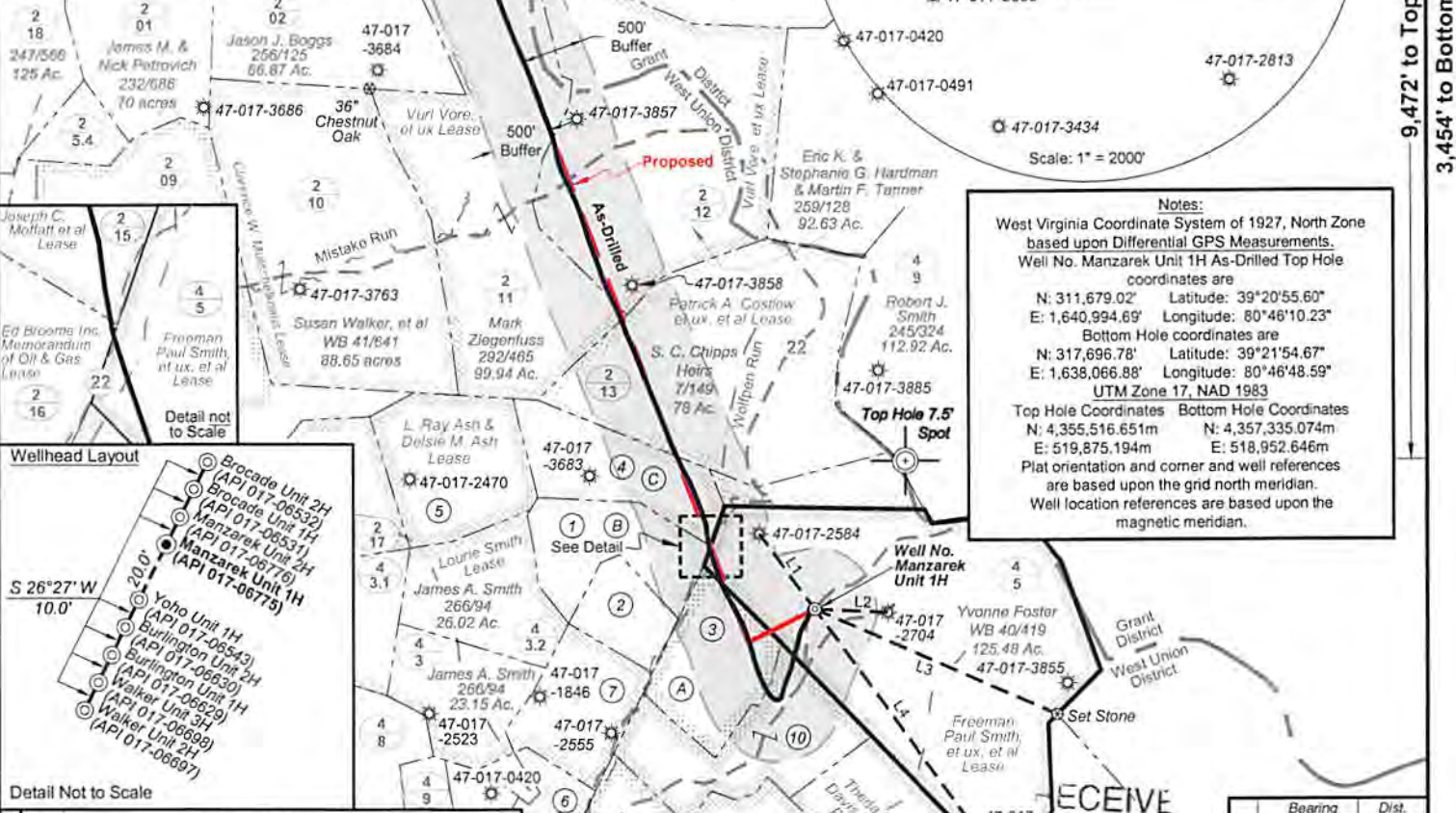
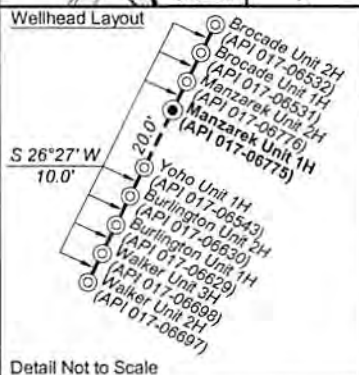


Antero Resources
Well No. Manzarek Unit 1H As-Drilled
Antero Resources Corporation

Top Hole Coordinates and As-drilled data and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.



Notes:
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements. Well No. Manzarek Unit 1H As-Drilled Top Hole coordinates are:
 N: 311,679.02' Latitude: 39°20'55.60"
 E: 1,640,994.89' Longitude: 80°46'10.23"
 Bottom Hole coordinates are:
 N: 317,696.78' Latitude: 39°21'54.67"
 E: 1,638,066.88' Longitude: 80°46'48.59"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,355,516.651m N: 4,357,335.074m
 E: 519,875.194m E: 518,952.646m
 Plat orientation and corner and well references are based upon the grid north meridian. Well location references are based upon the magnetic meridian.



ID	Mineral Owners	
A	Ed Broome Inc, Memorandum of Oil & Gas Lease	
B	Ed Broome Inc, Memorandum of Oil & Gas Lease	
C	Joseph C. Moffatt, et al Lease	

ID	TM/Par	Owner	Bk / Pg	Acres
1	2/16	David & Lucy Mae Sparling	219/213	20.95
2	4/4.2	David & Lucy Mae Sparling	219/213	10.69
3	4/4	David & Lucy Mae Sparling	219/213	20.75
4	2/15	Ronnie D. Smith, et al	253/696	23.07
5	2/14	Ronnie D. Smith & Thomas G. Smith	259/232	31.00
6	4/11	Gary Lynn McMillan	195/237	7.19
7	4/3.3	James A. Smith	266/94	20.00
8	4/19	Naomi Beagle, et al	AP 19/594	33.25
9	4/20	Stella E. Spencer, et al	103/53	31.50
10	4/4.1	David & Lucy Mae Sparling	219/213	31.50

Legend

- ⊙ Proposed gas well
- ⊙ Found corner, as noted
- ⊙ Existing Well, as noted
- Creek or Drain
- Existing Road
- Surface boundary (approx.)
- Interior surface tracts (approx.)

Bearing	Dist.
L1 S 36°40' W	759.7'
L2 N 87°30' W	590.8'
L3 N 66°35' W	2,144.2'
L4 N 36°10' W	2,750.3'



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.

Bradley D. Miller
 Bradley D. Miller, P.S. 2167



FILE NO: 264-30(54)-M(G)-14
 DRAWING NO: Manzarek 1H As-Drilled Well Plat
 SCALE: 1" = 1500'
 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: May 24 20 18
 OPERATOR'S WELL NO. Manzarek Unit 1H
 API WELL NO
 47 - 017 - 06775
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: 1229' As-Drilled WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union
 DISTRICT: West Union Theda Dolores Price Davis, Heir of Esta Faye Price, OGL; COUNTY: Doddridge 07/20/2018
 SURFACE OWNER: Yvonne Foster Patrick A. Costlow, et ux, et al; D&D Spencer Enterprises Co; ACREAGE: 125.48 30; 63.087;
 ROYALTY OWNER: Freeman Paul Smith, et ux, et al; Joseph C. Moffatt, et al; Vurl Vore, et ux; LEASE NO: 22173 ACREAGE: 20.75; 125; 283;
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,898' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 14,020' 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