

LATITUDE 39°15'00"

10,581'

6,569' TO BOTTOM HOLE

LATITUDE 39°12'30"

LONGITUDE 80°35'00"

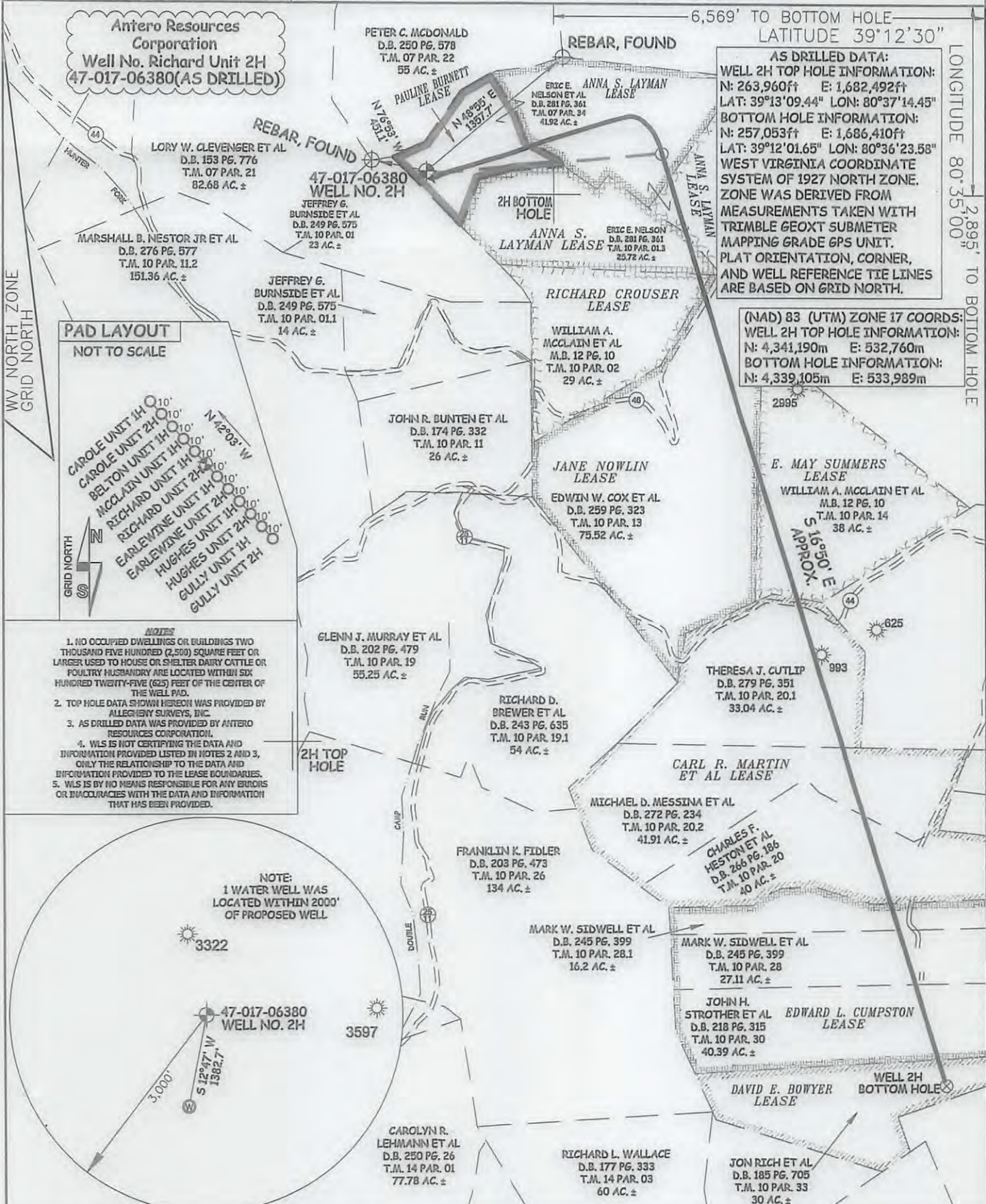
2,895' TO BOTTOM HOLE

LONGITUDE 80°35'00"

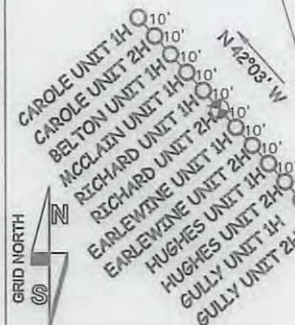
Antero Resources Corporation  
Well No. Richard Unit 2H  
47-017-06380(AS DRILLED)

AS DRILLED DATA:  
WELL 2H TOP HOLE INFORMATION:  
N: 263,960ft E: 1,682,492ft  
LAT: 39°13'09.44" LON: 80°37'14.45"  
BOTTOM HOLE INFORMATION:  
N: 257,053ft E: 1,686,410ft  
LAT: 39°12'01.65" LON: 80°36'23.58"  
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: 4,341,190m E: 532,760m  
BOTTOM HOLE INFORMATION:  
N: 4,339,105m E: 533,989m



PAD LAYOUT  
NOT TO SCALE



- NOTES**
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 SURVEYS, 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.



