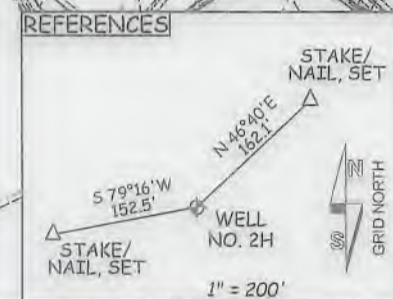
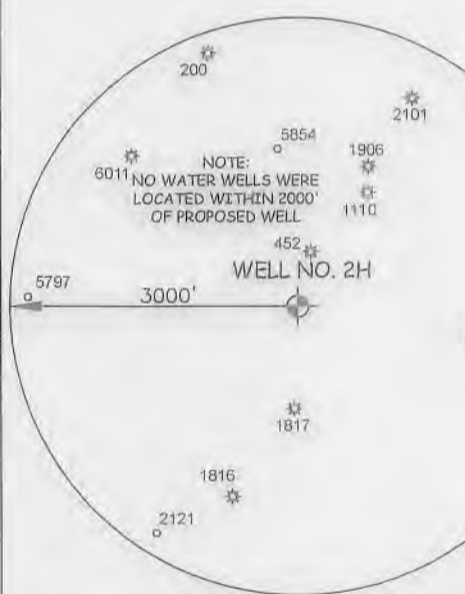
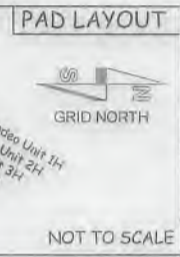
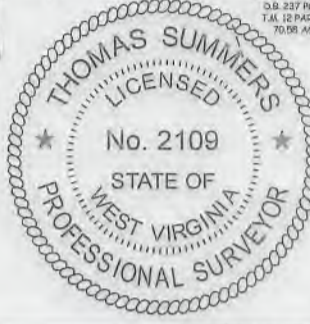


NOTES:  
 WELL 2H TOP HOLE INFORMATION:  
 N: 299,020ft E: 1,653,296ft  
 LAT: 39°18'52.19" LON: 80°43'31.46"  
 BOTTOM HOLE INFORMATION:  
 N: 290,449ft E: 1,658,494ft  
 LAT: 39°17'28.17" LON: 80°42'23.85"  
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE  
 MEASUREMENTS TAKEN WITH TRIMBLE GEOXT 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: 4,351,723m E: 523,687m  
 BOTTOM HOLE INFORMATION:  
 N: 4,349,138m E: 525,314m

(NAD) 27 (UTM) ZONE 17 COORDS:  
 WELL 2H TOP HOLE INFORMATION:  
 N: 14,276,562ft E: 1,718,083ft  
 POINT OF ENTRY INFORMATION:  
 N: 14,277,046ft E: 1,720,423ft  
 BOTTOM HOLE INFORMATION:  
 N: 14,268,082ft E: 1,723,422ft



JOB # 13-028WA  
 DRAWING # CALLAHAN2HR3  
 SCALE 1" = 2000'  
 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 RULES 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  
 ⊕ Found monument, as noted

THOMAS SUMMERS P.S. 2109

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 1,422'-ORIGINAL 1,376'-PROPOSED WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
 QUADRANGLE SMITHBURG 7.5' DISTRICT WEST UNION COUNTY DODDRIDGE

SURFACE OWNER MARY E. DEETS AND/OR PAUL A. SMITH ACREAGE 53.29 ACRES +/- AND/OR 175.78 ACRES±  
 OIL & GAS ROYALTY OWNER T.G. BAKER ET AL.; G.L. SWENTZEL ET UX; PANSY HEFLIN ET AL.; LEASE ACREAGE 53.46 ACRES±; 103 ACRES±; 222.5 ACRES±;  
 JOHN C. COULEHAN ET UX; OLIVIA JONES; DORIS L. CLEVELAND; MONTA McCONNELL ET AL.; MARY F. JONES 118 ACRES±; 260 ACRES±; 58 ACRES±; 114 ACRES±; 194 ACRES±

