

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47 - 033 - 05690 County Harrison District Union
Quad Big Isaac 7.5' Pad Name Washbourne Pad Field/Pool Name -----
Farm name Richard B. Washbourne Well Number Carpenter Unit 2H
Operator (as registered with the OOG) Antero Resources Appalachian Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4337316.575m Easting 541724.674m
Landing Point of Curve Northing --- Easting ---
Bottom Hole Northing --- Easting ---

Elevation (ft) 1290' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Air - Foam & 4% KCL
Mud - Polymer

RECEIVED
Office of Oil and Gas
JUN 08 2020
WV Department of
Environmental Protection

Date permit issued 12/13/2012 Date drilling commenced 11/13/2013 Date drilling ceased N/A
Date completion activities began N/A Date completion activities ceased N/A
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 25', 258', 282' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1480' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 213', 373', 523' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:
SPW
6/16/2020

API 47- 033 - 05690 Farm name Richard B. Washbourne Well number Carpenter Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	40'	New	94#, H-40	N/A	Y
Surface	---	---	---	---	---	---	---
Coal							
Intermediate 1	---	---	---	---	---	---	---
Intermediate 2							
Intermediate 3							
Production	---	---	---	---	---	---	---
Tubing							
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	---	---	---	---	---	---	---
Surface	---	---	---	---	---	---	---
Coal							
Intermediate 1	---	---	---	---	---	---	---
Intermediate 2							
Intermediate 3							
Production	---	---	---	---	---	---	---
Tubing							

Drillers TD (ft) 40' (Deepest Point Drilled) Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

RECEIVED
Office of Oil and Gas

Kick off depth (ft) N/A

JUN 08 2020

Check all wireline logs run caliper density deviated/directional induction neutron resistivity gamma ray temperature sonic

