

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

35. The AMI Plan overview, page 6, discusses Cellular AMI as the preferred technology. Please provide the following:
- a. Information regarding the cellular networks 5g coverage in the KAW service territory.
 - b. For each of the cellular networks being considered the projected phase out of 4g coverage.
 - c. The capability of the preferred endpoint to use 4g or 5g coverage.
 - d. The monthly cost for each endpoint to receive cellular service and how that service is provided and charged.
 - e. Please explain in detail what is meant by “limited ongoing maintenance related to security reviews, hardware refreshers and changes in technology” in terms of a benefit for the use of cellular AMI.
 - f. Are all endpoint technologies compatible with all cellular networks? Please explain in detail.
 - g. Are endpoints able to be upgraded to easily switch cellular networks? Does that require changes in hardware at each endpoint? Please explain in detail.
 - h. How would cellular provider address gaps in coverage? Who would pay for any upgrades needed?
 - i. Provide all documentation and discussions related to cellular network service agreements reviewed and costs reviewed while evaluating the likely cellular networks KAW would use.
 - j. What would be the typical length of cellular network service agreements and pricing? What would be the recourse of dramatic price increases for cellular service?

Response:

A, B & C. Cellular Coverage Analysis was completed in October 2024 with the following results:

Lexington District: 99.9% have coverage by either AT&T or Verizon

Northern District: 95.7% have coverage by either AT&T or Verizon

D. Cellular endpoints are purchased with the connectivity that aligns with the Length of Service. Other than purchasing the endpoint, no additional charges are required for connectivity.

E. This statement refers to the differences between cellular and fixed networks. In a fixed network, a utility must perform security reviews, update to hardware (collector motherboard, antenna, etc.), as well as any changes to the RF technology used within a fixed network. In contrast, cellular devices leverage the existing cellular communications

network that is regularly updated to keep up with the latest technologies providing reliability and security.

F. Cellular endpoints are currently configured to work with a specific cellular carrier. This is why the vendors perform a Cellular Coverage Analysis to identify the best cellular carrier solution to ensure successful performance of the endpoint. Currently, our approved vendors are compatible with Verizon, AT&T and AT&T FirstNet.

G. Currently, our approved vendors require the uninstallation of an endpoint of one cellular carrier and the installation of another endpoint of another cellular carrier. The vendors are in the process of producing a multi-carrier endpoint.

H Cellular carriers are continuously evaluating and expanding their coverage areas at no cost to American Water. American Water requests updates to Cellular Coverage Analysis to identify where improvements in coverage exists to allow KAW to make decisions as to when to upgrade an AMR solution to an AMI solution.

I. Cellular Coverage Analysis performed by Badger have been added as attachments:

- KAW_R_AGDR1_NUM035_082925_Attachment1
- KAW_R_AGDR1_NUM035_082925_Attachment2
- KAW_R_AGDR1_NUM035_082925_Attachment3
- KAW_R_AGDR1_NUM035_082925_Attachment4

Costs are included in the AMI Plan at page 26.

J. Costs shown in the AMI Plan at page 26 include the total cost of cellular service for the Length of Service.

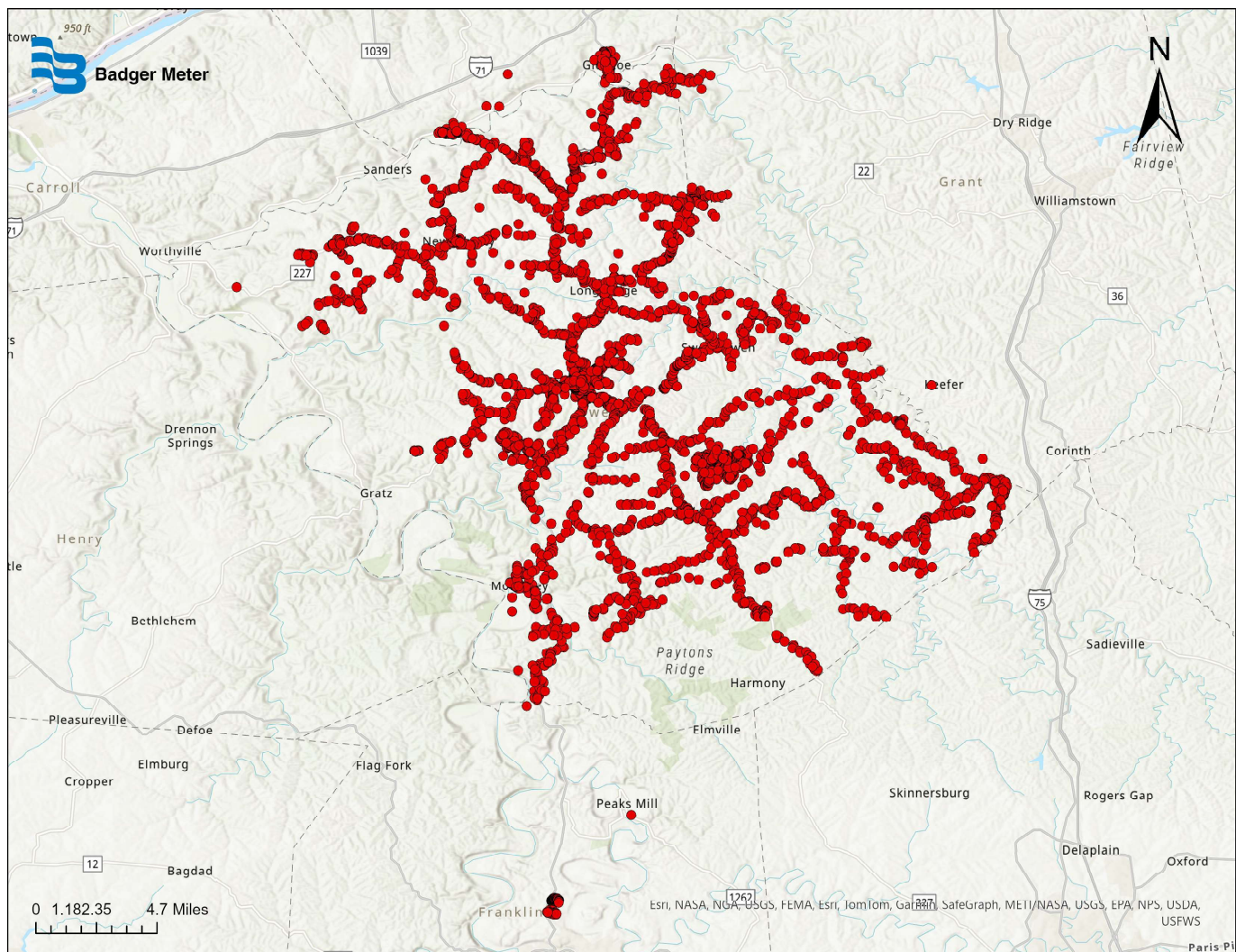
**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/17/2024**Project:** AWKY D601 Northern District**Revision:** 1.0

SUMMARY INFORMATION**Endpoint Type:** **ORION Cellular Endpoint with connectivity to M2M cellular networks, Insufficient****Service Area (square miles):** **160****Total Endpoints:** **5,083****REQUEST INFORMATION****Solution Architect:** Tom Watts**Account Manager:** Bruce Aqualina**INFORMATION PROVIDED**

	<u>FILE NAME</u>	<u>DATE RECEIVED</u>
Coverage Request Form:		
Endpoint Locations:	CCA_PremiseExtract_20240605_KY.xlsx	9/20/2024

ANALYSIS COVERAGE AREA

Analysis is based on service location addresses coordinates provided by the American Water Team. A map of the provided endpoint locations is shown below.

**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/17/2024**Project:** AWKY D601 Northern District**Revision:** 1.0**ENDPOINT LOCATIONS MAP**


Badger Meter

BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: American Water - KY

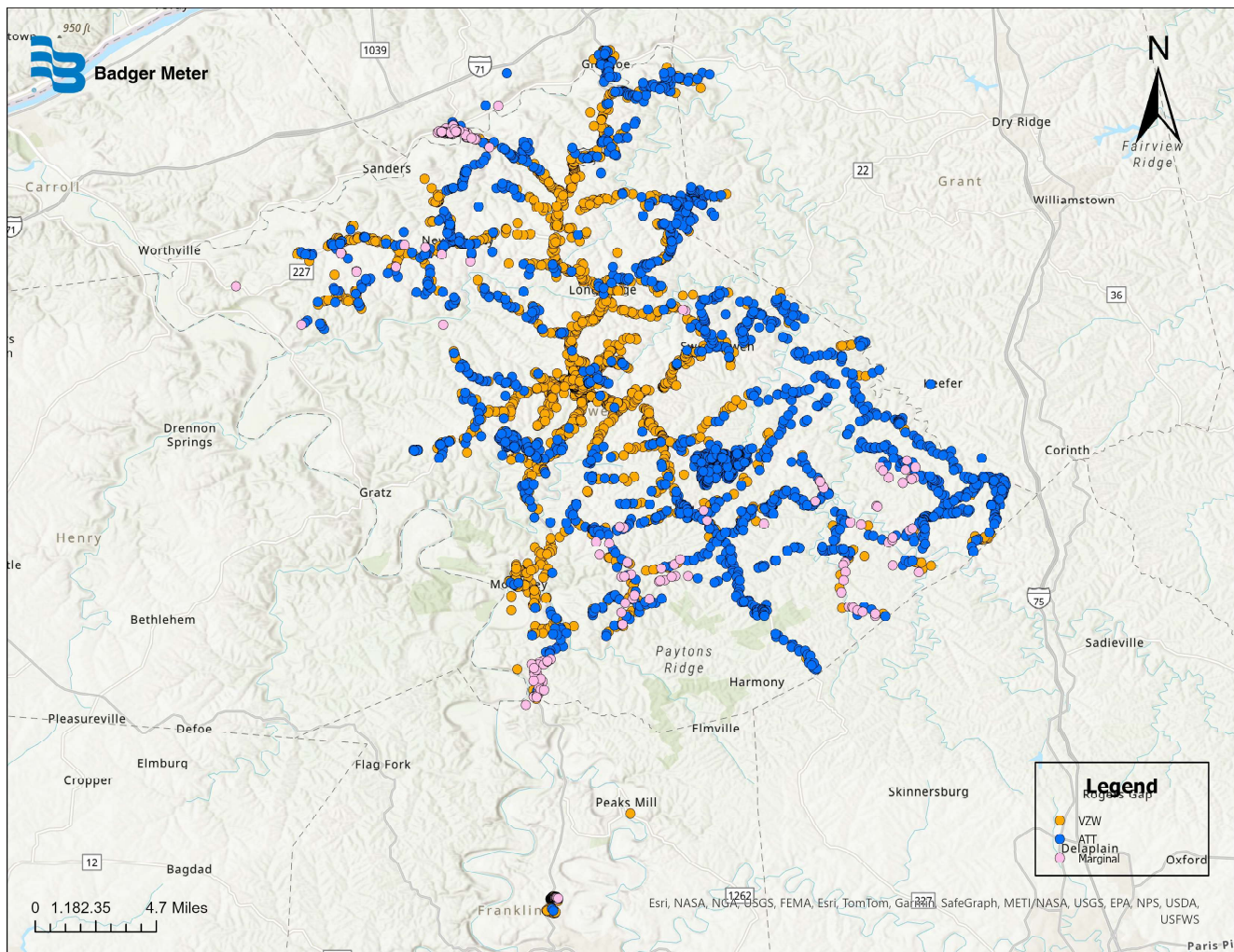
Date Issued: 10/17/2024

Project: AWKY D601 Northern District

Revision: 1.0

CELLULAR COVERAGE ANALYSIS

- This cellular coverage analysis has been run to determine connectivity of our providers M2M solutions which include both LTE-M and NB IoT networks. ORION Cellular Endpoints provide connectivity to both LTE-M and NB IoT networks.
- Using information provided from our carrier partners, this service area has M2M network coverage that will support our ORION Cellular endpoints in some, but not all areas. Approximately 95.7% of locations evaluated are expected to have coverage, approximately 4.3% of the locations evaluated appears to have marginal coverage. It is recommended to have these areas with insufficient coverage reevaluated after a period of 12 months as the M2M cellular network is rapidly evolving.
- The map below provides an illustration of that coverage. Further guidance on marginal locations can be provided upon request. All marginal locations are recommended to be revalidated in 12 months as rapid improvements to cellular coverage continue.



**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/17/2024**Project:** AWKY D601 Northern District**Revision:** 1.0

ASSUMPTIONS MADE

- Submitted information including but not limited to street addresses, service area, GPS coordinates, and meter locations are accurate.
- If GPS coordinates or a GIS shapefile are not provided for endpoint locations, street addresses are geocoded into decimal-degree latitude and longitude using ESRI's StreetMap Premium for ArcGIS North America HERE address locaters.
- Data from third party providers such as USGS National Elevation Dataset (NED), USGS National Land Cover Database (NLCD), Tele-Atlas municipal boundaries, cellular providers, and the RF propagation software used by Badger Meter is accurate.
- ORION endpoints are installed and maintained according to "ORI-UM-00025 ORION Water Endpoint Installation Manual" using a Badger Meter approved endpoint installation kit in a location that allows two-way communication between the endpoint and the cellular network.
 - Pit or vault installations are through a non-metal pit lid and the pit or vault lid is at or above grade
 - Indoor installations are mounted as high as possible in the floor joists above grade on an exterior wall

CLARIFICATIONS

- The ORION cellular coverage analysis is subject to change for reasons which may include but are not limited to; consultation with the customer, site visit by Badger Meter authorized personnel, and the availability of new or updated information.
- Cellular coverage within the utility service area is required to deploy ORION cellular endpoints.
- Review the cellular coverage analysis with your Badger Meter representative in order to understand how it may be used by the utility as a tool to deploy the system.
- All endpoints are to be installed in compliance with the published ORION installation guidelines which can be found at www.badgermeter.com
- Cellular endpoint type recommended is specific to the latitude and longitude for each location.

