

LATITUDE 39°12'30"

6,881'

LATITUDE 39°10'00" 2,646' TO BOTTOM HOLE

LONGITUDE 80°52'30"

9,754' TO BOTTOM HOLE

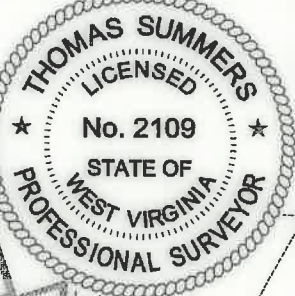
12,975'

LONGITUDE 80°52'30"

Antero Resources Corporation Well No. Hughes River Unit 1H

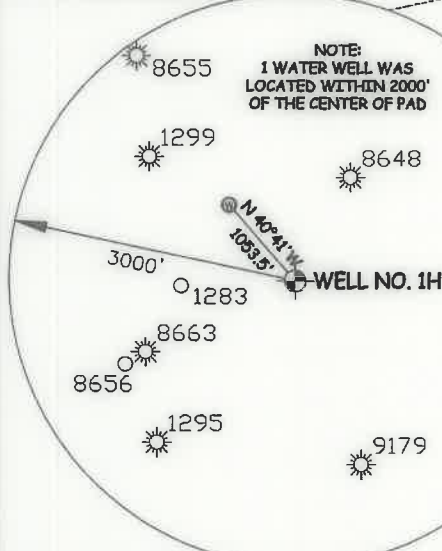
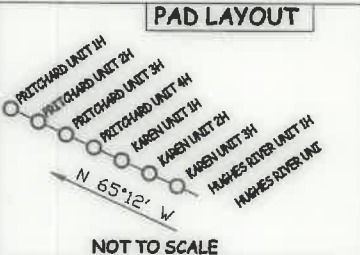
AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
 N: 248,105ft E: 1,603,304ft
 LAT: 39°10'21.76" LON: 80°53'57.37"
BOTTOM HOLE INFORMATION:
 N: 236,085ft E: 1,607,355ft
 LAT: 39°08'23.59" LON: 80°53'03.58"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE 6EOXT 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: 4,335,957m E: 508,716m
BOTTOM HOLE INFORMATION:
 N: 4,332,316m E: 510,011m



WV NORTH ZONE GRID NORTH

- 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
 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 # 14-127WA
 DRAWING # HUGHESRIVER1HAD
 SCALE 1" = 2000'
 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

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 +/-
 O - - - - - Proposed Well Path
 O - - - - - As Drilled Well Path

Thomas Summers
 THOMAS SUMMERS P.S. 2109
 DATE 11/20/19
 OPERATOR'S WELL # HUGHES RIVER UNIT #1H

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 945.5' AS BUILT WATERSHED SOUTH FORK HUGHES RIVER
 QUADRANGLE PULLMAN 7.5' DISTRICT UNION
 SURFACE OWNER LYNWOOD IRELAND ET AL
 OIL & GAS ROYALTY OWNER BELLE PRITCHARD; W. P. IRELAND ET UX;
C. C. DAVIS ET AL; JOYCE E. WEBER; CHARLES CARSON; ELBERT SHEETS HEIRS;
MICHAEL I. SPIKER ET AL; YVONNE JOYCE RIGGLEMAN; AI G. KELLEY; L. M. EHRET ET UX
 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 6,354' TVD 19,320' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

API WELL # 47 - 085 - 10369
 STATE COUNTY PERMIT
 COUNTY RITCHIE
 ACREAGE 144.276 ACRES +/-
 LEASE ACREAGE 415 AC±; 222 AC±;
130 AC±; 445.67 AC±; 71.95 AC±; 70.25 AC±;
84.14 AC±; 35.5 AC±; 100 AC±; 234 AC±;

LATITUDE 39°12'30"

6,881'

LATITUDE 39°10'00" 2,646' TO BOTTOM HOLE

LONGITUDE 80°52'30"

9,754' TO BOTTOM HOLE

12,975'

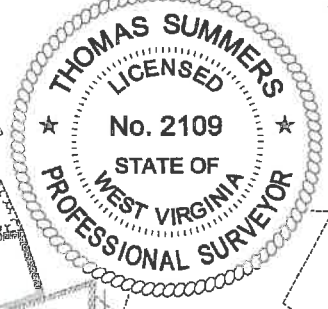
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WELL NO. 1H

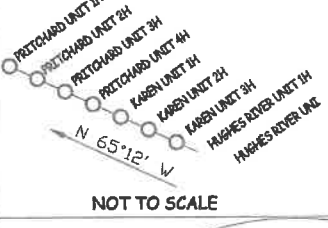
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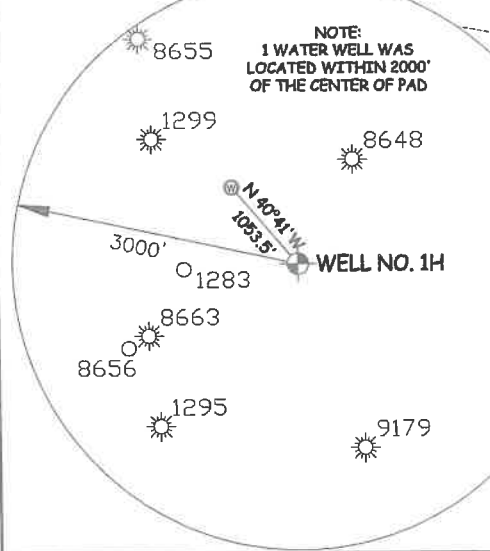


