

LATITUDE 39°22'30"

4,841'

8,129' TO BOTTOM HOLE
LATITUDE 39°25'00"

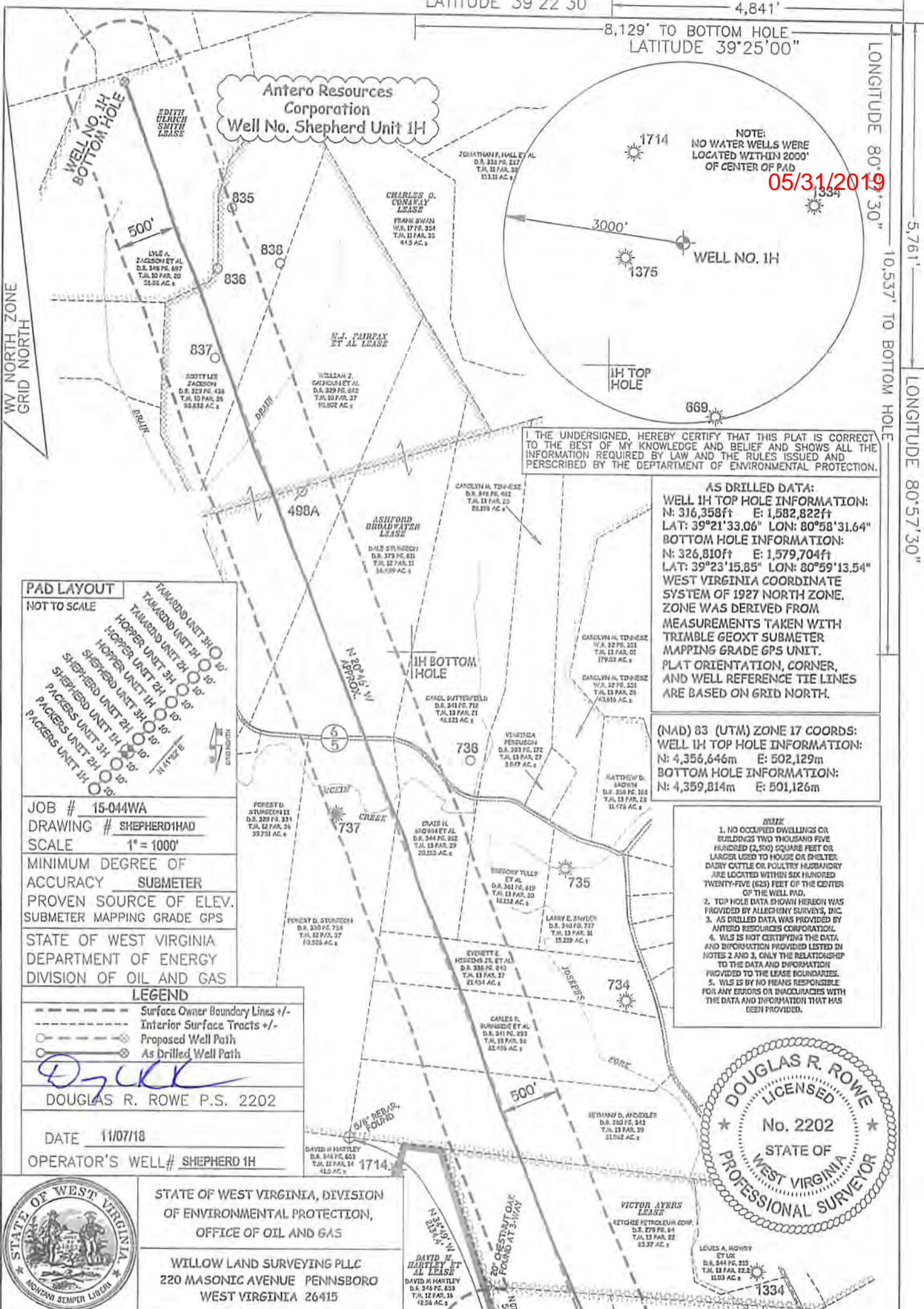
LONGITUDE 80°30'30"

5,761'

LONGITUDE 80°57'30"

Antero Resources Corporation
Well No. Shepherd Unit 1H

05/31/2019



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 PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
 N: 316,358ft E: 1,582,822ft
 LAT: 39°21'33.06" LON: 80°58'31.64"
BOTTOM HOLE INFORMATION:
 N: 326,810ft E: 1,579,704ft
 LAT: 39°23'15.85" LON: 80°59'13.54"
 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 THE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
 N: 4,356,646m E: 502,129m
BOTTOM HOLE INFORMATION:
 N: 4,359,814m E: 501,126m

- 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 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 # 15-044WA
 DRAWING # SHEPHERD1HAD
 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

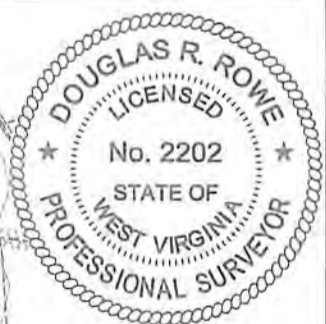
LEGEND

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

D. Rowe
 DOUGLAS R. ROWE P.S. 2202
 DATE 11/07/18
 OPERATOR'S WELL# SHEPHERD 1H



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



WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,178' AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE PENNSBORO 7.5 SHL MIDDLEBOURNE 7.5 BHL 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 AYERS;
 ASHFORD BROADWATER; M.J. FAIRFAX ET AL; EDITH ULRICH SMITH

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 6,433' TVD 17,661' MD

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

API WELL # 47 - 095 - 02385
 STATE COUNTY PERMIT LEASE ACREAGE 42.56 AC±; 221.24 AC±; 97 AC±; 583.712 AC±; 120 AC±; 56.88 AC±

COUNTY NAME PERMIT