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**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D602 Lexington District**Revision:** 1.0

SUMMARY INFORMATION

Endpoint Type: **ORION Cellular Endpoint with connectivity to M2M cellular networks, Insufficient****Service Area (square miles):** **285****Total Endpoints:** **145,759**

REQUEST INFORMATION

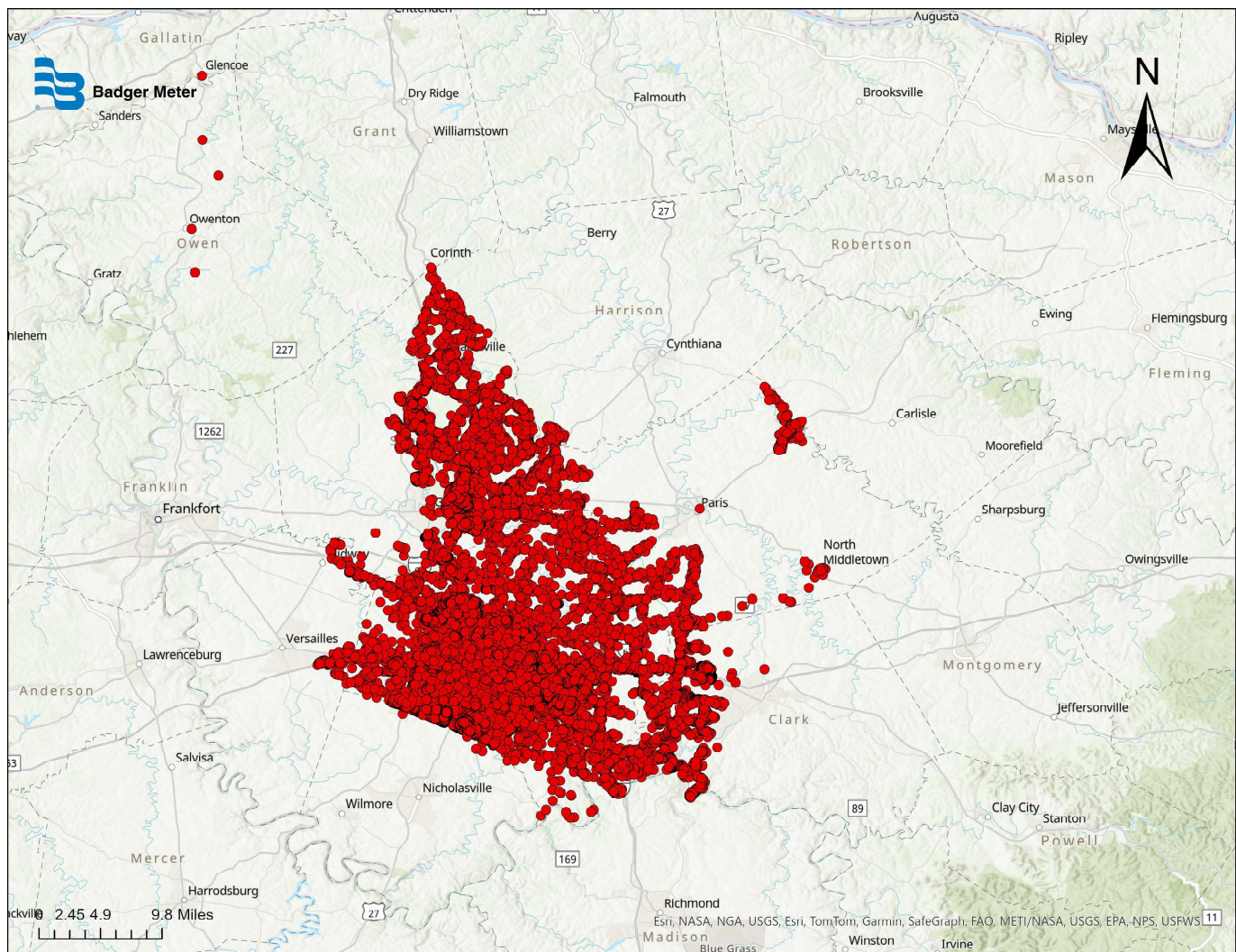
Solution Architect: Tom Watts**Account Manager:** Bruce Aqualina

INFORMATION PROVIDED

	<u>FILE NAME</u>	<u>DATE RECEIVED</u>
Coverage Request Form:		
Endpoint Locations:	CCA_PremiseExtract_20240605_KY.xlsx	9/20/2024

ANALYSIS COVERAGE AREA

Analysis is based on service location addresses coordinates provided by the American Water Team with 145,709 out of 145,759 (99.9%) successfully geocoded. A map of the provided endpoint locations is shown below.

**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D602 Lexington District**Revision:** 1.0**ENDPOINT LOCATIONS MAP**


Badger Meter

BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: American Water - KY

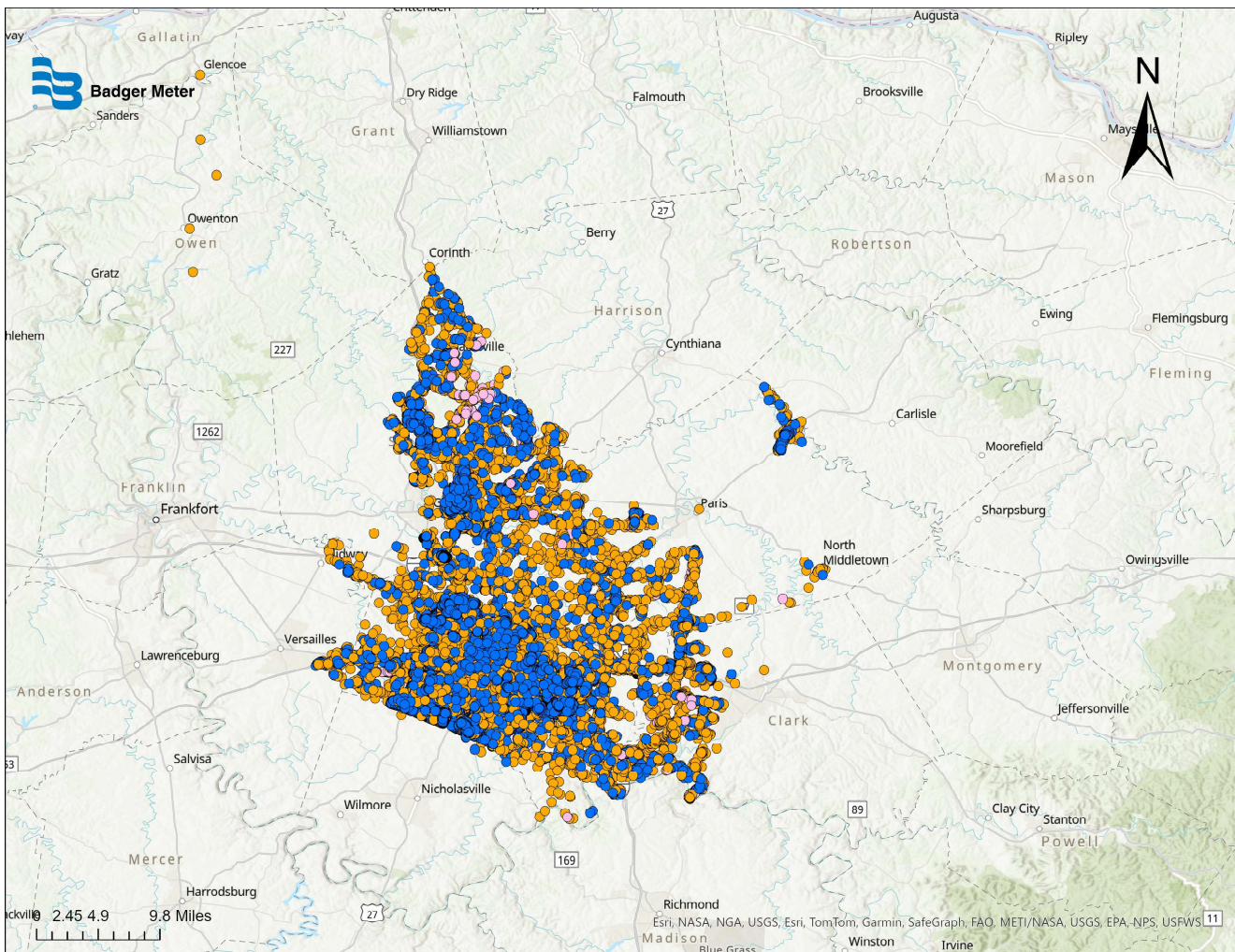
Date Issued: 10/18/2024

Project: AWKY D602 Lexington District

Revision: 1.0

CELLULAR COVERAGE ANALYSIS

- This cellular coverage analysis has been run to determine connectivity of our providers M2M solutions which include both LTE-M and NB IoT networks. ORION Cellular Endpoints provide connectivity to both LTE-M and NB IoT networks.
- Using information provided from our carrier partners, this service area has M2M network coverage that will support our ORION Cellular endpoints in some, but not all areas. Approximately 99.9% of locations evaluated are expected to have coverage, approximately 0.1% of the locations evaluated appears to have marginal coverage. It is recommended to have these areas with insufficient coverage reevaluated after a period of 12 months as the M2M cellular network is rapidly evolving.
- The map below provides an illustration of that coverage. Further guidance as to the placement of endpoints by type will be provided as deployment plans are refined.



**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D602 Lexington District**Revision:** 1.0

ASSUMPTIONS MADE

- Submitted information including but not limited to street addresses, service area, GPS coordinates, and meter locations are accurate.
- If GPS coordinates or a GIS shapefile are not provided for endpoint locations, street addresses are geocoded into decimal-degree latitude and longitude using ESRI's StreetMap Premium for ArcGIS North America HERE address locaters.
- Data from third party providers such as USGS National Elevation Dataset (NED), USGS National Land Cover Database (NLCD), Tele-Atlas municipal boundaries, cellular providers, and the RF propagation software used by Badger Meter is accurate.
- ORION endpoints are installed and maintained according to "ORI-UM-00025 ORION Water Endpoint Installation Manual" using a Badger Meter approved endpoint installation kit in a location that allows two-way communication between the endpoint and the cellular network.
 - Pit or vault installations are through a non-metal pit lid and the pit or vault lid is at or above grade
 - Indoor installations are mounted as high as possible in the floor joists above grade on an exterior wall

CLARIFICATIONS

- The ORION cellular coverage analysis is subject to change for reasons which may include but are not limited to; consultation with the customer, site visit by Badger Meter authorized personnel, and the availability of new or updated information.
- Cellular coverage within the utility service area is required to deploy ORION cellular endpoints.
- Review the cellular coverage analysis with your Badger Meter representative in order to understand how it may be used by the utility as a tool to deploy the system.
- All endpoints are to be installed in compliance with the published ORION installation guidelines which can be found at www.badgermeter.com
- Cellular endpoint type recommended is specific to the latitude and longitude for each location.

