

LATITUDE 39°22'30"

9,868'

7,622' TO BOTTOM HOLE

LATITUDE 39°22'30"

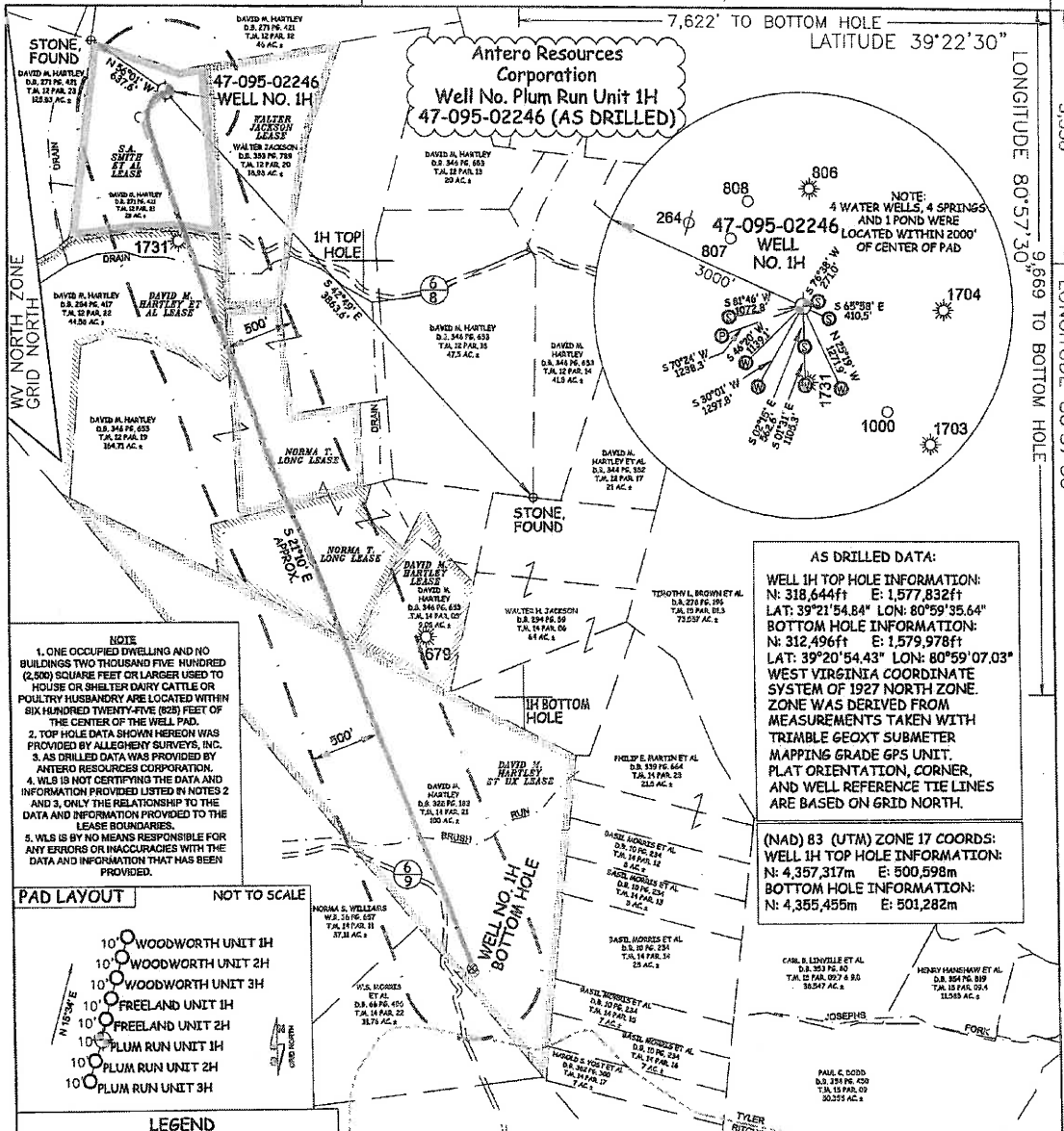
LONGITUDE 80°57'30"

3,558'

LONGITUDE 80°57'30"

9,669' TO BOTTOM HOLE

LONGITUDE 80°57'30"



NOTE

- ONE OCCUPIED DWELLING AND NO 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.
- TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
- AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- 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.
- WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

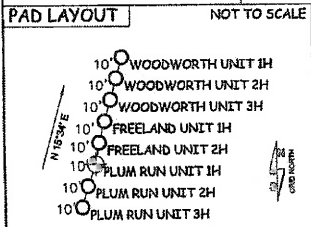
AS DRILLED DATA:

WELL 1H TOP HOLE INFORMATION:
 N: 318,644ft E: 1,577,832ft
 LAT: 39°21'54.84" LON: 80°59'35.64"

BOTTOM HOLE INFORMATION:
 N: 312,496ft E: 1,579,978ft
 LAT: 39°20'54.43" LON: 80°59'07.03"

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 1H TOP HOLE INFORMATION:
 N: 4,357,317m E: 500,598m
 BOTTOM HOLE INFORMATION:
 N: 4,355,455m E: 501,282m

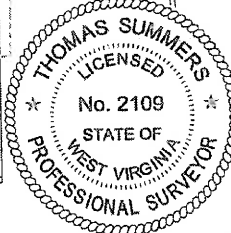


LEGEND

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

DATE 07/21/2017
 OPERATOR'S WELL# PLUM RUN UNIT #1HAD

JOB # 15-005WA
 DRAWING # PLUMRUN1HADR
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS



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

WILLOW LAND SURVEYING PLLC
 220 MASONIC AVENUE PENNSBORO WEST VIRGINIA 26415

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.

THOMAS SUMMERS P.S. 2109

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___ API WELL # 47 - 095 - 02246
 (IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW

LOCATION: ELEVATION AS DRILLED 1,021' WATERSHED OUTLET MIDDLE ISLAND CREEK STATE COUNTY PERMIT
 QUADRANGLE PENNSBORO 7.5 DISTRICT MEADE COUNTY TYLER

SURFACE OWNER DAVID M. HARTLEY ACREAGE 28 ACRES +/-
 OIL & GAS ROYALTY OWNER S.A. SMITH ET AL; DAVID M. HARTLEY ET AL; LEASE ACREAGE 28 AC.; 44.58 AC.;
 NORMA T. LONG; NORMA T. LONG; DAVID M. HARTLEY ET AL 22.5 AC.; 22.55 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 6,278' TVD 12,625' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT CT CORPORATION SYSTEM
 ADDRESS 1615 WYNKOP STREET ADDRESS 5400 D BIG TYLER ROAD
 DENVER, CO 80202 CHARLESTON, WV 25313

FORM WW-6