

7,843' to Bottom Hole

6,639' to Top Hole

TOP HOLE LATITUDE 39 - 30 - 00  
BTM HOLE LATITUDE 39 - 32 - 30

LONGITUDE 80 - 52 - 30

10,223' to Top Hole  
12,651' to Bottom Hole

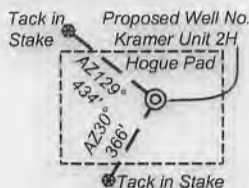
Page 1 of 5

**Antero Resources**  
**Well No. Kramer Unit 2H**  
**BHL MOD**  
**Antero Resources Corporation**

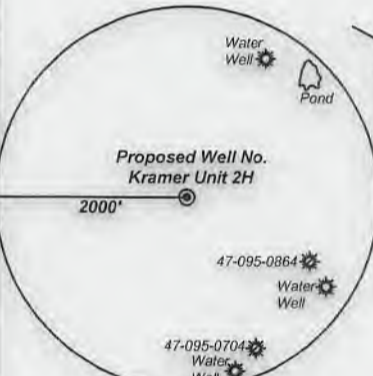


- Legend**
- ⊙ Proposed gas well
  - ⊙ Monument, as noted
  - ⊙ Existing Well, as noted
  - ⊙ Existing Well, as noted
  - Creek or Drain
  - Existing Road
  - Surface boundary (approx.)
  - Interior surface tracts (approx.)
  - Corporation Line

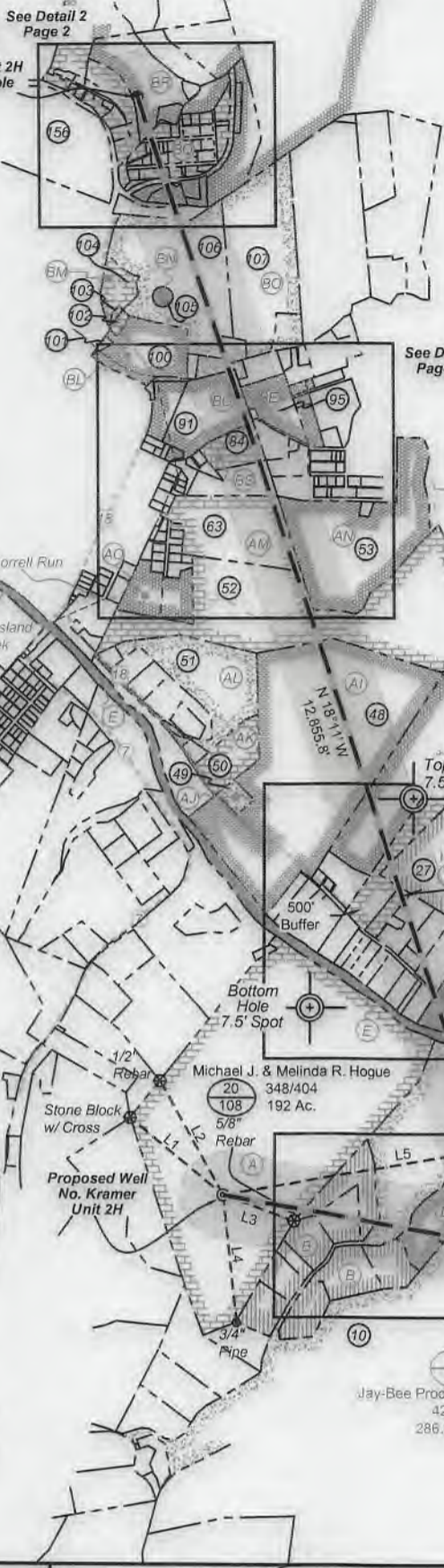
**Well Location References**



	Bearing	Dist.
L1	S 50°25' E	1,405.2'
L2	S 29°02' E	1,516.0'
L3	N 70°20' W	881.6'
L4	N 06°11' W	1,483.0'
L5	N 80°04' E	3,085.9'



Note: 3 water wells and 1 pond 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.



