

LATITUDE 39°22'30"

4,815'

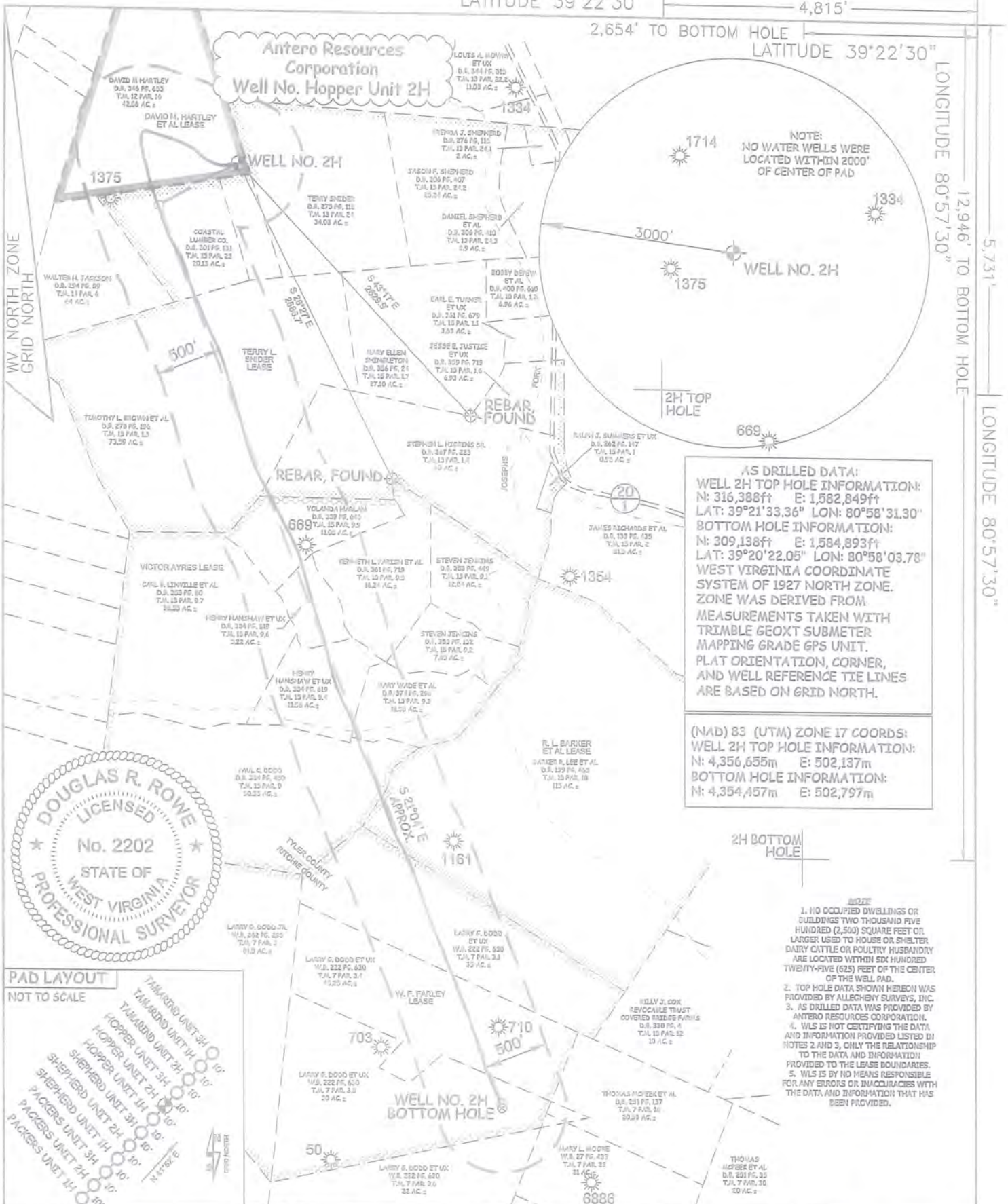
2,654' TO BOTTOM HOLE

LATITUDE 39°22'30"

LONGITUDE 80°57'30"

5,731'

LONGITUDE 80°57'30"



**AS DRILLED DATA:**  
**WELL 2H TOP HOLE INFORMATION:**  
 N: 316,388ft E: 1,582,849ft  
 LAT: 39°21'33.36" LON: 80°58'31.30"  
**BOTTOM HOLE INFORMATION:**  
 N: 309,138ft E: 1,584,893ft  
 LAT: 39°20'22.05" LON: 80°58'03.78"  
 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 2H TOP HOLE INFORMATION:**  
 N: 4,356,655m E: 502,137m  
**BOTTOM HOLE INFORMATION:**  
 N: 4,354,457m E: 502,797m

- NOTE**
1. 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.
  2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVYS, INC.
  3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
  4. 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.
  5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.



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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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

**LEGEND**  
 - - - - - Surface Owner Boundary Lines +/-  
 - - - - - Interior Surface Tracts +/-  
 O Proposed Well Path  
 O As Drilled Well Path  
 DOUGLAS R. ROWE P.S. 2202

JOB # 15-042WA  
 DRAWING # HOPPER2HAD  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY SUBMETER  
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS  
 STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

DATE 11/07/18  
 OPERATOR'S WELL# HOPPER 2H

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  API WELL # 47 - 095 - 02389  
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1,176' AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK STATE COUNTY PERMIT  
 QUADRANGLE PENNSBORO 7.5' DISTRICT MEADE COUNTY TYLER  
 SURFACE OWNER DAVID M. HARTLEY ACREAGE 42.56 ACRES +/-  
 OIL & GAS ROYALTY OWNER DAVID M. HARTLEY ET AL; TERRY L. SNIDER; VICTOR AYRES; R.L. BARKER ET AL; W. F. FARLEY LEASE ACREAGE 42.56 AC±; 221.24 AC±; 167.5 AC±; 115 AC±; 192 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 6,442' TVD 14,246' MD  
 WELL OPERATOR ANTERO RESOURCES CORPORATION DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313  
 FORM WW-6 DENVER, CO 80202

COUNTY NAME PERMIT