COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION )
INTO THE MEASURING, )
RECORDING, AND REPORTING OF ) CASE NO. 2018-00394
WATER LOSS BY KENTUCKY’S )
JURISDICTIONAL WATER )
UTILITIES )

RESPONSE OF

LAUREL COUNTY WATER DISTRICT NO. 2

TO

COMMISSION’S REQUEST FOR INFORMATION

DATED DECEMBER 18, 2018

FILED: January 11, 2018
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC INVESTIGATION INTO THE MEASURING, RECORDING, AND REPORTING OF WATER LOSS BY KENTUCKY’S JURISDICTIONAL WATER UTILITIES CASE NO. 2018-00394

CERTIFICATION OF RESPONSE OF LAUREL COUNTY WATER DISTRICT NO. 2 TO COMMISSION’S REQUEST FOR INFORMATION

This is to certify that I have supervised the preparation of Laurel County Water District No. 2’s Response to the Commission’s Request for Information. The response submitted on behalf of Laurel County Water District No. 2 is true and accurate to the best of my knowledge, information, and belief formed after a reasonable inquiry.

Date: 1/10/2019

Kenneth Fisher, Superintendent
Laurel County Water District No. 2
Response to Commission’s Request for Information

Question No. 1

Responding Witness: Kenneth Fisher

Q-1. Explain in detail the manner in which you measure, calculate, and track water loss, and:

a. Identify whether you use any manual form (including Excel spreadsheet) or electronic or mechanized system to calculate and track water loss.

b. Provide a copy of any form used (including Excel spreadsheet).

c. Identify the source of any form or system used.

A-1. a. Laurel County Water District No. 2 (LWD No. 2) reads the Master meter daily at the treatment plant of the water leaving the plant and going into the distribution. Laurel County Water District No.2 reads all customer meters Monthly and the number of gallons billed on the billing report generated by United Systems is considered the water sold amount on the Monthly water loss report. The difference of water sold from water purchased is our water loss after adjustments are made for flushing, Fire department use, Water used in the water Treatment plant production, and filter washes.

b. PSC Monthly Water Loss Report is attached to report.

c. Public Service Commission
Response to Commission’s Request for Information

Question No. 2

Responding Witness: Kenneth Fisher

Q-2. Explain in detail your understanding of the information to be provided in each of the categories on the Water Statistics page (reference page 30) of the annual report required of jurisdictional water utilities, accessed through the Commission’s website.


1. Tracking of water bought and sold.
2. Amount of water produced.
3. Amount of water Purchased.
4. The total amount of water produced and purchased.
5. 
6. Total water sold to LWD No. 2 customers.
7. Total water sold to LWD No. 2 residential customers only.
8. Total water sold to LWD No. 2 commercial customers only.
9. Total water sold to LWD No. 2 Industrial customers only.
10. LWD No. 2 has no bulk loading stations.
11. LWD has no resale.
12. LWD does not have any other means of sale.
13. Total water sales to all customers.
14.

15. Water used in the treatment plant production or Distribution.

16. Water used at LWD No.2 to wash filters and for the Water treatment plant production.

17. LWD has no wastewater plant.

18. Water used for annual flushing and Maintenance.

19. All water used for fire department emergencies, we cannot get our fire departments to send Monthly fire department usage so we use .1 percent on the Fire Department water usage form KRS 278.170. We have attached the report.

20. Water used at LWD No. 2 water office and meter test bench.

21. Total of all Known water use.

22.

23. Unknown water Loss.

24. Estimate of all known tank overflows.

25. We use a Monthly Excavation break report provided by Kentucky Rural water Association to figure up the gallons for line breaks. We have attached the report.

26. Estimate of all known line leaks.

27. Other known issues of water loss.
28. Total of all known water loss.

29. Total line loss divided by total water produced equals percentage of water loss for Laurel County Water District No. 2.
Q-3. State any questions you have regarding how to use the updated Commission Form described and attached as Appendix A to this Order.

A-3. Laurel County Water District No.2 has no questions about the updated Commission Form.
Q-4. State any suggestions or improvements you have for the updated Commission Form described and attached as Appendix A to this Order.

