

RE: ANTERO RESOURCES CORPORATION'S TAX YEAR 2021

HEARING
October 05, 2021

1 action that Antero has taken with respect to the prior
2 tax years. Which, you know, isn't -- we don't believe
3 was fair.

4 But we thank you very much for your patience and
5 for listening to all of this.

6 MR. MUDRINICH: I just have a brief closing
7 statement.

8 Again, the constitutional issues and the APA
9 issues to be handled by arguments about the APA and the
10 constitutional issues that were handled on appeal.

11 I would like to note, though, that it's the
12 State's position that the June, directed by then Tax
13 Commissioner Steager, was beyond his authority. And
14 that's why it was revoked. And it's by him in subsequent
15 important notice, as these things were called.

16 And the State also has complied with the Consol
17 decision. The Court said your average is a number, they
18 used the number of 125,000 for expenses. The Court also
19 said that the State's interpretation, that the ordinary
20 offer any expenses don't extend beyond basically the well
21 site, field line. We complied with that.

22 And with that I'll close, other than I would
23 like to have admitted into the record the administrative
24 note -- the variables filed in the State register for oil

1 and gas and a copy of the legislative rule in effect at
2 the time, 110 series 1J.

3 MR. ROSENBERG: No objection.

4 MR. MUDRINICH: I'm sure you've seen this.

5 MR. ROSENBERG: We just want to make sure that
6 the Board admits all the exhibits.

7 PRESIDENT GLASPELL: Make a motion to admit?
8 All in favor?

9 COMMISSIONER MEANS: Aye.

10 COMMISSIONER TRAVIS: Aye.

11 (State's Exhibit A marked.)

12 MR. ROSENBERG: Thank you.

13 MR. MUDRINICH: Thank you.

14 PRESIDENT GLASPELL: Make a motion to close the
15 meeting?

16 MR. MEANS: I move.

17 PRESIDENT GLASPELL: All in favor?

18 COMMISSIONER TRAVIS: Aye.

19 PRESIDENT GLASPELL: All right.

20 (Whereupon, the hearing was concluded.)
21
22
23
24

1 STATE OF WEST VIRGINIA, To-wit:.

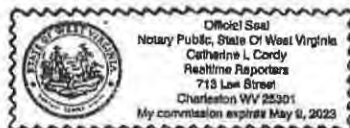
2 I, Catherine L. Cordy, a Notary Public and Court
3 Reporter within and for the State aforesaid, duly
4 commissioned and qualified, do hereby certify that the
above hearing was taken by me and before me at the time
and place specified in the caption hereof.

5 I do further certify that said hearing was correctly
6 taken by me in stenotype notes, that the same was
7 accurately transcribed out in full and reduced to
typewriting, and that said transcript is a true record of
the hearing.

8 I further certify that I am neither attorney or
9 counsel for, nor related to or employed by, any of the
10 parties to the action in which these proceedings were
11 had, and further I am not a relative or employee of any
attorney or counsel employed by the parties hereto or
financially interested in the action.

12 My commission expires the 9th day of May, 2023.

13 Given under my hand and seal this 5th day of
14 October, 2021.



Catherine L. Cordy

Catherine L. Cordy
Notary Public-Court Reporter

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Dave Hardy
Secretary of Revenue



STATE TAX DEPARTMENT

Dale W. Steager
State Tax Commissioner

August 31, 2020

The Honorable Mac Warner
Secretary of State
Building 1, Suite 157-K
State Capitol
Charleston, West Virginia 25305

FILED
2020 AUG 31 P 2:06
OFFICE OF THE SECRETARY OF STATE

Dear Secretary Warner:

Attached for filing in the State Register are final natural resource property valuation variables for the 2021 Tax Year that have been developed by the State Tax Department for use in determining the appraised value of coal, oil, natural gas, managed timberland and other natural resource properties for ad valorem tax purposes.

In accordance with the requirements of §110CSR1-I, 1-J and 1-K, tentative variables were made available for public comments on June 29, 2020. The department received zero comments on the tentative valuation variables. Additionally, changes were made for the coal, oil and gas, other mined mineral, and managed timberland royalty rates and prices based upon information that was unavailable on June 29, 2020.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dale W. Steager".

Dale W. Steager
State Tax Commissioner

DWS/lb/t

Attachment

Property Tax Division
P.O. Box 2389
Charleston, WV 25328-2389
Phone 304-558-3940 FAX 304-558-1843



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2020 AUG 31 P 2:06

OFFICE OF THE
SECRETARY OF STATE

OIL AND GAS PROPERTIES ANALYSIS

Tax Year 2021

Dale W. Steager
State Tax Commissioner
Department of Revenue

OIL AND GAS

TY 2021

Capitalization Rate Analysis and Results:

In developing a capitalization rate for use in valuing specific income-producing properties consideration is given to the three approaches generally employed in estimating a discount rate. As a matter of practicality, the Bands-of-Investment and Summation Technique approaches are utilized in establishing discount rates for producing oil and gas properties. Data for analysis has been derived in accordance with current Legislative Rule Title 110, Series 1J.

Safe Rate (3-Month Constant Maturity Interest Rates)

January	December	2019	2.104%
January	December	2018	1.973%
January	December	2017	0.947%

Risk Rate (Interest differential between Loan Rate and 3-Month Constant Maturity Interest Rates)

<u>Loan Rate*</u>		<u>Risk Rate</u>
2019	7.280%	5.176%
2018	6.900%	4.927%
2017	6.100%	5.153%

*Prime plus 2%

Equity (Differential between Equity Rates and 3-Month Constant Maturity Interest Rates)

<u>Equity Rate**</u>		<u>Risk Rate</u>
2019	13.0%/(1-0.26)-1.55	16.018%
2018	13.0%/(1-0.26)-1.55	15.595%
2017	13.0%/(1-0.275)-1.55	16.621%

** DQYDJ.COM

Composite Risk Rate Loan and Equity Rates weighted by industry estimated capital structure.

	<u>Equity Rate</u>	<u>Debt Rate</u>	<u>Composite Risk</u>	
2019	10.4114%	1.817%	12.671%	***
2018	10.1365%	1.724%	12.485%	
2017	10.8034%	1.804%	13.270%	

Note: Debt equity Ratio Debt 35% Equity 65%

*** Effective severance tax adjustment 0.95

Non Liquidity Rate Interest differential between 3-month Constant Maturity Interest Rates and a 1 year Constant Maturity Interest Rates which reflects a reasonable time necessary to sell active property.

			<u>1yr T Bill</u>	<u>90 day T Bill</u>	<u>Non Liquidity Rate</u>
January	December	2019	2.050%	1.550%	0.500%
January	December	2018	2.332%	1.973%	0.358%
January	December	2017	1.201%	0.947%	0.254%

Management Rate Charges for the management of investment portfolios.

Fixed Rate (by Rule) 0.500%

Property Tax Rate Sixty percent (60%) of State average Class III property tax rate.

2019 60% of 2.17 1.320%

Inflation Rate

January	December	2019	1.810%
January	December	2018	1.810%
January	December	2017	2.110%

Capitalization Rate

Since the valuation of oil and gas property is predicated on a three year production, the capitalization rate will be considered in a similar manner.

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Inflation Rate	-1.810%	-1.810%	-2.110%
Safe Rate	2.104%	1.973%	0.947%
Composite Risk Rate	12.871%	12.485%	13.270%
Non Liquidity Rate	0.500%	0.359%	0.254%
Management Rate	0.500%	0.500%	0.500%
Property Tax Rate	1.320%	1.302%	1.308%
Total	15.485%	14.709%	14.169%
	50.000%	33.333%	16.667%
	7.743%	4.903%	2.362%
			15.007%

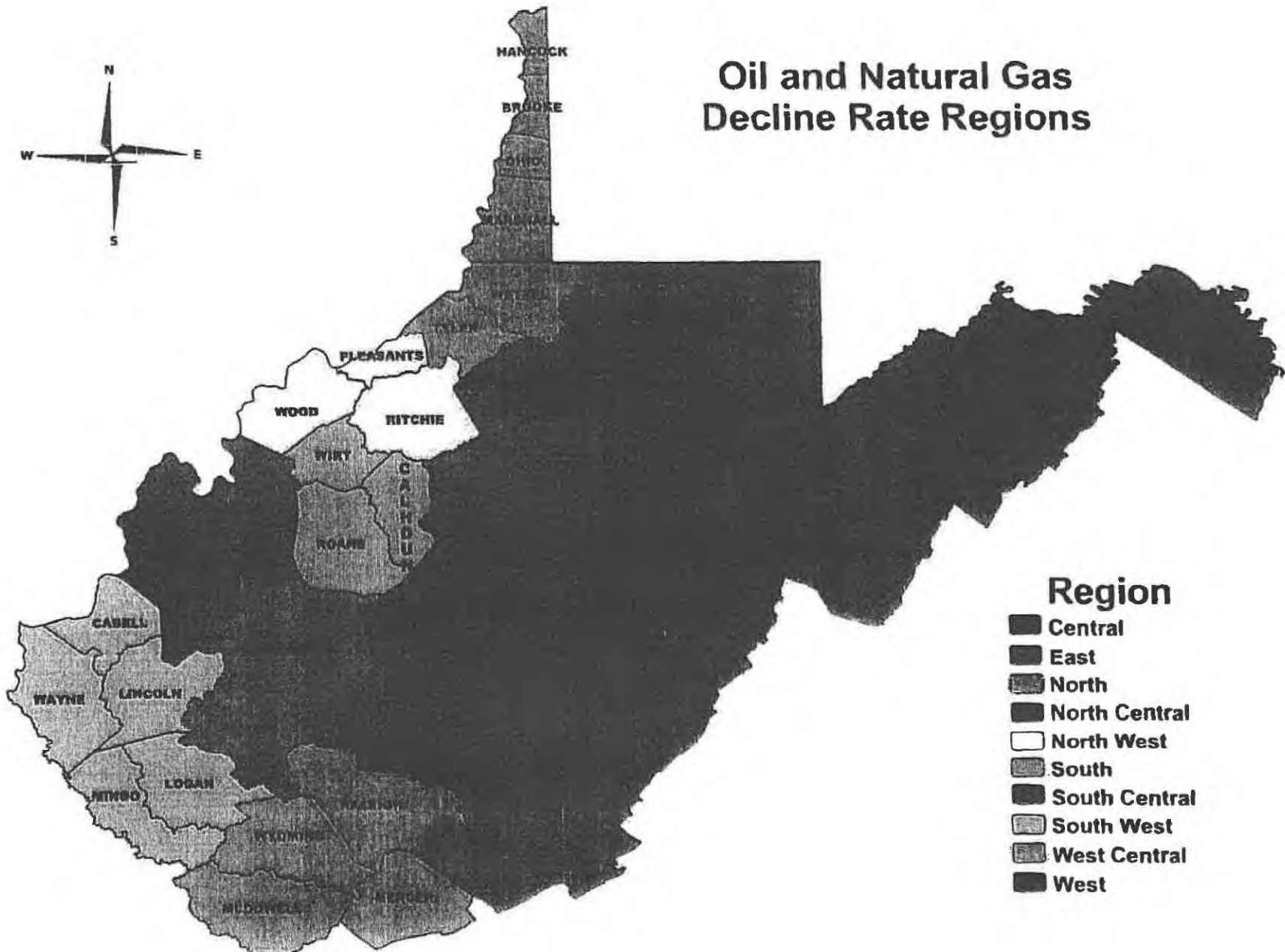
Capitalization Rate Rounded to:

15.01%

MULTIPLIERS FOR 14.6% MID-YEAR LIFE (ANNUALLY)

<u>YEAR</u>		<u>YEAR</u>	
1	0.932475	21	0.056901
2	0.810796	22	0.049476
3	0.704895	23	0.043020
4	0.612999	24	0.037406
5	0.533009	25	0.032525
6	0.463456	26	0.028281
7	0.402979	27	0.024591
8	0.350394	28	0.021382
9	0.304671	29	0.018592
10	0.264915	30	0.016166
11	0.230346	31	0.014056
12	0.200288	32	0.012222
13	0.174152	33	0.010627
14	0.151427	34	0.009240
15	0.131667	35	0.008035
16	0.114486	36	0.006986
17	0.099546	37	0.006075
18	0.086557	38	0.005282
19	0.075262	39	0.004593
20	0.065441	40	0.003993

Oil and Natural Gas Decline Rate Regions



Decline Rates for Natural Gas and Oil Formations: Central				
Central:Braxton, Clay, Fayette, Nicholas, Webster				
Code	Formation	Year 1	Year 2	Year 3 +
12	Alexander, Benson	-0.31	-0.20	-0.10
14	Benson	-0.48	-0.08	-0.08
16	Benson, Balltown+	-0.45	-0.16	-0.12
17	Gordon +	-0.30	-0.07	-0.07
18	Big Injun	-0.34	-0.13	-0.13
19	Big Injun, Big Lime	-0.36	-0.13	-0.13
22	Big Lime	-0.34	-0.34	-0.13
26	Ravencliff	-0.40	-0.40	-0.25
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
109	Trenton/Deeper *	-0.41	-0.22	-0.09
110	Marcellus *	-0.41	-0.22	-0.09
9	Exception (Median)	-0.41	-0.22	-0.09
10	Non-Filer	-0.30	-0.07	-0.07

* New Formation(s) involved in recent production. These will be valued with the Exception Rates until decline information is available.