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**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D603 Rockcastle District**Revision:** 1.0

SUMMARY INFORMATION

Endpoint Type: **ORION Cellular Endpoint with connectivity to M2M cellular networks, Insufficient****Service Area (square miles):** **316****Total Endpoints:** **955**

REQUEST INFORMATION

Solution Architect: Tom Watts**Account Manager:** Bruce Aqualina

INFORMATION PROVIDED

	<u>FILE NAME</u>	<u>DATE RECEIVED</u>
Coverage Request Form:		
Endpoint Locations:	CCA_PremiseExtract_20240605_KY.xlsx	9/20/2024

ANALYSIS COVERAGE AREA

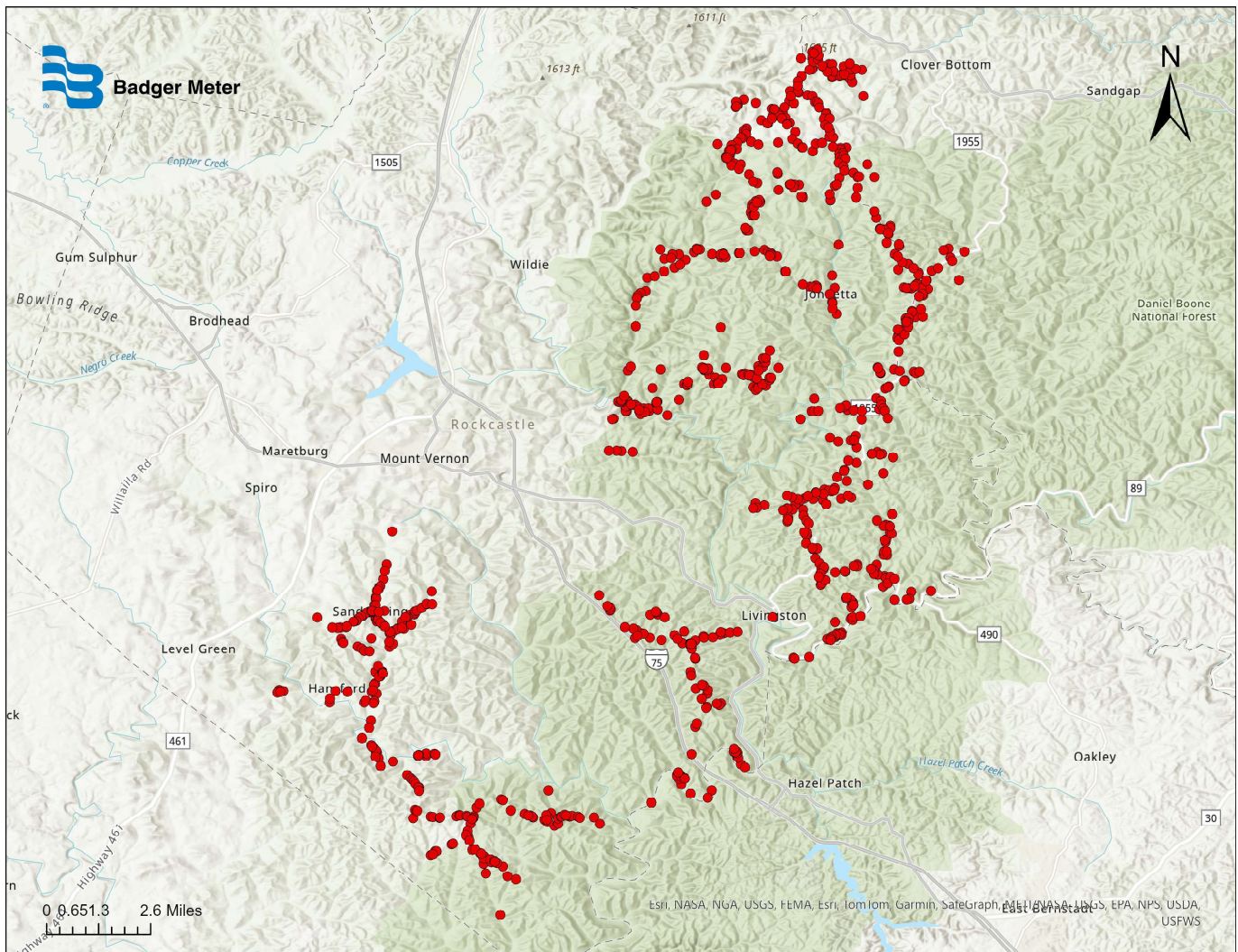
Analysis is based on service location addresses coordinates provided by the American Water Team. A map of the provided endpoint locations is shown below


Badger Meter
BEACON® AMA Solution
ORION® Cellular Coverage Analysis (CCA)
Customer: American Water - KY

Date Issued: 10/18/2024

Project: AWKY D603 Rockcastle District

Revision: 1.0

ENDPOINT LOCATIONS MAP




BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: American Water - KY

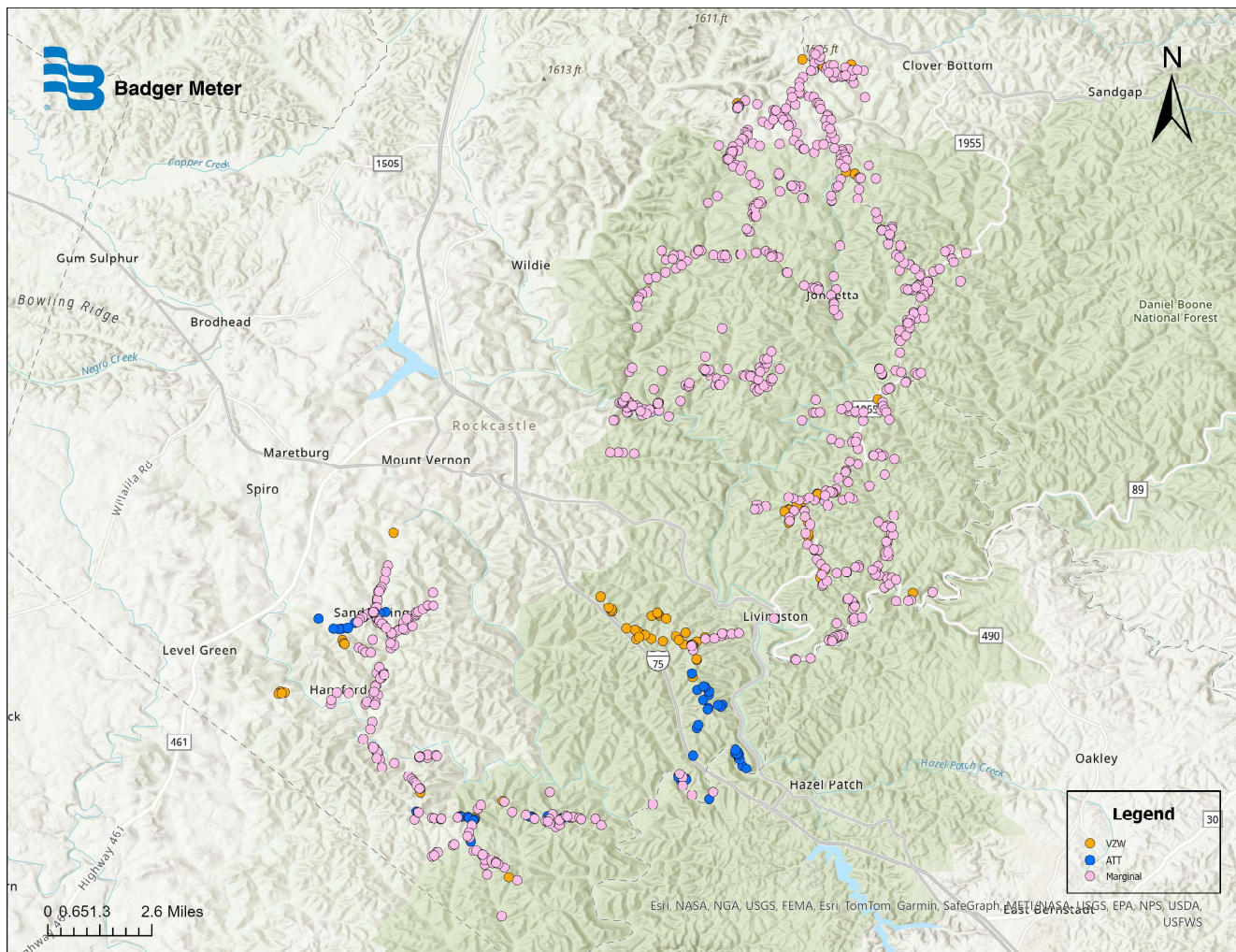
Date Issued: 10/18/2024

Project: AWKY D603 Rockcastle District

Revision: 1.0

CELLULAR COVERAGE ANALYSIS

- This cellular coverage analysis has been run to determine connectivity of our providers M2M solutions which include both LTE-M and NB IoT networks. ORION Cellular Endpoints provide connectivity to both LTE-M and NB IoT networks.
- Using information provided from our carrier partners, this service area has M2M network coverage that will support our ORION Cellular endpoints in some, but not all areas. Approximately 16.75% of locations evaluated are expected to have coverage, approximately 83.25% of the locations evaluated appears to have insufficient coverage. It is recommended to have these areas with insufficient coverage reevaluated after a period of 12 months as the M2M cellular network is rapidly evolving.
- The map below provides an illustration of that coverage. Further guidance as to the placement of endpoints by type will be provided as deployment plans are refined.



**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D603 Rockcastle District**Revision:** 1.0

ASSUMPTIONS MADE

- Submitted information including but not limited to street addresses, service area, GPS coordinates, and meter locations are accurate.
- If GPS coordinates or a GIS shapefile are not provided for endpoint locations, street addresses are geocoded into decimal-degree latitude and longitude using ESRI's StreetMap Premium for ArcGIS North America HERE address locaters.
- Data from third party providers such as USGS National Elevation Dataset (NED), USGS National Land Cover Database (NLCD), Tele-Atlas municipal boundaries, cellular providers, and the RF propagation software used by Badger Meter is accurate.
- ORION endpoints are installed and maintained according to "ORI-UM-00025 ORION Water Endpoint Installation Manual" using a Badger Meter approved endpoint installation kit in a location that allows two-way communication between the endpoint and the cellular network.
 - Pit or vault installations are through a non-metal pit lid and the pit or vault lid is at or above grade
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**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D605 North Middletown District**Revision:** 1.0

SUMMARY INFORMATION

Endpoint Type: **ORION Cellular Endpoint with connectivity to M2M cellular networks, Insufficient****Service Area (square miles):** **5****Total Endpoints:** **414**

REQUEST INFORMATION

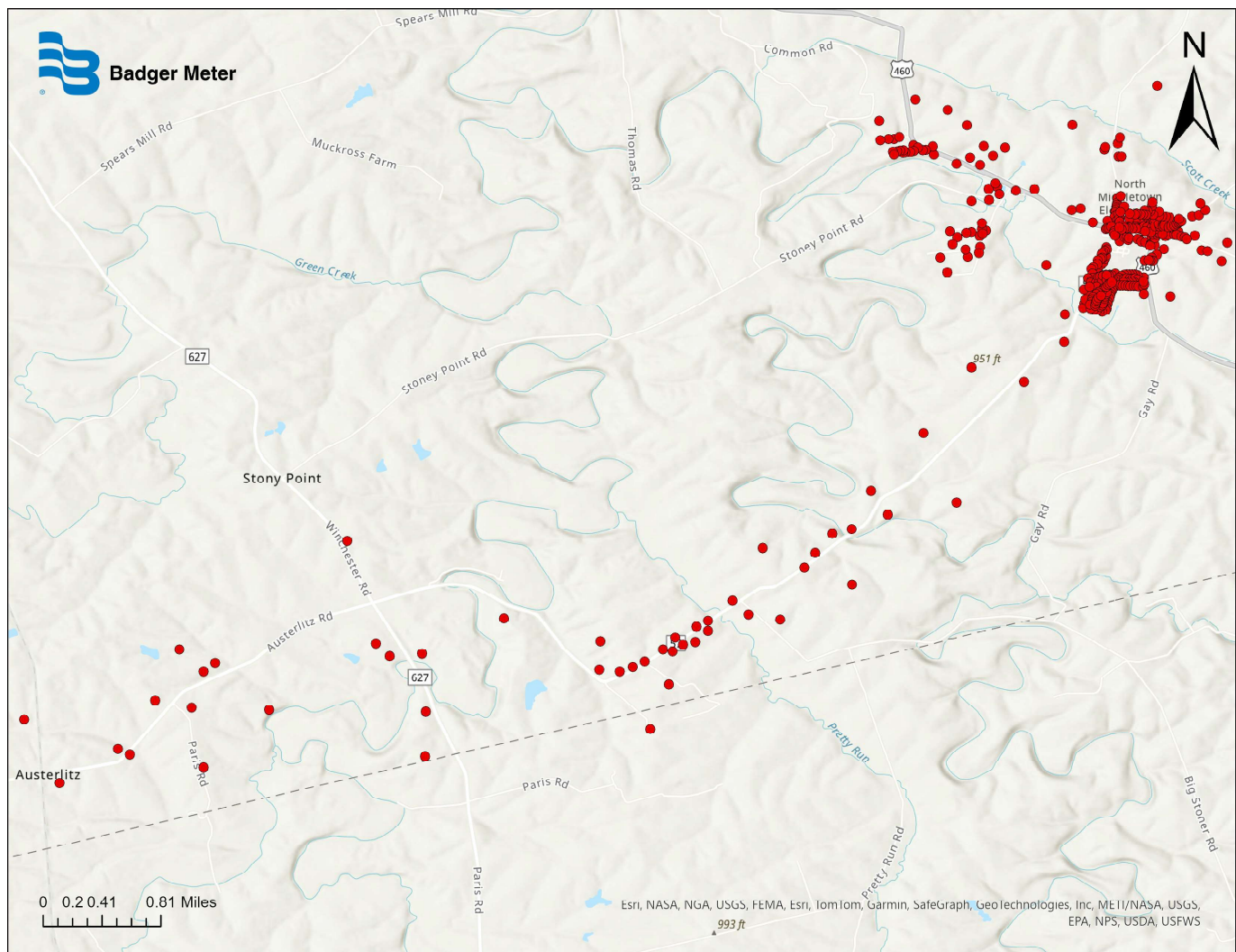
Solution Architect: Tom Watts**Account Manager:** Bruce Aqualina

INFORMATION PROVIDED

	<u>FILE NAME</u>	<u>DATE RECEIVED</u>
Coverage Request Form:		
Endpoint Locations:	CCA_PremiseExtract_20240605_KY.xlsx	9/20/2024

ANALYSIS COVERAGE AREA

Analysis is based on service location addresses coordinates provided by the American Water Team. A map of the provided endpoint locations is shown below

**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D605 North Middletown District**Revision:** 1.0**ENDPOINT LOCATIONS MAP**



BEACON® AMA Solution

ORION® Cellular Coverage Analysis (CCA)

