

Antero Resources
Well No. Pup Unit 1H
Antero Resources Corporation



Note: It appears 6 water wells and 2 springs 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.

Scale: 1" = 2000'



11,857' to Top Hole

2,837' to Bottom Hole

LATITUDE 39 - 15 - 00

BTM HOLE LONGITUDE 80 - 40 - 00

TOP HOLE LONGITUDE 80 - 37 - 30

3,578' to Bottom Hole

14,264' to Top Hole

Bottom Hole 7.5' Spot

Line	Bearing	Dist.
L1	S 14°55' W	1015.7'
L2	S 12°47' E	515.0'
L3	N 51°48' E	534.4'
L4	N 59°07' E	473.8'

Well Location References

9" Poplar AZ 146° 234'

60" Red Oak AZ 105° 279'

Swisher Drill Pad

Proposed Well No. Pup Unit 1H

Scale: 1" = 400'

(+) Denotes Location of Well on Topographical Maps United States

TM-Par.	Surface Owner	Bk/Pg	Acres
1 8-49	Terry Gale Boyce	200/30	4.0
2 8-47	Euna Gay Engstrom	WB 38/36	3.0
3 8-48	Ramona Boyce	WB 26/621	2.0
4 8-34	Norma Jean Martin	WB 88/275	25.0
5 8-32	Roger A. McClain II & Stacy L. McClain	288/303	15.18
6 8-10	Roger A. McClain II & Stacy L. McClain	288/303	28.58
7 8-33	Marlin G. Kelly, et al	294/665	36.75
8 13-8	Darrell W. & Barbara Devericks	229/260	17.84
9 13-35	Christopher R. Kelley & Brandi M. Trent	242/688	1.03
10 13-9	Leona Swisher	WB 33/535	56.99
11 13-2	Dennis R. Cottrill	293/508	40.25
12 12-7	Laura L. Hurst	179/17	35.0
13 8-46	Gary W./Judy Douglass	211/502	20.0
14 12-6	Gary W. Douglass, et al	233/136	35.0
15 9-16	Ramona J. Boyce	26/621	31.32

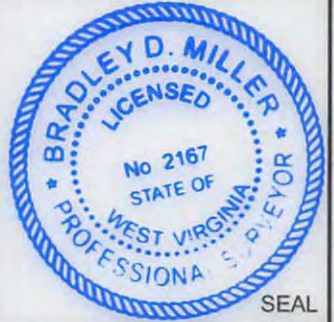
Notes:
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Well No. Pup Unit 1H Top Hole coordinates are N: 260,895.97' Latitude: 39°12'37.53" E: 1,669,550.91' Longitude: 80°39'58.36"
Bottom Hole coordinates are N: 271,732.71' Latitude: 39°14'24.27" E: 1,666,772.12' Longitude: 80°40'35.46"
UTM Zone 17, NAD 1983
Top Hole Coordinates N: 4,340,190.828m E: 528,832.975m
Bottom Hole Coordinates N: 4,343,478.097m E: 527,931.337m
Plate orientation and corner well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Legend

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

Top Hole 7.5' Spot

Notes:
Well No. Pup Unit 1H UTM Zone 17, NAD 1927
Top Hole Coordinates N: 14,238,727.075' E: 1,734,965.170'
Point of Entry Coordinates N: 14,239,064.436' E: 1,735,379.367'
Bottom Hole Coordinates N: 14,249,512.169' E: 1,732,007.222'



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: 86-30-NM-13
DRAWING NO: Pup Unit 1H Well Plat 11-16
SCALE: 1" = 1200'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Bridgeport, WV

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

DATE: December 21 2016
Operator's Well No. Pup Unit 1H
API WELL NO
47 - 017 - 06806
STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-built 981' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: New Milton
DISTRICT: New Milton COUNTY: Doddridge
SURFACE OWNER: Leona Swisher ACREAGE: 56.99; 56.99; 60.75
ROYALTY OWNER: Mary Maxine Welch, et al; Marlin Guy Kelley; Aleta B. Chapman; Shirley Devericks, et al LEASE NO: 20215 ACREAGE: 56; 56.99; 60.75
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7,200' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 18,700' 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