Decline Rates for Natural Gas and Oil Formations: East				
East: Berkeley, Grant, Greenbrier, Hampshire, Hardy, Jefferson, Mineral, Monroe, Morgan, Pendleton, Pocahontas, Preston, Randolph, Summers, Tucker				
Code	Formation	Year 1	Year 2	Year 3 +
1	Oriskany	-0.30	-0.30	-0.19
14	Benson	-0.31	-0.17	-0.12
20	Benson +	-0.44	-0.20	-0.08
21	Benson, Fifth	-0.29	-0.28	-0.09
32	Brallier +	-0.48	-0.20	-0.05
33	Elk, Benson	-0.39	-0.21	-0.08
34	Elk, Benson, Riley	-0.53	-0.19	-0.05
35	Elk, Benson, Riley +	-0.36	-0.19	-0.11
36	Elk, Benson, Balltown	-0.34	-0.18	-0.11
37	Elk, Alexander, Benson	-0.50	-0.07	-0.07
38	Elk, Alexander, Benson +	-0.40	-0.16	-0.16
39	Huntermville	-0.31	-0.31	-0.14
40	Fox, Haverty	-0.36	-0.21	-0.15
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
110	Marcellus	-0.59	-0.22	-0.17
9	Exception (Median)	-0.41	-0.22	-0.10
10	Non-Filer	-0.29	-0.07	-0.05

Decline Rates for Natural Gas and Oil Formations: South				
South: McDowell, Mercer, Raleigh, Wyoming				
Code	Formation	Year 1	Year 2	Year 3 +
8	Berea	-0.34	-0.15	-0.15
22	Big Lime	-0.31	-0.19	-0.07
23	Big Lime, Maxton	-0.31	-0.19	-0.07
24	Big Lime, Ravencloff	-0.29	-0.29	-0.17
25	Berea +	-0.37	-0.12	-0.08
26	Ravencloff	-0.40	-0.08	-0.07
28	Weir	-0.44	-0.20	-0.10
29	Weir +	-0.28	-0.21	-0.08
30	Weir, Big Lime	-0.37	-0.19	-0.13
42	Maxton, Ravencloff	-0.40	-0.08	-0.07
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.27	-0.13	-0.09
97	Coalbed Methane (Vertical)	0.03	0.10	-0.05
98	Coalbed Methane (Horizontal)	-0.05	-0.05	-0.32
110	Marcellus *	-0.36	-0.19	-0.09
9	Exception (Median)	-0.36	-0.19	-0.09
10	Non-Filer	-0.23	-0.08	-0.05

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* New Formation(s) involved in recent production. These will be valued with the Exception Rates until decline information is available.

Decline Rates for Natural Gas and Oil Formations: South West				
South West: Cabell, Lincoln, Logan, Mingo, Wayne				
Code	Formation	Year 1	Year 2	Year 3 +
3	Devonian Shale	-0.31	-0.15	-0.04
8	Berea	-0.36	-0.11	-0.11
18	Big Injun	-0.38	-0.22	-0.04
22	Big Lime	-0.19	-0.19	-0.19
43	Berea, Big Lime	-0.18	-0.18	-0.18
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
109	Trenton/Deeper *	-0.38	-0.22	-0.10
110	Marcellus *	-0.38	-0.22	-0.10
9	Exception (Median)	-0.38	-0.22	-0.10
10	Non-Filer	-0.18	-0.11	-0.04

* New Formation(s) involved in recent production. These will be valued with the Exception Rates until decline information is available.

Decline Rates for Natural Gas and Oil Formations: South Central				
South Central: Boone, Kanawha				
Code	Formation	Year 1	Year 2	Year 3 +
3	Devonian Shale	-0.23	-0.08	-0.05
4	Huron	-0.31	-0.15	-0.04
8	Berea	-0.23	-0.14	-0.09
18	Big Injun	-0.29	-0.25	-0.12
27	Huron, Shales above Huron	-0.21	-0.08	-0.05
28	Weir	-0.30	-0.21	-0.14
29	Weir +	-0.31	-0.25	-0.09
31	Devonian Shales +	-0.27	-0.07	-0.05
86	Big Injun-Oil	-0.19	-0.18	-0.10
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
109	Trenton/Deeper *	-0.33	-0.19	-0.08
110	Marcellus *	-0.33	-0.19	-0.08
9	Exception (Median)	-0.33	-0.19	-0.08
10	Non-Filer	-0.19	-0.07	-0.04

* New Formation(s) involved in recent production. These will be valued with the Exception Rates until decline information is available.

Decline Rates for Natural Gas and Oil Formations: North				
North: Brooke, Hancock, Marshall, Ohio, Tyler, Wetzel				
Code	Formation	Year 1	Year 2	Year 3 +
11	Gordon	-0.47	-0.31	-0.09
13	Alexander, Benson, Riley	-0.26	-0.16	-0.15
15	Benson, Riley	-0.18	-0.16	-0.06
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
97	Coalbed Methane (Vertical)	-0.23	-0.08	-0.05
110	Marcellus	-0.52	-0.23	-0.18
9	Exception (Median)	-0.39	-0.23	-0.08
10	Non-Filer	-0.18	-0.16	-0.06

North West: Pleasants, Ritchie, Wood				
Code	Formation	Year 1	Year 2	Year 3 +
2	Huron, Rhinestreet	-0.41	-0.26	-0.07
4	Huron	-0.42	-0.24	-0.14
5	Huron, Shales above Huron	-0.39	-0.25	-0.14
8	Berea	-0.31	-0.15	-0.15
11	Gordon	-0.38	-0.10	-0.10
12	Alexander, Benson (No Riley)	-0.34	-0.23	-0.10
13	Alexander, Benson, Riley	-0.32	-0.20	-0.10
14	Benson	-0.19	-0.19	-0.10
44	Rhinestreet, Huron, Shallow Shale	-0.43	-0.28	-0.11
47	Alexander, Riley, (No Benson)	-0.41	-0.05	-0.05
48	Rhinestreet, Alexander, Benson, Riley	-0.31	-0.24	-0.10
49	Weir, Squaw, Big Injun	-0.27	-0.17	-0.07
50	Rhinestreet	-0.40	-0.27	-0.27
51	Rhinestreet +	-0.36	-0.21	-0.10
52	All Upper Devonian (Undiv)	-0.48	-0.33	-0.19
53	Huron, Chemung	-0.35	-0.11	-0.09
54	Huron, Hampshire, Pocono	-0.12	-0.12	-0.11
55	Upper Devonian (Above Huron)	-0.46	-0.33	-0.23
56	Chemung Sands= Riley, Bradford, Balltown, Speechley, Warren (No Benson or Alexander)	-0.28	-0.18	-0.10
83	Huron Oil	-0.74	-0.44	-0.40
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
109	Trenton/Deeper *	-0.39	-0.23	-0.23
110	Marcellus	-0.46	-0.29	-0.23
111	Utica *	-0.46	-0.29	-0.23
9	Exception (Median)	-0.39	-0.23	-0.13
10	Non-Filer	-0.12	-0.05	-0.05

* New Formation(s) involved in recent production. These will be valued with the Exception Rates until decline information is available.

**North Central: Barbour, Doddridge, Gilmer, Harrison, Lewis, Marion,
Monongalia, Taylor, Upshur**

Code	Formation	Year 1	Year 2	Year 3 +
11	Gordon	-0.41	-0.14	-0.12
12	Alexander, Benson	-0.37	-0.19	-0.11
13	Alexander, Benson, Riley	-0.40	-0.28	-0.05
14	Benson	-0.31	-0.17	-0.12
15	Benson, Riley	-0.34	-0.17	-0.14
18	Big Injun	-0.36	-0.16	-0.13
21	Benson, Fifth	-0.31	-0.20	-0.14
28	Weir	-0.34	-0.34	-0.07
29	Weir +	-0.28	-0.28	-0.23
33	Elk, Benson	-0.34	-0.16	-0.11
34	Elk, Benson, Riley	-0.42	-0.27	-0.08
37	Elk, Alexander, Benson	-0.49	-0.23	-0.08
38	Elk, Alexander, Benson +	-0.38	-0.20	-0.12
40	Fox, Haverly	-0.46	-0.16	-0.08
50	Rhinesreel	-0.28	-0.03	-0.03
57	Alexander, Benson, Balltown	-0.39	-0.26	-0.08
58	Alexander	-0.35	-0.20	-0.10
59	Alexander +	-0.39	-0.22	-0.10
60	Alexander, Benson, Riley +	-0.39	-0.35	-0.12
61	Balltown	-0.35	-0.20	-0.10
62	Balltown, Speechley	-0.28	-0.22	-0.10
63	Balltown, Speechley +	-0.30	-0.13	-0.10
64	Benson, Balltown, Speechley	-0.28	-0.22	-0.09
65	Benson, Bradford	-0.37	-0.20	-0.10
66	Benson, Balltown	-0.29	-0.23	-0.11
67	Benson, Riley +	-0.38	-0.14	-0.10
68	Benson, Speechley	-0.30	-0.22	-0.14
69	Brallier, Elk	-0.42	-0.20	-0.13
70	Brallier	-0.40	-0.22	-0.15
71	Deeper/Onondaga or Oriskany/Helderberg	-0.24	-0.24	-0.03
72	Elk, Alexander	-0.42	-0.22	-0.09
73	Elk Benson +	-0.38	-0.20	-0.12
74	Elk	-0.43	-0.12	-0.10
75	Elk, Riley	-0.60	-0.35	-0.17
76	Fox +	-0.46	-0.18	-0.09
77	Haverly, Elk, Benson (No Alexander)	-0.35	-0.16	-0.16
78	Haverly	-0.45	-0.15	-0.15
79	Riley	-0.44	-0.22	-0.10
80	Speechley	-0.30	-0.18	-0.09
81	Alexander, Benson, Speechley	-0.39	-0.24	-0.10
82	Haverly, Elk, Alexander	-0.47	-0.14	-0.14
85	Fifth, Oil	-0.45	-0.25	-0.22
87	Bayard All	-0.30	-0.20	-0.05
88	Fifth	-0.29	-0.18	-0.12
89	Fifth +	-0.25	-0.15	-0.13
90	Gordon, Injun All	-0.41	-0.23	-0.23
91	Squaw	-0.37	-0.31	-0.06
92	Injun +	-0.34	-0.22	-0.22
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
97	Coalbed Methane (Vertical)	-0.23	-0.08	-0.05
98	Coalbed Methane (Horizontal)	-0.05	-0.05	-0.32
109	Trenton/Deeper *	-0.38	-0.21	-0.11
110	Marcellus	-0.59	-0.29	-0.23
9	Exception (Median)	-0.38	-0.21	-0.11
10	Non-Filer	-0.23	-0.03	-0.03

* New Formation(s) involved in recent production. These will be values with the Exception Rates until decline information is available.