Customer: American Water - KY

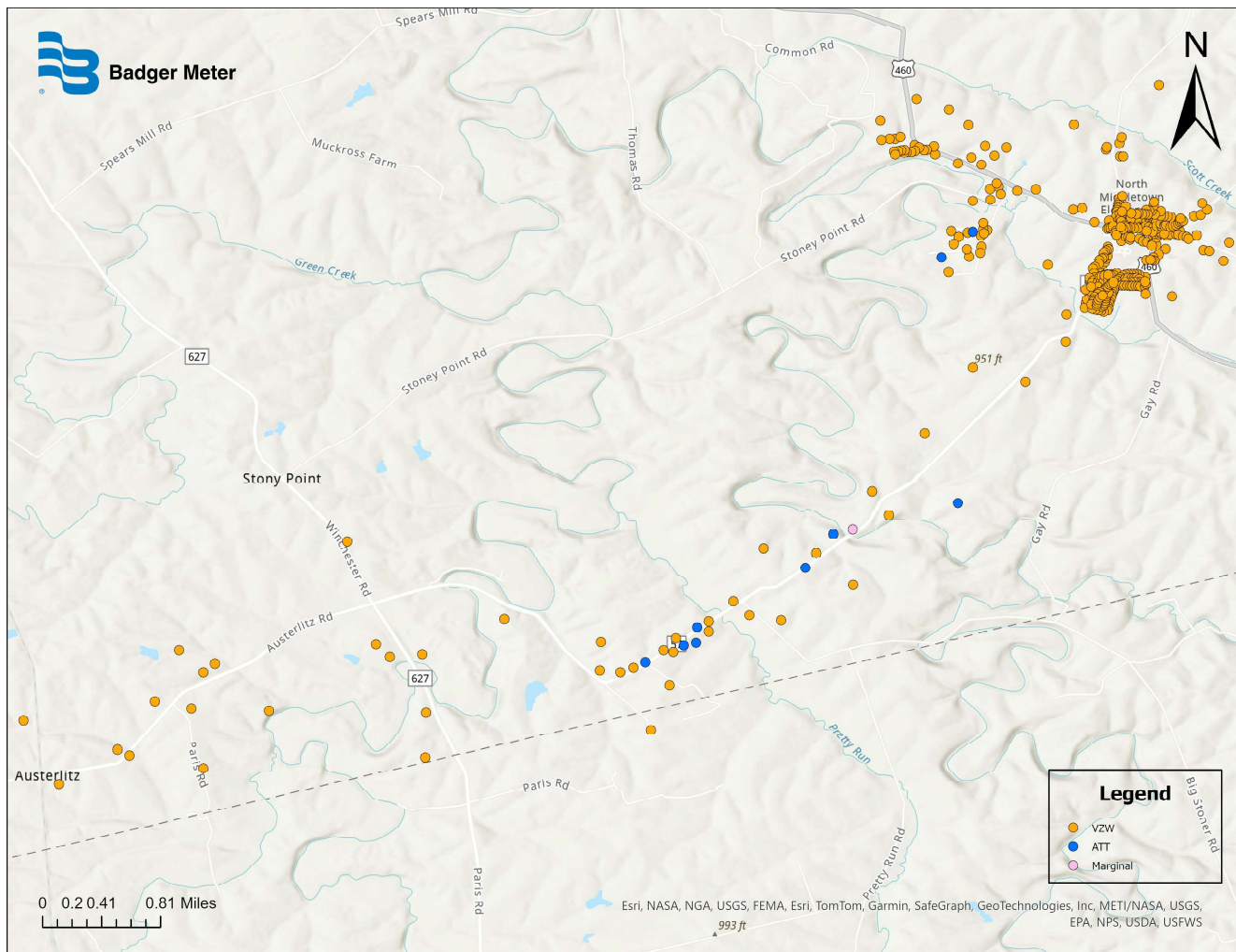
Date Issued: 10/18/2024

Project: AWKY D605 North Middletown District

Revision: 1.0

CELLULAR COVERAGE ANALYSIS

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- Using information provided from our carrier partners, this service area has M2M network coverage that will support our ORION Cellular endpoints in some, but not all areas. Approximately 99.8% of locations evaluated are expected to have coverage, approximately 0.2% of the locations evaluated appears to have marginal coverage. It is recommended to have these areas with insufficient coverage reevaluated after a period of 12 months as the M2M cellular network is rapidly evolving.
- The map below provides an illustration of that coverage. Further guidance as to the placement of endpoints by type will be provided as deployment plans are refined.



**Badger Meter****BEACON® AMA Solution****ORION® Cellular Coverage Analysis (CCA)****Customer:** American Water - KY**Date Issued:** 10/18/2024**Project:** AWKY D605 North Middletown District**Revision:** 1.0

ASSUMPTIONS MADE

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- Cellular endpoint type recommended is specific to the latitude and longitude for each location.

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KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Justin Sensabaugh

36. The AMI Plan overview, page 6, discusses Benefits of AMI technology as the preferred technology. Please explain how AMI information would be used on an actual basis, with examples, to detect system leaks or theft, or improve water system operations and management.

Response:

Please see Exhibit A pages 12 – 14, Figures 5, 6, and 7, for explanations on how AMI information is used to improve leak detection, water system operations and management. For larger customers, such as the University of Kentucky or Toyota, please see Exhibit A page 16, paragraphs 1-3 on how the AMI technology helps larger operational entities improve the management of their systems.

**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Krista Citron

37. Reference the AMI plan. Please provide a legible and electronic version of figure 4 on page 11.

Response:

See KAW_R_AGDR1_NUM037_082925_Attachment_1.

Sum of Gallons		Hour																								Grand Total
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Wednesday, November 13, 2024	10.2	0.0																								10.2
Tuesday, November 12, 2024	8.3	0.0	0.0	0.0	0.0	1.3	12.9	1.1	24.5	26.7	22.4	21.3	15.2	12.0	1.3	0.0	0.0	0.0	14.0	0.2	0.0	0.0	5.7	1.7		168.6
Monday, November 11, 2024	20.3	0.0	0.0	0.0	0.0	1.3	10.9	0.1	30.9	8.6	27.9	8.8	8.5	7.9	2.5	0.0	0.0	0.0	3.6	1.8	2.6	0.0	4.4	15.9		155.9
Sunday, November 10, 2024	7.5	0.0	0.0	0.0	0.0	0.0	0.0	14.7	33.7	7.7	0.0	2.6	0.4	1.3	0.0	16.3	2.8	13.7	3.2	0.0	15.1	0.9	0.0	9.6		129.4
Saturday, November 9, 2024	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	33.8	0.4	1.3	6.5	5.4	0.0	0.0	0.0	0.0	3.2	0.1	22.0	10.4	0.0	2.5	3.7		90.4
Friday, November 8, 2024	3.3	0.1	0.0	1.3	0.0	0.0	8.9	0.7	15.8	8.7	0.0	15.7	18.4	19.8	0.0	0.0	3.0	11.8	8.0	7.6	3.7	3.8	10.8	1.3		142.4
Thursday, November 7, 2024	0.0	0.0	0.0	0.0	1.3	0.0	10.4	0.7	27.3	1.3	7.0	26.8	10.7	19.1	18.6	0.3	0.0	5.8	9.6	2.6	0.1	1.3	2.6	0.0		145.5
Wednesday, November 6, 2024	13.9	0.0	0.0	1.3	0.0	1.3	9.8	1.2	20.2	12.5	11.4	17.7	4.0	1.8	18.1	7.6	10.2	5.2	0.0	2.9	8.3	0.0	1.6	1.3		150.3
Tuesday, November 5, 2024	14.0	0.0	0.0	0.0	0.0	0.0	8.9	13.0	18.2	0.0	11.3	6.3	20.4	5.8	1.8	0.0	0.0	0.0	0.0	2.3	0.0	0.0	1.4	3.3		106.6
Monday, November 4, 2024	15.8	0.0	0.0	0.0	0.0	0.0	13.3	1.4	20.9	9.4	25.4	15.5	18.6	0.0	1.4	0.0	0.0	0.0	0.0	1.4	1.2	1.3	0.0	8.4		134.0
Sunday, November 3, 2024	6.1	2.3	0.0	0.0	1.4	0.0	2.1	0.0	12.2	23.3	19.5	13.3	3.6	6.4	0.2	1.3	19.3	1.4	13.3	12.1	0.0	1.3	0.0	8.0		146.9
Saturday, November 2, 2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.1	28.7	0.7	1.3	1.0	2.7	14.3	6.5	0.0	0.0	4.0	0.0	5.1	3.5	6.4	0.0	9.2		106.7
Friday, November 1, 2024	1.6	0.0	1.3	0.0	0.0	1.2	13.8	1.6	27.2	14.5	22.0	12.9	0.3	2.6	0.0	0.0	2.3	8.7	0.3	1.3	1.8	1.5	2.7	3.2		121.0
Thursday, October 31, 2024	0.0	1.4	0.0	0.0	0.0	0.0	14.4	6.4	9.5	13.2	9.9	14.5	23.2	1.4	0.0	0.0	1.4	2.0	0.1	5.4	3.0	0.0	1.9	9.6		117.4
Wednesday, October 30, 2024	10.8	0.0	0.0	1.6	1.2	0.0	12.8	0.0	37.8	9.0	20.0	14.5	3.2	0.0	2.6	0.0	7.1	20.8	7.2	12.3	1.3	1.3	5.2	3.7		172.2
Tuesday, October 29, 2024	8.5	1.9	0.0	0.0	0.0	2.7	13.1	2.9	15.5	10.7	27.8	2.2	14.3	0.0	1.6	1.3	0.0	0.1	1.3	1.3	0.0	1.3	3.4	15.5		125.3
Monday, October 28, 2024	9.8	0.0	2.8	0.0	0.0	0.0	8.9	0.6	11.9	14.4	15.4	13.2	9.8	24.8	3.5	1.2	0.0	1.5	1.4	0.0	0.0	1.2	4.3	4.7		129.5
Sunday, October 27, 2024	8.7	0.0	0.0	0.0	0.0	0.0	1.5	1.3	0.0	9.7	28.7	20.0	7.3	0.0	7.1	0.0	0.0	1.3	4.0	0.0	12.7	0.0	13.9	5.5		121.6
Saturday, October 26, 2024	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	51.7	7.5	0.0	2.6	3.1	0.0	0.0	4.7	26.3	0.0	1.6	1.2	0.0	0.0	10.2	9.5		119.1
Friday, October 25, 2024	1.3	0.0	0.0	0.0	0.0	1.3	13.5	1.3	2.6	5.2	0.0	12.0	16.9	25.8	11.1	10.3	9.8	21.3	3.9	14.8	1.5	0.5	6.0	0.0		159.1
Thursday, October 24, 2024	0.1	16.3	1.7	0.0	1.4	0.0	1.4	2.3	0.0	14.1	29.5	11.3	15.3	0.4	32.1	8.7	1.9	0.0	3.0	1.3	1.7	0.0	3.8	0.2		146.4
Wednesday, October 23, 2024	2.4	0.0	0.0	0.0	1.3	0.0	13.6	2.7	14.7	1.8	12.0	21.9	33.0	13.4	0.6	0.0	4.1	11.1	3.2	1.4	0.0	0.0	12.3	10.8		160.2
Tuesday, October 22, 2024	13.0	0.0	0.0	0.0	0.0	0.0	15.4	0.1	12.8	9.8	12.4	32.1	14.6	21.7	0.2	1.3	0.0	0.0	0.0	2.6	0.0	1.3	1.2	17.4		155.8
Monday, October 21, 2024	2.0	0.0	0.0	0.0	0.0	1.3	1.4	0.0	17.2	4.0	46.0	10.8	11.8	22.9	12.5	1.3	0.0	1.5	2.7	0.0	0.0	1.3	0.0	23.3		160.0
Sunday, October 20, 2024	29.0	2.2	0.0	1.2	0.0	1.4	0.0	13.3	32.7	5.9	1.9	5.5	1.3	0.0	0.0	12.0	16.7	0.7	0.0	1.6	5.6	5.3	11.6	9.7		157.6
Saturday, October 19, 2024	2.6	2.5	0.0	0.0	0.0	0.0	0.0	9.2	36.7	8.2	0.0	1.2	1.8	0.0	1.3	2.9	10.8	0.0	11.0	0.0	0.0	1.3	3.9	6.3		99.7
Friday, October 18, 2024	0.1	1.6	1.4	0.0	0.0	1.3	11.6	0.1	2.7	2.8	30.4	28.3	22.2	13.6	22.9	25.0	13.5	9.9	0.2	6.0	1.3	0.0	2.6	0.0		197.4
Thursday, October 17, 2024	0.0	0.0	0.0	0.0	1.4	0.0	12.2	0.4	13.8	6.6	24.2	23.3	11.3	15.9	13.6	0.0	0.4	2.0	0.0	0.0	2.4	2.8	3.1	0.1		133.6
Wednesday, October 16, 2024	1.8	4.8	0.0	0.0	0.0	0.0	12.6	0.4	23.1	15.5	6.4	18.2	26.5	16.6	0.0	3.1	2.6	0.1	1.4	2.3	0.0	0.0	1.1	10.9		147.5
Tuesday, October 15, 2024	14.4	0.0	0.0	0.0	0.0	1.4	14.1	0.0	33.1	14.2	0.0	6.6	42.1	18.2	1.7	0.0	0.0	1.5	2.2	0.2	0.0	1.3	0.0	12.4		163.4
Monday, October 14, 2024	9.4	0.0	0.0	0.0	1.5	0.0	12.3	0.0	26.8	9.3	22.5	11.5	17.6	8.8	2.9	0.0	0.0	0.0	1.5	0.6	1.4	0.0	5.1	11.9		143.0
Sunday, October 13, 2024	17.8	2.5	1.3	0.0	0.0	0.0	0.0	1.4	16.0	13.2	22.6	16.2	3.8	0.0	17.4	12.1	0.0	0.0	0.0	1.3	0.0	1.3	0.0	6.9		133.6
Saturday, October 12, 2024	0.0	1.3	0.0	0.8	0.0	0.0	0.0	7.3	29.5	0.3	0.0	0.0	12.1	8.7	0.0	1.9	0.1	1.3	1.2	0.1	6.0	11.5	1.7	0.0		83.7
Friday, October 11, 2024	8.8	0.0	0.0	0.0	0.0	0.0	15.2	0.0	19.5	3.6	29.1	9.8	9.3	1.8	1.7	0.0	2.2	0.0	1.8	0.0	2.8	7.3	8.6	1.7		123.3
Thursday, October 10, 2024	0.0	0.0	0.0	1.3	0.0	0.0	13.2	3.3	28.3	11.1	24.9	13.4	18.0	14.6	0.3	1.9	0.1	3.1	1.2	1.5	1.9	1.3	4.3	6.1		149.7
Wednesday, October 9, 2024	9.7	0.0	0.0	0.0	0.0	0.0	9.2	3.0	28.0	10.4	26.3	8.6	15.0	15.2	2.1	0.3	16.9	12.6	9.9	11.3	4.6	1.2	0.0	2.3		186.6
Tuesday, October 8, 2024	11.1	0.0	0.0	0.0	1.2	0.0	15.3	1.3	17.1	13.8	20.6	25.3	10.4	12.8	1.6	1.2	0.0	1.2	0.1	1.3	0.0	0.0	0.0	14.1		148.5
Monday, October 7, 2024	8.9	0.0	0.0	0.0	0.0	0.0	17.2	3.2	44.3	4.4	0.0	8.2	22.0	34.4	0.8	0.0	0.0	0.0	2.7	0.7	0.0	0.0	4.5	18.9		170.2
Sunday, October 6, 2024	10.2	1.3	0.0	0.0	0.0	1.5	0.0	0.0	0.0	3.0	20.4	29.9	21.4	12.7	0.0	8.8	1.2	0.0	0.0	0.3	13.8	1.3	0.0	12.5		138.4
Saturday, October 5, 2024	0.0	0.0	0.0	0.0	1.5	0.0	0.0	17.6	42.7	1.0	0.0	2.7	2.4	17.8	7.3	0.0	3.2	6.2	0.0	0.2	1.3	0.0	0.0	3.0		106.8
Friday, October 4, 2024	0.0	0.0	0.0	0.0	1.3	0.0	11.1	2.4	29.3	0.4	0.0	15.6	9.4	6.6	11.4	1.4	2.2	0.9	1.2	0.0	4.1	1.3	3.1	0.0		101.6
Thursday, October 3, 2024	12.9	0.0	0.0	0.0	0.0	1.4	10.5	1.2	27.6	10.3	16.3	15.1	1.6	0.0	0.0	0.0	5.7	6.0	1.8	0.0	0.0	1.3	6.8	0.0		118.4
Wednesday, October 2, 2024	7.9	0.0	0.0	0.0	0.0	0.0	10.8	3.1	14.8	10.5	9.3	3.0	12.8	16.3	12.9	8.7	4.3	0.1	2.6	1.4	1.9	0.8	8.9	11.1		141.2
Tuesday, October 1, 2024	10.3	1.6	0.0	0.0	0.0	1.2	12.8	4.1	25.6	21.2	43.9	18.2	13.5	13.8	8.1	0.0	0.0	2.3	2.0	0.0	3.3	1.2	2.7	11.7		197.6
Monday, September 30, 2024	9.0	0.0	1.3	0.0	0.0	0.0	14.3	1.4	25.2	11.5	18.5	9.2	0.1	10.9	4.5	1.2	0.0	1.3	0.2	0.0	0.0	0.0	2.5	9.6		120.7
Sunday, September 29, 2024	13.3	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.2	16.6	14.4	26.1	20.2	7.2	14.3	0.0	0.0	1.4	6.7	6.5	1.2	0.0	13.4		144.8
Saturday, September 28, 2024	0.0	0.0	2.3	0.0	0.0	0.0	1.5	19.2	36.8	4.7	0.0	0.0	5.3	0.0	0.9	0.2	3.8	20.6	14.1	0.4	1.5	0.0	0.0	7.7		119.1
Friday, September 27, 2024	4.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0	21.2	0.0	0.0	23.8	22.3	10.5	14.0	0.0	17.2	15.5	8.0	14.9	0.0	5.8	3.5	0.0		162.2
Thursday, September 26, 2024	0.0	0.0	0.0	0.0	0.0	0.0	15.3	0.0	12.5	3.3	14.8	12.0	12.1	18.4	20.7	11.7	0.6	2.2	2.5	0.0	4.3	12.4	16.0	0.2		158.8
Wednesday, September 25, 2024	11.0	0.0	1.8	0.0	0.0	1.7	15.6	0.0	21.8	1.4	14.5	45.5	15.0	4.7	0.0	1.6	6.8	5.6	3.3	3.6	1.4	0.0	7.1	1.9		164.3
Tuesday, September 24, 2024	13.4	0.0	0.0	0.0	1.4	0.0	16.8	0.1	20.4	7.5	20.5	12.7	9.1	11.2	2.8	1.4	0.0	3.5	2.9	5.1	1.4	0.0	2.6	12.1		145.1
Monday, September 23, 2024	14.8	0.0	0.0	0.0	0.0	0.0	11.6	0.0	22.2	15.0	13.7	21.5	7.7	14.6	3.5	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	3.9		136.6
Sunday, September 22, 2024	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	40.4	24.6	26.4	15.0	0.8	0.0	16.2	7.1	14.6	0.0							

