



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

PERMIT MODIFICATION APPROVAL

February 23, 2016

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET
DENVER, CO 80202

Re: Permit Modification Approval for API Number 9502307, Well #: JOHNSTON UNIT 1H

Change SHL Location

Oil and Gas Operator:

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

For

Gene Smith
Assistant Chief of Permitting
Office of Oil and Gas

Promoting a healthy environment.

02/26/2016

EXHIBIT 7: WELL PAD SURFACE DIAGRAM



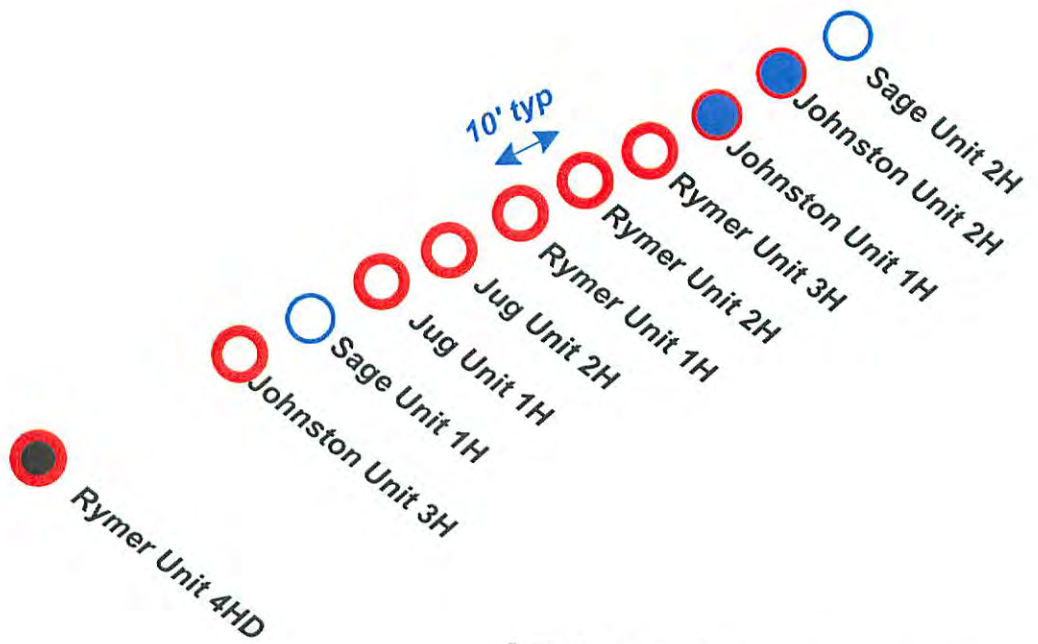
WELL NAME	API NUMBER	WELL STATUS
Sage Unit 2H	Proposed Well	Future Well
Rymer Unit 3H	47-095-02275	Permitted Well
Rymer Unit 2H	47-095-02270	Permitted Well
Rymer Unit 1H	47-095-02269	Permitted Well
Jug Unit 2H	47-095-02171	Permitted Well
Jug Unit 1H	47-095-02265	Permitted Well
Sage Unit 1H	Proposed Well	Future Well
Johnston Unit 3H	Proposed Well	New Well - Permit Applied
Johnston Unit 2H	Proposed Well	New Well - Permit Applied
Johnston Unit 1H	Proposed Well	New Well - Permit Applied
Rymer Unit 4HD	47-095-02273	Permitted Well

Dale Pad

Legend

-  Existing
-  Permitted
-  Proposed
-  Modified

1/27/16



4709502305 MoD

RECEIVED
Office of Oil and Gas

JAN 28 2016

WV Department of
Environmental Protection

02/26/2016

LATITUDE 39°27'30"

8,260'

LATITUDE 39°25'00"

6,368' TO BOTTOM HOLE

LONGITUDE 80°50'00"

3,532' TO BOTTOM HOLE

LONGITUDE 80°50'00"

Antero Resources Corporation
Well No. Johnston Unit 1H

WILLIE R. LESTER
D.B. 326 PG. 402
T.M. 04 PAR. 07
97.75 AC. ±

REGINA H. BERTOZZI ET AL
D.B. 334 PG. 420
T.M. 04 PAR. 08.3
41.86 AC. ±

ROBERT L. RIPLEY ET AL
D.B. 327 PG. 77
T.M. 04 PAR. 06.2
18.75 AC. ±

RAYMOND UNDERWOOD
W.B. 28 PG. 70
T.M. 04 PAR. 12
76.5 AC. ±

RAYMOND V. UNDERWOOD
ET UX LEASE

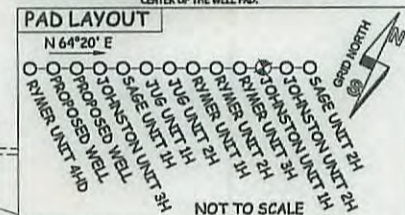
WELL NO. 1H
RAYMOND UNDERWOOD
D.B. 114 PG. 272
T.M. 04 PAR. 13
96 AC. ±

NOTES:
WELL 1H TOP HOLE INFORMATION:
N: 342,381ft E: 1,615,138ft
LAT: 39°25'55.28" LON: 80°51'45.27"
BOTTOM HOLE INFORMATION:
N: 333,231ft E: 1,616,895ft
LAT: 39°24'25.12" LON: 80°51'21.13"
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.