Decline Rates for Natural Gas and Oil Formations: West				
West: Jackson, Mason, Putnam				
Code	Formation	Year 1	Year 2	Year 3 +
1	Oriskany	-0.40	-0.40	-0.29
2	Huron, Rhinestreet	-0.13	-0.12	-0.03
3	Devonian Shale	-0.31	-0.15	-0.04
4	Huron	-0.29	-0.14	-0.05
5	Huron, Shales above Huron	-0.38	-0.15	-0.06
6	Huron, Berea	-0.29	-0.08	-0.08
7	Berea, Devonian Shale	-0.08	-0.08	-0.08
8	Berea	-0.36	-0.16	-0.16
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
109	Trenton/Deeper *	-0.35	-0.20	-0.09
110	Marcellus *	-0.35	-0.20	-0.09
9	Exception (Median)	-0.35	-0.20	-0.09
10	Non-Filer	-0.08	-0.08	-0.03

* New Formation(s) Involved in recent production. These will be valued with the Exception Rates until decline information is available.

Decline Rates for Natural Gas and Oil Formations: West Central				
West Central: Calhoun, Roane, Wirt				
Code	Formation	Year 1	Year 2	Year 3 +
2	Huron, Rhinestreet	-0.49	-0.11	-0.06
4	Huron	-0.33	-0.22	-0.14
27	Huron, Shales above Huron	-0.42	-0.23	-0.12
44	Rhinestreet, Huron, Shallow Shale	-0.51	-0.14	-0.11
45	Devonian Shale, Pocono	-0.25	-0.17	-0.12
46	Pocono	-0.29	-0.25	-0.12
84	Big Injun, Oil	-0.41	-0.41	-0.11
93	4th Sand	-0.42	-0.32	-0.08
94	50 Foot	-0.34	-0.26	-0.07
95	Injun/Weir	-0.51	-0.26	-0.09
96	Maxton	-0.70	-0.27	-0.08
109	Trenton/Deeper *	-0.42	-0.24	-0.10
110	Marcellus *	-0.42	-0.24	-0.10
9	Exception (Median)	-0.42	-0.24	-0.10
10	Non-Filer	-0.25	-0.11	-0.06

* New Formation(s) involved in recent production. These will be valued with the Exception Rates until decline information is available.

Average Industry Operating Expense Results

CONVENTIONAL GAS

- Average Operating Expenses	=	\$5,000
- Coal Bed Methane, Vertical Wells Expenses	=	\$9,000

OIL

- Average Operating Expenses	=	\$5,750
- Average Enhanced Operating Expenses	=	\$9,000

MARCELLUS/UTICA

- Vertical Producing Well		
- Average Operating Expenses	=	\$15,000
- Horizontal Producing Well		
- Average Operating Expenses	=	\$125,000

HORIZONTAL WELLS (OTHER THAN MARCELLUS/UTICA AND COAL BED METHANE)

- Horizontal Producing Well		
- Average Operating Expenses	=	\$20,000

Minimum Working Interest Appraisal = \$500 per well

Flat Rate Royalty Multiplier = 5.75

Home Use Only Wells: Appraised at \$500 per well

Industrial Use Only Wells:* MCF usage X \$2.56/MCF
BBL usage X \$56.99/BBL

*(Also includes Department of Environmental Protection reported wells.)

Non-Filer Valuations

Working Interest	=	150% of previous year's appraisal
Royalty Interest	=	90% of previous year's appraisal

Valuation

The previously discussed variables are used to establish a future income stream converted to present worth through application of a capitalization rate. The sum of the discounted future net income per year represents a reasonable estimate of market value.

Lease Rate/Term Survey and Results

The non-producing property value for each county is determined by multiplying the average delay rental by a factor, which represents the average lease term under present economic conditions.

As a result of higher lease terms being inversely proportional to the value of oil and gas (thus counties with little leasing or production activities reflect inflated values) and with the volatile nature of county activity, necessary adjustments in the review have been made.

A compilation of lease terms produced a statewide average of 5 years. This term (5 years) was applied to all county lease rates and compared to the appraisal rates derived from calculations using individual county data as well as regional data. The resulting calculations were reviewed and considered in the assignment of an appraisal rate per acre.

The appraisal rate/acre amounts shown on the next page are preliminary figures, which may change if additional lease data is received. These rates have been applied to all county magisterial districts with either producing wells, lease activity within the past 5 years or both. Tax districts void of activity within the past 5 years have been assigned the minimum value per acre.

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
BARBOUR	1	1	\$55.00
		2	\$1.00
		3	\$55.00
		4	\$55.00
		5	\$55.00
		6	\$1.00
		7	\$55.00
		8	\$55.00
		9	\$55.00
		10	\$55.00
		11	\$55.00
BERKELEY	2	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
BOONE	3	1	\$20.00
		2	\$1.00
		3	\$1.00
		4	\$20.00
		5	\$20.00
		6	\$20.00
		7	\$1.00
		8	\$20.00
		9	\$1.00
BRAXTON	4	1	\$20.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$20.00
		6	\$20.00
		7	\$20.00
		8	\$1.00
BROOKE	5	1	\$1.00
		2	\$1.00
		3	\$105.00
		4	\$105.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
CABELL	6	1	\$25.00
		2	\$1.00
		3	\$25.00
		4	\$25.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$25.00
		9	\$1.00
		10	\$25.00
CALHOUN	7	1	\$30.00
		2	\$1.00
		3	\$30.00
		4	\$30.00
		5	\$30.00
		6	\$30.00
CLAY	8	1	\$20.00
		2	\$1.00
		3	\$20.00
		4	\$20.00
		5	\$20.00
		6	\$20.00
DODDRIDGE	9	1	\$100.00
		2	\$100.00
		3	\$100.00
		4	\$100.00
		5	\$100.00
		6	\$100.00
		7	\$100.00
		8	\$100.00
		9	\$1.00
FAYETTE	10	1	\$20.00
		2	\$20.00
		3	\$20.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
		11	\$1.00
		12	\$1.00
		13	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
GILMER	11	1	\$25.00
		2	\$25.00
		3	\$25.00
		4	\$1.00
		5	\$1.00
		6	\$25.00
GRANT	12	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
GREENBRIER	13	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
		11	\$1.00
		12	\$1.00
		13	\$1.00
		14	\$1.00
		15	\$1.00
		16	\$1.00
		17	\$1.00
		18	\$1.00
HAMPSHIRE	14	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
HANCOCK	15	1	\$25.00
		2	\$1.00
		3	\$25.00
		4	\$25.00
		5	\$1.00
		6	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
HARDY	16	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
HARRISON	17	1	\$90.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$90.00
		6	\$1.00
		7	\$90.00
		8	\$1.00
		9	\$90.00
		10	\$1.00
		11	\$90.00
		12	\$90.00
		13	\$1.00
		14	\$90.00
		15	\$90.00
		16	\$1.00
		17	\$1.00
		18	\$90.00
		19	\$1.00
		20	\$90.00
		21	\$1.00
JACKSON	18	1	\$40.00
		2	\$40.00
		3	\$1.00
		4	\$40.00
		5	\$1.00
		6	\$40.00
		7	\$40.00
JEFFERSON	19	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
KANAWHA	20	1	\$30.00
		2	\$1.00
		3	\$30.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
		11	\$1.00
		12	\$1.00
		13	\$1.00
		14	\$1.00
		15	\$30.00
		16	\$30.00
		17	\$1.00
		18	\$1.00
		19	\$30.00
		20	\$1.00
		21	\$1.00
		22	\$1.00
		23	\$30.00
		24	\$30.00
		25	\$30.00
		26	\$1.00
		27	\$1.00
		28	\$30.00
		29	\$1.00
		30	\$1.00
		31	\$1.00
LEWIS	21	1	\$35.00
		2	\$35.00
		3	\$35.00
		4	\$35.00
		5	\$1.00
		6	\$35.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
LINCOLN	22	1	\$25.00
		2	\$25.00
		3	\$1.00
		4	\$25.00
		5	\$25.00
		6	\$25.00
		7	\$25.00
		8	\$25.00
		9	\$25.00
		10	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
LOGAN	23	1	\$15.00
		2	\$15.00
		3	\$15.00
		4	\$15.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$15.00
		9	\$1.00
MARION	24	1	\$1.00
		2	\$90.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$90.00
		10	\$1.00
		11	\$90.00
		12	\$90.00
		13	\$1.00
		14	\$1.00
		15	\$1.00
		16	\$90.00
		17	\$1.00
		18	\$90.00
		19	\$90.00
		20	\$1.00
		21	\$1.00
		22	\$1.00
MARSHALL	25	1	\$1.00
		2	\$1.00
		3	\$105.00
		4	\$105.00
		5	\$105.00
		6	\$1.00
		7	\$105.00
		8	\$1.00
		9	\$105.00
		10	\$1.00
		11	\$1.00
		12	\$105.00
		13	\$105.00
		14	\$105.00
		15	\$105.00
		16	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
MASON	26	1	\$1.00
		2	\$25.00
		3	\$25.00
		4	\$25.00
		5	\$25.00
		6	\$25.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$25.00
		11	\$1.00
		12	\$1.00
		13	\$1.00
		14	\$25.00
		15	\$25.00
		16	\$25.00
MC DOWELL	27	1	\$20.00
		2	\$1.00
		3	\$20.00
		4	\$20.00
		5	\$1.00
		6	\$20.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
		11	\$20.00
		12	\$1.00
		13	\$20.00
		14	\$1.00
		15	\$1.00
		16	\$1.00
MERCER	28	1	\$1.00
		2	\$15.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$15.00
		7	\$1.00
		8	\$1.00
		9	\$15.00
		10	\$1.00
		11	\$15.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
MINERAL	29	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
		11	\$1.00
MINGO	30	1	\$1.00
		2	\$1.00
		3	\$20.00
		4	\$20.00
		5	\$20.00
		6	\$20.00
		7	\$20.00
		8	\$1.00
		9	\$20.00
		10	\$20.00
		11	\$20.00
		12	\$1.00
MONONGALIA	31	1	\$35.00
		2	\$1.00
		3	\$35.00
		4	\$35.00
		5	\$35.00
		6	\$1.00
		7	\$35.00
		8	\$35.00
		9	\$1.00
		10	\$1.00
		11	\$1.00
		12	\$1.00
		13	\$1.00
		14	\$1.00
		15	\$1.00
		16	\$1.00
		17	\$1.00
		18	\$1.00
		19	\$35.00
			\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
MONROE	32	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
MORGAN	33	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
NICHOLAS	34	1	\$1.00
		2	\$15.00
		3	\$15.00
		4	\$15.00
		5	\$1.00
		6	\$1.00
		7	\$15.00
		8	\$1.00
		9	\$1.00
OHIO	35	1	\$1.00
		2	\$1.00
		3	\$105.00
		4	\$105.00
		5	\$1.00
		6	\$105.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$1.00
PENDLETON	36	1	\$1.00
		2	\$10.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$10.00

