

LATITUDE 39°25'00"

8,165'

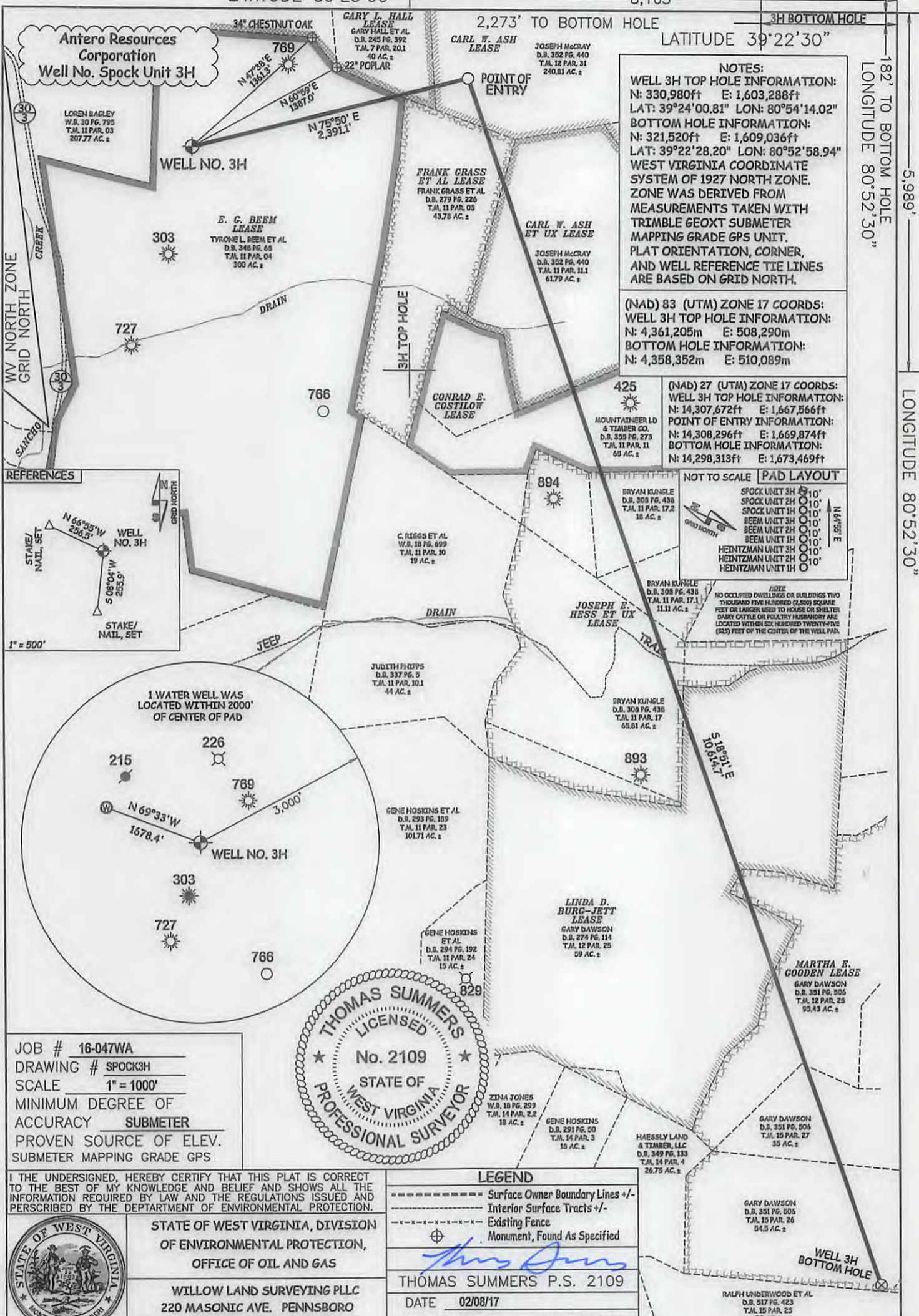
3H BOTTOM HOLE

LATITUDE 39°22'30"

182' TO BOTTOM HOLE
LONGITUDE 80°52'30"

5,989'

