

LATITUDE 39°12'30"

7,483'

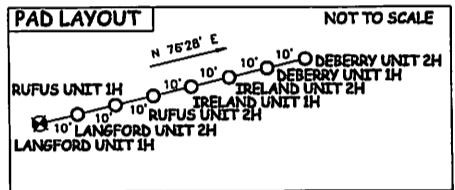
1,321' TO BOTTOM HOLE
LATITUDE 39°15'00"

LONGITUDE 80°55'00"
4,738'
LONGITUDE 80°52'30"
1,026' TO BOTTOM HOLE

Antero Resources Corporation
Well No. Langford Unit 1H
47-085-10044 (AS DRILLED)

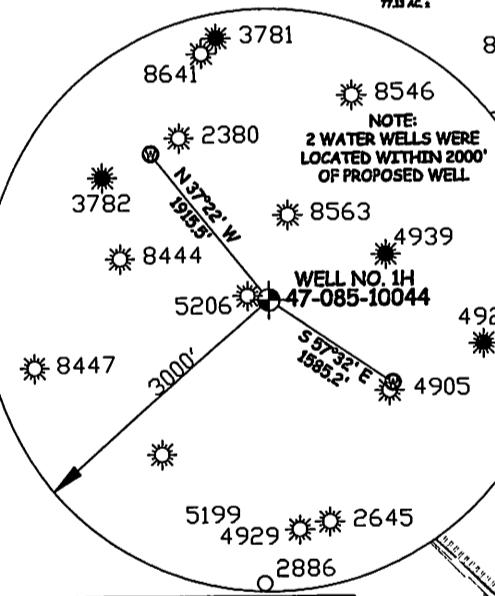
AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 256,350ft E: 1,602,828ft
LAT: 39°11'43.17" LON: 80°54'05.05"
BOTTOM HOLE INFORMATION:
N: 265,325ft E: 1,597,321ft
LAT: 39°13'11.02" LON: 80°55'16.78"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE 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: 4,338,466m E: 508,529m
BOTTOM HOLE INFORMATION:
N: 4,341,173m E: 506,806m



- NOTES
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.

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



RECEIVED
Office of Oil and Gas
MAY 26 2015

WV Department of Environmental Protection

JOB # 13-016WA
DRAWING # LANGFORD1HAD
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
WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 1,080' ORIGINAL - 1,076' AS DRILLED WATERSHED SOUTH FORK HUGHES RIVER
QUADRANGLE PULLMAN 7.5' DISTRICT UNION COUNTY RITCHIE

SURFACE OWNER ASHLEY E. NESS, JR. ACREAGE 90 ACRES +/-
OIL & GAS ROYALTY OWNER HERBERT O. IRELAND ET AL; CHARLIE HEASTER ET AL; LEASE ACREAGE 90 ACRES +/-; 234.49 ACRES +/-
KENNETH GODFREY ET UX; JACK H. LANGFORD; BERNARD RICHARDS ET UX; EDWIN DEEM; ROBERT GASTLER; JACK H. LANGFORD ET AL. 175.69 ACRES +/-; 50.59 ACRES +/-; 214.94 ACRES +/-; 92.13 ACRES +/-; 31.26 ACRES +/-; 448.5 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 PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,433' TVD 17,252' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

COUNTY NAME PERMIT