A-4. Laurel County Water District No. 2 has no suggestions or improvements for the updated Commission Form.
LAUREL COUNTY WATER DISTRICT NO. 2

CASE NO. 2018-00394

Response to Commission’s Request for Information

Question No. 5

Responding Witness: Kenneth Fisher

Q-5. State any questions you have regarding how the information in the updated Commission Form described and attached as Appendix A to this Order is to be incorporated into annual reports.

A-5. Laurel County Water District No. 2 has no questions regarding how information in the updated Commission Form is to be incorporated into annual reports.
Q-6. State any concerns you have regarding the use of the updated Commission Form described and attached as Appendix A to this Order.

A-6. Laurel County Water District No. 2 has no concerns about the updated Commission Form.
Q-7. State whether you believe it is reasonable, proper, and appropriate for the Commission to require jurisdictional water utilities to maintain and use the updated Commission Form described and attached as Appendix A to this Order. Fully explain your answer

A-7. Laurel County Water District No.2 believes it is reasonable, proper, and appropriate for the Commission to require Water Utilities to maintain and use the updated Commission Form attached as Appendix A. Laurel County Water District No. 2 believes that keeping water loss to a minimum is the key to running an efficient water district.
CERTIFICATE OF SERVICE

In accordance with 807 KAR 5:001, Section 8, I certify that Laurel County Water District No. 2’s electronic filing of this Response is a true and accurate copy of the same document being filed in paper medium; that the electronic filing was transmitted to the Public Service Commission on January 11, 2019; that there are currently no parties that the Public Service Commission has excused from participation by electronic means in this proceeding; and that an original paper medium of this Response will be delivered to the Public Service Commission within two business days.

Kenneth Fisher, Superintendent
Laurel County Water District No. 2
# Monthly Water Loss Report

**Water Utility:** Laurel County Water District # 2  
**For the Month of:** December  
**Year:** 2018

## Line # | Item | Gallons (Thousands)
---|---|---
1 | WATER PRODUCED, PURCHASED & DISTRIBUTED | 36,100
2 | Water Produced | 36,100
3 | Water Purchased | -
4 | TOTAL PRODUCED AND PURCHASED | 36,100
5 |
6 | WATER SALES | |
7 | Residential | 22,179
8 | Commercial | 4,228
9 | Industrial | 4,711
10 | Bulk Loading Stations | |
11 | Wholesale | |
12 | Other Sales | |
13 | TOTAL WATER SALES | 31,118 86.2%
14 |
15 | OTHER WATER USED | |
16 | Utility and/or Water Treatment Plant | 1,277
17 | Wastewater Plant | |
18 | System Flushing | 1,196
19 | Fire Department | 311
20 | Other office shop meter bench | 4
21 | TOTAL OTHER WATER USED | 2,788 7.7%
22 |
23 | WATER LOSS | |
24 | Tank Overflows | |
25 | Line Breaks | 2,194
26 | Line Leaks | |
27 | Other | |
28 | TOTAL LINE LOSS | 2,194 6.1%
29 |
30 | Note: Line 13 + Line 21 + Line 28 Must Equal Line 4
31 |
32 | WATER LOSS PERCENTAGE | |
33 | Unaccounted-For Water (Line 28 divided by Line 4) | 6.1%
<table>
<thead>
<tr>
<th>Day</th>
<th>Location</th>
<th>Size</th>
<th>P.S.I.</th>
<th>Chlorine Conc</th>
<th>Time Start - End</th>
<th>Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>SUNNYSIDE LN</td>
<td>4&quot;</td>
<td>1&quot;</td>
<td></td>
<td>9:45 - 10:15</td>
<td>8,970</td>
</tr>
<tr>
<td>5</td>
<td>GREG LN</td>
<td>2&quot;</td>
<td>8&quot;</td>
<td></td>
<td>11:35 - 11:45</td>
<td>45,920</td>
</tr>
<tr>
<td>7</td>
<td>ROBINSON CR</td>
<td>4&quot;</td>
<td>2&quot;</td>
<td>1.5</td>
<td>10:00 - 10:20</td>
<td>11,960</td>
</tr>
<tr>
<td>7</td>
<td>Davenport</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td></td>
<td>10:20 - 10:30</td>
<td>1,640</td>
</tr>
<tr>
<td>27</td>
<td>Court Rd</td>
<td>4&quot;</td>
<td>1&quot;</td>
<td></td>
<td>12:50 - 1:00</td>
<td>2,990</td>
</tr>
</tbody>
</table>