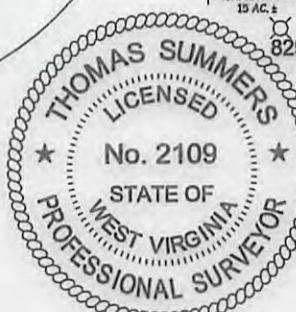
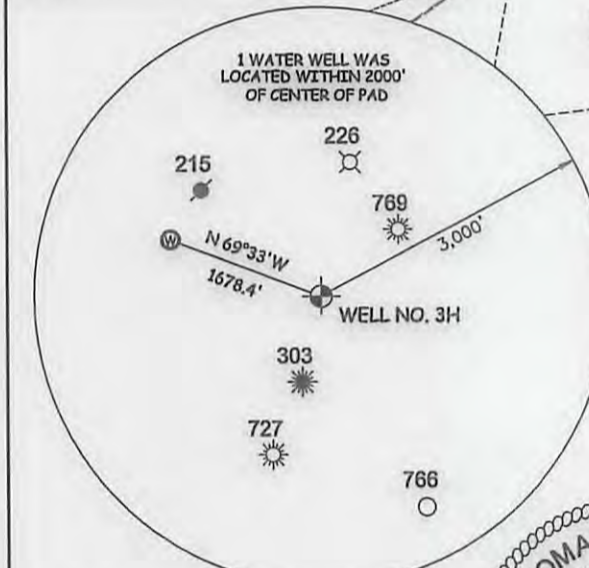
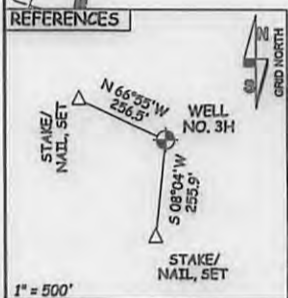
LONGITUDE 80°52'30"



NOTES:
 WELL 3H TOP HOLE INFORMATION:
 N: 330,980ft E: 1,603,288ft
 LAT: 39°24'00.81" LON: 80°54'14.02"
 BOTTOM HOLE INFORMATION:
 N: 321,520ft E: 1,609,036ft
 LAT: 39°22'28.20" LON: 80°52'58.94"
 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 3H TOP HOLE INFORMATION:
 N: 4,361,205m E: 508,290m
 BOTTOM HOLE INFORMATION:
 N: 4,358,352m E: 510,089m

(NAD) 27 (UTM) ZONE 17 COORDS:
 WELL 3H TOP HOLE INFORMATION:
 N: 14,307,672ft E: 1,667,566ft
 POINT OF ENTRY INFORMATION:
 N: 14,308,296ft E: 1,669,874ft
 BOTTOM HOLE INFORMATION:
 N: 14,298,313ft E: 1,673,469ft



JOB # 16-047WA
 DRAWING # SPOCK3H
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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 REGULATIONS ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