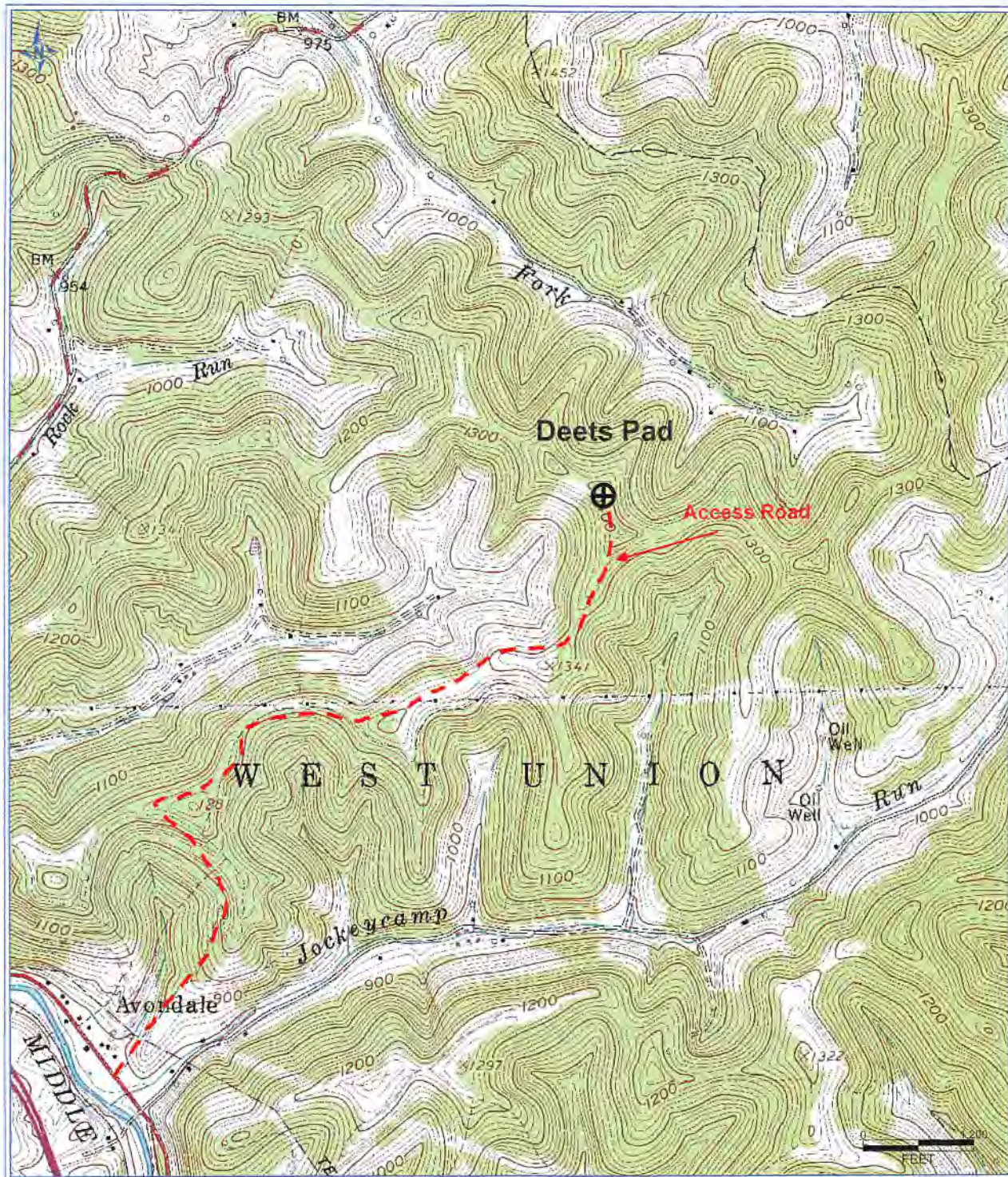
PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X  
 PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL  
 (SPECIFY) \_\_\_ PLUG & ABANDON \_\_\_ CLEAN OUT & REPLUG \_\_\_

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,600' TVD 19,900' MD  
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPLER - CT CORPORATION SYSTEM  
 ADDRESS 1625 17TH STREET ADDRESS 5400 D BIG TYLER ROAD  
 DENVER, CO 80202 CHARLESTON, WV 25313

DATE 09/20/18 OPERATOR'S WELL# CALLAHAN UNIT #2H  
 API WELL # 47 - 017 - 06874 STATE COUNTY PERMIT  
 COUNTY NAME PERMIT

185' TO BOTTOM HOLE  
 LONGITUDE 80°42'30"  
 6,862'  
 LONGITUDE 80°42'30"

12/21/2018



**Antero Resources Corporation**  
 Appalachian Basin  
 Callahan Unit 2H  
 Doddridge County

Quadrangle: West Union  
 Watershed: Middle Island Creek  
 District: West Union  
 Date: 3-20-2017

RECEIVED  
 Office of Energy and Gas  
 SEP 24 2018  
 Division of Environmental Protection