Sum of Gallons		Hour																								Page 3
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total	
Monday, September 16, 2024	12.9	0.0	0.0	0.0	0.0	0.0	12.3	0.0	20.8	10.5	21.0	14.1	18.9	2.6	1.4	0.0	0.0	0.0	0.1	1.7	0.0	2.3	0.0	3.8	122.4	
Sunday, September 15, 2024	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	1.9	38.0	32.2	1.3	6.9	18.7	10.7	3.0	3.8	0.0	1.5	0.0	13.7	3.6	4.7	165.9	
Saturday, September 14, 2024	0.0	0.0	0.0	0.0	0.0	2.4	0.0	18.0	35.3	4.2	0.0	1.8	3.6	0.0	0.0	22.8	12.3	0.0	0.0	0.0	0.0	0.0	1.5	8.6	110.5	
Friday, September 13, 2024	1.5	1.4	0.3	0.0	0.0	0.0	12.5	0.0	29.2	7.7	2.0	1.5	24.5	22.9	0.0	0.0	3.5	4.0	3.9	12.9	0.0	1.4	0.0	3.1	132.4	
Thursday, September 12, 2024	17.9	1.8	0.0	1.4	0.0	1.5	12.7	2.1	16.7	5.8	38.1	4.7	13.0	16.9	0.0	0.0	0.3	2.0	7.4	1.1	3.3	1.4	9.6	0.1	157.8	
Wednesday, September 11, 2024	0.0	0.0	0.0	1.5	0.0	0.0	14.8	0.5	26.1	9.2	35.3	8.8	0.0	8.0	4.8	1.4	0.0	0.1	0.0	1.6	1.4	1.4	0.0	3.5	118.4	
Tuesday, September 10, 2024	17.0	0.0	0.0	0.0	0.0	0.0	13.1	0.2	26.8	5.8	16.3	10.6	26.3	7.9	2.8	1.5	1.4	1.4	0.0	2.4	4.3	1.8	1.6	0.0	141.3	
Monday, September 9, 2024	13.4	0.3	0.0	0.0	0.0	0.0	12.5	1.7	48.2	5.3	11.8	8.3	2.6	2.8	0.0	0.0	0.0	0.8	10.9	5.0	11.5	2.4	9.7	11.7	158.8	
Sunday, September 8, 2024	16.2	2.0	0.0	1.5	0.0	0.0	0.0	1.5	0.0	0.0	25.6	30.9	10.0	0.0	5.8	0.0	2.5	3.7	3.9	1.4	2.7	11.9	12.3	9.2	140.9	
Saturday, September 7, 2024	11.0	5.2	0.0	0.0	2.8	1.4	0.0	20.5	31.7	1.4	0.0	0.0	0.0	16.6	0.0	0.0	0.0	18.8	0.0	0.0	0.0	4.9	8.9	6.5	129.8	
Friday, September 6, 2024	0.0	0.0	0.0	0.0	1.4	1.4	13.1	0.0	14.9	23.3	20.9	20.9	5.6	2.6	16.3	6.0	26.6	8.8	5.9	12.0	0.0	1.4	0.0	5.1	186.1	
Thursday, September 5, 2024	14.4	0.0	0.0	0.0	0.0	0.0	14.5	0.0	17.5	10.3	7.6	18.2	15.6	3.7	13.6	1.8	1.4	2.2	6.7	1.5	1.9	0.0	3.8	2.3	137.1	
Wednesday, September 4, 2024	9.1	0.0	0.0	0.0	0.0	0.0	12.8	4.3	17.5	14.8	0.0	11.8	13.3	27.0	3.5	1.4	0.0	1.4	0.0	3.2	1.4	0.0	0.0	7.7	129.1	
Tuesday, September 3, 2024	3.0	0.0	0.0	0.0	0.0	0.0	10.8	1.7	31.6	3.4	18.5	12.3	14.9	12.2	1.5	1.4	0.0	0.0	1.4	0.0	0.0	1.5	0.0	4.4	118.7	
Monday, September 2, 2024	18.4	0.0	0.0	0.0	0.0	1.4	0.0	17.1	42.0	2.6	0.0	7.3	0.0	11.1	0.0	18.9	0.0	0.1	0.0	1.1	0.1	1.4	11.0	12.9	145.5	
Sunday, September 1, 2024	27.4	0.0	0.0	1.4	0.0	0.0	0.0	0.0	6.3	22.0	18.6	33.5	34.7	21.9	2.5	0.9	4.9	6.6	18.2	0.0	0.1	0.1	0.0	19.4	218.5	
Saturday, August 31, 2024	1.4	0.0	0.0	0.0	0.0	1.5	0.0	21.8	18.1	4.9	0.0	6.3	11.0	7.8	16.5	16.6	0.0	0.0	0.0	0.0	0.0	0.0	14.1	2.4	122.5	
Friday, August 30, 2024	2.3	0.2	0.0	0.0	0.0	0.0	13.4	28.7	28.6	5.6	0.0	0.0	0.0	0.1	1.5	0.0	0.0	2.9	9.5	19.7	0.0	7.3	0.0	0.0	119.7	
Thursday, August 29, 2024	0.0	0.0	0.0	0.0	1.0	0.0	0.4	36.4	23.8	9.5	0.0	0.6	19.9	3.2	0.0	0.0	0.0	3.5	17.7	15.9	0.6	2.6	0.2	4.4	139.9	
Wednesday, August 28, 2024	18.0	0.5	0.0	0.0	0.0	0.0	13.4	2.8	17.2	14.6	19.6	14.1	5.3	5.7	3.5	18.1	15.7	5.7	6.4	0.0	11.5	9.0	7.1	0.3	188.6	
Tuesday, August 27, 2024	11.7	0.0	0.0	0.0	0.0	0.0	15.9	0.6	24.2	10.6	18.4	12.2	6.6	0.0	1.4	1.4	0.0	1.4	0.0	0.0	3.2	2.3	0.0	10.9	120.8	
Monday, August 26, 2024	10.6	0.0	0.0	0.0	0.0	0.0	13.2	0.0	32.4	5.3	16.6	14.1	26.9	23.0	2.2	0.1	1.4	0.0	4.5	0.0	0.6	1.4	0.0	7.9	160.2	
Sunday, August 25, 2024	2.9	0.0	0.0	0.0	1.4	0.0	0.0	0.0	19.3	28.4	26.8	15.1	0.2	0.0	1.5	0.0	19.5	0.0	0.0	2.7	0.0	3.4	0.0	12.1	133.5	
Saturday, August 24, 2024	0.0	0.0	0.0	0.0	0.0	1.4	1.5	20.6	21.1	1.3	1.9	0.0	0.0	2.9	0.0	0.0	15.1	0.5	15.6	14.4	0.0	1.4	0.0	12.0	109.6	
Friday, August 23, 2024	0.0	0.0	0.0	1.4	0.0	0.0	14.0	0.6	17.7	3.4	8.2	17.3	12.1	21.6	1.4	0.0	0.0	2.4	5.8	12.8	7.1	14.8	0.3	0.0	140.9	
Thursday, August 22, 2024	0.0	0.0	1.4	1.4	0.0	1.4	14.3	0.0	14.4	12.4	16.0	8.6	13.4	2.9	14.0	6.9	10.7	5.8	10.3	0.0	25.5	0.0	0.0	4.3	164.1	
Wednesday, August 21, 2024	13.7	0.0	0.0	0.0	0.0	0.0	12.4	0.0	11.2	4.6	0.1	13.7	25.8	26.3	31.9	30.4	1.4	8.2	20.8	21.2	4.0	0.0	2.9	8.7	237.2	
Tuesday, August 20, 2024	7.7	0.5	0.0	0.0	0.0	1.4	11.5	1.7	21.0	17.4	30.9	19.2	13.1	28.4	8.3	0.0	0.0	0.0	1.4	0.0	0.0	1.4	3.5	17.9	185.5	
Monday, August 19, 2024	9.4	0.0	0.0	0.0	1.4	0.0	1.4	0.0	1.9	22.0	0.2	18.1	27.3	21.9	1.5	13.9	0.0	1.2	0.0	0.1	0.0	3.2	3.5	23.6	150.5	
Sunday, August 18, 2024	0.0	23.3	1.6	0.0	0.0	0.0	0.0	0.0	15.3	17.6	22.0	12.8	9.2	26.1	0.0	0.0	2.1	0.6	2.5	2.6	0.0	0.0	1.5	20.4	157.5	
Saturday, August 17, 2024	2.3	0.0	1.4	0.0																						

