



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 10, 2016

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET
DENVER, CO 80202

Re: Permit Modification Approval for API Number 9502328, Well #: KLONDIKE UNIT 2H

Extend Lateral

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,

A handwritten signature in red ink that reads "Gene Smith" with a stylized flourish below it.

Gene Smith
Assistant Chief of Permitting
Office of Oil and Gas

Promoting a healthy environment.

02/12/2016

WW-6B
(04/15)

API NO. 47-095 - 02328

OPERATOR WELL NO. Klondike Unit 2H

Well Pad Name: Existing Pierpoint Pad

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Antero Resources Corporat 494488557 095 - Tyler Ellsworth Shirley 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Klondike Unit 2H Well Pad Name: Existing Pierpoint Pad

3) Farm Name/Surface Owner: Lloyd C. Seckman Public Road Access: CR 46/1

4) Elevation, current ground: 1201' Elevation, proposed post-construction: 1201'

5) Well Type (a) Gas Oil Underground Storage

Other _____

(b) If Gas Shallow Deep

Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale: 6800' TVD, Anticipated Thickness- 55 feet, Associated Pressure- 2800#

8) Proposed Total Vertical Depth: 6800' TVD

9) Formation at Total Vertical Depth: Marcellus 4709502328 Mod 2

10) Proposed Total Measured Depth: 18,700' MD

11) Proposed Horizontal Leg Length: 11,283'

12) Approximate Fresh Water Strata Depths: 280'

13) Method to Determine Fresh Water Depths: Weigle Unit 1H (API# 47-095-02126) on same pad

14) Approximate Saltwater Depths: 770', 1591'

15) Approximate Coal Seam Depths: 896'

16) Approximate Depth to Possible Void (coal mine, karst, other): None Anticipated

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

RECEIVED
Office of Oil and Gas
JAN 27 2015
WV Department of
Environmental Protection

WW-6B
(04/15)

API NO. 47- 095 - 02328

OPERATOR WELL NO. Klondike Unit 2H

Well Pad Name: Existing Pierpoint Pad

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	40'	40'	CTS, 38 Cu. Ft.
Fresh Water	13-3/8"	New	J-55/H-40	54.5#/48#	335'	335'	CTS, 465 Cu. Ft.
Coal	9-5/8"	New	J-55	36#	2450'	2450'	CTS, 998 Cu. Ft.
Intermediate							
Production	5-1/2"	New	P-110	20#	18,700'	18,700'	CTS, 4750 Cu. Ft.
Tubing	2-3/8"	New	N-80	4.7#		7100'	
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	24"	0.438"	1530	50	Class A	1.18
Fresh Water	13-3/8"	17-1/2"	0.38"/0.33"	2730/1730	1000	Class A	1.18
Coal	9-5/8"	12-1/4"	0.352"	3520	1500	Class A	1.18
Intermediate							
Production	5-1/2"	8-3/4" & 8-1/2"	0.361"	12,630	2500	Lead-HPOZ & Tail-H	H/POZ-1.44 & H-1.8
Tubing	2-3/8"	4.778"	0.19"	11,200			
Liners							

4709502328 MOD

PACKERS

Kind:	N/A			
Sizes:	N/A			RECEIVED Office of Oil and Gas
Depths Set:	N/A			JAN 27 2015

WV Department of
Environmental Protection

WW-6B
(10/14)

API NO. 47- 095 - 02328

OPERATOR WELL NO. Klondike Unit 2H

Well Pad Name: Existing Pierpoint Pad

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill, perforate, fracture a new horizontal shallow well and complete Marcellus Shale.

4709502328 MOD2

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Antero plans to pump Slickwater into the Marcellus Shale formation in order to ready the well for production. The fluid will be comprised of approximately 99 percent water and sand, with less than 1 percent special-purpose additives as shown in the attached "List of Anticipated Additives Used for Fracturing or Stimulating Well."

Anticipated Max Pressure - 9300 lbs
Anticipated Max Rate - 80 bpm

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 22.30 existing acres

22) Area to be disturbed for well pad only, less access road (acres): 3.38 existing acres

23) Describe centralizer placement for each casing string:

Conductor: no centralizers
Surface Casing: one centralizer 10' above the float shoe, one on the insert float collar and one every 4th joint spaced up the hole to surface.
Intermediate Casing: one centralizer above float joint, one centralizer 5' above float collar and one every 4th collar to surface.
Production Casing: one centralizer at shoe joint and one every 3 joints to top of cement in intermediate casing.