**Notes:**  
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.  
Well No. Kramer Unit 2H Top Hole coordinates are  
N: 356,966.71' Latitude: 39°28'17.95"  
E: 1,605,368.46' Longitude: 80°53'52.66"  
Bottom Hole coordinates are  
N: 369,712.90' Latitude: 39°30'23.77"  
E: 1,604,397.61' Longitude: 80°54'07.58"  
**UTM Zone 17, NAD 1983**  
Top Hole Coordinates Bottom Hole Coordinates  
N: 4,369,132.274m N: 4,373,010.514m  
E: 508,791.333m E: 508,430.752m  
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. Kramer Unit 2H  
**UTM Zone 17, NAD 1927**  
Top Hole Coordinates  
N: 14,333,680.70'  
E: 1,669,212.13'  
Point of Entry Coordinates  
N: 14,334,263.12'  
E: 1,672,241.47'  
Bottom Hole Coordinates  
N: 14,346,404.55'  
E: 1,668,029.05'

- Wellhead Layout**
- ⊙ Proposed Well Kramer Unit 2H (47-095-02677)
  - ⊙ Kramer Unit 1H (47-095-02673)
  - ⊙ Lancaster Unit 3H (47-095-02676)
  - ⊙ Lancaster Unit 2H (47-095-02675)
  - ⊙ Lancaster Unit 1H (47-095-02674)
  - ⊙ Fender Unit 3H (47-095-02672)
  - ⊙ Fender Unit 2H (47-095-02671)
  - ⊙ Fender Unit 1H (47-095-02670)



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: 15-54-E-19  
DRAWING NO: Kramer Unit 2H Well Plat  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: Submeter  
PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

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

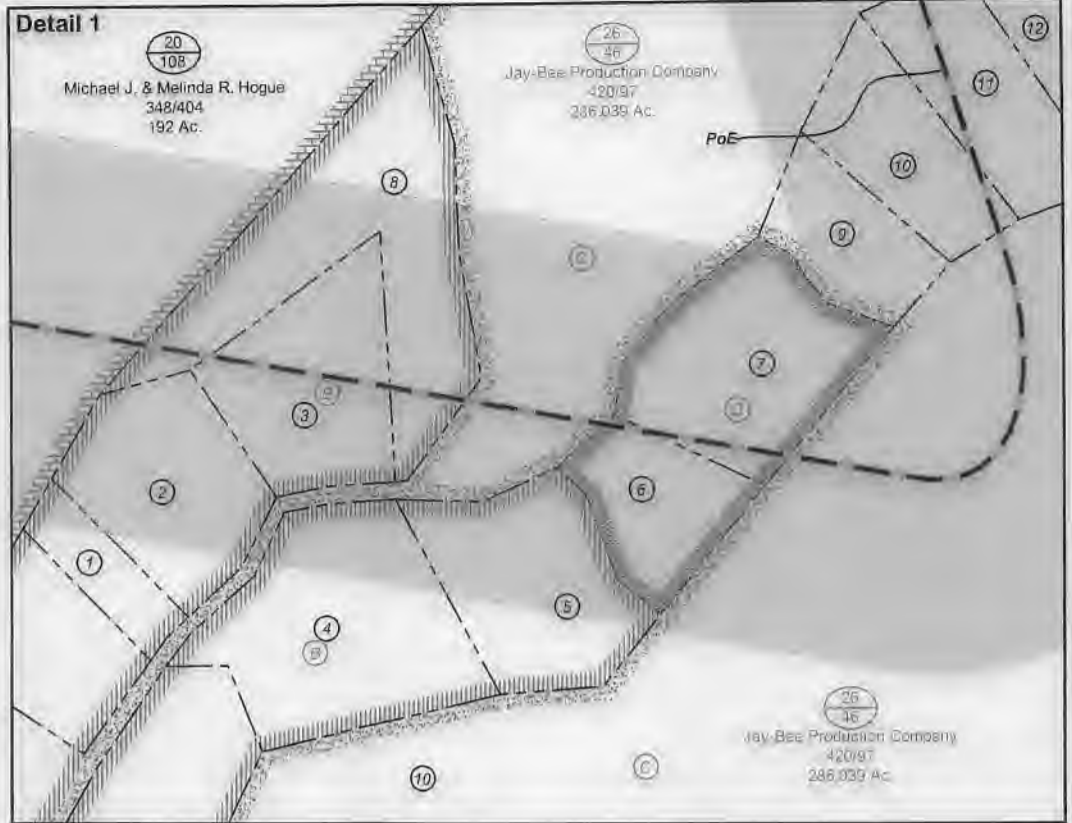
DATE: March 12 2019  
OPERATOR'S WELL NO. Kramer 2H  
API WELL NO  
47 - 095 - 02677  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
Proposed 1,014.5'  
LOCATION: ELEVATION: Existing 1,033' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Middlebourne 191.5; 81.33; 310.393; 9.178; 67.67; 6.95064; 1.58; 3.566; 0.99; 5.27; 5.94; 3.23; 19.35; 19.35; 70.9775; 100.45; 102.33; 8.62; 19.518; 93.225; 6.85; 2.750; 34.59654; 41.0; 28.54; 452.99125  
DISTRICT: Ellsworth WV Division of Natural Resources; Connie L. Hickman; Jessica L. Dotson; Boyd M. Parr, et ux; Town of Middlebourne; Scott Denomme, et ux (2); Nancy J. Villers; William M. Baker, et ux; Richard A. Fonner, et ux; Jerry R. Brown, et ux; Map2012-OK; Dylan Shane Murray, et ux; Lance M. Hickman; Mary A. Hickman (2); Mary Alice Hickman Estate; WV Dept. of Transportation, DOH; James S. Suter, et ux; Randy Murray, et ux; Norman C. Twyman;  
SURFACE OWNER: Michael J. & Melinda R. Hogue LEASE NO: ACREAGE:  
ROYALTY OWNER: Michael J. & Melinda R. Hogue; James F. Doan, et ux (2); Ridgetop Capital LP; Nancy Ann Villers.  
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 24,500' MD 6,900' TVD

