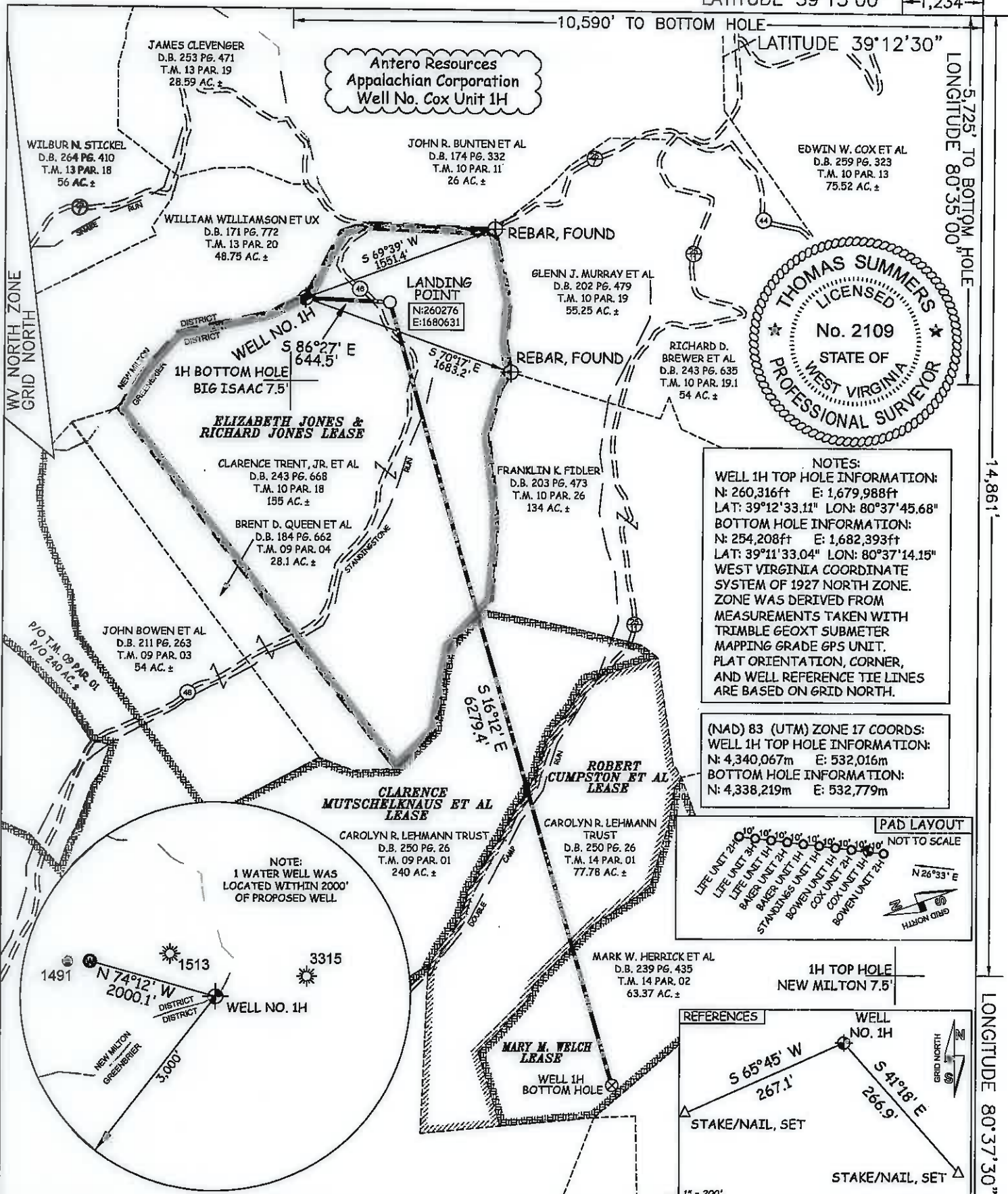
10,590' TO BOTTOM HOLE

LATITUDE 39°12'30"