WV Department of Environmental Protection

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor - 0

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED N/A

Antero Resources
Well No. Carpenter 2H
 As-Drilled
Antero Resources Corporation

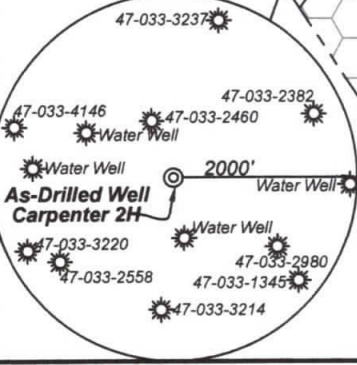
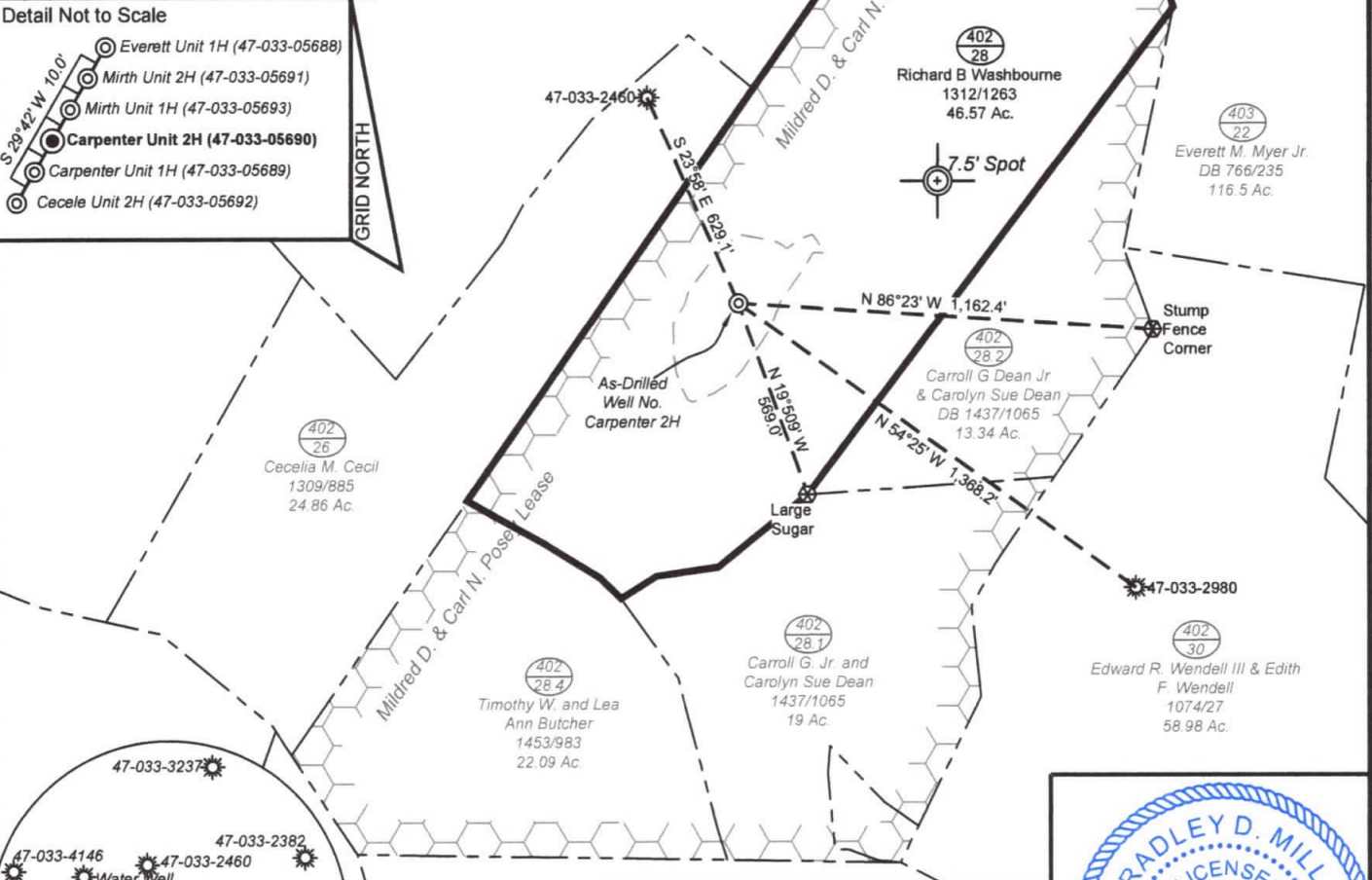


Top Hole coordinates verified by survey grade GPS. As-drilled data and information was provided by Antero Resources Corporation. Allegheny Surveys, Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

Notes:
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Carpenter 2H coordinates are
 N: 250,758.27' Latitude: 39°11'02.39"
 E: 1,711,697.81' Longitude: 80°31'01.47"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates
 N: 4,337,316.575m
 E: 541,724.674m
 Plat orientation and corner and 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
 - ☀ Existing Well, as noted
 - ☀ Digitized Well
 - Existing Road
 - Surface boundary (approx.)
 - - - Interior surface tracts (approx.)

- Detail Not to Scale**
- ⊙ Everett Unit 1H (47-033-05688)
 - ⊙ Mirth Unit 2H (47-033-05691)
 - ⊙ Mirth Unit 1H (47-033-05693)
 - ⊙ **Carpenter Unit 2H (47-033-05690)**
 - ⊙ Carpenter Unit 1H (47-033-05689)
 - ⊙ Cecele Unit 2H (47-033-05692)



Note: 4 water wells 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.

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: 186-36-U-12
 DRAWING NO: Carpenter 2H As-Drilled
 SCALE: 1" = 500'
 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: June 3 2020
 OPERATOR'S WELL NO. Carpenter 2H
 API WELL NO
47 - 033 - 5690
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 1,290' WATERSHED: Middle West Fork Creek QUADRANGLE: Big Issac
 DISTRICT: Union COUNTY: Harrison

SURFACE OWNER: Richard B. Washbourne ACREAGE: 46.57
 ROYALTY OWNER: Mildred D. & Carl N. Posey LEASE NO: _____ ACREAGE: 102

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 40' TVD 40' 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

4,840' to Top Hole

LATITUDE 39 - 12 - 30

LONGITUDE 80 - 30 - 00

8,864' to Top Hole