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Sum of Gallons		Hour																							
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total
Friday, July 19, 2024	4.6	0.0	1.5	0.1	1.3	0.0	9.2	2.8	0.0	2.7	0.0	32.4	19.1	19.2	10.7	0.0	0.0	0.0	4.1	1.4	0.1	0.0	18.1	7.0	134.3
Thursday, July 18, 2024	0.0	0.9	0.0	0.0	1.6	0.0	12.3	2.3	0.0	4.4	3.0	32.9	7.0	3.9	22.0	17.0	21.2	2.2	0.0	2.7	1.4	0.0	2.6	0.4	137.7
Wednesday, July 17, 2024	15.5	9.6	0.0	0.0	0.0	3.5	10.4	2.2	0.0	0.0	7.1	25.5	14.1	17.7	18.9	34.8	6.9	25.4	0.6	1.9	0.7	4.9	0.0	0.0	199.4
Tuesday, July 16, 2024	7.4	1.8	0.0	0.0	1.3	0.0	11.0	1.3	0.0	34.4	14.4	16.2	6.8	18.7	16.0	0.0	0.0	0.0	0.3	1.7	1.4	0.0	1.3	11.0	145.2
Monday, July 15, 2024	16.6	6.0	0.0	0.0	1.3	1.3	9.3	0.3	1.4	5.6	12.5	19.4	11.1	28.8	1.9	0.0	0.0	0.0	0.0	0.0	1.7	0.4	0.0	2.9	120.6
Sunday, July 14, 2024	14.4	2.9	0.0	0.0	1.9	0.0	0.0	0.0	0.0	21.0	24.6	18.8	4.9	1.3	2.2	0.0	0.1	2.3	11.9	0.0	9.5	0.0	0.0	2.4	118.3
Saturday, July 13, 2024	5.0	0.0	0.0	0.0	1.8	0.0	3.3	7.6	37.7	3.6	0.0	2.8	0.0	0.3	0.4	2.0	17.2	0.0	4.2	0.0	0.0	0.0	22.7	1.8	110.6
Friday, July 12, 2024	14.5	3.5	0.0	0.0	2.1	2.2	10.1	0.7	0.0	0.0	11.5	32.1	23.4	6.1	27.0	18.4	20.7	23.3	23.8	0.0	4.4	5.6	0.8	0.0	230.2
Thursday, July 11, 2024	0.0	0.0	0.0	0.0	1.6	2.4	13.1	0.6	1.3	12.4	24.8	30.4	3.4	16.5	2.2	0.3	0.0	17.4	0.0	0.0	0.0	0.0	2.6	9.7	138.7
Wednesday, July 10, 2024	6.6	0.0	3.7	0.0	0.0	0.0	11.2	1.9	19.7	25.6	6.4	10.4	21.5	15.7	0.0	0.0	5.2	0.5	0.0	0.0	0.0	1.7	17.0	0.9	147.8
Tuesday, July 9, 2024	2.0	0.0	0.0	0.0	0.0	0.0	11.8	0.0	0.0	0.0	4.9	30.8	13.1	16.9	5.8	0.0	0.0	0.0	1.3	0.0	1.4	0.0	2.4	19.8	110.3
Monday, July 8, 2024	2.2	15.5	0.0	1.4	0.0	0.0	10.0	0.0	0.0	1.4	28.1	12.5	21.8	1.6	20.2	1.3	0.0	1.4	4.6	0.0	0.0	2.8	0.0	8.8	133.7
Sunday, July 7, 2024	17.4	0.0	0.0	0.0	0.0	0.0	0.0	1.8	34.0	9.3	10.5	12.2	3.1	0.0	10.2	0.7	2.5	28.5	9.8	1.8	7.0	18.6	0.3	0.0	167.8
Saturday, July 6, 2024	10.8	1.4	0.0	0.0	0.0	0.0	24.2	22.4	4.7	0.0	0.1	0.0	1.4	19.0	14.7	3.9	0.0	0.0	0.0	0.0	1.3	0.0	0.0	3.2	107.0
Friday, July 5, 2024	33.5	3.8	0.0	0.0	0.0	3.5	0.0	2.9	0.0	0.0	4.2	24.9	12.2	19.8	19.0	13.5	1.3	0.2	1.3	11.6	11.3	7.2	1.8	1.8	173.8
Thursday, July 4, 2024	15.0	0.0	2.1	0.0	0.0	0.0	0.0	16.5	23.5	12.4	1.6	2.9	0.0	0.0	10.3	13.1	3.3	21.3	0.0	0.0	0.8	0.0	0.0	1.8	124.5
Wednesday, July 3, 2024	11.2	15.5	0.0	0.0	0.0	0.0	10.9	2.1	0.0	2.1	33.8	21.9	16.4	16.3	5.6	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	11.2	149.8
Tuesday, July 2, 2024	4.4	0.0	0.0	0.0	0.0	0.0	13.0	0.0	2.0	0.0	4.3	45.3	14.4	14.5	10.3	0.0	0.0	0.6	0.3	10.3	0.0	0.0	0.0	0.4	119.8
Monday, July 1, 2024	1.6	1.3	0.0	0.0	0.0	0.0	11.2	2.5	0.6	0.0	21.3	45.4	32.9	29.1	8.5	0.0	5.3	4.0	0.0	1.5	0.0	1.4	0.0	3.6	170.1
Sunday, June 30, 2024	14.3	17.9	0.0	0.0	0.0	0.0	20.6	0.0	0.0	1.3	7.9	40.4	15.7	23.2	25.1	0.0	0.0	0.0	4.7	0.0	0.0	1.1	1.8	0.0	173.8
Saturday, June 29, 2024	0.0	0.0	0.0	0.0	0.0	0.0	4.4	10.6	34.6	7.6	1.9	3.3	2.8	0.0	0.6	3.7	9.8	1.1	0.2	0.1	19.4	0.3	0.0	8.5	108.8
Friday, June 28, 2024	12.5	2.1	0.0	0.0	2.1	0.0	9.0	2.8	6.6	16.6	18.8	3.1	10.0	1.2	0.0	8.9	1.3	1.3	0.0	2.0	5.2	7.8	0.7	10.8	122.8
Thursday, June 27, 2024	20.6	3.0	0.0	0.0	0.0	0.0	10.6	4.7	0.0	29.2	28.6	12.9	9.9	8.0	13.2	29.7	22.1	14.1	2.3	7.2	3.6	0.0	5.8	3.0	228.4
Wednesday, June 26, 2024	12.2	2.6	0.0	0.0	0.0	0.0	10.7	0.6	0.0	3.7	30.4	20.3	17.2	0.0	3.4	0.0	2.5	0.0	4.5	0.9	0.0	0.0	0.0	0.2	109.2
Tuesday, June 25, 2024	19.6	0.0	5.1	0.0	0.0	0.0	12.2	2.5	0.0	0.0	20.6	21.8	13.6	21.9	3.6	0.0	0.0	0.0	2.1	0.0	2.0	0.0	0.0	10.3	135.4
Monday, June 24, 2024	11.3	0.0	0.0	0.0	0.0	0.0	8.5	0.2	12.5	4.1	13.4	20.2	13.8	13.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	13.8	111.6
Sunday, June 23, 2024	0.0	0.0	0.0	0.0	0.0	5.7	6.7	30.4	22.0	0.9	7.5	8.3	0.0	0.0	0.1	9.5	0.0	5.6	0.0	6.8	0.0	0.0	6.1	11.2	120.8
Saturday, June 22, 2024	3.6	0.0	0.0	0.0	0.0	0.0	3.4	0.0	4.7	4.2	10.1	38.6	18.1	14.2	12.4	3.6	24.8	0.3	21.6	0.0	2.0	6.7	3.7	6.0	177.9
Friday, June 21, 2024	0.0	0.0	0.0	2.7	0.0	0.0	8.3	20.1	35.0	13.6	3.8	0.0	6.9	0.0	23.7	11.3	5.8	8.1	9.1	0.9	0.0	0.0	6.0	4.2	159.6
Thursday, June 20, 2024	0.0	0.0	0.0	0.0	3.4	0.0	9.7	1.4	7.0	14.8	15.5	18.5	8.7	2.0	0.0	0.0	0.0	0.0	4.0	20.5	9.5	0.0	0.0	1.3	116.4
Wednesday, June 19, 2024	0.0	0.0	0.0	0.0	3.5	1.4	13.3	1.6	2.2	1.9	17.6	15.6	10.3	10.8	0.0	9.6	17.1	1.8	0.3	0.0	0.0	0.0	21.4	5.9	134.1
Tuesday, June 18, 2024	4.6	0.0	0.0	0.0	0.0	0.0	16.2	0.9	0.0	4.2	30.6	33.1	21.2	11.5	12.2	16.8	4.6	0.3	6.6	3.8	0				

KAW_R_AGDR1_NUM037_082925																									
Sum of Gallons		Hour																							
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total
Tuesday, May 21, 2024	21.4	0.0	0.0	0.0	0.0	2.2	17.4	55.4	95.8	271.6	266.8	270.3	271.1	271.8	270.0	266.5	268.5	267.0	271.3	271.1	269.9	271.4	270.4	270.5	4,240.4
Monday, May 20, 2024	276.8	272.9	269.1	268.3	270.0	267.3	264.1	252.5	59.7	20.0	0.1	0.1	0.1	0.1	2.6	0.1	0.1	2.9	0.1	0.2	0.1	19.5	7.7	4.7	2,259.0
Sunday, May 19, 2024	288.3	269.8	270.3	267.7	268.2	268.0	266.2	265.3	264.0	281.0	287.3	309.0	280.2	273.3	282.4	285.4	271.2	291.4	277.8	279.8	269.7	268.3	271.2	270.6	6,626.2
Saturday, May 18, 2024	0.1	7.0	0.0	0.0	2.1	0.0	0.1	9.8	198.2	278.3	281.0	297.5	294.8	267.4	267.4	268.8	272.8	272.7	272.7	270.3	274.0	268.4	268.6	273.4	4,345.5
Friday, May 17, 2024	16.8	1.3	0.1	0.1	0.1	0.1	85.1	263.4	146.4	19.8	17.5	35.7	7.0	0.0	0.0	211.5	271.1	101.7	0.2	0.2	4.6	1.5	7.0	0.0	1,191.1
Thursday, May 16, 2024	280.5	266.2	269.8	275.3	268.5	268.1	280.8	267.3	289.9	277.3	278.2	284.5	150.1	9.6	84.3	269.5	272.1	278.0	277.9	273.2	270.3	268.4	272.3	75.9	5,808.0
Wednesday, May 15, 2024	290.9	274.0	268.7	269.1	269.8	271.6	275.2	262.3	63.7	26.1	6.1	277.9	293.5	276.5	272.6	271.4	271.8	271.2	270.1	274.3	274.5	269.2	268.6	267.8	5,837.0
Tuesday, May 14, 2024	31.3	10.7	0.0	2.5	0.0	0.0	13.2	2.0	26.6	40.2	65.8	280.0	276.0	274.9	269.3	266.0	266.6	266.0	276.9	270.5	267.7	267.2	270.0	275.4	3,719.0
Monday, May 13, 2024	292.3	263.5	263.1	263.6	261.9	131.5	12.1	0.2	24.6	48.9	17.4	21.2	291.1	24.3	2.6	0.0	0.0	2.2	0.2	3.1	0.1	0.2	3.0	18.3	1,945.4
Sunday, May 12, 2024	233.0	282.4	269.1	266.3	268.6	269.2	269.6	270.8	270.8	241.7	48.5	45.2	121.4	271.8	273.2	272.0	273.3	265.1	273.7	264.1	260.9	262.1	273.1	269.9	5,815.9
Saturday, May 11, 2024	296.7	270.3	268.2	262.5	263.3	262.0	273.1	273.6	268.1	264.8	113.9	27.5	181.5	185.9	8.5	11.8	0.9	20.3	5.9	0.4	0.5	0.5	0.3	5.8	3,266.3
Friday, May 10, 2024	98.5	262.4	268.8	270.5	271.2	270.5	270.0	262.9	272.1	297.8	292.1	282.5	101.5	22.2	47.0	1.2	12.5	6.7	6.9	2.5	0.0	0.0	39.8	276.1	3,635.8
Thursday, May 9, 2024	275.3	268.0	265.0	266.3	266.1	272.1	274.3	261.2	282.6	269.8	283.7	275.9	293.1	291.7	182.7	0.1	0.1	12.2	31.4	272.1	137.8	0.4	279.5	98.3	4,859.6
Wednesday, May 8, 2024	298.0	280.6	269.5	269.1	269.0	268.5	275.5	202.7	162.4	304.4	288.7	305.1	129.4	101.8	273.5	279.0	269.2	266.2	266.0	270.8	270.0	280.5	289.6	272.0	6,161.6
Tuesday, May 7, 2024	268.3	164.1	5.8	0.0	0.1	1.8	15.3	0.4	247.6	287.6	286.8	292.7	295.1	296.7	282.2	276.0	273.1	273.3	274.3	268.7	273.9	272.7	270.1	279.9	4,906.2
Monday, May 6, 2024	287.3	282.1	274.5	276.3	275.7	270.7	280.5	261.9	288.8	98.4	18.4	21.8	17.9	18.9	187.5	276.4	279.1	274.6	267.4	270.0	271.4	278.3	270.1	271.5	5,319.5
Sunday, May 5, 2024	281.7	267.5	266.7	267.6	267.5	269.2	267.7	266.0	262.1	285.0	298.9	307.2	287.4	281.3	288.3	283.2	266.1	269.7	268.7	271.6	268.5	267.8	275.3	273.9	6,608.7
Saturday, May 4, 2024	20.0	1.6	0.0	0.0	3.8	37.9	266.4	271.6	284.0	297.0	277.3	264.3	280.6	282.1	283.7	274.7	273.6	277.3	269.2	270.0	268.5	269.6	269.4	270.5	5,012.9
Friday, May 3, 2024	141.0	197.1	0.0	0.0	3.4	0.0	10.8	163.3	85.4	3.6	9.9	0.0	0.0	0.1	0.0	0.0	0.0	1.9	0.0	1.9	2.5	0.1	0.0	13.9	635.3
Thursday, May 2, 2024	25.8	0.0	0.0	0.0	0.0	0.0	1.9	10.7	37.1	55.6	16.9	28.1	2.2	0.0	0.0	0.0	0.0	0.1	2.7	6.1	10.1	0.0	2.1	2.3	201.6
Wednesday, May 1, 2024	23.4	15.0	0.0	0.0	0.0	0.0	189.3	120.3	30.6	9.9	30.1	19.3	0.1	0.1	0.1	0.1	0.1	0.3	12.1	16.4	7.2	0.9	16.3	9.3	500.8
Tuesday, April 30, 2024	15.9	20.7	0.0	5.3	0.0	0.0	11.4	0.5	53.6	18.2	18.8	6.7	0.0	0.0	0.0	0.0	0.0	1.9	0.0	4.6	7.5	2.0	8.1	6.2	181.3
Monday, April 29, 2024	15.4	0.0	0.0	0.0	0.0	0.0	10.0	2.2	25.0	25.6	16.1	15.5	0.0	2.2	6.6	0.0	0.0	2.1	2.9	0.1	0.1	0.0	12.3	20.8	156.9
Sunday, April 28, 2024	281.6	266.0	266.7	267.1	263.7	261.9	265.8	229.0	81.8	3.9	0.1	4.1	29.9	8.9	0.2	21.6	0.4	0.2	3.4	2.0	15.4	6.9	16.1	10.5	2,307.3
Saturday, April 27, 2024	286.9	270.0	265.6	271.6	264.4	268.3	268.5	265.3	262.6	266.6	273.8	309.2	58.6	24.0	12.8	19.1	18.1	29.3	13.6	1.0	2.4	1.9	0.1	135.0	3,588.7
Friday, April 26, 2024	11.4	2.1	0.0	0.0	0.0	0.0	12.7	3.7	26.5	213.3	259.2	287.7	316.3	287.3	282.9	140.7	2.0	0.1	2.8	0.2	5.6	3.2			