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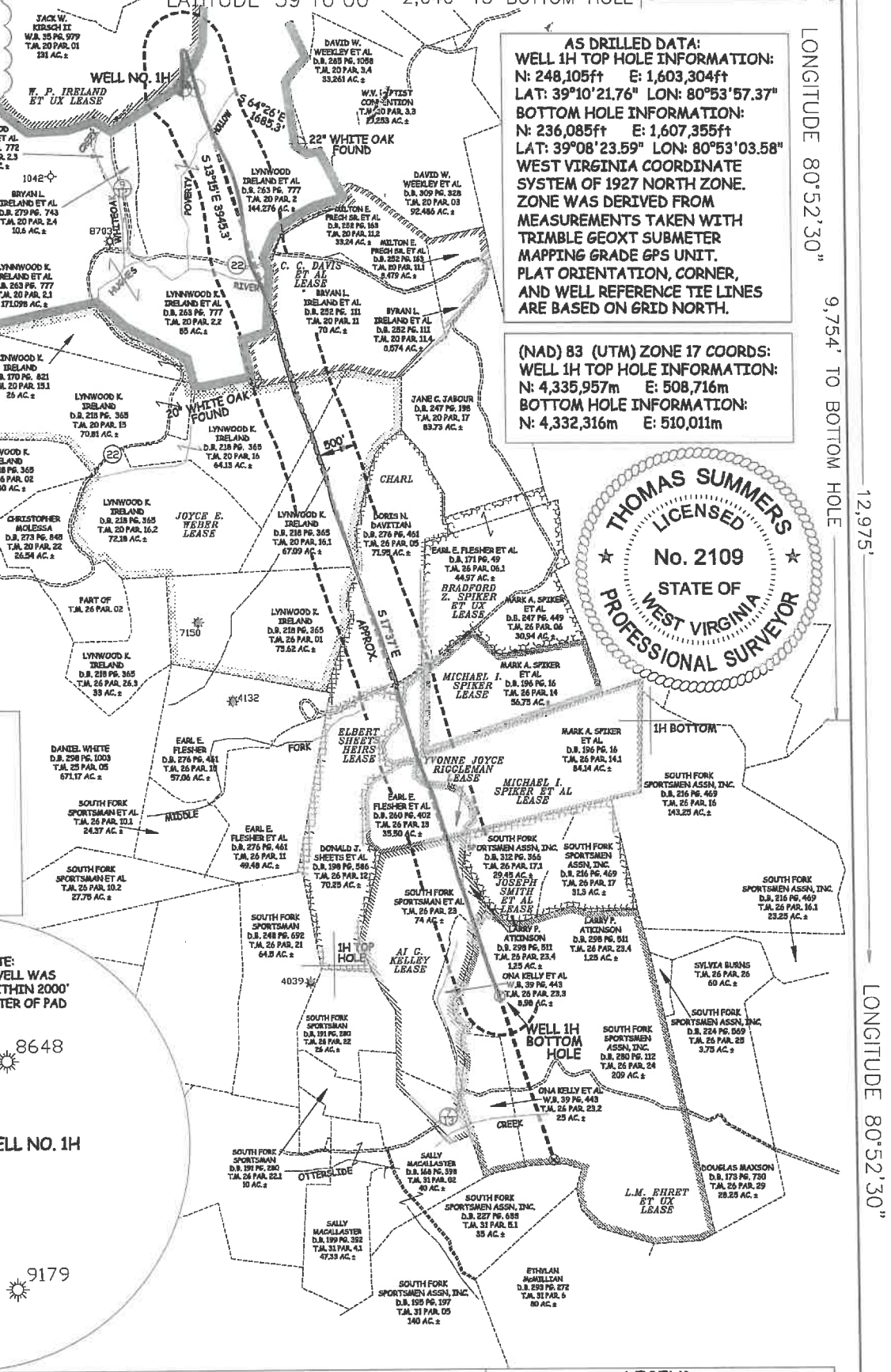
PAD LAYOUT



NOT TO SCALE



NOTE: 1 WATER WELL WAS LOCATED WITHIN 2000' OF THE CENTER OF PAD



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 DRAWING # **HUGHESRIVER1HAD**
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 MINIMUM DEGREE OF ACCURACY **SUBMETER**
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 STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS



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DENVER, CO 80202 **5400 D BIG TYLER ROAD**
FORM WW-6 **CHARLESTON, WV 25313**

COUNTY NAME PERMIT