

LATITUDE 39°15'00"

7,928'

2,042' TO BOTTOM HOLE  
LATITUDE 39°12'30"  
3H BOTTOM HOLE

Antero Resources Corporation  
Well No. Miracle Unit 3H  
47-085-10140 (AS DRILLED)

WELL NO. 3H-  
47-085-10140

LAWRENCE C. HEW  
ET AL LEASE  
FRANKLIN P. QUIMBY  
D.B. 200 PG. 948  
T.M. 27 PAR. 11  
23 AC.±

CLARENCE COTTRILL ET AL.  
D.B. 176 PG. 465  
T.M. 27 PAR. 9  
24.24 AC.±

JAMES H. LAFFERTY  
D.B. 210 PG. 889  
T.M. 4 PAR. 1  
113 AC.±

WM. VANCAMPEN  
ET AL LEASE  
JACK D. MACKAY ET AL.  
D.B. 280 PG. 972  
T.M. 27 PAR. 3  
233.05 AC.±

4479

EASTERN AMERICAN  
ENERGY  
CORPORATION LEASE  
JACK D. MACKAY ET AL.  
D.B. 280 PG. 972  
T.M. 27 PAR. 3  
244.86 AC.±

8621

MARJORIE CROOKS  
ET AL LEASE  
JAMES H. LAFFERTY  
D.B. 210 PG. 889  
T.M. 4 PAR. 11  
117 AC.±

STONE FOUND

3H TOP HOLE

AS DRILLED DATA:  
WELL 3H TOP HOLE INFORMATION:  
N: 269,093ft E: 1,602,577ft  
LAT: 39°13'49.07" LON: 80°54'10.76"  
BOTTOM HOLE INFORMATION:  
N: 260,407ft E: 1,608,331ft  
LAT: 39°12'24.11" LON: 80°52'55.95"  
WEST VIRGINIA COORDINATE  
SYSTEM OF 1927 NORTH ZONE.  
ZONE WAS DERIVED FROM  
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 3H TOP HOLE INFORMATION:  
N: 4,342,347m E: 508,388m  
BOTTOM HOLE INFORMATION:  
N: 4,339,730m E: 510,185m

- NOTE
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
  2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
  3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
  4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
  5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

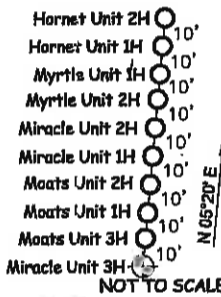
WV NORTH ZONE

596' TO BOTTOM HOLE  
LONGITUDE 80°52'30"

7,176'

LONGITUDE 80°52'30"

PAD LAYOUT



JACK H. LANGFORD ET AL.  
D.B. 274 PG. 419  
T.M. 9 PAR. 1  
126.6 AC.±

C.W. HALL  
HEIRS LEASE  
C.W. HALL  
D.B. 64 PG. 381  
T.M. 9 PAR. 2  
49.17 AC.±

2534

STONE FOUND

JACK LANGFORD ET AL.  
D.B. 252 PG. 755  
T.M. 9 PAR. 3  
14.71 AC.±

JACK LANGFORD ET AL.  
D.B. 173 PG. 640  
T.M. 9 PAR. 27  
74.62 AC.±

JACK LANGFORD ET AL.  
D.B. 252 PG. 755  
T.M. 9 PAR. 4  
10.13 AC.±

ALBERT  
KORNER ET AL.  
D.B. 197 PG. 24  
T.M. 9 PAR. 6  
18.75 AC.±

FRED CONSTABLE ET AL.  
D.B. 306 PG. 722  
T.M. 9 PAR. 28  
28.4 AC.±

J.J. WISE ET AL.  
W.L. 16 PG. 314  
T.M. 9 PAR. 8  
LOT

GRANT CLANNINGHAM ET AL.  
D.B. 246 PG. 626  
T.M. 9 PAR. 5  
20 AC.±

BYRL ROSS  
ET AL LEASE  
NACOE CLANNINGHAM  
D.B. 263 PG. 29  
T.M. 9 PAR. 9  
102.37 AC.±

MOORE CLANNINGHAM  
D.B. 263 PG. 29  
T.M. 9 PAR. 23  
25 AC.±

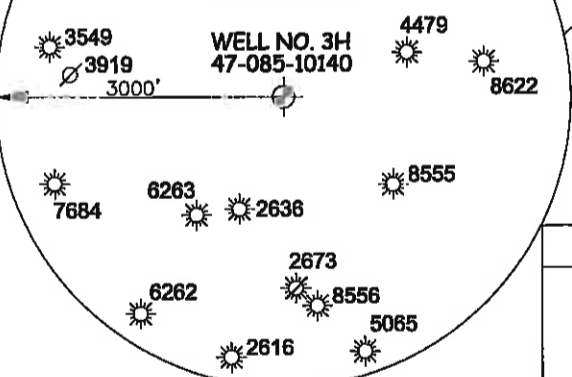
BP  
MINERAL HOLDINGS III, LLC  
LEASE

DENNIS FERGUSON  
ET AL LEASE  
JOHN A. LOUISE ET AL.  
D.B. 299 PG. 920  
T.M. 9 PAR. 11  
82.2 AC.±

7297

7142

NOTE:  
NO WATER WELLS WERE  
LOCATED WITHIN 2000'  
OF PROPOSED WELL



LEGEND

- Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
- X Existing Fence
- ⊕ Found monument, as noted
- Proposed Well Path
- ⊗ As Drilled Well Path

JOB # 13-050WA  
DRAWING # MIRACLE3HAD  
SCALE 1" = 1000'  
MINIMUM DEGREE OF  
ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV.  
SUBMETER MAPPING GRADE GPS



STATE OF WEST VIRGINIA, DIVISION  
OF ENVIRONMENTAL PROTECTION,  
OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC  
220 MASONIC AVE. PENNSBORO  
WEST VIRGINIA 26415

DATE 02/29/2016  
OPERATOR'S WELL# MIRACLE UNIT #3H  
API WELL # 47 - 085 - 10140  
STATE COUNTY PERMIT

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 1,216' ORIGINAL - 1,191' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER  
QUADRANGLE PULLMAN 7.5 DISTRICT CLAY (TH) UNION (BH) COUNTY RITCHIE  
SURFACE OWNER FRANKLIN P. QUIMBY ACREAGE 23 ACRES +/-  
OIL & GAS ROYALTY OWNER LAWRENCE C. HEW ET AL; WM. VANCAMPEN ET AL; EASTERN AMERICAN ENERGY CORP.;  
MARJORIE CROOKS ET AL; BYRL ROSS ET AL; JACK LANGFORD ET AL; DENNIS FERGUSON ET AL; BP MINERAL HOLDINGS III, LLC; ELOISE MIRACLE ET AL  
117 AC±; 103 AC±; 74 AC±; 88 AC±; 55 AC±; 116 AC±  
PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_  
PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL  
(SPECIFY) (AS DRILLED) PLUG & ABANDON CLEAN OUT & REPLUG  
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,680' TVD 17,433' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT CT CORPORATION SYSTEM  
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

COUNTY NAME PERMIT