

LATITUDE 39°12'30"

6,890'

LATITUDE 39°10'00" 3,628' TO BOTTOM HOLE

LONGITUDE 80°52'30"

9,975' TO BOTTOM HOLE

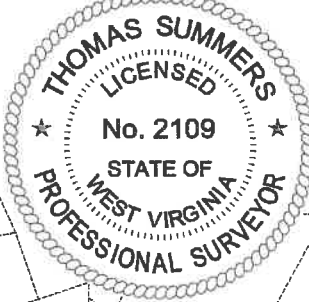
12,971'

LONGITUDE 80°52'30"

Antero Resources Corporation
Well No. Karen Unit 3H
47-085-10216

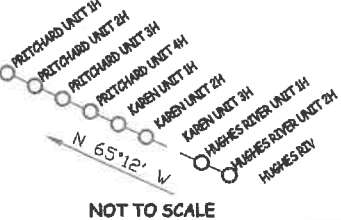
AS DRILLED DATA:
WELL 3H TOP HOLE INFORMATION:
N: 248,109ft E: 1,603,295ft
LAT: 39°10'21.80" LON: 80°53'57.48"
BOTTOM HOLE INFORMATION:
N: 235,880ft E: 1,606,369ft
LAT: 39°08'21.41" LON: 80°53'16.05"
WEST VIRGINIA COORDINATE
SYSTEM OF 1927 NORTH ZONE.
ZONE WAS DERIVED FROM
MEASUREMENTS TAKEN WITH
TRIMBLE 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 3H TOP HOLE INFORMATION:
N: 4,335,958m E: 508,713m
BOTTOM HOLE INFORMATION:
N: 4,332,248m E: 509,712m



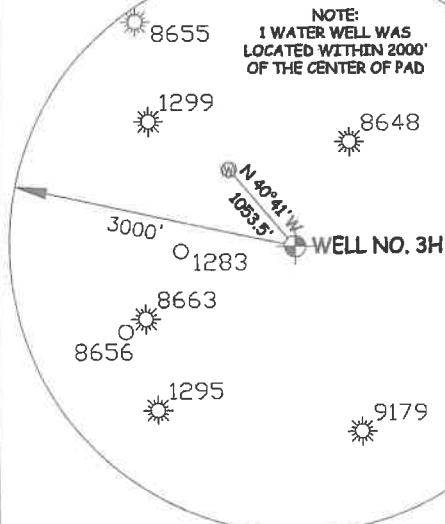
- NOTE**
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY
 3. AS 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.

PAD LAYOUT



NOT TO SCALE

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



JOB # 14-127WA
DRAWING # KAREN3HAD
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 +/-
- Proposed Well Path
- As Drilled Well Path

THOMAS SUMMERS P.S. 2109

DATE 11/20/19
OPERATOR'S WELL# KAREN UNIT #3H

API WELL # 47 - 085 - 10216
STATE COUNTY PERMIT

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 COUNTY RITCHIE
SURFACE OWNER LYNWOOD IRELAND ET AL

OIL & GAS ROYALTY OWNER BELLE PRITCHARD; W. P. IRELAND ET UX;
JOYCE E. WEBER; EARL E. FLESHER ET AL; EARL E. FLESHER; ELBERT SHEETS HEIRS;
YVONNE JOYCE RIGGLEMAN; AI G. KELLEY
ACREAGE 144.276 ACRES +/-
LEASE ACAGE 415 AC±; 222 AC±;
445.67 AC±; 57 AC±; 82 AC±; 70.25 AC±;
35.5 AC±; 100 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 6,334' TVD 19,270' MD

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