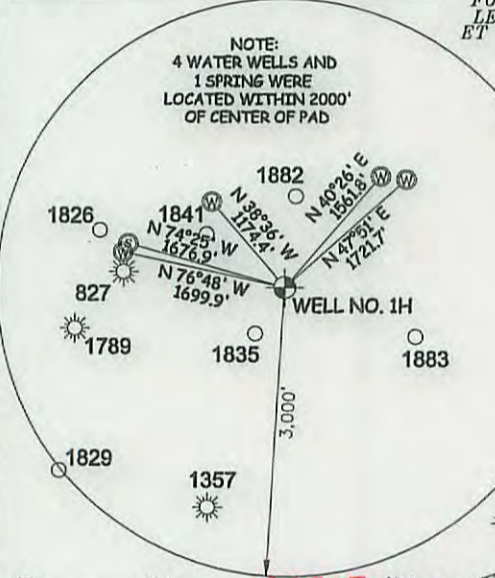
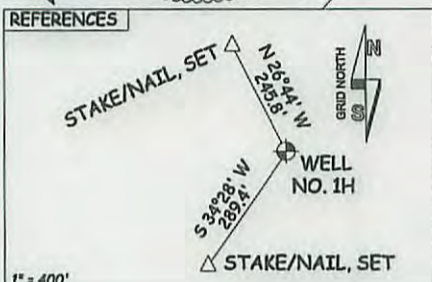
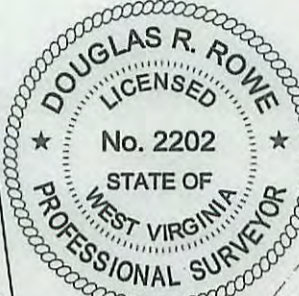
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 4,364,738m E: 511,842m
BOTTOM HOLE INFORMATION:
N: 4,361,960m E: 512,423m

A = LOREN E. BAGLEY D.B. 349 PG. 284 T.M. 8 PAR 3.1
B = LOREN E. BAGLEY D.B. 349 PG. 284 T.M. 8 PAR 3.3
C = ARLIT ARBOGAST D.B. 376 PG. 826 T.M. 8 PAR 3.2
D = DAVID D. CHIPPS D.B. 290 PG. 682 T.M. 8 PAR 3.5

NOTE:
NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HERDS ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.



WV NORTH ZONE
GRID NORTH



47 - 095 - 02307 HCA
STATE COUNTY PERMIT

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 PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

JOB # 15-034WA
DRAWING # JOHNSTON1HR2
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND
--- Surface Owner Boundary Lines +/-
--- Interior Surface Tracts +/-
-x-x-x- Existing Fence
⊕ Found monument, as noted
DOUGLAS R. ROWE P.S. 2202
DATE 01/26/16
OPERATOR'S WELL# JOHNSTON UNIT #1H

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1,036' ORIGINAL - 1,017' PROPOSED WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' DISTRICT CENTERVILLE COUNTY TYLER
SURFACE OWNER RAYMOND UNDERWOOD ACREAGE 96 ACRES +/-
OIL & GAS ROYALTY OWNER RAYMOND V. UNDERWOOD ET UX; W.V.D.N.R.; LEASE ACREAGE 96 ACRES±; 244.25 ACRES±;
FORREST E. LEASEBURG ET UX; HELEN L. OSBORNE; RITA J. HITCHCOCK; RONALD ASH ET UX; CARL W. ASH ET UX 78 ACRES±; 168.75 ACRES±; 50 ACRES±; 72 ACRES±; 88 ACRES±
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) MOD - SHL PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,700' TVD 17,000' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

02/26/2016

LATITUDE 39°27'30"

8,260'

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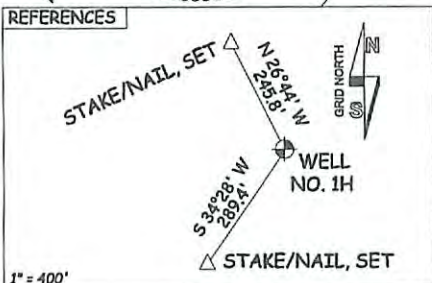
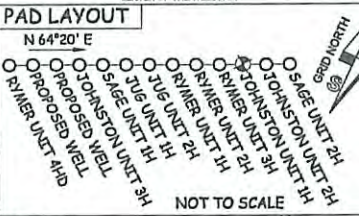


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47 - 095 - **62307**
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