OIL & GAS RESERVE RATES FOR TY 2021

COUNTY	CO #	DISTRICT #	TY2021 \$/AC
PLEASANTS	37	1	\$40.00
		2	\$40.00
		3	\$40.00
		4	\$40.00
		5	\$40.00
		6	\$1.00
		7	\$40.00
		8	\$40.00
POCAHONTAS	38	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
PRESTON	39	1	\$30.00
		2	\$30.00
		3	\$30.00
		4	\$30.00
		5	\$30.00
		6	\$30.00
		7	\$1.00
		8	\$30.00
		9	\$1.00
		10	\$30.00
		11	\$1.00
		12	\$1.00
		13	\$1.00
		14	\$1.00
		15	\$1.00
		16	\$1.00
		17	\$1.00
		18	\$1.00
		19	\$1.00
		20	\$1.00
PUTNAM	40	1	\$25.00
		2	\$25.00
		3	\$1.00
		4	\$25.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$25.00
		9	\$1.00
		10	\$25.00
		11	\$25.00
		12	\$25.00
		13	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
RALEIGH	41	1	\$20.00
		2	\$20.00
		3	\$1.00
		4	\$1.00
		5	\$20.00
		6	\$1.00
		7	\$20.00
		8	\$20.00
		9	\$20.00
		10	\$1.00
		11	\$20.00
		12	\$20.00
RANDOLPH	42	1	\$20.00
		2	\$20.00
		3	\$1.00
		4	\$20.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$20.00
		11	\$20.00
		12	\$1.00
		13	\$1.00
		14	\$1.00
		15	\$1.00
		16	\$20.00
		17	\$1.00
		18	\$1.00
RITCHIE	43	1	\$80.00
		2	\$1.00
		3	\$80.00
		4	\$1.00
		5	\$80.00
		6	\$1.00
		7	\$80.00
		8	\$1.00
		9	\$1.00
		10	\$80.00

OIL & GAS RESERVE RATES FOR TY 2021

COUNTY	CO #	DISTRICT #	TY2021 \$/AC
ROANE	44	1	\$35.00
		2	\$35.00
		3	\$35.00
		4	\$35.00
		5	\$1.00
		6	\$35.00
		7	\$35.00
		8	\$1.00
		9	\$35.00
SUMMERS	45	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$1.00
		5	\$5.00
		6	\$1.00
		7	\$1.00
TAYLOR	46	1	\$1.00
		2	\$1.00
		3	\$90.00
		4	\$90.00
		5	\$90.00
		6	\$90.00
		7	\$90.00
TUCKER	47	1	\$15.00
		2	\$15.00
		3	\$1.00
		4	\$1.00
		5	\$15.00
		6	\$1.00
		7	\$1.00
		8	\$1.00
		9	\$15.00
		10	\$1.00
		11	\$15.00
		12	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
TYLER	48	1	\$100.00
		2	\$100.00
		3	\$1.00
		4	\$100.00
		5	\$100.00
		6	\$100.00
		7	\$1.00
		8	\$1.00
		9	\$1.00
		10	\$100.00
UPSHUR	49	1	\$70.00
		2	\$70.00
		3	\$1.00
		4	\$70.00
		5	\$70.00
		6	\$70.00
		7	\$70.00
WAYNE	50	1	\$20.00
		2	\$20.00
		3	\$1.00
		4	\$1.00
		5	\$1.00
		6	\$1.00
		7	\$1.00
		8	\$20.00
		9	\$20.00
		10	\$20.00
		11	\$1.00
		12	\$20.00
WEBSTER	51	1	\$1.00
		2	\$1.00
		3	\$1.00
		4	\$15.00
		5	\$15.00
		6	\$15.00
		7	\$1.00

OIL & GAS RESERVE RATES FOR TY 2021			
COUNTY	CO #	DISTRICT #	TY2021 \$/AC
WETZEL	52	1	\$100.00
		2	\$100.00
		3	\$100.00
		4	\$100.00
		5	\$100.00
		6	\$1.00
		7	\$1.00
		8	\$100.00
		9	\$1.00
		10	\$1.00
		11	\$1.00
		12	\$100.00
		13	\$1.00
WIRT	53	1	\$35.00
		2	\$35.00
		3	\$35.00
		4	\$1.00
		5	\$35.00
		6	\$35.00
		7	\$35.00
		8	\$35.00
WOOD	54	1	\$35.00
		2	\$35.00
		3	\$35.00
		4	\$35.00
		5	\$1.00
		6	\$35.00
		7	\$35.00
		8	\$35.00
		9	\$35.00
		10	\$1.00
		11	\$35.00
		12	\$35.00
		13	\$1.00
		14	\$1.00
WYOMING	55	1	\$20.00
		2	\$20.00
		3	\$20.00
		4	\$20.00
		5	\$20.00
		6	\$1.00
		7	\$20.00
		8	\$1.00
		9	\$1.00
		10	\$20.00

**TITLE 110
LEGISLATIVE RULE
STATE TAX DEPARTMENT**

**SERIES 1J
VALUATION OF PRODUCING AND RESERVE OIL AND
NATURAL GAS FOR AD VALOREM PROPERTY TAX PURPOSES**

§110-1J-1. General.

1.1. Scope. -- This rule provides the methodology the State Tax Commissioner shall use to determine the appraised value of producing and reserve oil and natural gas properties for ad valorem tax purposes.

1.2. Authority. -- W. Va. Code §§11-1C-5(b), 11-1C-5a, and 11-1C-10(d).

1.3. Filing date. -- May 5, 2005.

1.4. Effective date. -- June 1, 2005
This rule applies to tax years beginning on or after January 1, 2006.

§110-1J-2. Introduction.

Oil or natural gas is one of the several estates in real property which may be owned either separately or in conjunction with other estates. If oil or natural gas is owned as a separate estate, either absolute, as a leasehold, or in conjunction with other estates, West Virginia property tax law requires that ownership be listed, valued and taxed in proportion to its value to be ascertained as directed by law. If oil or natural gas is owned in conjunction with other estates, the value of the oil or natural gas shall be included in the value of the other estate. Oil or natural gas may be owned without being produced. Oil or natural gas title may exist where no oil or natural gas is known to be present, or where the oil or natural gas is unproducible or depleted.

2.1. Categories for valuing oil and/or

natural gas properties. -- Parcels of property bearing or having the potential to bear oil and/or natural gas or having the oil and/or natural gas mineral interest separated from the fee of the property shall be categorized as:

2.1.1. producing property (to include home use/industrial on-property consumption);

2.1.2. non-producing property;

2.1.3. barren property; or

2.1.4. plugged and/or abandoned property.

§110-1J-3. Definitions.

As used in this rule and unless the context clearly requires a different meaning, the following terms have the meaning ascribed in this section.

3.1. "Bands of investment discount component" means a discount rate derived by assigning rates to various debt and equity investment financing tiers and summing these rates, weighted by their respective percentages of total financing.

3.2. "Barren oil and natural gas property" means those fee and mineral parcels in West Virginia where data suggests that the presence of oil and natural gas is very unlikely.

3.3. "Capitalization rate" means a rate used to convert an estimate of income to an

estimate of market value. Subsection 4.5 of this rule further explains this term.

3.4. "Commissioner" or "Tax Commissioner" means the Tax Commissioner of the State of West Virginia, or his or her delegate.

3.5. "Discount component" means a rate reflecting a provision for returning to an investor a sum of money equal to the aggregate of the anticipated return-on-investment over the economic life of an investment.

3.6. "Flat Rate royalty" means a royalty rate in which the amount paid per year (e.g. \$100 per year) is set within a lease and is not dependant on the production or income derived from the well.

3.7. "Flush production" means the production of oil and/or natural gas from any well on an oil and/or natural gas property with an initial production date that is two (2) calendar years or less prior to the July 1st assessment date. Production beginning after December 31st and prior to the July 1st assessment date must be reported.

3.8. "Gross receipts" means total income received from production on any well, at the field line point of sale, during a calendar year before subtraction of any royalties and/or expenses.

3.9. "Management rate" means a rate reflecting a return to an investor for the management of similar investment portfolios.

3.10. "Natural gas producing property" means the property from which natural gas has been produced or extracted at any time during the calendar year preceding the July 1 assessment date. Natural gas producing property includes the interest or interests underlying an area of up to one hundred

twenty-five (125) acres of surface per well for property with active wells on the parcel. All acreage of a natural gas producing property in excess of one hundred twenty-five (125) acres per well, shall be valued at the non-producing rate per acre referenced in section 4. of this rule.

3.11. "Nonliquidity rate" means a rate reflecting a return to an investor representing the loss of interest on an investment arising from the time required to sell the investment.

3.12. "Non-Producing or Shut-in Well" means a well, which due to the producer's decisions, market reasons and/or product performance, was non-productive during the entire most recent calendar year preceding the July 1st assessment date.

3.13. "Oil and/or natural gas, non-producing property" means properties that were not engaged in production during the previous assessment year period of July 1st through June 30th. This category includes any acreage that has been shut-in for the entire year.

3.14. "Oil and/or natural gas plugged and abandoned property" means plugged and abandoned oil and/or natural gas wells.

3.15. "Oil producing property" means property from which oil has been produced or extracted at any time during the calendar year preceding the July 1 assessment date. Oil producing property includes the interest or interests underlying an area of up to forty (40) acres of surface per well with one (1) or more active well(s) on the parcel. All acreage of an oil producing property in excess of forty (40) acres per well, shall be valued at the non-producing rate per acre referenced in Section 4 of this rule.

3.16. "Operating expenses" means only those ordinary expenses which are directly related to the maintenance and production of

natural gas and/or oil. These expenses do not include extraordinary expenses, depreciation, ad valorem taxes, capital expenditures or expenditures relating to vehicles or other tangible personal property not permanently used in the production of natural gas or oil.

3.17. "Overriding royalty" means the fractional interest in the gross production payable to a person who is neither the producer nor the owner of the oil and natural gas estate and who is not required to bear a share of the development or operating costs of the well.

3.18. "Personal property" used in oil or natural gas production means machinery and equipment in and about the well and all other tangible personal property used in oil and/or natural gas production from the well to the fieldline point of sale. It shall not include vehicles or other tangible personal property not permanently used in production.

3.19. "Producer/operator" means any person or persons, corporation, partnership, joint venture or other enterprise which proposes to or does locate, drill, produce, manage, or abandon any well.

3.20. "Property tax component" means a rate reflecting a provision for returning to an investor a sum of money equal to property taxes paid over the economic life of an investment.

3.21. "Recapture component" means a rate reflecting a provision for returning to an investor a sum of money equal to his or her investment.

3.22. "Risk rate" means a rate reflecting a return to an investor necessary to attract capital to an investment containing a possible loss of principal and/or interest.

3.23. "Royalty interest" means the

fractional interest in oil and/or natural gas production that is not subject to development costs or operating expenses and extends undiminished over the life of the property. Typically, it is retained by the oil and/or natural gas rights owner or lessor.

3.24. "Safe rate" means a rate reflecting a return to an investor on an investment which has little, if any, likelihood of loss of principal or of loss in anticipated return on investment.

3.25. "Settled production" means the production of oil and/or natural gas from all wells on a property with an initial production date that is more than two (2) calendar years prior to the July 1st assessment date.

3.26. "Storage wells" means drilled and completed wells on any property used for the artificial injection or storage of natural gas into a natural reservoir strata.

3.27. "Sum of the Years digit" means the weighted average that will be used in the calculations. For a 3 year weighted average, the sum of the years digit method places the first year at 50%, the second year at 33.33% and the third year at 16.67%.

3.28. "Summation discount component" means a discount rate expressed as the aggregate of a safe rate, risk rate, nonliquidity rate, and management rate, adjusted for inflation.

3.29. "Well" means any shaft or hole sunk, drilled, bored or dug into the earth or into underground strata for the extraction of oil or gas.

3.30. "Working interest" means the fractional interest in oil and/or natural gas production subject to development and operating expenses and owned by the leaseholder and/ or operator.

§110-1J-4. Methods of Valuation.

4.1. General. -- Oil and/or natural gas producing property value shall be determined through the process of applying a yield capitalization model to the net receipts (gross receipts less royalties paid less operating expenses) for the working interest and a yield capitalization model applied to the gross royalty payments for the royalty interest. Where ownership is split through a lease or royalty arrangement, different values shall be determined for the working interest and the royalty interest. If the well produced for less than twelve (12) months during the first calendar year of production, or during the first calendar year of production after being shut-in during the previous calendar year, the gross receipts and royalties paid shall be annualized prior to the process of applying a yield capitalization rate. Each term in this valuation is discussed below.

