

LATITUDE 39°15'00"

5,542'

1,049' TO BOTTOM HOLE

LATITUDE 39°15'00"

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

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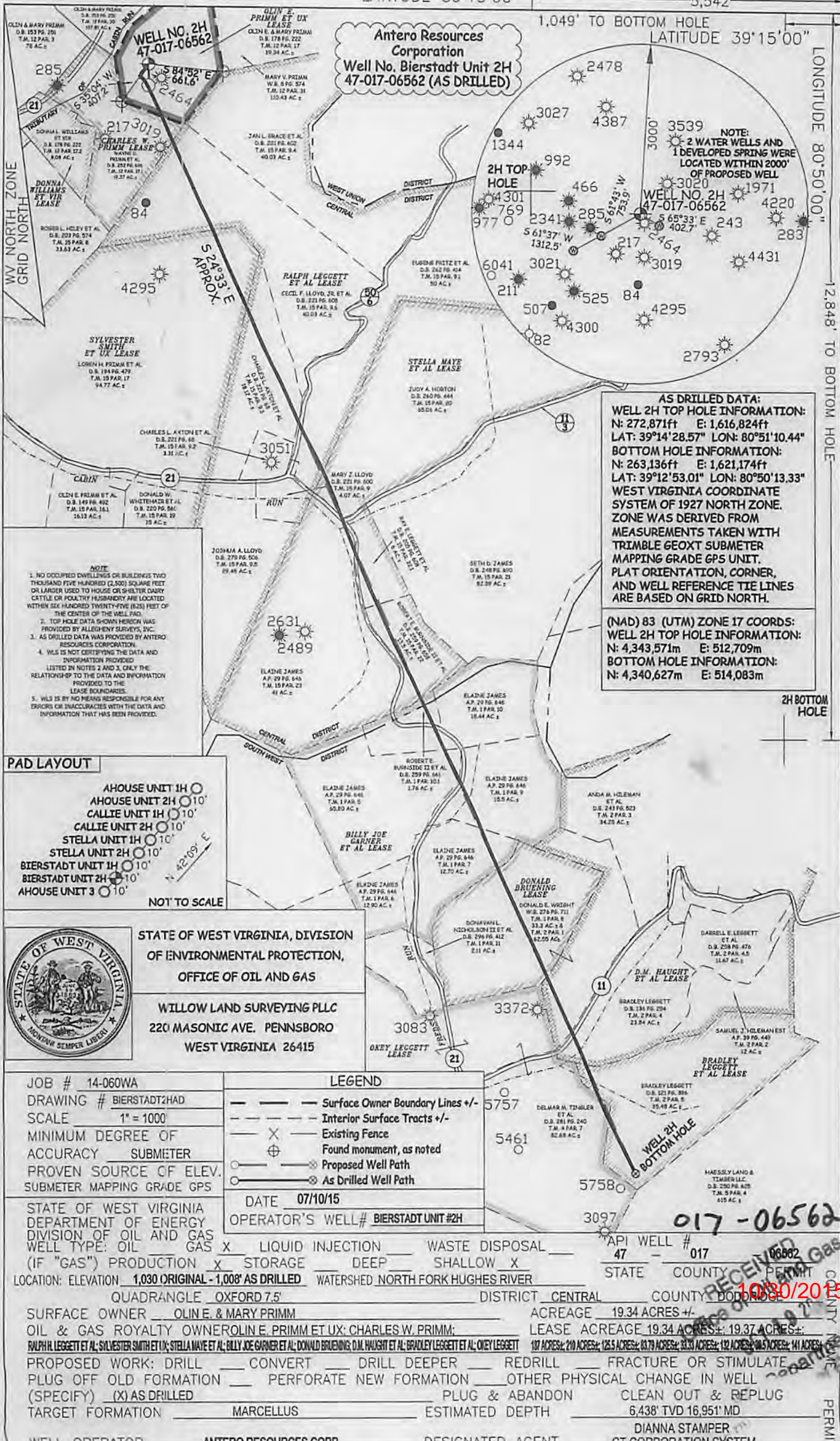
LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

LONGITUDE 80°50'00"

Antero Resources Corporation  
Well No. Bierstadt Unit 2H  
47-017-06562 (AS DRILLED)

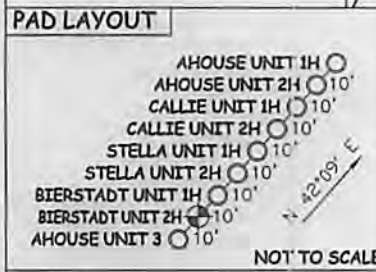


NOTE:  
2 WATER WELLS AND  
1 DEVELOPED SPRING WERE  
LOCATED WITHIN 2000'  
OF PROPOSED WELL

AS DRILLED DATA:  
WELL 2H TOP HOLE INFORMATION:  
N: 272,871ft E: 1,616,824ft  
LAT: 39°14'28.57" LON: 80°51'10.44"  
BOTTOM HOLE INFORMATION:  
N: 263,136ft E: 1,621,174ft  
LAT: 39°12'53.01" LON: 80°50'13.33"  
WEST VIRGINIA COORDINATE  
SYSTEM OF 1927 NORTH ZONE.  
ZONE WAS DERIVED FROM  
MEASUREMENTS TAKEN WITH  
TRIMBLE 660XT 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: 4,343,571m E: 512,709m  
BOTTOM HOLE INFORMATION:  
N: 4,340,627m E: 514,083m

- 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 RECORDS.  
5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.



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

JOB # 14-060WA  
DRAWING # BIERSTADT2HAD  
SCALE 1" = 1000  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND

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

DATE 07/10/15  
OPERATOR'S WELL# BIERSTADT UNIT #2H

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS  
WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL  
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X  
LOCATION: ELEVATION 1,030 ORIGINAL - 1,008' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER  
QUADRANGLE OXFORD 7.5' DISTRICT CENTRAL COUNTY BOONVILLE  
SURFACE OWNER OLIN E. & MARY PRIMM ACREAGE 19.34 ACRES +/-  
OIL & GAS ROYALTY OWNER OLIN E. PRIMM ET UX; CHARLES W. PRIMM; LEASE ACREAGE 19.34 ACRES +/-; 19.37 ACRES +/-  
RALPH L. LEGGETT ET AL; SYLVESTER SMITH ET UX; STELLA MAYE ET AL; BILLY JOE GARNER ET AL; DONALD BRUEHNIG; D.M. HAUGHT ET AL; BRADLEY LEGGETT ET AL; OKEY LEGGETT 107 ACRES +/-; 210 ACRES +/-; 126.5 ACRES +/-; 61.79 ACRES +/-; 30.33 ACRES +/-; 12 ACRES +/-; 10.5 ACRES +/-; 141 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 6,438' TVD 16,951' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER  
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
DENVER, CO 80202 CHARLESTON, WV 25313

017-06562

API WELL # 47 STATE COUNTY PERMIT

10/30/2015

RECEIVED

DEPARTMENT OF OIL AND GAS

PERMIT