

LATITUDE 39°25'00"

9,011'

494' TO BOTTOM HOLE
LATITUDE 39°27'30"

Antero Resources Corporation
Well No. Silas Unit 1H
47-095-02157 (AS DRILLED)

AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 328,714ft E: 1,649,514ft
LAT: 39°23'45.13" LON: 80°44'24.79"
BOTTOM HOLE INFORMATION:
N: 336,509ft E: 1,646,364ft
LAT: 39°25'01.75" LON: 80°45'06.29"
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 1H TOP HOLE INFORMATION:
N: 4,360,750m E: 522,384m
BOTTOM HOLE INFORMATION:
N: 4,363,109m E: 521,385m

WV NORTH ZONE GRID NORTH

LONGITUDE 80°45'00"

7,575'

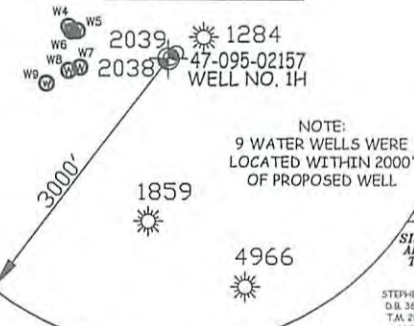
14,999' TO BOTTOM HOLE

LONGITUDE 80°42'30"

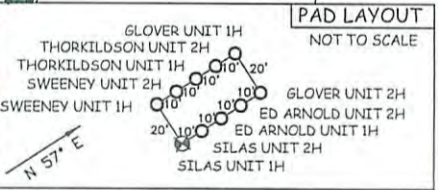
NOTE
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOLTER HUSBANDRY DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, 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.
6. THIS WELL BORE IS SUBJECT TO THAT 60 FOOT STRIP OF LAND KNOWN AS THE OLD SISTERVILLE AND SALEM TURNPIKE WHICH MAY OR MAY NOT COINCIDE WITH THE CURRENT LOCATION OF WV STATE ROUTE 23 IN THIS AREA.

WELL NO. 1H TO WATER WELLS

LINE	BEARING	DIST.
W1	N 38°55' W	1579.6'
W2	N 48°06' W	1599.3'
W3	N 56°59' W	1618.6'
W4	N 71°42' W	1080.7'
W5	N 72°29' W	978.6'
W6	N 73°42' W	1036.9'
W7	S 87°01' W	958.6'
W8	S 83°38' W	1032.9'
W9	S 78°52' W	1283.6'



NOTE:
9 WATER WELLS WERE LOCATED WITHIN 2000' OF PROPOSED WELL



RECEIVED
Office of Oil and Gas
JUL 06 2015
WV Department of Environmental Protection

JOB # 13-096WA
DRAWING # SILAS1HAD
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

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

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

DATE 06/25/15
OPERATOR'S WELL# SILAS UNIT #1H
API WELL # 47 - 095 - 02157
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 748' ORIGINAL - 745' AS DRILLED WATERSHED MCELROY CREEK
QUADRANGLE CENTER POINT 7.5' (TH) SHIRLEY 7.5' (BH) DISTRICT MCELROY COUNTY TYLER
SURFACE OWNER FOREST & BRENDA MOORE ACREAGE 26.478 ACRES +/-
OIL & GAS ROYALTY OWNER RALPH SWEENEY ET UX; RALPH SWEENEY ET UX; M.V.B. GEORGE; ELIZA UNDERWOOD ET AL LEASE ACREAGE 25.668 ACRES+; 55.43 ACRES+; 300 ACRES±; 216 ACRES±

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) (X) AS DRILLED
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,594' TVD 14,846' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

07/24/2015

COUNTY NAME PERMIT