24) Describe all cement additives associated with each cement type:

Conductor: no additives, Class A cement.
Surface: Class A cement with 2-3% calcium chloride and 1/4 lb of flake
Intermediate: Class A cement with 1/4 lb of flake, 5 gallons of clay treat
Production: Lead cement- 50/50 Class H/Poz + 1.5% salt + 1% C-45 + 0.5% C-16a + 0.2% C-12 + 0.45% C-20 + 0.05% C-51
Production: Tail cement- Class H + 45 PPS Calcium Carbonate + 1.0% FL-160 + 0.2% ACGB-47 + 0.05% ACSA-51 + 0.2% ACR-20

RECEIVED
Office of Oil and Gas

JAN 27 2015

WV Department of
Environmental Protection

25) Proposed borehole conditioning procedures:

Conductor: blowhole clean with air, run casing, 10 bbls fresh water.
Surface: blowhole clean with air, trip to conductor shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate pipe capacity + 40 bbls fresh water followed by 25 bbls bentonite mud, 10 bbls fresh water spacer.
Intermediate: blowhole clean with air, trip to surface casing shoe, trip to bottom, blowhole clean with air, trip out, run casing, circulate 40 bbls brine water followed by 10 bbls fresh water and 25 bbls bentonite mud, pump 10 bbls fresh water.
Production: circulate with 14 lb/gal NaCl mud, trip to middle of lateral, circulate, pump high viscosity sweep, trip to base of curve, pump high viscosity sweep, trip to top of curve, trip to bottom, circulate, pump high viscosity sweep, trip out, run casing, circulate 10 bbls fresh water, pump 48 bbls barite pill, pump 10 bbls fresh water followed by 48 bbls mud flush and 10 bbls water.

*Note: Attach additional sheets as needed.

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>Lloyd C. Seckman Lease</u>			
Lloyd C. Seckman	Antero Resources Appalachian Corporation	1/8+	0413/0763
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Thomas L. Burkhardt Lease</u>			
Thomas L. Burkhardt	Antero Resources Appalachian Corporation	1/8+	0400/0439
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Edwin C. Weigle Heirs Lease</u>			
Kathy Ann Seago, as beneficiary of the Estate of Edwin C. Weigle, deceased	Antero Resources Appalachian Corporation	1/8+	0402/0448
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>Joseph Sayre Lease</u>			
Joseph Sayre	Antero Resources Appalachian Corporation	1/8+	0395/0322
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>James C. Rymer Lease</u>			
James C. Rymer	Chesapeake Appalachia, LLC	1/8	0370/0534
Chesapeake Appalachia, LLC	Jay-Bee Oil and Gas, Inc.	Assignment of Oil and Gas Leases	0420/0571
Jay-Bee Oil and Gas, Inc.	Antero Resources Corporation	Assignment of Oil and Gas Leases	0453/0498
<u>Richard L. Seago, et ux Lease</u>			
Richard L. Seago, et ux	Antero Resources Appalachian Corporation	1/8+	0403/0733
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>James E. Gregg, et ux Lease</u>			
James E. Gregg, et ux	Antero Resources Appalachian Corporation	1/8+	0408/0460
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>John H. Crumrine, et al Lease</u>			
Charles A. Crumrine & John W. Crumrine	Drilling Appalachian Corporation	1/8	0257/0521
Drilling Appalachian Corporation	Antero Resources Appalachian Corporation	Assignment	0422/0074
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1
<u>West Virginia Division of Natural Resources Lease (Middle Island Creek)</u>			
West Virginia Division of Natural Resources	Antero Resources Corporation	1/8+	0514/0366
<u>West Virginia Division of Natural Resources (TM 2-27-p/o 5)</u>			
West Virginia Division of Natural Resources	Jay-Bee Production Company	1/8+	0485/0358
Jay-Bee Production Company	JB Exploration I, LLC	Deed of Trust	Doddridge Co. 0189/0452
JB Exploration I, LLC	Antero Resources Corporation	*Partial Assignment	0509/0757