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

**Antero Resources**  
**Well No. Kramer Unit 2H**  
**BHL MOD**  
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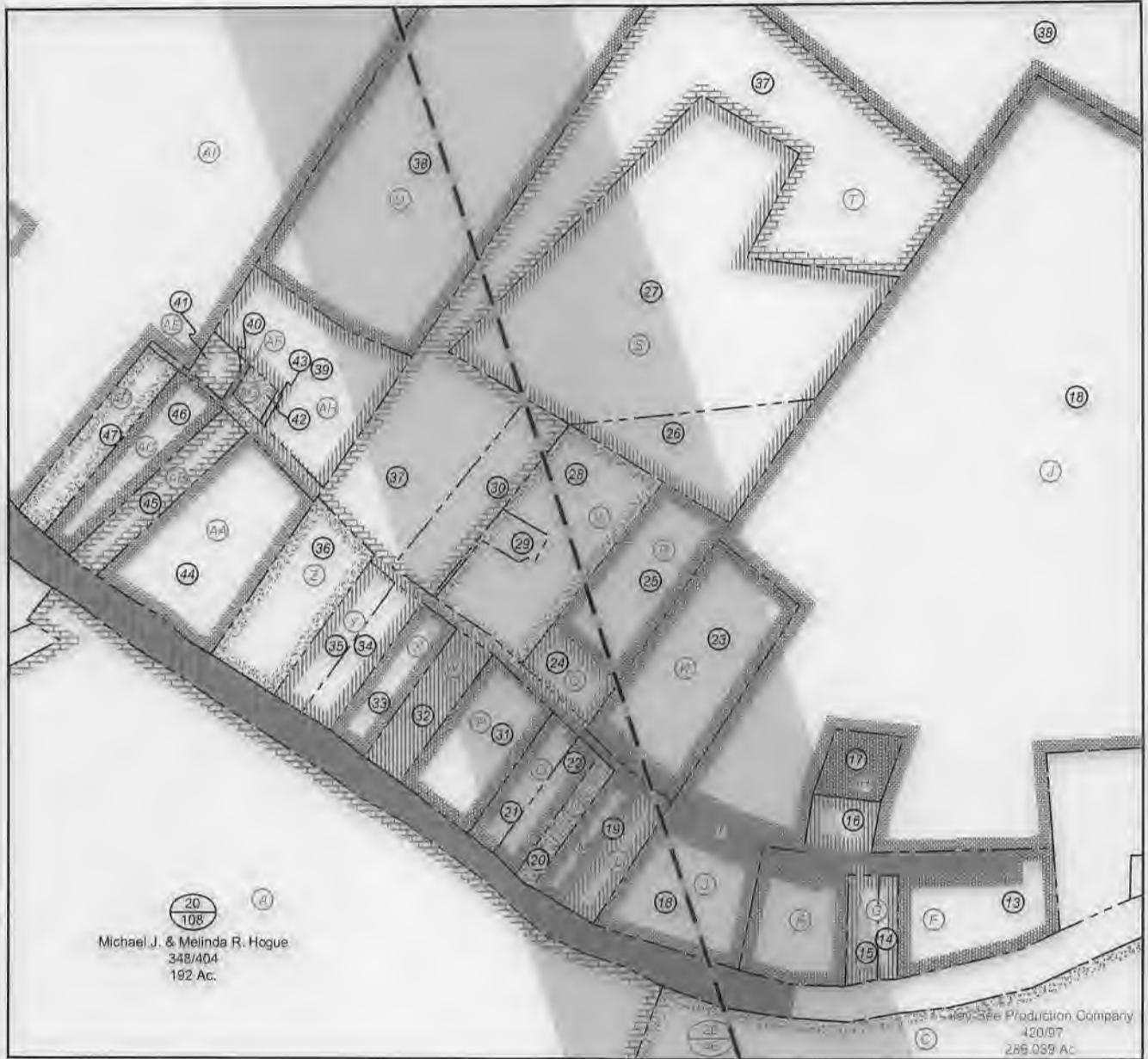
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**OIL AND GAS DIVISION**

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 47 - 095 - 02677  
 STATE COUNTY PERMIT

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 LOCATION: ELEVATION: Existing 1,033' Proposed 1,014.5' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Middlebourne  
 DISTRICT: Ellsworth COUNTY: Tyler  
 SURFACE OWNER: Michael J. & Melinda R. Hogue ACREAGE: 192.0  
 ROYALTY OWNER: Michael J. & Melinda R. Hogue; James F. Doan, et ux (2); Ridgeloop Capital LP; Nancy Ann Villers; LEASE NO: ACREAGE: 191.5; 81.33; 310.393; 9.178; 67.67; 6.05064; 1.58; 3.556; 0.99; 5.27; 5.94; 3.23; 19.35; 19.35; 70.9775; 100.45; 102.33; 8.62; 19.518; 93.225; 6.85; 2.750; 34.59654; 41.0; 28.54; 452.99125  
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 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,900' TVD 24,500' MD

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 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road  
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20  
108  
Michael J. & Melinda R. Hogue  
348/404  
192 Ac.

See Production Company  
420/07  
286 039 Ac.

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 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) BHL MOD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 24,500' MD 6,900' TVD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
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Antero Resources Well No. Kramer Unit 2H BHL MOD Antero Resources Corporation

Leases

Table with columns A-BS listing lease owners such as Michael J. & Melinda R. Hogue, James F. Doan, et ux, etc.

Main table with columns ID, TM/Par, Owner, Bk/Pg, Acres. Lists various land parcels and their owners.

Continuation of the main table, listing parcels 79 through 166.

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STATE COUNTY PERMIT

WELL TYPE: [ ] OIL [X] GAS [ ] LIQUID INJECTION [ ] WASTE DISPOSAL
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