4.2. Percentage interest in oil and/or natural gas. -- Where the ownership of oil and/or natural gas in place is divided through a lease or other arrangement, the compensation to the owner of the property is derived by designating a percentage (generally one-eighth) of the production income to be the royalty payment to the owner. The remainder (generally seven-eighths) is the working interest. The Tax Commissioner shall annually determine working and royalty percentage interests on a per well or lease basis, through a review of oil and natural gas producer/operator annual property tax returns. These percentages shall be determined annually by dividing the total royalty paid by the reported gross income.

4.3. Average industry operating expenses. -- The Tax Commissioner shall every five (5) years, determine the average annual industry operating expenses per well. The average annual industry operating expenses shall be deducted from working

interest gross receipts to develop an income stream for application of a yield capitalization procedure.

4.4. Average industry production decline rates. -- The Tax Commissioner shall every five (5) years derive and report the average industry production decline rates by reviewing well production records of various State agencies along with data provided by companies and individuals.

4.5. Capitalization rate. -- A single statewide capitalization rate for oil and natural gas shall be determined annually by the Tax Commissioner through the use of generally accepted methods. The rate shall be based on the assumption of a declining-terminal, non-inflating income series. The capitalization rate used to value oil and natural gas shall be developed through consideration of: (1) a discount rate determined by the summation technique, and (2) a property tax component.

4.5.1. Discount component.

The summation technique shall be used in developing a discount component of the capitalization rate. The five subcomponents of the discount rate are;

4.5.1.a. Safe rate. -- The "safe rate" shall reflect a rate of return that an investor could expect on an investment of minimal risk. It shall be developed through review of interest rates offered on thirteen (13) week United States Constant Maturity Treasury Yields for a period of three (3) calendar years immediately prior to the July 1st assessment date. A weighted average (sum of years digits) will be used in order to arrive at a Safe Rate.

4.5.1.b. Risk rate -- The relative degree of risk of an investment in oil and natural gas property is difficult to determine from published interest rates. Interest rates required on loans for acquisition and/or

development of oil and natural gas properties shall be calculated by adding two percent (2%) to the Prime Interest Rate Charged By banks as published in the Economic Indicators Prepared By The Council Of Economic Advisors For The Joint Economic Committee for the three (3) calendar years immediately prior to the July 1 assessment date. The loan rate shall be compared to quarterly interest rates offered on thirteen (13) week United States Constant Maturity Treasury Yields for the same three (3) calendar years period. The weighted average (sum of years digits) difference between the two, combined with bands-of-investment analysis, shall be used as a basis to estimate the risk rate;

4.5.1.c. Nonliquidity rate. -- The "nonliquidity rate" shall be developed through an annual survey to determine a reasonable estimate of time that oil and natural gas properties, when exposed to the market for sale, remain on the market. The time determined in this manner shall be used to identify United States Constant Maturity Treasury Yields with similar time differentials in excess of thirteen (13) week United States Constant Maturity Treasury Yields. The interest differential between these securities shall be used to represent the nonliquidity rate. For example, if it is determined that oil and natural gas property remains on the market for an average of nine months (39 weeks) before being sold, the nonliquidity rate shall be derived by taking the rate on one (1) year United States Constant Maturity Treasury Yields minus the rate on 13-week United States Constant Maturity Treasury Yields; The rate used will be a weighted average (sum of years digits) of the data from the three (3) calendar year periods prior to the July 1 assessment date.

4.5.1.d. Management rate. -- The "management rate" represents the cost of managing the investment, not the cost of managing the oil and natural gas property. Because the management rate has

historically been one-half of one percent (0.5%) of the value of investment portfolios, for purposes of determining the discount component the management rate shall be one-half of one percent (0.5%); and

4.5.1.e. Inflation rate (negative). -- Nominal interest rates, including the "safe rate" mentioned in paragraph 4.5.1.a of this subdivision, are higher than real rates by an amount representing expectation of future inflation; however, net annual income from oil and natural gas property is to be estimated assuming level future royalties (no inflation). The capitalization rate shall be a real rate, net of expectation of inflation. The inflation rate shall be estimated through analysis of the most recent calendar year's urban consumer price index as determined by the U.S. Department of Labor, Bureau of Labor Statistics. The weighted average (sum of years digits) rate will be used from the data of the three (3) calendar year periods prior to the July 1 assessment date.

4.5.2. In determining the discount component of the capitalization rate, the Tax Commissioner shall deduct the inflation rate from the sum of the safe rate, the risk rate, the nonliquidity rate and the management rate.

4.5.3. Property tax component. -- This component shall be estimated by multiplying the assessment rate by the prior tax year's statewide average for Class III property. At the present time, research indicates that royalty rates on oil and natural gas include a component for property tax, with no additional compensation from the producer. As a result, the property tax component shall be used in the capitalization rate; however, if this described general practice changes and property taxes are paid as additional compensation, the use of this component shall be deleted. The rate used will be a weighted average (sum of years digits) of the data from the three (3) tax year periods prior to the July 1 assessment date.

4.5.4. Results of capitalization rate survey -- A review of economic data for development of components referenced in Subdivision 4.5.1 of this rule shall be conducted annually and results filed by the Tax Commissioner in the State Register on or before July 1st of each year. Public comment on the published results shall be accepted until August 1st of each year with final results filed in the State Register on or before September 1st of each year.

4.6. Yield capitalization model. -- A yield capitalization model shall be developed for each producing property. The model shall use as a beginning point and include for each producing well, the gross receipts (both working interest and royalty interest) and production amounts based on those gross receipts from the most recent consecutive three (3) full production calendar years preceding the July 1 assessment date. These amounts will be weighted average (sum of years digits) and then adjusted for production decline to reflect the income available to the property owner beginning with the July 1st assessment date to June 30 next succeeding the assessment date. Gross receipts and production amounts shall be proportionately reduced by application of the appropriate production decline rate, referenced in Subsection 4.4 of this rule, to yield a declining terminal income series typical of the producing area and strata. The income series shall be apportioned to the working interest and to the royalty interest based upon percentage interests referenced in Subsection 4.2 of this rule. Where the well did not produce during the entire calendar year, the gross receipts and royalties paid will be annualized prior to the process of applying a yield capitalization procedure.

4.6.1. Working interest model. -- The working interest weighted average (sum of years digits) gross receipts income series referenced in Subsection 4.6 of this rule

shall be reduced by the annual operating expenses referenced in Subsection 4.3 of this rule to yield a net working interest income series. The net working interest income series shall be discounted by applying, on an annual basis, a mid-year life Inwood factor reflecting the capitalization rate referenced in Subsection 4.5 of this rule. The summation of the annual discounted income streams shall be the market value estimate for the working interest of the producing oil and/or natural gas well including personal property as defined by Section 3 of this rule. The minimum appraised value for any producing well will not be less than the machinery and equipment value discussed in Section 4.16 of this rule. This minimum rate will not apply to home-use only wells.

4.6.2. Royalty interest model. -- The royalty interest weighted average (sum of years digits) gross receipts income series referenced in Subsection 4.6 of this rule shall be discounted by applying, on an annual basis, a mid-year life Inwood factor reflecting the capitalization rate referenced in Subsection 4.5 of this rule. This amount will then be proportionally distributed to each royalty owner based on the royalty percentage received during the most recent calendar year to the July 1 assessment date. The summation of the annual discounted income streams shall be the market value estimate for the royalty interest of the producing oil and/or natural gas well for an area of up to one hundred twenty-five (125) acres per producing natural gas wells and up to forty (40) acres per producing oil wells.

4.6.3. Valuation of home-use only wells. -- The appraised value of wells used for home-use only will be an annual appraised value of \$500.00 resulting in an assessed value of \$300.00. If the home-use well owner has ownership in the mineral rights, the assessed value will be added to the real property assessment. However, if the home-use well owner only has rights in

the surface, the assessed value will be added to the personal property assessment.

4.6.4. Valuation of industrial use wells. -- The appraised value of wells used for industrial purposes only will be based on the actual most recent calendar year preceding the July 1 appraisal date MCF usage times the average West Virginia spot price for that calendar year determined by the "Natural Gas Monthly," published by the U.S. Department of Energy, Energy Information Administration.

4.7. Valuation of non-producing acreage. -- The value per acre of non-producing acreage, which includes shut-in wells, shall equal the discounted annual lease payment per acre. A valuation schedule for non-producing properties shall be determined annually by the Tax Commissioner for each district within a county, where data is available. The Tax Commissioner shall annually conduct a review of oil and/or natural gas lease agreements transacted at arms-length in all fifty-five (55) counties to determine the average annual delay rental lease payment per acre, and lease term. The per-acre value for non-producing property shall be the sum of the projected annual income stream from delay rental during the lease term discounted in each year by a capitalization rate. A valuation of \$1.00 per acre shall be used where property is located in those areas of the State where drilling activity/production have not been established and the property is presumed to be barren.

4.8. Valuation of plugged and abandoned acreage. -- Plugged and abandoned acreage shall be valued to the oil or gas owner at the nominal rate of one dollar (\$1.00) per acre. This category includes any plugged and abandoned acreage of up to one hundred twenty-five (125) acres per natural gas well and up to forty (40) acres per oil well.

4.9. Valuation of barren oil and natural gas areas. -- These oil and natural gas areas (fee accounts) shall be valued at \$1.00 per deed acre.

4.10. Valuation of wells that produce both oil and natural gas. -- The valuation of wells that produce both oil and natural gas shall be determined by use of the methods described in this rule. These values shall then be summed to result in the overall value of the oil and/or natural gas producing acreage.

4.11. Valuation of storage well areas. -- The valuation of storage well areas shall equal the discounted annual lease payment per acre that is applied to the reserve oil and gas acreage within the county. The minimum value applied to the areas will not be less than \$5.00 per deed acre. The value shall not include inventories stored within. Natural gas storage inventories shall be assessed to the inventory owner.

4.12. Annual reports. -- The Tax Commissioner shall on or before July 1st of each year publish and file in the State Register an annual summary of the variables to be considered in arriving at the value of the specific oil and/or natural gas related property. Public comments shall be accepted until August 1st of each year with the final results filed in the State Register on or before September 1st of each year.

4.13. Farm properties. -- The oil and gas rights, that are part of a "fee" estate where the use of the surface has qualified for farm use appraisal, shall be valued as described in the Tax Commission's rule, Valuation of Farmland and Structures Situated Thereon For Ad Valorem Property Tax Purposes, 110 C.S.R. 1A.

4.14. Property reports. -- On or before August 1st of each year the producer shall file the West Virginia Oil and Gas Producer/Operator Return with the State Tax

Commission, with acknowledgement to the county assessors in the counties where the oil and natural gas property is located. This Return form shall be designed by the State Tax Commissioner so that information pertinent to the valuation of the producing property, and plugged and abandoned property shall be reported properly by the oil and gas producer.

4.15. Confidentiality -- All information provided by or on behalf of a natural resources property owner or by or on behalf of an owner of an interest in natural resources property to any state or county representative for use in the valuation or assessment of natural resources property or for use in the development or maintenance of a legislatively funded mineral mapping or geologic information system is confidential. The information is exempt from disclosure under the provisions of West Virginia Code § 29B-1-4, and shall be kept, held, and maintained confidential except to the extent the information is needed by the state tax commissioner to defend an appraisal challenged by the owner or lessee of the natural resources property subject to the appraisal: Provided, That this section may not be construed to prohibit publication or release of information generated as part of the minerals mapping or geologic information system, whether in the form of aggregated statistics, maps, articles, reports, professional talks, or otherwise presented in accordance with generally accepted practices and in a manner so as to preclude the identification or determination of information about particular property owners.

4.16. Valuation of the Producer's Personal Property at Non-Producing or Shut-In wells—The valuation of the producer's personal property that is part of a non-producing or shut-in well's appraisal will be assigned to the producer at the same value applied to home use only wells.

4.17. Valuation of Pre-Production/Permit Leaseholds---Chattel real accounts (personal property) for pre-production/permit leaseholds will be valued by the county assessor.