**Totals**

71,480 Gallons

Operator Signature

Codes

<table>
<thead>
<tr>
<th>Breaks - B</th>
<th>Complaint - C</th>
<th>New - N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Periodic - P</td>
<td>Interruption - I</td>
<td></td>
</tr>
</tbody>
</table>
Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district ("User") may withdraw water from the utility's water distribution system for the purpose of fighting fires or training firefighters at no charge on the condition that it maintains estimates of the amount of water used for fire protection and training during the calendar month and reports the amount of this water usage to the utility no later than the 15th day of the following calendar month.

Any city, county, urban-county, charter county, fire protection district, or volunteer fire protection district that withdraws water from the utility's water distribution system for fire protection or training purposes and fails to submit the required report on water usage in a timely manner shall be assessed the cost of this water.

A non-reporting user's usage shall be presumed to be 100 percent of the utility's total water sales for the calendar month.

<table>
<thead>
<tr>
<th>Date</th>
<th>Hydrant Location and/or Number</th>
<th>Reason Operated</th>
<th>Total Minutes Operated</th>
<th>Nozzle size (typically 2.5 or 4.5)</th>
<th>Pitot Pressure</th>
<th>GPM</th>
<th>Gallons Flowed</th>
<th>Estimated Flow if Pitot not used</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/2018</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62,132</td>
<td></td>
</tr>
</tbody>
</table>

Signed: ____________________________ Date: ________________ Total Gallons for Month: 62,132

(fire department representative) Kentucky Rural Water Association 2008
## Monthly Excavation Break Report

**Laurel County Water District #2** (name of Water System)

Ky 0630238 (PWSID)

### Area Calculator

<table>
<thead>
<tr>
<th>Hole</th>
<th>Area (sq. in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>1.766</td>
</tr>
</tbody>
</table>

Insert the approximate dimensions of the hole or crack to determine the area of the break. Insert the area in the spreadsheet below.