4700502328 MOD 2

RECEIVED
Office of Oil and Gas

JAN 27 2015

WV Department of
Environmental Protection

*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
 Chapter 22, Article 6A, Section 5(a)(5)
 IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book/Page
<u>West Virginia Division of Natural Resources (TM 2-27-p/o 5)</u>			
West Virginia Division of Natural Resources	Jay-Bee Production Company	1/8+	0485/0358
Jay-Bee Production Company	JB Exploration I, LLC	Deed of Trust	Doddridge Co. 0189/0452
JB Exploration I, LLC	Antero Resources Corporation	*Partial Assignment	0509/0757
<u>Patsy Fletcher Lease</u>			
Patsy J. Fletcher	Antero Resources Appalachian Corporation	1/8+	0417/0696
Antero Resources Appalachian Corporation	Antero Resources Corporation	Name Change	Exhibit 1

*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

****CONTINUED ON NEXT PAGE****

4709502328 MOD 2

RECEIVED
 Office of Oil and Gas
 JAN 27 2015
 WV Department of
 Environmental Protection

WW-6A1
(5/13)

Operator's Well No. Klondike Unit 2H

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
WVDNR Lease	West Virginia Division of Natural Resources	Antero Resources Corporation	1/8+	0514/0366

*Partial Assignments to Antero Resources Corporation include 100% rights to extract, produce and market the oil and gas from the Marcellus and any other formations completed with this well.

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Antero Resources Corporation
 By: Kevin Kilstrom
 Its: Senior VP of Production

201502328 MOD
 RECEIVED
 Office of Oil and Gas
 JAN 27 2015
 WV Department of
 Environmental Protection

FILED

JUN 10 2013

Natalie E. Tennant
Secretary of State
1900 Kanawha Blvd E
Bldg 1, Suite 157-K
Charleston, WV 25305



Penny Barker, Manager
Corporations Division
Tel: (304)558-8000
Fax: (304)558-8381
Website: www.wvsos.com
E-mail: business@wvsos.com

FILE ONE ORIGINAL
(Two if you want a filed
stamped copy returned to you)
FEE: \$25.00

APPLICATION FOR
AMENDED CERTIFICATE
OF AUTHORITY

Office Hours: Monday - Friday
8:30 a.m. - 5:00 p.m. ET

**** In accordance with the provisions of the West Virginia Code, the undersigned corporation hereby ****
applies for an Amended Certificate of Authority and submits the following statement:

- Name under which the corporation was authorized to transact business in WV: Antero Resources Appalachian Corporation
- Date Certificate of Authority was issued in West Virginia: 6/25/2008
- Corporate name has been changed to: Antero Resources Corporation
(Attach one Certified Copy of Name Change as filed in home State of Incorporation.)
- Name the corporation elects to use in WV: Antero Resources Corporation
(due to home state name not being available)
- Other amendments: (attach additional pages if necessary)
- Name and phone number of contact person. (This is optional; however, if there is a problem with the filing, listing a contact person and phone number may avoid having to return or reject the document.)
Alvyn A. Schopp (303) 367-7310
Contact Name Phone Number
- Signature information (See below Important Legal Notice Regarding Signature):
Print Name of Signer: Alvyn A. Schopp Title/Capacity: Authorized Person
Signature: [Handwritten Signature] Date: June 10, 2013

RECEIVED
Office of Oil and Gas
JAN 27 2015
209502323 MOP

WV Department of
Environmental Protection

***Important Legal Notice Regarding Signature:** Per West Virginia Code §31D-1-129. Penalty for signing false document. Any person who signs a document he or she knows is false in any material respect and knows that the document is to be delivered to the secretary of state for filing is guilty of a misdemeanor and, upon conviction thereof, shall be fined not more than one thousand dollars or confined in the county or regional jail not more than one year, or both.