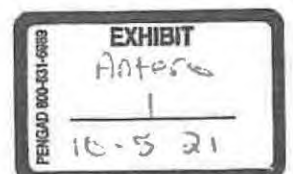
4.18. Valuation of Producing Flat-Rate Royalty accounts --- The appraised value of a producing flat-rate royalty will be valued using a level terminal income series rather than the declining terminal income series as discussed in Subsection 4.6 of this rule.

**IN THE COUNTY COMMISSION OF DODDRIDGE COUNTY, WEST VIRGINIA
SITTING AS THE BOARD OF ASSESSMENTS APPEALS**

RE: ANTERO RESOURCES CORPORATION'S TAX
YEAR 2021 NOTICE OF PROTEST AND ELECTION
TO HAVE MATTER HEARD BY THE BOARD OF
ASSESSMENT APPEALS

INDEX

1. Protest letter with well values
2. Slides
3. June 2020 Guidance document and the October 2020 Withdrawal
4. The proof of payment documents





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February 19, 2021

VIA FACSIMILE/CERTIFIED MAIL TO FOLLOW

Lorena Cathern Slater
Doddridge County Clerk
108 East Court Street, Suite 1
West Union, WV 26456

Re: Antero Resources Corporation
Notice of Protest and Election to have matter
heard by the Board of Assessment Appeals

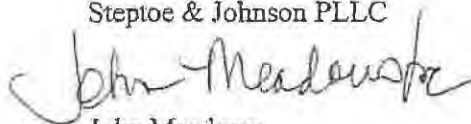
Dear Ms. Slater:

This firm serves as West Virginia tax counsel to Antero Resources Corporation. Attached for filing on behalf of Antero Resources Corporation please find the company's Tax Year 2021 Notice of Protest and Election to have matter heard by the Board of Assessment Appeals. Please contact me if you have any questions regarding this matter or if any further information or actions is required to lodge this appeal and secure a hearing date in October.

A copy of this filing is also being provided to the Assessor and to the Tax Commissioner as indicated below.

Thank you for your assistance.

Very truly yours,
Stephoe & Johnson PLLC



John Meadows

cc: David Sponaule
Matt Irby
Leroy Barker
Kirsten Evans

February 19, 2021

VIA FACSIMILE/CERTIFIED MAIL TO FOLLOW

Lorena Cathern Slater
Doddridge County Clerk
108 East Court Street, Suite 1
West Union, WV 26456

Re: Antero Resources Corporation
Notice of Protest and Election to have matter
heard by the Board of Assessment Appeals

Dear Ms. Slater:

In accordance with W.Va. Code §§ 11-3-23a, 11-3-24 and 11-3-24b, Antero Resources Corporation hereby protests the assessment of its property identified on the attached spreadsheet.

Generally stated, the primary reason for Antero Resources Corporation's filing of this notice of protest is that the assessments of the properties at issue do not reflect the true and actual value of the properties.

Antero Resources Corporation reserves the right to raise additional grounds during the appeal process, including, but not limited to, the following: (1) the assessment of the properties at issue are not based on the fair market value of the properties; (2) the State's *ad valorem* tax regime disallowing deductions for actual expenses benefits in-state natural gas sellers at the expense of out-of-state natural gas sellers and thus violates dormant Commerce Clause principles; (3) the State's *ad valorem* tax regime disallowing deductions for actual expenses overvalues, for tax purposes, the wells of out-of-state sellers while undervaluing the comparable wells of in-state sellers and thus violates state and federal equal protection principles; and (4) the State's refusal to apply to pending tax disputes, and purported October 2020 Withdrawal of, its June 2020 Guidance allowing these deductions constitutes arbitrary and capricious agency decision-making that violates the State Administrative Procedures Act and state and federal due process principles. Please note that with respect to each property identified on the attached spreadsheet, the State Appraised Value, the Taxpayer's Value and the Value the Taxpayer Believes to be in Controversy are all indicated.

Furthermore, please be advised that Antero Resources Corporation elects to have this matter heard in October of 2021 when the County Commission sits as the Board of Assessment Appeals.

Antero Resources Corporation acknowledges that it will timely pay first and second half installment payments of taxes levied for the current tax year on or before the due date, unless it seeks and obtains a final order from a court of competent jurisdiction that would enjoin such payment requirements during the pendency of this protest. Any reduction in assessed value that is administratively or judicially determined in a decision that becomes final will result in a credit being established against taxes that become due for a subsequent tax year(s), except as otherwise stated in the decision or as provided in Chapter 11, Article 3 of the West Virginia Code.

A copy of this letter is also being provided to the County Assessor and State Tax Commissioner.

Best regards,

Antero Resources Corporation

A handwritten signature in dark ink, appearing to read "Sheri L. Pearce". The signature is fluid and cursive, with a stylized "S" and "P".

Sheri L. Pearce

Chief Accounting Officer & VP Accounting

CC: David Sponaule
Matt Irby
Leroy Barker
Kirsten Evans

Antero Resources Corporation
Tax Year 7/1/20-6/30/21
Doddridge County, WV

CY	Account #	# of Wells	API #	API # for Second Well (if applicable)	Property Description	State Appraised Value	Taxpayer Value	Value the Taxpayer Believes to be in Controversy
9	120146079	1	4701706079		Valentine Unit 2H (10206.	1,033,545	452,669	580,876
9	120146083	1	4701705083		Valentine Unit 1H (10205.	886,559	361,533	525,026
9	120156169	1	4701706169		Seaborn Unit 1H (10295.1)	1,510,306	745,128	765,178
9	120156170	1	4701706170		Seaborn Unit 2H (10330.1)	1,563,646	773,349	790,297
9	120156187	1	4701706187		Dotson Unit 1H (10309.1)	1,133,826	489,099	644,727
9	120156188	1	4701706188		Central Unit 2H (10311.1)	1,013,089	454,603	556,486
9	120156189	1	4701706189		Dotson Unit 2H (10310.1)	1,135,496	504,779	630,717
9	120166141	1	4701706141		Piggot Unit 2H (10305.1)	2,070,620	1,073,234	997,386
9	120166142	1	4701706142		Piggot Unit 1H (10304.1)	1,675,050	845,676	829,374
9	120166190	1	4701706190		Ahouse Unit 1H (10329.1)	1,402,896	680,396	722,500
9	120166191	1	4701706191		Ahouse Unit 2H (10387.1)	1,602,447	795,731	806,716
9	120166192	1	4701706192		Callie Unit 1H (10385.1)	1,183,129	551,909	631,220
9	120166193	1	4701706193		Callie Unit 2H (10386.1)	1,424,212	693,481	730,731
9	120166201	1	4701706201		Shale Unit 1H (10364.1)	1,787,314	916,839	870,475
9	120166206	1	4701706206		Violet Unit 1H (10331.1)	2,078,219	1,092,537	985,682
9	120166207	1	4701706207		Shale Unit 2H (10379.1)	1,702,870	859,971	842,899
9	120166211	1	4701706211		Nero Unit 1H (10746.1)	2,044,553	1,086,658	957,885
9	120166212	1	4701706212		Nero Unit 2H (10747.1)	2,318,856	1,251,590	1,067,266
9	120166213	1	4701706213		Vonda Unit 1H (10745.1)	2,666,841	1,413,591	1,253,250
9	120166266	1	4701706266		Marks Unit 1H (10340.1)	2,293,975	1,219,269	1,074,706
9	120166272	1	4701706272		Mash Unit 1H (10341.1)	2,133,288	1,120,755	1,012,533
9	120166275	1	4701706275		Mash Unit 2H (10355.1)	2,411,129	1,318,420	1,092,709
9	120166289	1	4701706289		Pike Unit 1H (10436.1)	925,485	438,331	486,154
9	120166292	1	4701706292		Leggett Unit 1H (10394.1)	1,157,063	556,999	600,064
9	120166293	1	4701706293		Leggett Unit 2H (10435.1)	942,887	436,474	506,413
9	120166294	1	4701706294		Pike Unit 2H (10437.1)	1,254,315	630,761	623,554
9	120166359	1	4701706359		Shearer Unit 2H (10501.1)	1,739,478	866,202	873,276
9	120166402	1	4701706402		Twyford Unit 1H (10502.1)	2,157,148	1,104,785	1,052,363
9	120166430	1	4701706430		Zellerback Unit 1H (10503	1,079,361	497,260	582,101
9	120166431	1	4701706431		Amanda Unit 1H (10504.1)	961,752	445,018	516,734
9	120166432	1	4701706432		Amanda Unit 2H (10505.1)	867,318	390,792	476,526
9	120176370	1	4701706370		Washington Unit 1H (10562	1,785,011	889,187	895,824
9	120176371	1	4701706371		Washington Unit 2H (10520	2,277,298	1,190,312	1,086,986
9	120176415	1	4701706415		Hudkins Unit 1H (10591.1)	1,413,305	675,116	738,189
9	120176436	1	4701706436		Hudkins Unit 2H (10592.1)	1,567,060	760,161	806,899
9	120176464	1	4701706464		Hayden Unit 1H (10564.1)	2,007,370	1,026,205	981,165
9	120176465	1	4701706465		Hayden Unit 2H (10563.1)	2,018,025	1,030,624	987,401
9	120176474	1	4701706474		Leason Run Unit 1H (10569	1,373,863	658,600	715,263
9	120176475	1	4701706475		Leason Run Unit 2H (10590	1,687,589	841,648	845,941
9	120176488	1	4701706488		McPherson Unit 1H (10521.	3,566,363	2,030,138	1,536,225
9	120176561	1	4701706561		Bierstadt Unit 1H (10558.	2,787,134	1,496,259	1,290,875
9	120176562	1	4701706562		Bierstadt Unit 2H (10559.	2,396,711	1,275,070	1,121,641
9	120176563	1	4701706563		Stella Unit 1H (10556.1)	2,632,521	1,453,844	1,178,677
9	120176564	1	4701706564		Stella Unit 2H (10557.1)	2,735,992	1,533,466	1,202,526
9	120176619	1	4701706619		James Unit 2H (11407.1)	2,185,005	1,162,462	1,022,543
9	120176620	1	4701706620		James Unit 1H (11406.1)	1,751,590	916,321	835,269
9	120176621	1	4701706621		McGee Unit 1H (10546.1)	1,796,917	964,842	832,075
9	120176622	1	4701706622		McGee Unit 2H (10545.1)	1,732,881	890,359	842,522
9	120176657	1	4701706657		Sheep Run Unit 1H (10640.	3,168,845	1,828,740	1,340,105
9	120176658	1	4701706658		Sheep Run Unit 2H (10641	2,172,577	1,088,989	1,083,588
9	120176659	1	4701706659		Hileman Unit 1H (10631.1)	3,877,435	2,202,392	1,675,043
9	120176660	1	4701706660		Hileman Unit 2H (10632.1)	3,649,305	2,078,667	1,570,638
9	120186476	1	4701706476		Wentz Unit 1H (10547.1)	3,513,166	2,103,348	1,409,818
9	120186509	1	4701706509		Wentz Unit 2H (10544.1)	5,444,271	3,383,138	2,061,133
9	120186613	1	4701706613		Hiley Unit 1H (10638.1)	2,931,010	1,632,476	1,298,534