LONGITUDE 80°35'00"

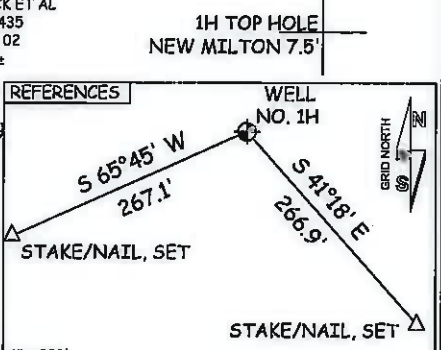
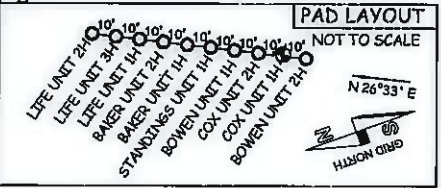
14,861'

LONGITUDE 80°37'30"



NOTES:  
 WELL 1H TOP HOLE INFORMATION:  
 N: 260,316ft E: 1,679,988ft  
 LAT: 39°12'33.11" LON: 80°37'45.68"  
 BOTTOM HOLE INFORMATION:  
 N: 254,208ft E: 1,682,393ft  
 LAT: 39°11'33.04" LON: 80°37'14.15"  
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:  
 WELL 1H TOP HOLE INFORMATION:  
 N: 4,340,067m E: 532,016m  
 BOTTOM HOLE INFORMATION:  
 N: 4,338,219m E: 532,779m



JOB # 12-065WA  
 DRAWING # COX1HR2  
 SCALE 1" = 1000'

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

LEGEND  
 - - - - - Surface Owner Boundary Lines +/-  
 - - - - - Interior Surface Tracts +/-  
 X Existing Fence  
 ⊕ Found monument, as noted



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
 WILLOW LAND SURVEYING PLLC  
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

THOMAS SUMMERS P.S. 2109  
 DATE 02/13/13  
 OPERATOR'S WELL# COX UNIT 1H  
 API WELL # 47 - 017 - Revised  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS  
 WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1,410' WATERSHED STANDINGSTONE RUN OF MEATHOUSE FORK  
 QUADRANGLE NEW MILTON 7.5 (TOP HOLE) BIG ISAAC 7.5 (BOTTOM HOLE) DISTRICT GREENBRIER COUNTY DODDRIDGE  
 SURFACE OWNER CLARENCE TRENT, JR. ET AL ACREAGE 155 ACRES +/-  
 OIL & GAS ROYALTY OWNER ELIZABETH JONES & RICHARD JONES; CLARENCE MUTSCHELKNAUS ET AL; ROBERT CUMPSTON ET AL; MARY M. WELCH LEASE ACREAGE 155 ACRES±; 135.421 ACRES±; 75 ACRES±; 70 ACRES±  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X  
 PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) *Permit Modification - Extend Lateral (30')* PLUG & ABANDON CLEAN OUT & REPLUG  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,600' TVD 13,100' MD  
 WELL OPERATOR ANTERO RESOURCES APPALACHIAN CORP. DESIGNATED AGENT DIANNA STAMPER  
 ADDRESS 1625 17TH STREET ADDRESS 5400 D BIG TYLER ROAD  
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

COUNTY NAME PERMIT  
 06/21/2013



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west virginia department of environmental protection

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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](http://www.dep.wv.gov)

**PERMIT MODIFICATION APPROVAL**

June 19, 2013

ANTERO RESOURCES APPALACHIAN CORPORATION  
1625 17TH STREET, SUITE 300  
DENVER, CO 80202

Re: Permit Modification Approval for API Number 1706161 , Well #: COX UNIT 1H  
**MODIFIED HORIZONTAL LATERAL**

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

Regulatory/Compliance Manager  
Office of Oil and Gas

**Promoting a healthy environment.**

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06/21/2013