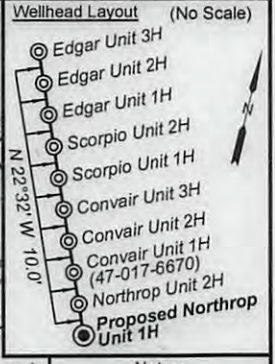
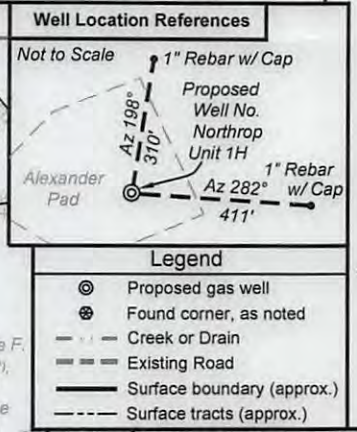


**Notes:**  
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.  
 Well No. Northrop Unit 1H Top Hole coordinates are  
 N: 306,913.92' Latitude: 39°20'08.27"  
 E: 1,639,266.29' Longitude: 80°46'31.37"  
 Bottom Hole coordinates are  
 N: 298,501.91' Latitude: 39°18'45.44"  
 E: 1,641,444.91' Longitude: 80°46'02.14"  
**UTM Zone 17, NAD 1983**  
 Top Hole Coordinates Bottom Hole Coordinates  
 N: 4,354,056.152m N: 4,351,504.504m  
 E: 519,372.852m E: 520,079.319m  
 Plat orientation and corner and well references are based upon the grid north meridian.  
 Well location references are based upon the magnetic meridian.



**Notes:**  
 Well No. Northrop Unit 1H  
**UTM Zone 17, NAD 1927**  
 Top Hole Coordinates  
 N: 14,284,217.66'  
 E: 1,703,928.47'  
 Point of Entry Coordinates  
 N: 14,283,849.56'  
 E: 1,703,011.70'  
 Bottom Hole Coordinates  
 N: 14,275,846.09'  
 E: 1,706,246.28'

Note: 9 water wells were found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.



**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 prescribed by the Department of Environmental Protection.**

*Kenneth J. Plum*

**Kenneth J. Plum, P.S. 2216**



FILE NO: 48-30-WU-14  
 DRAWING NO: Northrop 1H Well Plat 11-16  
 SCALE: 1" = 1200'  
 MINIMUM DEGREE OF ACCURACY: Submeter  
 PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**OIL AND GAS DIVISION**

DATE: November 11 20 16  
 Operator's Well No. Northrop Unit 1H  
 API WELL NO  
 47 - 017 - 06791H6A  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: Existing Grade - 1193' Proposed Grade - 1181' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union  
 DISTRICT: West Union COUNTY: Doddridge  
 SURFACE OWNER: Matthew W. Alexander & Linda Marie Muhly B. J. (Sally) Underwood; Lois Jean Braun ACREAGE: 63.94  
 ROYALTY OWNER: William A. Farr; Charles Williams by Randy Williams, A.I.F.; Joseph Freeman, et ux LEASE NO: ACREAGE: 45.8; 120; 31  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 7,500' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 16,900' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road  
 Denver, CO 80202 Charleston, WV 25313