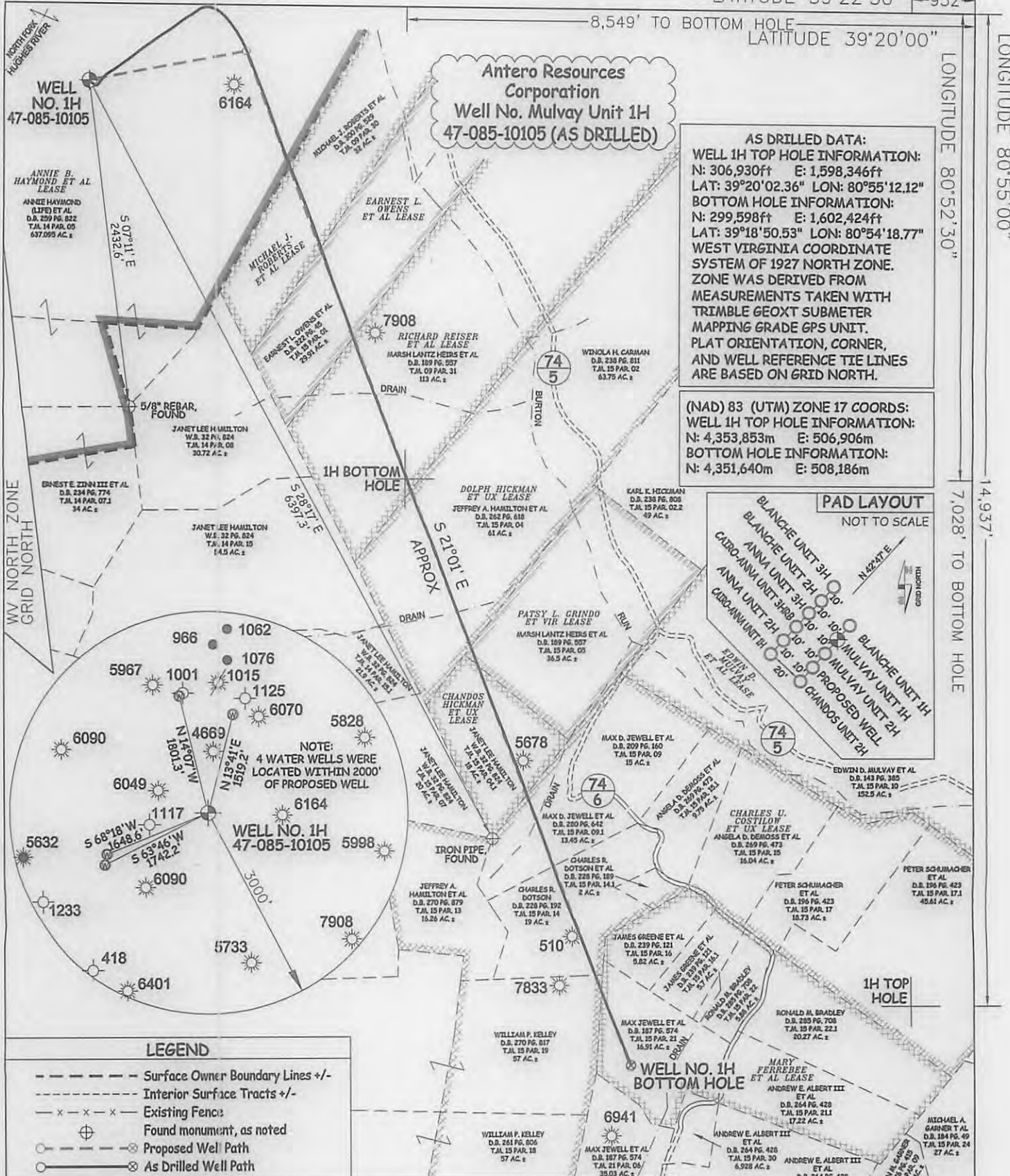


LATITUDE 39°22'30" -952'

LATITUDE 39°20'00"

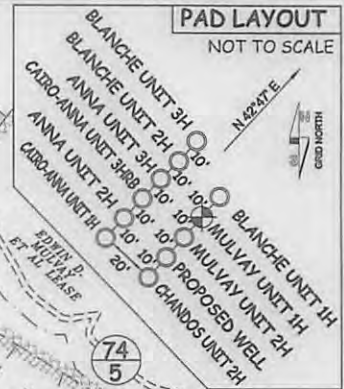
LONGITUDE 80°52'30"

LONGITUDE 80°55'00"



**AS DRILLED DATA:**  
**WELL 1H TOP HOLE INFORMATION:**  
 N: 306,930ft E: 1,598,346ft  
 LAT: 39°20'02.36" LON: 80°55'12.12"  
**BOTTOM HOLE INFORMATION:**  
 N: 299,598ft E: 1,602,424ft  
 LAT: 39°18'50.53" LON: 80°54'18.77"  
**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: 4,353,853m E: 506,906m  
**BOTTOM HOLE INFORMATION:**  
 N: 4,351,640m E: 508,186m



**LEGEND**

- Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
- x - x - Existing Fence
- ⊕ Found monument, as noted
- Proposed Well Path
- ⊗ As Drilled Well Path

JOB # 12-130WA  
 DRAWING # MULVAY1HAD  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY SUBMETER  
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS



STATE OF WEST VIRGINIA, DIVISION  
 OF ENVIRONMENTAL PROTECTION,  
 OFFICE OF OIL AND GAS  
 WILLOW LAND SURVEYING PLLC  
 266 HUSHERS RUN RD PENNSBORO  
 WEST VIRGINIA 26415

- NOTE**
- NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
  - TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
  - AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
  - WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
  - WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 DIVISION OF OIL AND GAS

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

LOCATION: ELEVATION 992' ORIGINAL - 971' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER  
 QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE

SURFACE OWNER ANNIE B. HAYMOND, ET AL ACREAGE 637.095 ACRES +/-

OIL & GAS ROYALTY OWNER ANNIE B. HAYMOND, ET AL; MICHAEL J. ROBERTS ET AL; EARNEST L. OWENS ET AL; RICHARD REISER ET AL; LEASE ACREAGE 700 AC±; 34,638 AC±; 34,638 AC±; 113 AC±;  
 DOLPH HICKMAN ET UX; PATSY L. GRINDO Q ET VIR; CHANDOS HICKMAN ET UX; CHARLES U. COSTILOU ET UX; MARY FERREBEE ET AL 124 AC±; 36.5 AC±; 18 AC±; 200 AC±; 68 AC±

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_  
 PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  AS DRILLED \_\_\_ PLUG & ABANDON \_\_\_ CLEAN OUT & REPLUG \_\_\_  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,330' TVD 14,870' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER  
 ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM  
 DENVER, CO 80202 CHARLESTON, WV 25313

DATE 07/27/15 OPERATOR'S WELL# MULVAY UNIT #1H  
 API WELL # 47 - 085 - 10105  
 STATE COUNTY PERMIT

10/16/2015