LATITUDE 39°27'30"

7,256'

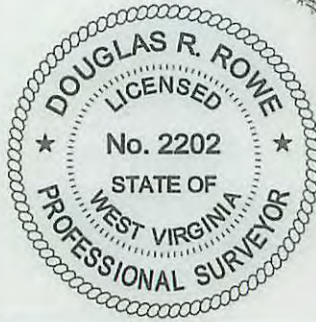
11,592' TO BOTTOM HOLE

LATITUDE 39°30'00"

LONGITUDE 80°50'00"

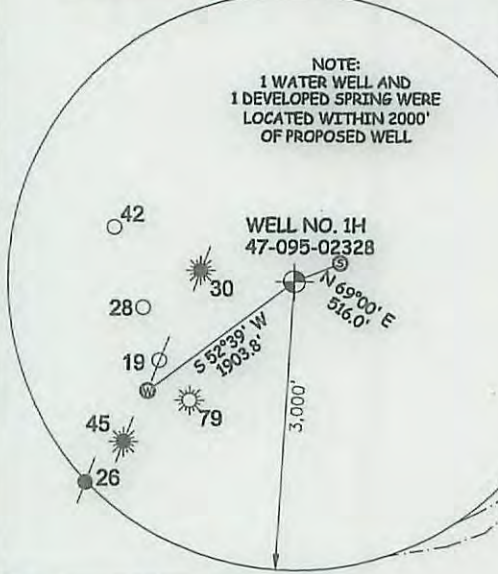
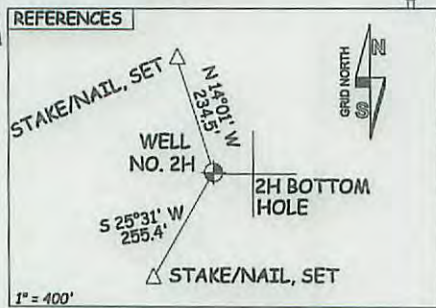
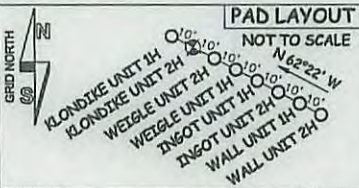
LONGITUDE 80°50'00"

Antero Resources Corporation
Well No. Klondike Unit 2H
API #47-095-02328



NOTES:
WELL 2H TOP HOLE INFORMATION:
N: 349,658ft E: 1,616,250ft
LAT: 39°27'07.37" LON: 80°51'32.51"
BOTTOM HOLE INFORMATION:
N: 359,890ft E: 1,612,065ft
LAT: 39°28'47.87" LON: 80°52'27.84"
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 2H TOP HOLE INFORMATION:
N: 4,366,961m E: 512,144m
BOTTOM HOLE INFORMATION:
N: 4,370,057m E: 510,817m



47 - 095 - 02328
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 PERSERIBED 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 # 15-055WA
DRAWING # KLONDIKE2HR2
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 +/-
Existing Fence
Found monument, as noted
DOUGLAS R. ROWE P.S. 2202
DATE 01/20/16
OPERATOR'S WELL# KLONDIKE UNIT #2H

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 1,216' ORIGINAL - 1,201' AS DRILLED WATERSHED OUTLET MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' DISTRICT ELLSWORTH COUNTY TYLER
SURFACE OWNER LLOYD C. SECKMAN ACREAGE 128.5 ACRES +/-
OIL & GAS ROYALTY OWNER LLOYD C. SECKMAN; THOMAS L. BURKHART; EDWIN C. WEIGLE HEIRS; JOSEPH SAYRE LEASE ACREAGE 128.5 AC +/-; 90 AC +/-; 129.2 AC +/-; 100 AC +/-;
JAMES C. RYMER; RICHARD L. SEAGO ET UX; JAMES E. GREGG ET UX; JOHN H. CRUMRINE ET AL; WVDNR; PATSY FLETCHER 143.89 AC +/-; 74.2 AC +/-; 141 AC +/-; 256 AC +/-; 20 AC +/-; 71.74 AC +/-; 80 AC +/-; 19.8 AC +/-
PROPOSED WORK: DRILL CONVERT DRILL DEEPER X REDRILL FRACTURE OR STIMULATE X
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) MOD-BHL PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,800' TVD 18,700' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

02/12/2016

LATITUDE 39°27'30"

7,256'

11,592' TO BOTTOM HOLE

LATITUDE 39°30'00"

LONGITUDE 80°50'00"
LONGITUDE 80°50'00"

