

LATITUDE 39°12'30"

3,262'

LATITUDE 39°15'00"

5,097' TO BOTTOM HOLE

LONGITUDE 80°55'00"

6,862'

10,880' TO BOTTOM HOLE

COUNTY NAME

PERMIT

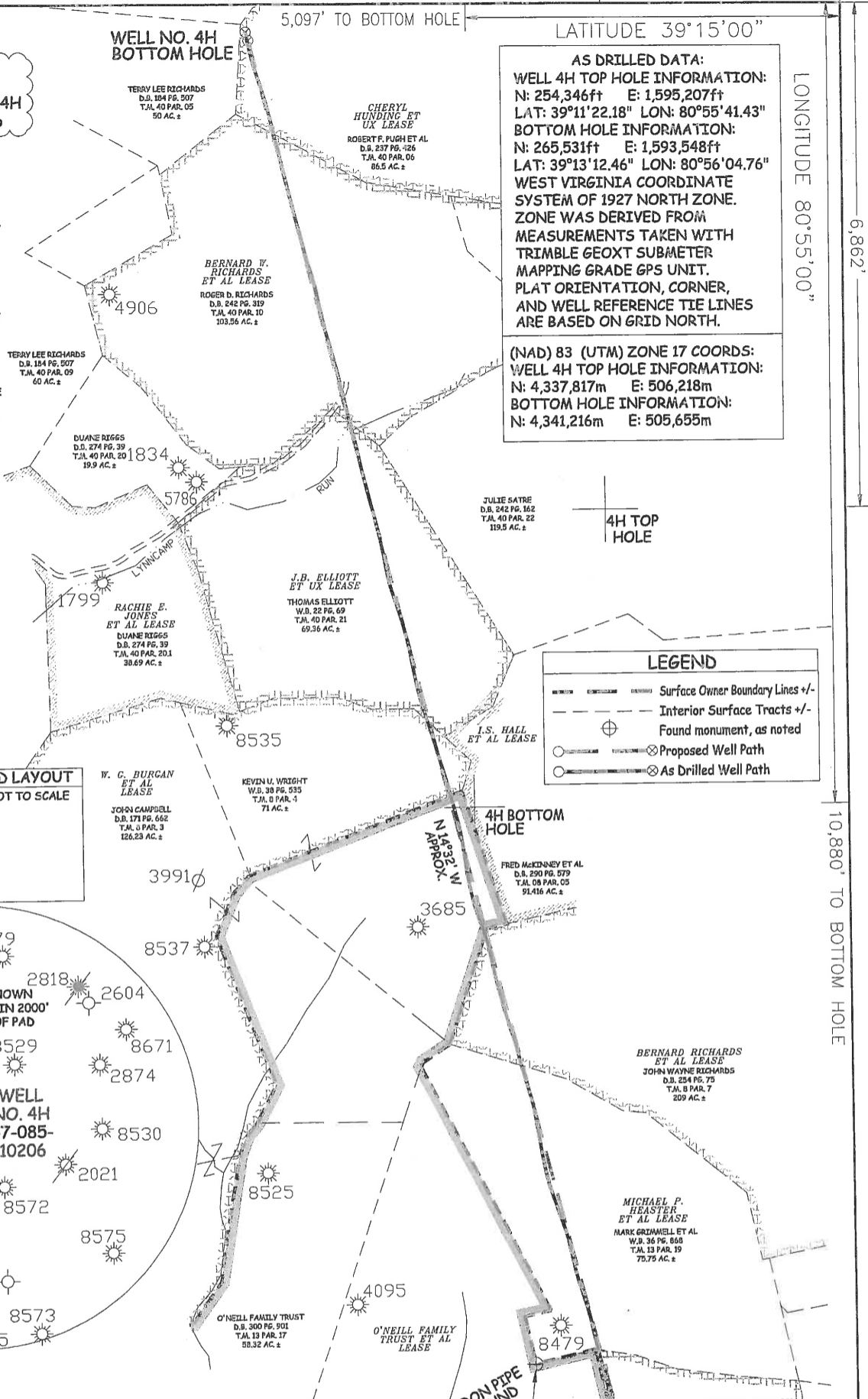
Antero Resources Corporation
Well No. Left Fork Unit 4H
A.P.I. #47-085-10206

AS DRILLED DATA:
WELL 4H TOP HOLE INFORMATION:
N: 254,346ft E: 1,595,207ft
LAT: 39°11'22.18" LON: 80°55'41.43"
BOTTOM HOLE INFORMATION:
N: 265,531ft E: 1,593,548ft
LAT: 39°13'12.46" LON: 80°56'04.76"
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.

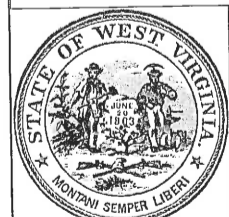
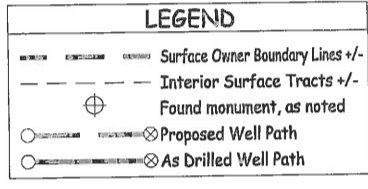
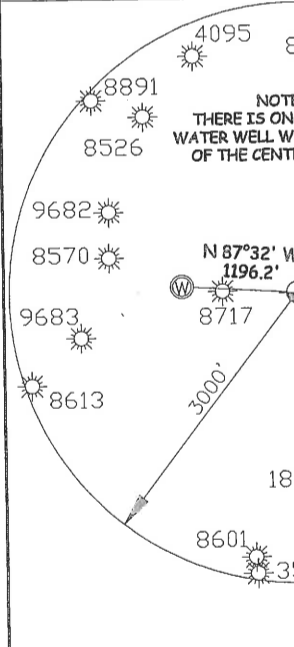
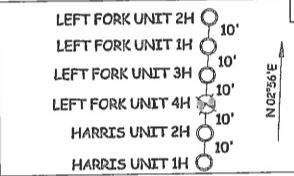
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 4H TOP HOLE INFORMATION:
N: 4,337,817m E: 506,218m
BOTTOM HOLE INFORMATION:
N: 4,341,216m E: 505,655m

- 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.

WV NORTH ZONE
GRID NORTH



JOB # 12-045
DRAWING # LEFTFORKUNIT4HAD
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



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE PENNSBORO WEST VIRGINIA 26415

DATE 11/08/16
OPERATOR'S WELL# LEFT FORK UNIT #4H

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ORIGINAL GROUND ELEV. 1,039' AS DRILLED ELEV. 1019'
WATERSHED SOUTH FORK HUGHES RIVER
QUADRANGLE PULLMAN 7.5' DISTRICT UNION COUNTY RITCHIE
SURFACE OWNER O'NEILL FAMILY TRUST ET AL ACREAGE 300.45 ACRES +/-
OIL & GAS ROYALTY OWNER O'NEILL FAMILY TRUST ET AL; DENNIS HADDOX ET AL; MICHAEL P. HEASTER ET AL; BERNARD RICHARDS ET AL; W.G. BORGAN ET AL; J.B. ELLIOTT ET UX; BERNARD W. RICHARDS ET AL; CHERYL HUNDING ET UX
LEASE ACREAGE 517.83 ACRES; 41.75 ACRES; 234.5 ACRES; 214 ACRES; 154 ACRES; 70 ACRES; 114 ACRES; 141.29 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 UP & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,200 TMD, 117-307 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

Office of Oil and Gas
WV Department of Environmental Protection
DIANNA STAMPER
FEB 01 2017
05/26/2017
47-085-10206
STATE COUNTY PERMIT NAME