Sum of Gallons Date	Hour																							Grand Total	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22		23
Saturday, March 23, 2024	21.5	0.0	0.0	0.0	0.0	3.1	0.0	219.1	269.4	166.9	37.3	129.8	294.2	313.3	270.4	280.5	281.4	289.0	272.8	264.9	263.9	264.6	270.6	275.7	4,188.6
Friday, March 22, 2024	8.7	272.4	269.0	267.2	266.4	270.1	289.4	255.8	256.4	99.4	31.2	23.0	7.0	27.7	2.4	3.3	0.1	0.1	7.5	0.1	0.1	2.2	0.1	5.3	2,364.8
Thursday, March 21, 2024	22.6	0.1	0.0	0.0	0.0	0.0	15.3	1.9	16.8	18.0	27.0	19.2	17.3	8.9	18.9	34.8	2.6	20.8	0.5	0.1	4.0	2.2	0.0	13.8	245.2
Wednesday, March 20, 2024	9.5	0.0	0.0	0.0	0.1	0.0	16.9	0.7	28.6	18.2	12.9	8.4	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.2	5.0	0.2	0.1	5.1	109.4
Tuesday, March 19, 2024	19.2	0.2	0.0	0.0	0.0	2.5	11.8	0.1	21.8	16.7	27.9	18.3	24.0	9.7	3.3	0.0	0.0	2.0	0.3	0.1	0.1	2.2	3.0	10.5	173.7
Monday, March 18, 2024	21.5	3.2	0.0	0.0	0.0	0.0	9.5	201.1	140.5	20.1	24.8	17.7	31.2	0.0	2.8	5.9	0.1	7.1	0.1	0.2	6.7	0.1	0.1	9.6	502.4
Sunday, March 17, 2024	24.2	7.9	4.9	0.0	0.0	0.0	4.9	10.9	28.0	15.8	0.1	0.1	2.2	4.3	2.0	0.2	2.6	0.1	3.0	28.2	24.8	5.3	6.1	0.1	175.8
Saturday, March 16, 2024	25.6	0.0	0.0	38.8	265.8	262.7	261.8	273.0	215.2	3.5	0.0	0.0	4.4	49.8	4.5	32.9	10.4	0.0	19.8	4.3	3.3	4.5	0.1	7.3	1,487.6
Friday, March 15, 2024	1.5	0.0	0.0	0.0	4.4	0.0	9.2	0.5	24.2	19.5	33.8	1.0	3.2	0.0	2.3	0.1	3.3	2.3	8.5	2.8	16.5	12.1	0.1	1.5	147.0
Thursday, March 14, 2024	0.0	0.0	0.0	0.0	0.0	2.7	8.0	6.5	40.4	23.8	22.0	9.7	28.1	0.0	0.0	3.4	189.3	264.3	270.0	270.9	269.2	267.2	65.9	0.6	1,742.0
Wednesday, March 13, 2024	12.9	0.3	0.0	0.0	0.0	0.0	14.9	3.3	15.1	19.3	12.1	23.6	15.2	19.7	9.8	0.1	0.8	0.0	13.6	119.5	134.3	0.8	2.3	4.2	421.5
Tuesday, March 12, 2024	41.7	272.0	268.4	268.3	268.0	267.5	277.1	266.2	303.9	130.0	65.5	34.3	17.8	7.5	4.3	7.5	1.1	0.0	4.6	2.9	7.0	0.1	0.1	15.2	2,530.9
Monday, March 11, 2024	261.2	259.6	258.0	255.9	258.4	260.9	262.1	263.6	194.8	24.1	51.5	36.3	29.2	4.3	5.2	2.6	2.4	0.3	0.2	0.3	5.3	0.2	0.2	5.3	2,441.7
Sunday, March 10, 2024	0.2	0.1		0.2	0.1	0.2	0.1	0.2	2.8	6.5	34.2	34.7	19.4	3.2	5.5	4.8	3.3	3.6	3.3	3.4	5.4	3.3	3.3	24.9	162.7
Saturday, March 9, 2024	2.5	0.0	2.2	0.0	0.0	0.0	0.1	2.7	0.0	0.0	22.8	33.5	219.5	279.2	268.5	269.3	281.4	285.0	24.2	0.3	5.1	0.2	12.3	25.0	1,733.9
Friday, March 8, 2024	0.2	0.2	0.0	0.1	64.2	266.6	270.9	261.6	196.8	10.2	17.1	20.7	24.0	4.8	14.9	13.2	0.1	2.2	0.0	9.6	0.0	2.1	5.5	8.1	1,193.1
Thursday, March 7, 2024	267.8	271.0	267.2	268.0	267.6	266.2	275.2	135.0	39.3	25.8	19.7	9.4	2.1	0.1	6.7	22.3	18.8	20.3	10.3	4.3	3.7	1.3	2.1	12.6	2,216.7
Wednesday, March 6, 2024	9.0	14.7	0.0	0.0	0.0	0.0	12.5	0.0	157.8	268.6	274.7	267.5	273.6	262.5	262.9	261.8	265.3	270.0	281.0	267.2	265.4	268.7	279.9	280.9	4,244.0
Tuesday, March 5, 2024	19.0	287.6	264.5	261.1	261.3	262.8	273.3	260.0	73.8	3.6	30.4	11.3	29.1	12.8	4.0	0.2	0.1	0.1	0.1	0.1	5.5	0.1	0.1	2.1	2,063.0
Monday, March 4, 2024	5.3	13.1	0.1	0.1	0.1	0.1	11.9	0.3	38.2	13.3	17.7	8.8	19.3	14.8	2.8	0.2	0.2	3.0	2.4	0.2	0.1	0.1	0.1	14.9	166.8
Sunday, March 3, 2024	22.1	7.6	6.3	0.0	2.2	3.1	0.0	2.0	7.5	33.9	24.6	31.6	9.4	0.0	4.9	0.0	0.0	0.1	5.4	4.0	9.2	0.3	0.2	19.0	193.2
Saturday, March 2, 2024	62.2	0.0	0.0	0.0	1.9	0.0	1.9	0.0	0.0	17.1	21.6	30.8	39.6	29.0	0.4	2.0	1.4	0.0	6.0	0.2	6.4	0.1	10.1	16.4	247.1
Friday, March 1, 2024	0.0	0.0	0.0	0.0	0.0	0.0	9.8	0.0	19.2	4.0	0.5	6.5	32.8	0.1	0.1	22.0	29.0	25.4	14.7	93.4	280.2	291.7	304.7	261.7	1,395.8
Thursday, February 29, 2024	0.3	0.2	0.1	0.1	3.4	0.1	10.4	0.6	43.1	26.7	164.5	269.8	267.0	275.0	169.8	2.1	0.2	2.3	4.3	2.1	87.3	286.3	285.7	226.6	2,128.1
Wednesday, February 28, 2024	10.1	14.2	0.0	0.0	3.0	0.0	10.4	2.5	19.8	9.0	25.5	17.8	24.3	8.5	11.6	31.7	6.0	4.0	2.5	265.6	195.1	0.1	30.6	24.5	716.8
Tuesday, February 27, 2024	22.5	4.6	0.0	0.0	0.0	0.0	16.2	0.0	82.3	5.6	43.0	15.2	14.3	0.2	7.6	3.6	3.4	0.2	0.1	3.8	0.4	0.2	0.2	19.2	242.8
Monday, February 26, 2024	0.1	18.1	0.0	1.7	251.6	262.3	270.6	254.2	112.8	2.5	33.0	22.4	10.8	25.1	13.6	0.0	0.0	0.0	3.4	5.6	0.0	6.8	12.3	21.4	1,328.3
Sunday, February 25, 2024	1.4	5.5	1.7	0.1	0.1	0.0	3.2	0.0	0.1	20.3	37.3	21.7	8.0	21.5	25.5	25.6	12.2	10.3	0.0	8.8	0.0	0.1	3.9	7.9	215.3
Saturday, February 24, 2024	15.3	0.7	0.0	0.0	0.0	0.0	0.0	0.7	39.0	13.3	1.4	4.0	0.1	3.2	2.0	24.8	0.1	3.6	4.7	2.8	0.3	0.3	0.3	17.4	134.0
Friday, February 23, 2024	0.0																								