Antero Resources Corporation
Well No. Klondike Unit 2H
API #47-095-02328

WELL 2H
BOTTOM HOLE

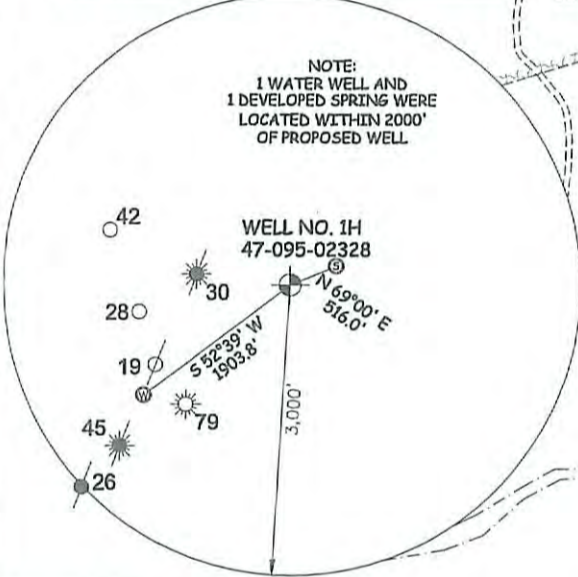
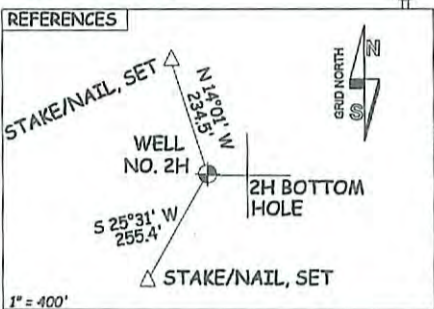
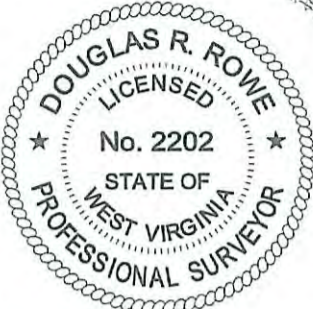
WVDNR
LEASE

NOTE:
NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED
12,500 SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY
CATTLE OR POULTRY IN SUBURBAN ARE LOCATED WITHIN SIX HUNDRED
TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.

NOTES:
WELL 2H TOP HOLE INFORMATION:
N: 349,658ft E: 1,616,250ft
LAT: 39°27'07.37" LON: 80°51'32.51"
BOTTOM HOLE INFORMATION:
N: 359,890ft E: 1,612,065ft
LAT: 39°28'47.87" LON: 80°52'27.84"
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 2H TOP HOLE INFORMATION:
N: 4,366,961m E: 512,144m
BOTTOM HOLE INFORMATION:
N: 4,370,057m E: 510,817m

PAD LAYOUT
NOT TO SCALE
KLONDIKE UNIT 1H
KLONDIKE UNIT 2H
WEIGLE UNIT 1H
INGOT UNIT 1H
WALL UNIT 1H
WALL UNIT 2H



47 - 095 - 02328
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 # 15-055WA
DRAWING # KLONDIKE2HR2
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 +/-
--- Existing Fence
--- Found monument, as noted
DOUGLAS R. ROWE P.S. 2202
DATE 01/20/16
OPERATOR'S WELL# KLONDIKE UNIT #2H

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
LOCATION: ELEVATION 1,216' ORIGINAL - 1,201' AS DRILLED WATERSHED OUTLET MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' DISTRICT ELLSWORTH COUNTY TYLER
SURFACE OWNER LLOYD C. SECKMAN ACREAGE 128.5 ACRES +/-
OIL & GAS ROYALTY OWNER LLOYD C. SECKMAN; THOMAS L. BURKHART; EDWIN C. WEIGLE HEIRS; JOSEPH SAYRE LEASE ACREAGE 128.5 AC±; 90 AC±; 129.2 AC±; 100 AC±;
JAMES C. RYMER; RICHARD L. SEAGO ET UX; JAMES E. GREGG ET UX; JOHN H. CRUMRINE ET AL; WVDNR; WVDNR; WVDNR; PATSY FLETCHER 143.89 AC±; 74.2 AC±; 141 AC±; 256 AC±; 20 AC±; 71.74 AC±; 60 AC±; 19.6 AC±
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER REDRILL ___ FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) MOD-BHL PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,800' TVD 18,700' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

02/12/2016

Office of Oil and Gas
JAN 27 2015
WV Department of Environmental Protection