### Hole or Crack Information

- **Hole**: 1.5 in
- **Area**: 1.766 sq. in

### Crack Dimensions

- **length (in)**: 1
- **width (in)**: 0.25
- **Area**: 0.25 sq. in

### Excavation Break Data

<table>
<thead>
<tr>
<th>Date</th>
<th>Excavation Break Location</th>
<th>Excavator</th>
<th>Minutes</th>
<th>Hole or Crack</th>
<th>Area of hole or crack</th>
<th>Normal PSI</th>
<th>GPM</th>
<th>Gallons Lost During Break</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/8/2018</td>
<td>Gene Philpot/ Hwy 25 6&quot; Main</td>
<td></td>
<td>60</td>
<td>Crack</td>
<td>6.750</td>
<td>100</td>
<td>1539</td>
<td>92,324</td>
</tr>
<tr>
<td>10/8/2018</td>
<td>719 Jackson Fariston Road 2&quot; Main</td>
<td></td>
<td>2160</td>
<td>Crack</td>
<td>1.250</td>
<td>80</td>
<td>255</td>
<td>550,513</td>
</tr>
<tr>
<td>10/15/2018</td>
<td>128 Shannon Square 3/4&quot; Service</td>
<td></td>
<td>2880</td>
<td>Crack</td>
<td>0.125</td>
<td>75</td>
<td>25</td>
<td>71,071</td>
</tr>
<tr>
<td>10/16/2018</td>
<td>Steeple chase Lane 4&quot; Main</td>
<td></td>
<td>30</td>
<td>Crack</td>
<td>1.500</td>
<td>80</td>
<td>306</td>
<td>9,175</td>
</tr>
<tr>
<td>10/17/2018</td>
<td>496 Court Road 4&quot; Main</td>
<td></td>
<td>30</td>
<td>Crack</td>
<td>1.000</td>
<td>100</td>
<td>228</td>
<td>6,839</td>
</tr>
<tr>
<td>10/16/2018</td>
<td>Steeplechase/Bakersfield 2&quot; Main</td>
<td></td>
<td>30</td>
<td>Crack</td>
<td>1.500</td>
<td>80</td>
<td>306</td>
<td>9,175</td>
</tr>
<tr>
<td>10/19/2018</td>
<td>Bakersfield Lane/ Parkside 2&quot; Main</td>
<td></td>
<td>30</td>
<td>Crack</td>
<td>0.500</td>
<td>75</td>
<td>99</td>
<td>2,961</td>
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<tr>
<td>10/23/2019</td>
<td>C&amp;C Macine Shop 3/4&quot; Service</td>
<td></td>
<td>2880</td>
<td>Crack</td>
<td>0.125</td>
<td>90</td>
<td>27</td>
<td>77,854</td>
</tr>
<tr>
<td>10/25/2018</td>
<td>304 Wildwood 2&quot; Main</td>
<td></td>
<td>1440</td>
<td>Crack</td>
<td>0.750</td>
<td>70</td>
<td>143</td>
<td>205,983</td>
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<tr>
<td>10/25/2018</td>
<td>Meadow Lane 2&quot; Main</td>
<td></td>
<td>30</td>
<td>Crack</td>
<td>0.125</td>
<td>90</td>
<td>27</td>
<td>811</td>
</tr>
<tr>
<td>11/21/2018</td>
<td>Campground Road 4&quot; Main</td>
<td></td>
<td>60</td>
<td>Hole</td>
<td>12.560</td>
<td>100</td>
<td>3817</td>
<td>229,049</td>
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<tr>
<td>11/26/2018</td>
<td>Horse Creek Road 4&quot;Main</td>
<td></td>
<td>120</td>
<td>Crack</td>
<td>1.250</td>
<td>80</td>
<td>255</td>
<td>30,584</td>
</tr>
<tr>
<td>11/27/2018</td>
<td>Court Road 4&quot; Main</td>
<td></td>
<td>10</td>
<td>Hole</td>
<td>1.766</td>
<td>90</td>
<td>509</td>
<td>5,092</td>
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<tr>
<td>12/7/2018</td>
<td>468 Old Uniion Church Rd 3/4&quot; Service</td>
<td></td>
<td>2880</td>
<td>Crack</td>
<td>0.250</td>
<td>90</td>
<td>54</td>
<td>155,709</td>
</tr>
<tr>
<td>12/7/2018</td>
<td>Behind C&amp;C Machine Shop 3/4&quot; Service</td>
<td></td>
<td>1440</td>
<td>Crack</td>
<td>0.188</td>
<td>100</td>
<td>43</td>
<td>61,549</td>
</tr>
<tr>
<td>12/12/2018</td>
<td>Five Star Paving 3/4&quot; Service</td>
<td></td>
<td>4320</td>
<td>Crack</td>
<td>0.188</td>
<td>100</td>
<td>43</td>
<td>184,648</td>
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<tr>
<td>12/14/2018</td>
<td>Intersection Hwy 25&amp;1629 6&quot; Main</td>
<td></td>
<td>30</td>
<td>Crack</td>
<td>1.500</td>
<td>110</td>
<td>359</td>
<td>10,759</td>
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<tr>
<td>12/18/2018</td>
<td>1050 Slate Ridge Road 3/4&quot; Service</td>
<td></td>
<td>1440</td>
<td>Crack</td>
<td>0.013</td>
<td>70</td>
<td>2</td>
<td>3,433</td>
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<tr>
<td>12/27/2018</td>
<td>Old Uniion Church Road 2&quot; Main</td>
<td></td>
<td>15</td>
<td>Crack</td>
<td>3.313</td>
<td>80</td>
<td>675</td>
<td>10,131</td>
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<tr>
<td>12/31/2018</td>
<td>Hwy 25E &amp; Greeting Card 4&quot; Main</td>
<td></td>
<td>1440</td>
<td>Crack</td>
<td>0.750</td>
<td>100</td>
<td>171</td>
<td>246,197</td>
</tr>
</tbody>
</table>

### Total Gallons Lost Due to Excavation Breaks

#REF! #REF!

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**Kentucky Rural Water Association**

2009