NOTE:  
1 WATER WELL WAS LOCATED WITHIN 2000' OF PROPOSED WELL

JOB # 12-148WA  
DRAWING # RICHARD2HAD  
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  
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

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

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

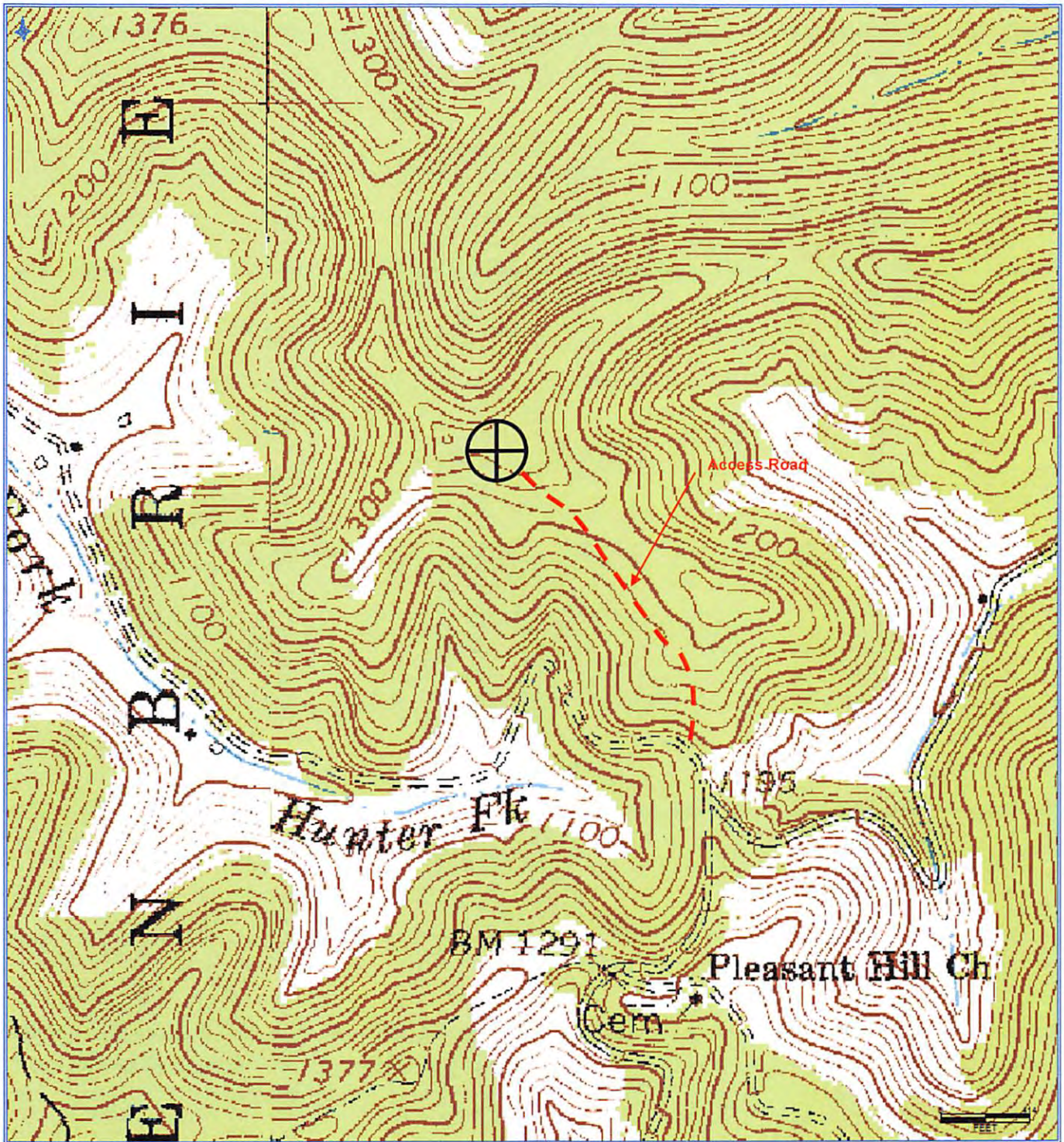
LOCATION: ELEVATION 1,354' ORIGINAL 1,332' AS DRILLED WATERSHED HEADWATERS OF MIDDLE ISLAND CREEK  
QUADRANGLE BIG ISSAC 7.5' DISTRICT GREENBRIER COUNTY DODD BRIDGE

SURFACE OWNER ERIC E. NELSON, ET AL ACREAGE 41.92 ACRES +/-  
OIL & GAS ROYALTY OWNER PAULINE BURNETT; ANNA S. LAYMAN; ANNA S. LAYMAN LEASE ACREAGE 14.29 ACRES; 25.16 ACRES; 23.9625 ACRES;  
ANNA S. LAYMAN; RICHARD CROUSER; JANE NOWLIN; E. MAY SUMMERS; CARL R. MARTIN ET AL; EDWARD L. CUMPTON; DAVID E. BOWYER 10.275 ACRES; 20.93 ACRES; 76 ACRES; 30 ACRES; 115 ACRES; 66 ACRES; 30 ACRES

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) (X) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG  
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,335' TVD 15,309' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER  
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

02/25/2017



**Antero Resources Corporation**  
Appalachian Basin  
Richard Unit  
Doddridge County  
Quadrangle: Big Isaac  
Watershed: Headwaters Middle Island Creek  
District: Greenbrier  
Date: 11-14-2016