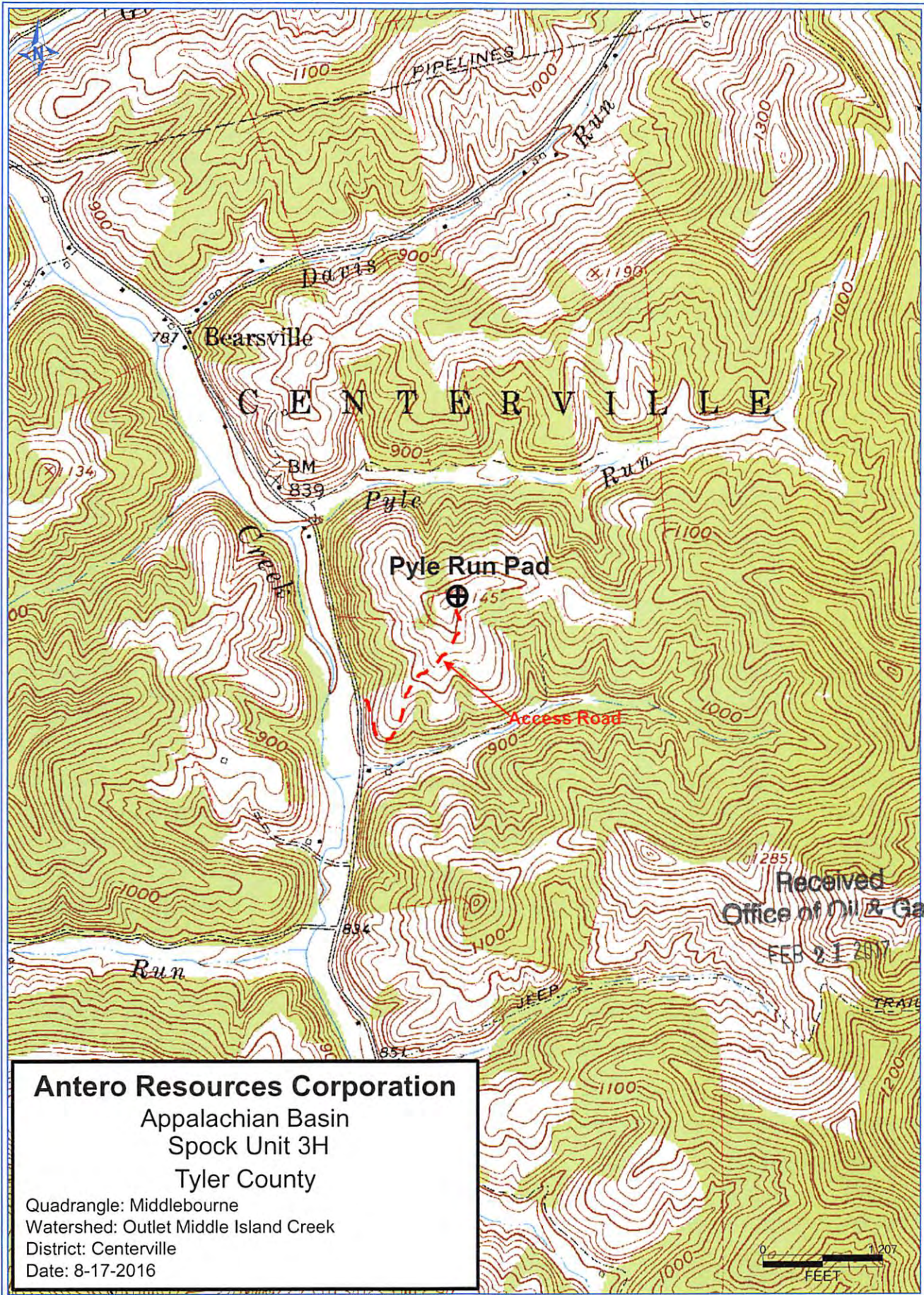
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

LEGEND
 - - - - - Surface Owner Boundary Lines +/-
 - - - - - Interior Surface Tracts +/-
 - - - - - Existing Fence
 ⊕ Monument, Found As Specified

THOMAS SUMMERS P.S. 2109
 DATE 02/08/17
 OPERATOR'S WELL# SPOCK UNIT #3H

STATE OF WEST VIRGINIA DEPT. OF ENERGY DIVISION OF OIL AND GAS
 WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW STATE COUNTY
 LOCATION: ELEVATION 1,142' - ORIGINAL 1,115' - PROPOSED WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE TH - MIDDLEBOURNE 7.5' BH - PENNSBORO 7.5' DISTRICT CENTERVILLE COUNTY TYLER
 SURFACE OWNER TYRONE L. BEEM ET AL ACREAGE 300 ACRES +/-
 OIL & GAS ROYALTY OWNER E. G. BEEM; GARY L. HALL; CARL W. ASH; FRANK GRASS ET AL; CARL W. ASH ET UX; CONRAD E. COSTILOV; JOSEPH E. HESS ET UX; LINDA D. BURG-JETT; MARTHA E. GOODEN
 LEASE ACREAGE 317 AC±; 80 AC±; 362.8 AC±; 43.78 AC±; 61.26 AC±; 64.42 AC±; 94.92 AC±; 178 AC±; 184.95 AC±
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
 (SPECIFY) PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,800' TVD 18,700' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

API WELL # 095 - 02428
 COUNTY NAME
 PERMIT
 05/12/2017



Antero Resources Corporation
Appalachian Basin
Spock Unit 3H
Tyler County

Quadrangle: Middlebourne
Watershed: Outlet Middle Island Creek
District: Centerville
Date: 8-17-2016