Antero Resources Corporation
Tax Year 7/1/20-6/30/21
Doddridge County, WV

CY	Account #	# of Wells	API #	API # for Second Well (if applicable)	Property Description	State Appraised Value	Taxpayer Value	Value the Taxpayer Believes to be in Controversy
9	120186614	1	4701706614		Hiley Unit 2H (10639.1)	2,806,545	1,556,503	1,250,042
9	120186718	1	4701706718		Devonian Unit 1H (11452.1)	3,998,516	2,449,267	1,549,249
9	120186719	1	4701706719		Devonian Unit 2H (11453.1)	8,752,850	5,478,264	3,274,586
9	120186720	1	4701706720		Devonian Unit 3H (11464.1)	6,333,429	4,028,483	2,304,946
9	120196554	1	4701706554		WILHELM UNIT 2H (10621.1)	3,631,477	1,794,519	1,836,958
9	120196555	1	4701706555		HORMELS UNIT 1H (10622.1)	3,548,160	1,760,575	1,787,585
9	120196556	1	4701706556		HORMELS UNIT 2HST (10623.1)	2,813,432	1,347,319	1,466,113
9	120196626	1	4701706626		WILHELM UNIT 1H (10620.1)	3,552,183	1,760,933	1,791,250
9	120196640	1	4701706640		ALDER UNIT 1H (11503.1)	2,496,021	1,232,088	1,263,933
9	120196641	1	4701706641		MURPHY UNIT 1H (11504.1)	2,476,891	1,214,257	1,262,634
9	120196642	1	4701706642		MURPHY UNIT 2HST (11505.1)	1,685,035	757,164	927,871
9	120196665	1	4701706665		MCGILL UNIT 1H (11570.1)	3,345,676	1,676,604	1,669,072
9	120196666	1	4701706666		MCGILL UNIT 2H (11571.1)	3,568,994	1,792,418	1,776,576
9	120196667	1	4701706667		DUCKBILL UNIT 1H (11568.1)	3,705,207	1,923,458	1,781,749
9	120196668	1	4701706668		DUCKBILL UNIT 2H (11569.1)	3,900,291	2,031,237	1,869,054
9	120196692	1	4701706692		ALDER UNIT 2H (11511.1)	3,685,201	1,901,498	1,783,703
9	120196699	1	4701706699		MARY JANE UNIT 1H (10676.1)	3,997,206	1,465,236	2,524,970
9	120196700	1	4701706700		MARY JANE UNIT 2H (10677.1)	3,888,852	1,172,169	2,716,683
9	120196701	1	4701706701		MARY JANE UNIT 3H (10678.1)	4,197,075	1,349,678	2,847,397
9	120196702	1	4701706702		MAHOGANY UNIT 2H (10699.1)	4,840,531	1,677,288	3,163,243
9	120196703	1	4701706703		HUNTER UNIT 1H (10674.1)	3,861,726	1,297,036	2,564,690
9	120196704	1	4701706704		HUNTER UNIT 2H (10675.1)	4,956,700	1,656,797	3,299,903
9	120196705	1	4701706705		MAHOGANY UNIT 1HST (10698.1)	4,881,595	1,791,563	3,090,032
9	120196708	1	4701706708		KING UNIT 1H (10696.1)	2,658,692	703,098	1,955,594
9	120196749	1	4701706749		KING UNIT 2H (10697.1)	4,291,138	1,577,249	2,713,889
9	120196761	1	4701706761		HUGLE UNIT 1H (11757.1)	3,094,948	1,493,022	1,601,926
9	120196766	1	4701706766		DOAK UNIT 1H (11596.1)	1,734,575	769,703	964,872
9	120196767	1	4701706767		DOAK UNIT 2H (11597.1)	1,836,764	825,525	1,011,239
9	120196772	1	4701706772		ODONNELL UNIT 1H (11598.1)	2,734,049	1,406,675	1,327,374
9	120196773	1	4701706773		ODONNELL UNIT 2H (11599.1)	2,783,534	1,417,521	1,366,013
9	120196777	1	4701706777		MOSSOR UNIT 1HST (11759.1)	3,189,747	1,599,543	1,590,204
9	120196778	1	4701706778		MOSSOR UNIT 2H (11760.1)	2,172,939	1,031,647	1,141,292
9	120196779	1	4701706779		MOSSOR UNIT 3H (11761.1)	1,771,543	803,878	967,665
9	120196780	1	4701706780		JANICE UNIT 1H (11762.1)	1,985,928	923,985	1,061,943
9	120196781	1	4701706781		JANICE UNIT 2H (11763.1)	2,503,728	1,190,917	1,312,811
9	120196782	1	4701706782		JANICE UNIT 3H (11764.1)	2,637,146	1,273,803	1,363,343
9	120196783	1	4701706783		HUGLE UNIT 2H (11758.1)	4,473,673	2,249,698	2,223,975
9	120206636	1	4701706636		ROCK UNIT 1H (11531.1)	3,676,329	1,833,047	1,843,282
9	120206637	1	4701706637		ROCK UNIT 2H (11532.1)	4,676,467	2,409,888	2,266,579
9	120206693	1	4701706693		SPELLMAN UNIT 2H (11530.1)	4,750,861	2,467,960	2,282,901
9	120206713	1	4701706713		SPELLMAN UNIT 1H (11529.1)	3,040,825	1,485,060	1,555,765
9	120206716	1	4701706716		RIDGE UNIT 1H (11533.1)	3,474,742	1,715,951	1,758,791
9	120206717	1	4701706717		RIDGE UNIT 2H (11534.1)	3,708,450	1,855,468	1,852,982
9	120206792	1	4701706792		HAWK UNIT 1H (14467.1)	8,203,185	4,428,397	3,774,788
9	120206795	1	4701706795		HAWK UNIT 2HST (12276.1)	5,820,243	3,102,089	2,718,154
9	120206796	1	4701706796		CALIFORNIA UNIT 1H (12205.1)	7,976,837	4,410,359	3,566,478
9	120206797	1	4701706797		CALIFORNIA UNIT 2H (12206.1)	7,046,519	3,795,478	3,251,041
9	120206798	1	4701706798		BOULDER UNIT 1H (12342.1)	2,371,966	1,206,257	1,165,709
9	120206833	1	4701706833		COOL UNIT 1H (10706.1)	8,171,663	3,523,362	4,648,301
9	120206834	1	4701706834		COOL UNIT 2H (10705.1)	10,022,157	4,384,243	5,637,914
9	120206837	1	4701706837		HATTIE UNIT 3H (10702.1)	10,472,668	4,070,044	6,402,624
9	316164971	1	4701704971		BOND 1 (11187.1)	21,562	500	21,062
9	320104585	1	4701704585		Underwood 1 (10871.1)	1,137	500	637
9	320105672	1	4701705672		Mutschelknaus 6 (10856.1)	4,882	500	4,382
9	320115585	1	4701705585		Newlon 1 (10857.1)	47,129	46,716	413

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9	320115586	1	4701705586		Newlon 2 (10858.1)	8,676	500	8,176
9	320115609	1	4701705609		Frum 1 (10842.1)	2,556	500	2,056
9	320115638	1	4701705638		S Hurst 1 (10863.1)	21,064	1,085	19,979
9	320115665	1	4701705665		Underwood 2 (10872.1)	1,897	500	1,397
9	320115691	1	4701705691		Maloney 1 (10848.1)	35,814	6,639	29,175
9	320115776	1	4701705776		Maloney 2 (10849.1)	16,486	500	15,986
9	320115777	1	4701705777		Van Scoy 2 (10874.1)	27,075	2,933	24,142
9	320115781	1	4701705781		Welch Fry 1 (10875.1)	660	500	160
9	320115817	1	4701705817		Connelly 1 (10837.1)	1,103	500	603
9	320115846	1	4701705846		J Yaremko 1 (10879.1)	1,440	500	940
9	320115858	1	4701705858		Connelly 3 (10825.1)	4,157	500	3,657
9	320115862	1	4701705862		S Hurst 2 (10864.1)	5,268	500	4,768
9	320146080	2	4701706080	4701706086	Neely Unit 1H and Neely U	1,592,303	557,386	1,034,917
9	320146085	1	4701706085		Leatherman Unit 2H (10204	649,701	209,030	440,671
9	320156084	1	4701706084		Leatherman Unit 1H (10203	581,770	175,961	405,809
9	320156128	1	4701706128		Moore Unit 1H (10259.1)	963,870	352,665	611,205
9	320156129	1	4701706129		Moore Unit 2H (10260.1)	1,086,600	413,564	673,036
9	320156163	1	4701706163		Emily Unit 2H (10283.1)	665,899	206,693	459,206
9	320156166	1	4701706166		Emily Unit 1H (10282.1)	822,288	282,343	539,945
9	320156194	1	4701706194		Costlow Unit 1H (10333.1)	2,494,360	1,157,178	1,337,182
9	320156204	1	4701706204		Langfitt Unit 2H (10750.1)	1,312,636	550,467	762,169
9	320156205	1	4701706205		Gaskins Unit 2H (10339.1)	1,979,008	858,272	1,120,736
9	320156221	1	4701706221		Langfitt Unit 1H (10749.1)	852,015	309,416	542,599
9	320156255	1	4701706255		Connie Unit 1H (10336.1)	1,121,541	450,212	671,329
9	320156256	1	4701706256		Connie Unit 2H (10337.1)	1,196,118	492,448	703,670
9	320156260	1	4701706260		Gaskins Unit 1H (10368.1)	2,564,371	1,186,444	1,377,927
9	320166202	1	4701706202		Holden Unit 1H (10748.1)	706,230	235,121	471,109
9	320166203	1	4701706203		Holden Unit 2H (10332.1)	936,337	352,050	584,287
9	320166220	1	4701706220		Costlow Unit 2H (10343.1)	2,487,712	1,142,354	1,345,358
9	320166246	1	4701706246		Duff Unit 1H (10400.1)	3,148,557	1,527,254	1,621,303
9	320166247	1	4701706247		Duff Unit 2H (10406.1)	3,161,897	1,554,522	1,607,375
9	320166259	1	4701706259		Mishka Unit 1H (10405.1)	2,179,301	975,676	1,203,625
9	320166262	1	4701706262		Vanscoy Unit 1H (10448.1)	1,110,095	432,367	677,728
9	320166263	1	4701706263		McConnell Unit 2H (10446	1,246,862	504,236	742,626
9	320166264	1	4701706264		Vanscoy Unit 2H (10449.1)	854,475	306,880	547,595
9	320166267	1	4701706267		Koch Unit 2H (10402.1)	1,405,286	578,516	826,770
9	320166268	1	4701706268		Mt Salem Revival Unit 2H	1,261,826	498,891	762,935
9	320166269	1	4701706269		Mt Salem Revival Unit 1H	1,108,669	427,479	681,190
9	320166281	1	4701706281		Gavin Unit 1H (10371.1)	887,741	329,070	558,671
9	320166301	1	4701706301		Heflin Unit 2H (10389.1)	1,705,391	732,670	972,721
9	320166302	1	4701706302		Gavin Unit 2H (10372.1)	1,047,699	405,078	642,621
9	320166399	1	4701706399		Hoskinson Unit 1H (10452	3,758,297	1,869,138	1,889,159
9	320176218	1	4701706218		Gains-Koch Unit 1H (11363	1,638,789	705,800	932,989
9	320176270	1	4701706270		Milo Unit 1H (11349.1)	2,273,832	1,054,031	1,219,601
9	320176274	1	4701706274		Mishka Unit 2H (10388.1)	3,064,424	1,475,987	1,588,437
9	320176303	1	4701706303		Gibson Unit 1H (11358.1)	4,240,607	2,189,851	2,050,756
9	320176372	1	4701706372		Gibson Unit 2H (11357.1)	3,802,258	1,948,091	1,854,167
9	320176373	1	4701706373		Anne Unit 1H (10550.1)	1,952,274	863,192	1,089,082
9	320176374	1	4701706374		Anne Unit 2H (10551.1)	1,963,285	865,951	1,097,334
9	320176375	1	4701706375		Hardin Unit 1H (10552.1)	2,465,194	1,116,903	1,348,291
9	320176395	1	4701706395		Gains Unit 1H (10445.1)	1,060,725	422,928	637,797
9	320176397	1	4701706397		McMillan Unit 1H (10453.1	2,881,335	1,405,174	1,476,161
9	320176398	1	4701706398		McMillan Unit 2H (10454.1	3,869,134	1,948,366	1,920,768
9	320176400	1	4701706400		Hoskinson Unit 2H (10451	3,218,874	1,602,787	1,616,087
9	320176424	1	4701706424		Zimka Unit 2H (10462.1)	1,584,141	695,043	889,098

