

LATITUDE 39°15'00"

10,588'

7,084' TO BOTTOM HOLE
LATITUDE 39°12'30"

LONGITUDE 80°35'00"
3,452' TO BOTTOM HOLE
11,179'

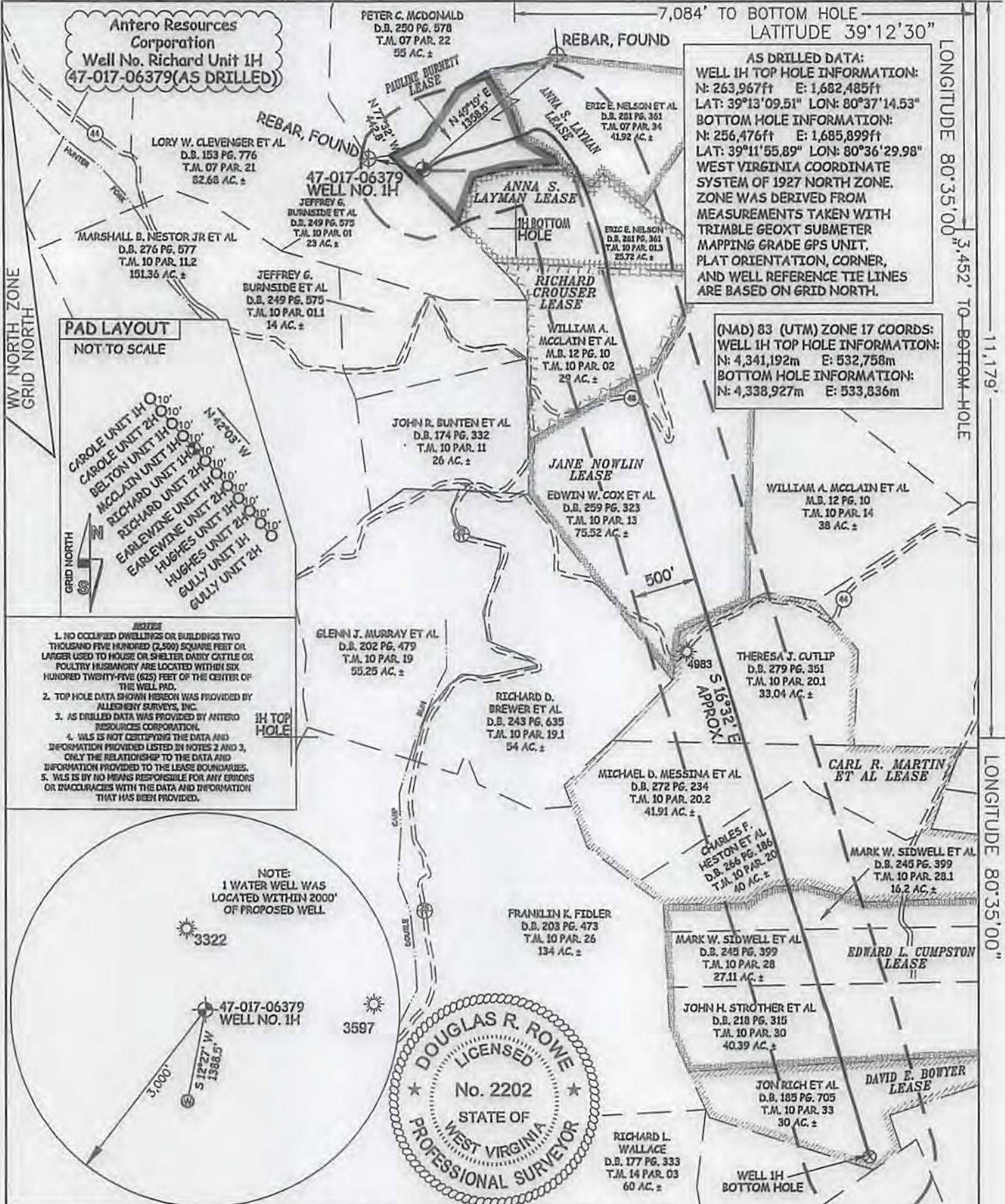
LONGITUDE 80°35'00"

LONGITUDE 80°35'00"

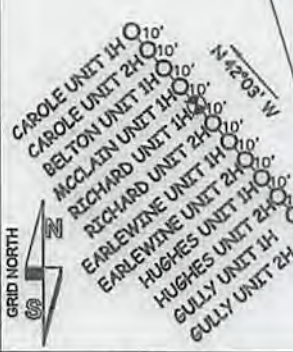
Antero Resources Corporation
Well No. Richard Unit 1H
47-017-06379 (AS DRILLED)

AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 263,967ft E: 1,682,485ft
LAT: 39°13'09.51" LON: 80°37'14.53"
BOTTOM HOLE INFORMATION:
N: 256,476ft E: 1,685,899ft
LAT: 39°11'55.89" LON: 80°36'29.98"
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.

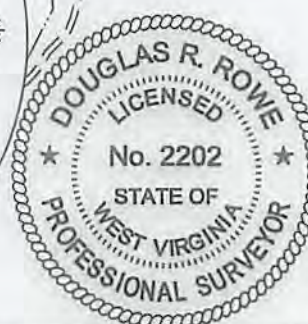
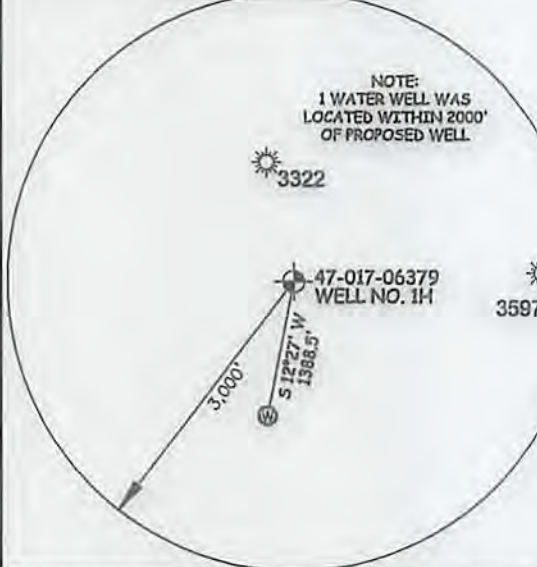
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 4,341,192m E: 532,758m
BOTTOM HOLE INFORMATION:
N: 4,338,927m E: 533,836m



PAD LAYOUT
NOT TO SCALE



1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER, DAILY 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.



JOB # 12-148WA
DRAWING # RICHARD1HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING 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 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 AVE. PENNSBORO WEST VIRGINIA 26415

LEGEND
- - - Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
○ Proposed Well Path
⊙ As Drilled Well Path

DOUGLAS R. ROWE P.S. 2202
DATE 11/28/17
OPERATOR'S WELL # RICHARD UNIT #1H
API WELL # 47 - 017 - 06379

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 1,332' AS-DRILLED WATERSHED HEADWATERS OF MIDDLE ISLAND CREEK
QUADRANGLE BIG ISSAC 7.5' DISTRICT GREENBRIER COUNTY DODDING

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 +/-
RICHARD CROUSER; JANE NOWLIN; CARL R. MARTIN ET AL; EDWARD L. CUMPSTON; DAVID E. BOWYER 29.93 ACRES +/-; 76 ACRES +/-; 115 ACRES +/-; 86 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) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,314' TVD 15,636' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

01/05/2018

COUNTY NAME PERMIT