

LATITUDE 39°22'30" -959'

LATITUDE 39°20'00"

LONGITUDE 80°52'30" 6,827' TO BOTTOM HOLE

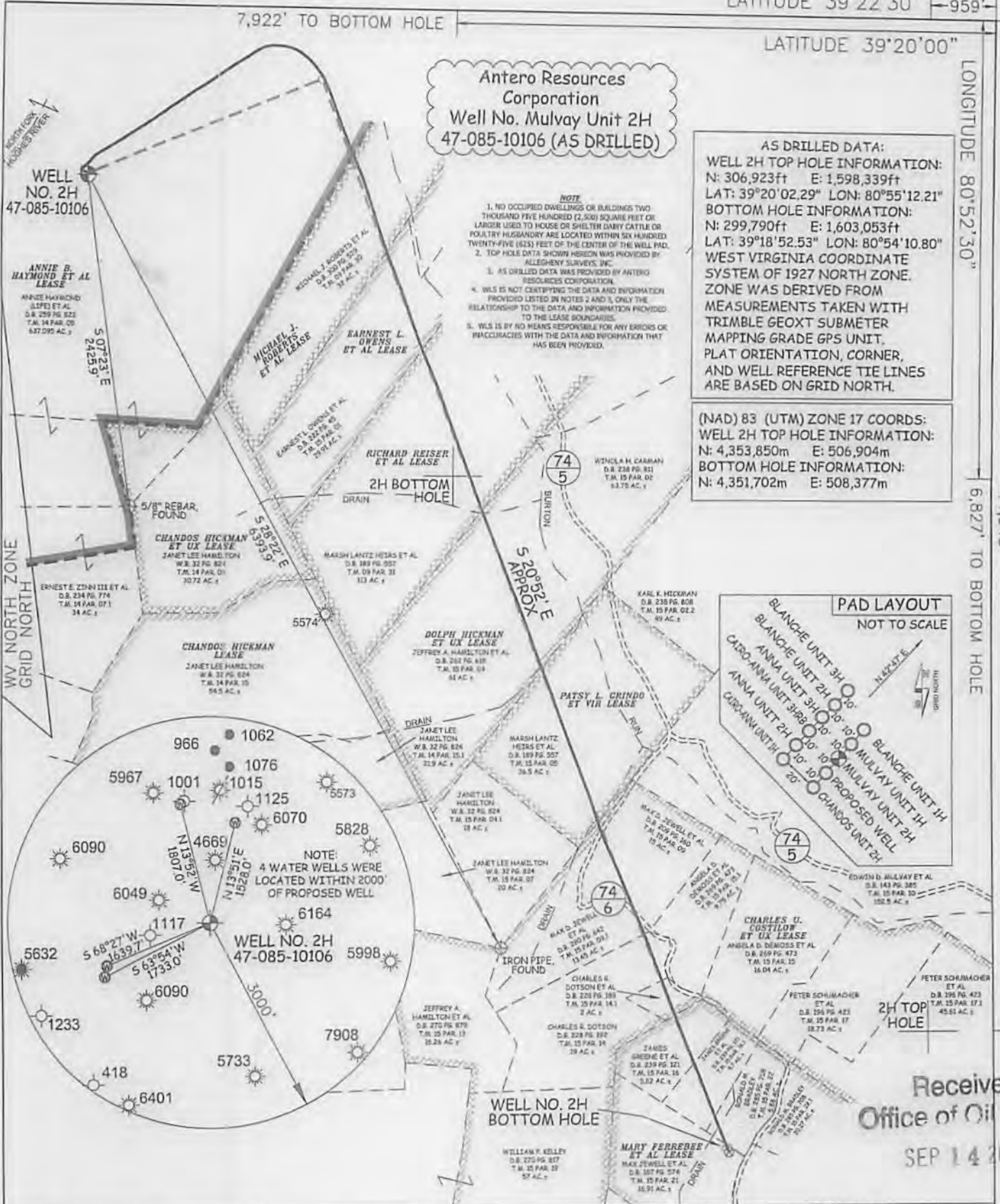
LONGITUDE 80°55'00" 14,945'

Antero Resources Corporation Well No. Mulvay Unit 2H 47-085-10106 (AS DRILLED)

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
 N: 306,923ft E: 1,598,339ft
 LAT: 39°20'02.29" LON: 80°55'12.21"
BOTTOM HOLE INFORMATION:
 N: 299,790ft E: 1,603,053ft
 LAT: 39°18'52.53" LON: 80°54'10.80"
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 2H TOP HOLE INFORMATION:
 N: 4,353,850m E: 506,904m
BOTTOM HOLE INFORMATION:
 N: 4,351,702m E: 508,377m

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.



Received
Office of Oil & Gas
SEP 14 2015

JOB # 12-130WA
 DRAWING # MULVAY2HAD
 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
 WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
 LOCATION: ELEVATION 992' ORIGINAL - 971' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER
 QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHE
 SURFACE OWNER ANNIE B. HAYMOND, ET AL ACREAGE 637.095 ACRES +/-
 OIL & GAS ROYALTY OWNER ANNIE B. HAYMOND, ET AL; MICHAEL J. ROBERTS ET AL; EARNEST L. OWENS ET AL; RICHARD REISER ET AL; DOLPH HICKMAN ET UX; PATSY L. GRINDO ET VIR; CHARLES U. COSTILOW ET UX; MARY FERREBEE ET AL LEASE ACREAGE 700 ACRES+; 34.638 ACRES+; 4.0 ACRES+; 113 ACRES+; 124 ACRES+; 36.5 ACRES+; 200 ACRES+; 68 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 6,330' TVD 15,400' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT CT CORPORATION SYSTEM
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 DENVER, CO 80202 CHARLESTON, WV 25313



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 266 HUSHERS RUN RD PENNSBORO WEST VIRGINIA 26415

LEGEND		
---	Surface Owner Boundary Lines +/-	
- - - -	Interior Surface Tracts +/-	
x x x x	Existing Fence	
⊕	Found monument, as noted	
⊙	Proposed Well Path	
⊗	As Drilled Well Path	
DATE 07/27/15		
OPERATOR'S WELL # MULVAY UNIT #2H		
API WELL #	47 - 085 - 10106	
STATE COUNTY PERMIT		
COUNTY NAME	CLAY	
PERMIT		

10/16/2015