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9	320176485	1	4701706485		Manser Unit 1H (10510.1)	687,110	238,638	448,472
9	320176486	1	4701706486		Manser Unit 2H (10511.1)	1,092,943	432,460	660,483
9	320176487	1	4701706487		Manser Unit 3H (10585.1)	1,131,153	484,594	646,559
9	320176495	1	4701706495		Weinhold Unit 1H (11365.1)	3,307,403	1,717,445	1,589,958
9	320176496	1	4701706496		Weinhold Unit 2H (11364.1)	3,349,986	1,743,211	1,606,775
9	320176497	1	4701706497		Deano Unit 1H (11347.1)	2,894,966	1,491,724	1,403,242
9	320176498	1	4701706498		Deano Unit 2H (10554.1)	2,142,573	963,396	1,179,177
9	320176533	1	4701706533		Yoho Unit 2H (11351.1)	3,381,562	1,760,540	1,621,022
9	320176565	1	4701706565		Vinola Unit 1H (11356.1)	3,626,877	1,814,956	1,811,921
9	320176566	1	4701706566		Vinola Unit 2H (11355.1)	2,953,664	1,458,849	1,494,815
9	320186304	1	4701706304		Hoskins Unit 2H (10374.1)	4,535,326	2,386,699	2,148,627
9	320186401	1	4701706401		Knight Unit 1H (10519.1)	5,359,507	2,876,973	2,482,534
9	320186416	1	4701706416		Hoskins Unit 1H (10517.1)	4,882,050	2,625,699	2,256,351
9	320186417	1	4701706417		Knight Unit 2H (10518.1)	5,081,585	2,738,971	2,342,614
9	320186425	1	4701706425		Arthur Unit 1H (10396.1)	7,739,884	4,526,157	3,213,727
9	320186426	1	4701706426		Michelle Unit 1H (11354.1)	6,849,537	3,998,863	2,850,674
9	320186427	1	4701706427		Michelle Unit 2H (10395.1)	8,701,182	4,963,321	3,737,861
9	320186478	1	4701706478		Rexal Unit 2H (11366.1)	7,297,553	4,253,593	3,043,960
9	320196477	1	4701706477		REXAL UNIT 1H (10553.1)	3,793,637	1,644,864	2,148,773
9	320196479	1	4701706479		KREITLER UNIT 1H (11386.1)	2,661,033	1,089,674	1,571,359
9	320196480	1	4701706480		KREITLER UNIT 2H (11387.1)	2,450,420	981,355	1,469,065
9	320196534	1	4701706534		BRADFORD UNIT 1H (11389.1)	3,390,233	1,474,354	1,915,879
9	320196535	1	4701706535		BRADFORD UNIT 2H (11388.1)	3,225,445	1,409,434	1,816,011
9	320196654	1	4701706654		ROLLINS UNIT 1H (11361.1)	3,820,158	1,576,770	2,243,388
9	320196655	1	4701706655		MCCUE UNIT 1HST2 (11359.1)	1,906,644	664,569	1,242,075
9	320196656	1	4701706656		MCCUE UNIT 2H (11360.1)	1,609,591	534,926	1,074,665
9	390004406	1	4701704406		Underwood FH 3 (11270.1)	3,296	555	2,741
9	420156143	1	4701706143		Walter Unit 3H (10279.1)	927,368	226,368	701,000
9	420156144	1	4701706144		Flossie Unit 2H (10303.1)	987,125	249,200	737,925
9	420156158	1	4701706158		Walter Unit 1H (10293.1)	1,130,754	307,955	822,799
9	420156162	1	4701706162		Walter Unit 2H (10294.1)	1,013,891	260,975	752,916
9	420156164	1	4701706164		Ruth Unit 1H (10292.1)	1,089,125	292,252	797,873
9	420156180	1	4701706180		Flossie Unit 1H (10312.1)	1,142,000	312,191	829,809
9	420166138	1	4701706138		Furbey Unit 2H (10350.1)	1,089,539	292,985	796,554
9	420166139	1	4701706139		Furbey Unit 1H (10349.1)	1,368,192	405,748	962,444
9	420166140	1	4701706140		Cecele Unit 1H (10297.1)	965,322	242,219	723,103
9	420166159	1	4701706159		Oneacre Unit 2H (10338.1)	1,599,205	498,715	1,100,490
9	420166160	1	4701706160		Cox Unit 2H (10353.1)	788,376	170,473	617,903
9	420166161	1	4701706161		Cox Unit 1H (10298.1)	617,466	106,933	510,533
9	420166167	1	4701706167		Bowen Unit 2H (10352.1)	1,362,848	403,416	959,432
9	420166181	1	4701706181		Welling Unit 1H (10491.1)	1,378,297	410,881	967,416
9	420166182	1	4701706182		White Unit 1H (10490.1)	1,777,675	587,597	1,190,078
9	420166183	1	4701706183		Welling Unit 2H (10348.1)	1,175,932	334,092	841,840
9	420166210	1	4701706210		Gainer Unit 1H (10757.1)	1,337,332	395,287	942,045
9	420166219	1	4701706219		Bowen Unit 1H (10354.1)	1,337,610	378,319	959,291
9	420166226	1	4701706226		Gainer Unit 2H (10399.1)	1,311,288	381,372	929,916
9	420166227	1	4701706227		Golden Unit 1H (10346.1)	2,256,807	798,187	1,458,620
9	420166230	1	4701706230		Golden Unit 2H (10347.1)	1,380,565	422,203	958,362
9	420166245	1	4701706245		Irons Unit 1H (10401.1)	1,682,404	556,555	1,125,849
9	420166278	1	4701706278		Belton Unit 1H (10429.1)	1,344,784	417,287	927,497
9	420166279	1	4701706279		Carole Unit 1H (10382.1)	1,455,451	440,564	1,014,887
9	420166280	1	4701706280		Carole Unit 2H (10430.1)	1,528,948	476,832	1,052,116
9	420166369	1	4701706369		Caswell Unit 1H (10422.1)	1,981,336	688,321	1,293,015
9	420166377	1	4701706377		Caswell Unit 2H (10426.1)	1,624,765	517,031	1,107,734
9	420166422	1	4701706422		Lettie Unit 1H (10470.1)	2,615,813	972,263	1,643,550

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9	420166433	1	4701706433		Downs Unit 1H (10481.1)	1,422,780	413,776	1,009,004
9	420166434	1	4701706434		Downs Unit 2H (10482.1)	2,005,914	684,843	1,321,071
9	420166435	1	4701706435		Lettie Unit 2H (10471.1)	1,748,051	580,908	1,167,143
9	420166450	1	4701706450		Arters Unit 1H (10483.1)	1,930,178	672,007	1,258,171
9	420176231	1	4701706231		Rikk Unit 2H (10444.1)	1,536,762	519,904	1,016,858
9	420176232	1	4701706232		IRONS UNIT 2H (10367.1)	2,572,040	716,760	1,855,280
9	420176376	1	4701706376		Arters Unit 2H (10427.1)	3,072,170	1,187,825	1,884,345
9	420176382	1	4701706382		Fuego Unit 1H (10461.1)	1,162,978	324,419	838,559
9	420176387	1	4701706387		Fuego Unit 2H (10459.1)	1,062,145	283,518	778,627
9	420176454	1	4701706454		NESTOR UNIT 1H (10488.1)	4,159,169	1,365,999	2,793,170
9	420176468	1	4701706468		BAKER UNIT 1H (10484.1)	5,048,757	1,707,059	3,341,698
9	420176469	1	4701706469		Baker Unit 2H (10485.1)	2,667,384	1,035,385	1,631,999
9	420176470	1	4701706470		Life Unit 1H (10486.1)	1,727,318	561,606	1,165,712
9	420176471	1	4701706471		Life Unit 2H (10487.1)	1,978,194	702,684	1,275,510
9	420196228	1	4701706228		RIKK UNIT 1H (10443.1)	2,511,531	701,206	1,810,325
9	420196282	1	4701706282		KELLEY UNIT 2H (10393.1)	1,395,311	295,113	1,100,198
9	420196306	1	4701706306		KELLEY UNIT 1H (10495.1)	1,704,751	404,250	1,300,501
9	420196319	1	4701706319		CHUMLEY UNIT 1HST (10496.1)	1,448,534	311,589	1,136,945
9	420196335	1	4701706335		CHUMLEY UNIT 2H (10497.1)	2,557,341	729,610	1,827,731
9	420196378	1	4701706378		MCCLAIR UNIT 1H (10633.1)	2,036,243	565,461	1,470,782
9	420196379	1	4701706379		RICHARD UNIT 1H (10634.1)	2,664,077	793,123	1,870,954
9	420196380	1	4701706380		RICHARD UNIT 2H (10635.1)	2,448,353	700,876	1,747,477
9	500520003	1	4701701713		Downes 1 (11209.1)	7,512	1,322	6,190
9	515154829	1	4701704829		Harbert 1 (11224.1)	2,761	500	2,261
9	515154844	1	4701704844		Pope 3 (11246.1)	555	500	55
9	516164931	1	4701704931		BOYCE 4 (11188.1)	2,238	500	1,738
9	516164951	1	4701704951		Vincent 3 (11274.1)	5,966	901	5,065
9	517174952	1	4701704952		Vincent 4 (11275.1)	9,186	5,431	3,755
9	518185324	1	4701705324		Bogges 4 (11186.1)	1,100	500	600
9	520105285	1	4701705285		Highland 3 (10774.1)	14,545	8,051	6,494
9	520105332	1	4701705332		Highland 19 (10773.1)	868	500	368
9	520105434	1	4701705434		Braun 2 (10785.1)	70,666	48,263	22,403
9	520105475	1	4701705475		5 Smith 1 (10817.1)	4,631	1,114	3,517
9	520105502	1	4701705502		Kile A1 (10797.1)	5,885	2,500	3,385
9	520105503	1	4701705503		Kile A2 (10798.1)	14,528	9,697	4,831
9	520105504	1	4701705504		Kile A3 (10799.1)	1,390	500	890
9	520105693	1	4701705693		Booher 4 (10832.1)	563	500	63
9	520115865	1	4701705865		WL Estlack 1 (10877.1)	3,215	912	2,303
9	520115866	1	4701705866		WL Estlack 2 (10878.1)	3,052	934	2,118
9	520145962	2	4701705962	4701706026	R. Swiger South Unit 1H a	1,432,869	732,578	700,291
9	520146027	1	4701706027		Trout Unit 1H (10176.1)	935,347	507,314	428,033
9	520146028	1	4701706028		Trout Unit 2H (10175.1)	783,397	405,188	378,209
9	520146043	1	4701706043		R. Swiger South Unit 3H (792,951	1,047,994	(255,043)
9	520146044	1	4701706044		Webb Unit 1H (10168.1)	485,182	220,616	264,566
9	520146045	1	4701706045		Webb Unit 2H (10169.1)	340,712	136,058	204,654
9	520146046	1	4701706046		Webb Unit 3H (10170.1)	595,299	289,651	305,648
9	520156117	1	4701706117		Kemper Unit 1H (10269.1)	1,079,531	601,559	477,972
9	520156118	1	4701706118		Thomas Unit 2H (10272.1)	972,771	529,941	442,830
9	520156120	1	4701706120		Thomas Unit 1H (10271.1)	571,567	274,690	296,877
9	520156121	1	4701706121		Kemper Unit 2H (10270.1)	722,802	383,045	339,757
9	520166119	1	4701706119		Statler Unit 1H (10735.1)	2,113,081	1,310,716	802,365
9	520166134	1	4701706134		Statler Unit 2H (10736.1)	1,899,536	1,161,288	738,248
9	520166148	1	4701706148		Welch Unit 1H (10737.1)	2,439,717	1,525,346	914,371
9	618185431	1	4701705431		Nicholson A1 (10811.1)	1,767	880	887
9	620146096	1	4701706096		Heirs Unit 2H (10240.1)	689,754	221,902	467,852