Sum of Gallons

Hour

Date

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Grand Total

Wednesday, January 24, 2024

42.6

0.4

0.0

0.0

0.0

0.0

12.8

1.7

9.9

5.0

17.0

21.8

30.0

10.3

13.2

0.2

10.7

0.4

0.5

7.5

5.6

0.3

8.8

5.7

204.4

Tuesday, January 23, 2024

20.5

0.1

0.1

0.2

0.2

0.1

10.4

0.5

16.7

5.0

23.1

39.8

15.9

27.7

4.6

0.1

0.0

0.0

0.5

2.9

0.0

2.2

4.3

8.3

183.1

Monday, January 22, 2024

21.3

0.0

0.0

0.0

1.3

0.0

0.0

0.0

22.7

3.9

0.0

12.4

6.7

0.1

0.1

15.3

6.0

0.1

0.1

0.2

0.1

0.1

16.4

28.9

135.8

Sunday, January 21, 2024

5.9

21.8

0.0

0.0

0.0

0.0

0.0

2.2

0.0

0.0

19.6

31.6

33.7

20.8

9.3

0.3

17.5

0.2

0.3

0.2

4.3

1.5

15.9

10.3

195.4

Saturday, January 20, 2024

14.6

3.6

0.0

0.0

0.0

0.0

0.0

1.3

54.4

14.2

1.4

2.7

7.3

15.0

1.1

2.5

3.0

25.7

14.1

0.3

13.4

9.9

16.2

1.1

201.8

Friday, January 19, 2024

4.8

0.0

0.0

0.0

1.9

0.7

0.0

0.0

0.0

27.5

30.8

21.9

37.5

4.1

3.6

10.5

1.3

1.8

0.1

0.1

0.1

0.1

1.6

19.4

168.0

Thursday, January 18, 2024

27.1

9.6

8.3

11.1

6.8

7.3

6.5

6.4

10.4

23.2

8.6

30.7

10.1

23.2

16.0

1.9

9.8

44.4

0.0

0.0

0.0

4.1

10.6

0.1

276.3

Wednesday, January 17, 2024

23.0

0.2

0.0

0.0

0.0

0.0

9.9

3.7

14.0

2.1

15.9

19.9

53.9

4.3

14.7

0.0

21.9

4.6

10.3

2.0

1.5

1.6

1.6

5.9

211.1

Tuesday, January 16, 2024

275.5

262.4

263.2

263.5

263.2

263.8

139.5

2.5

0.0

0.0

5.9

32.8

29.9

22.1

0.2

0.0

0.0

0.1

1.4

3.5

0.1

0.0

0.0

14.1

1,843.9

Monday, January 15, 2024

3.4

14.2

0.0

0.0

0.0

0.0

7.7

3.0

0.1

0.1

4.1

23.3

40.6

287.7

273.5

267.8

265.5

268.9

265.4

260.2

265.1

268.7

270.0

272.8

3,062.2

Sunday, January 14, 2024

35.7

0.0

0.0

0.0

0.0

0.0

0.0

0.0

5.5

9.5

62.5

34.3

1.9

22.6

22.4

6.5

1.9

0.1

0.8

23.8

14.7

8.4

13.1

1.0

264.7

Saturday, January 13, 2024

30.3

0.0

1.6

0.0

0.0

0.0

6.6

1.0

31.6

24.0

0.1

0.1

0.0

0.1

2.5

0.0

0.5

0.6

0.2

0.2

0.1

1.8

0.1

2.6

104.2

Friday, January 12, 2024

1.8

2.9

3.2

1.9

4.4

2.0

2.0

1.9

28.9

27.6

36.4

14.6

0.3

10.7

1.5

1.7

4.8

0.3

0.2

0.2

0.1

1.0

0.2

10.8

159.3

Thursday, January 11, 2024

85.7

7.4

1.8

1.7

137.9

191.9

189.5

193.8

139.1

12.1

28.9

24.3

12.1

18.5

21.1

11.4

2.9

3.4

1.8

1.9

39.9

11.1

1.9

1.9

1,142.0

Wednesday, January 10, 2024

55.0

20.5

2.5

2.3

2.3

2.3

11.6

4.6

28.3

8.4

8.5

29.3

16.1

20.7

13.2

78.2

189.7

192.7

191.3

188.2

83.3

3.3

4.0

1.7

1,157.9

Tuesday, January 9, 2024

35.0

24.2

2.4

2.5

2.5

2.5

10.9

4.0

15.9

6.7

108.5

32.1

17.0

37.0

4.3

3.0

2.8

2.9

314.1

Monday, January 8, 2024

6.8

16.7

0.2

0.1

0.2

0.3

10.1

1.0

15.8

7.6

0.4

11.7

46.0

35.3

10.4

1.4

1.0

1.0

165.9

Sunday, January 7, 2024

31.9

11.7

0.2

1.1

0.4

1.7

9.4

2.4

4.3

180.1

197.5

206.0

197.2

193.0

89.3

0.5

0.5

3.3

2.1

1.6

1.8

3.1

1.9

16.3

1,157.2

Saturday, January 6, 2024

11.7

14.3

1.4

0.1

0.1

0.1

13.7

3.2

0.2

7.5

30.4

37.2

24.6

47.7

0.8

0.2

0.2

0.1

1.7

2.0

0.2

1.4

1.6

4.8

205.2

Friday, January 5, 2024

5.1

12.1

0.1

0.1

0.1

0.1

10.8

2.8

41.8

17.9

6.7

28.5

0.1

0.1

1.9

0.1

0.1

0.2

1.6

3.0

2.9

0.2

0.1

4.9

140.9

Thursday, January 4, 2024

4.9

9.2

0.0

0.0

1.4

0.0

9.3

2.0

14.2

2.6

17.9

36.0

16.0

23.1

3.8

0.1

0.1

0.2

2.4

0.8

0.3

0.3

0.2

9.3

154.3

Wednesday, January 3, 2024

11.0

8.7

0.0

0.0

2.2

0.0

11.4

2.1

20.4

1.5

0.2

21.8

46.7

34.1

1.5

0.0

1.4

0.0

0.1

0.0

1.4

0.1

10.9

5.3

180.8

Tuesday, January 2, 2024

21.1

5.7

0.0

0.0

0.0

0.0

0.0

0.0

0.1

9.3

39.1

15.0

197.3

189.6

190.5

198.6

189.8

87.8

2.4

3.4

16.9

0.2

0.1

14.5

1,181.5

Monday, January 1, 2024

7.1

24.5

2.6

0.0

0.0

0.0

0.0

1.5

3.8

14.7

31.8

38.8

26.7

22.6

9.5

0.1

6.4

0.8

1.6

0.2

11.7

7.6

0.1

19.4

231.7

Sunday, December 31, 2023

12.4

0.1

0.0

0.1

0.1

7.0

0.1

1.4

0.1

0.6

156.2

206.8

186.5

186.3

191.6

192.7

186.7

201.5

65.4

0.3

0.3

0.2

0.1

1.9

1,598.2

Saturday, December 30, 2023

194.3

188.2

187.0

188.8

186.9

187.1

187.0

187.3

188.3

191.7

192.0

50.6

8.1

21.0

13.7

15.3

28.1

0.9

17.6

0.1

2.2

1.5

19.2

14.8

2,271.6

Friday, December 29, 2023

193.3

186.6

185.3

186.6

185.7

184.8

187.4

183.8

184.6

183.7

183.0

203.3

197.2

169.8

15.4

1.9

0.0

0.1

0.0

2.1

0.0

0.0

12.5

117.4

2,764.2

Thursday, December 28, 2023

27.7

1.5

0.1

0.0

0.0

0.0

10.0

3.1

0.1

3.0

162.9

99.5

20.2

33.5

7.2

0.1

0.1

0.4

0.7

0.1

0.1

0.1

86.4

186.8

643.5

Wednesday, December 27, 2023

191.7

188.7

183.3

183.8

184.6

184.4

189.7

182.8

184.1

183.6

107.2

19.9

17.2

27.2

0.0

0.0

0.0

0.2

0.5

0.0

0.

Sum of Gallons		Hour																								Page 8
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total	
Sunday, November 26, 2023	8.5	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	4.7	30.0	35.4	4.5	1.5	0.0	12.1	21.9	1.1	0.0	0.0	35.1	11.3	5.6	8.5	181.6	
Saturday, November 25, 2023	19.2	0.0	0.0	0.0	1.6	0.0	0.0	1.5	0.0	15.7	16.3	19.3	6.0	35.0	2.7	16.2	23.4	2.8	19.5	4.3	10.3	40.5	3.2	12.2	249.8	
Friday, November 24, 2023	16.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.3	40.6	25.2	28.3	31.0	0.1	0.0	0.0	1.0	10.7	1.5	0.1	0.0	1.5	10.1	176.6	
Thursday, November 23, 2023	16.6	0.1	0.0	0.0	1.3	0.0	0.0	0.0	8.4	38.9	24.4	0.2	14.3	3.5	4.9	28.6	8.3	2.6	0.2	0.0	0.0	8.7	19.0	0.2	180.2	
Wednesday, November 22, 2023	9.2	5.4	0.0	1.4	0.0	0.0	8.9	7.0	0.0	1.8	20.2	21.7	25.0	26.0	3.7	0.0	0.0	2.0	0.3	1.8	0.1	0.0	1.5	6.5	142.5	
Tuesday, November 21, 2023	16.4	1.5	0.0	0.0	0.0	0.0	18.5	2.0	0.0	2.0	35.7	26.2	10.5	15.9	24.3	23.3	26.2	28.1	5.8	2.7	0.4	1.7	0.6	10.2	252.0	
Monday, November 20, 2023	38.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	16.1	30.1	22.0	1.5	0.6	3.5	3.3	0.0	0.3	0.0	7.5	0.0	2.2	2.4	26.9	28.5	185.0	
Sunday, November 19, 2023	11.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	30.0	32.8	2.4	15.1	8.9	19.2	8.9	17.5	1.1	37.5	0.1	1.3	0.0	12.8	200.9	
Saturday, November 18, 2023	16.0	8.5	0.0	1.3	0.0	1.5	0.0	38.3	1.2	0.0	0.0	5.5	1.2	0.4	0.1	0.0	0.5	10.1	7.6	17.8	17.2	1.2	2.1	12.0	142.3	
Friday, November 17, 2023	1.7	0.0	0.0	0.0	0.0	1.4	9.5	9.0	17.4	5.0	4.6	28.0	21.6	1.9	1.9	1.0	3.6	0.0	1.3	1.6	5.7	14.8	20.1	4.8	154.9	
Thursday, November 16, 2023	0.0	1.4	0.0	1.3	0.0	0.0	2.6	1.5	16.3	38.1	12.5	20.8	13.9	10.8	18.0	24.0	3.3	25.4	14.6	14.6	0.0	1.6	0.0	8.3	229.1	
Wednesday, November 15, 2023	5.7	13.8	0.0	0.0	1.4	0.0	13.3	3.9	23.0	2.2	0.0	38.3	9.9	5.4	21.1	0.0	0.0	2.8	0.3	19.6	0.0	2.6	3.8	0.0	166.9	
Tuesday, November 14, 2023	11.7	0.0	0.0	0.0	0.0	0.0	12.2	1.8	20.5	20.6	27.4	16.4	30.0	34.0	4.6	0.0	0.0	3.5	1.1	0.2	0.0	1.4	0.0	7.9	193.4	
Monday, November 13, 2023	26.3	14.3	0.0	0.0	0.0	0.0	13.5	1.9	25.8	21.7	5.8	16.9	0.0	0.4	3.6	0.0	0.0	5.6	3.5	0.0	12.4	2.0	0.0	29.0	182.5	
Sunday, November 12, 2023	27.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	24.7	31.5	12.5	4.9	27.5	0.2	14.9	0.5	1.8	0.0	0.0	0.0	0.0	22.2	170.7	
Saturday, November 11, 2023	14.2	11.0	0.0	0.0	0.0	1.3	0.0	3.2	24.1	16.3	4.0	6.6	24.2	22.5	0.0	0.0	2.3	18.7	0.0	0.0	4.7	4.2	0.0	7.6	164.6	
Friday, November 10, 2023	2.6	0.5	0.0	0.0	1.3	0.0	12.1	1.8	32.7	2.1	3.9	28.2	22.4	45.5	9.6	0.1	0.1	0.2	1.4	5.2	0.9	2.1	2.7	32.7	208.1	
Thursday, November 9, 2023	1.4	1.5	0.0	0.0	0.0	0.0	10.7	4.9	23.1	5.5	0.0	16.3	15.9	15.0	0.0	12.4	1.4	0.0	2.1	1.8	7.5	0.0	1.3	19.5	140.5	
Wednesday, November 8, 2023	8.1	15.4	0.6	0.0	0.0	1.3	13.9	2.5	19.2	2.5	0.0	20.6	19.0	10.5	0.0	2.8	0.3	18.1	40.8	2.7	19.5	0.2	1.9	25.3	225.2	
Tuesday, November 7, 2023	26.8	4.2	0.0	0.0	1.5	2.7	16.1	8.9	22.3	12.6	6.3	26.6	20.0	28.2	11.1	0.0	0.0	0.3	1.4	0.0	1.3	0.0	0.0	22.0	212.1	
Monday, November 6, 2023	19.9	3.0	0.0	0.0	0.0	0.0	11.3	3.0	32.9	19.4	15.1	23.3	0.0	0.9	2.1	0.0	0.0	0.0	1.6	0.0	156.2	191.2	190.8	73.3	744.0	
Sunday, November 5, 2023	3.7	12.4	0.0	0.0	1.4	0.0	0.0	0.0	9.3	23.6	17.0	13.5	4.5	0.0	0.0	0.0	0.2	8.5	19.1	3.5	35.4	9.8	11.0	6.0	178.8	
Saturday, November 4, 2023	0.0	0.0	0.0	2.7	0.0	0.0	8.0	0.9	0.0	0.0	26.8	36.8	19.4	27.9	2.1	0.0	0.0	3.8	0.2	0.8	1.4	2.8	0.5	13.5	147.6	
Friday, November 3, 2023	10.4	0.0	0.0	122.1	183.2	182.4	192.4	183.6	65.4	5.5	17.2	39.5	12.0	15.8	12.6	67.6	30.9	8.0	2.7	2.9	2.1	11.3	25.4	2.7	1,195.5	
Thursday, November 2, 2023	11.3	0.0	0.0	0.0	0.0	0.0	16.5	4.0	22.5	18.7	37.8	24.6	0.0	16.6	2.2	1.4	0.2	6.9	113.5	188.6	187.7	191.4	197.1	43.3	1,084.0	
Wednesday, November 1, 2023	15.2	0.0	0.0	0.0	1.5	0.0	21.0	1.4	11.5	1.0	8.8	42.0	24.2	0.0	0.0	16.2	19.3	15.7	6.4	3.2	1.8	0.0	20.7	11.3	221.1	
Tuesday, October 31, 2023	15.1	1.7	0.0	0.0	0.0	1.3	15.1	1.2	100.5	188.7	200.5	195.4	193.9	131.0	0.0	0.0	1.3	2.1	1.7	0.1	0.0	1.4	7.6	7.3	1,066.1	
Monday, October 30, 2023	9.7	0.0	0.0	0.0	0.0	0.0	13.3	1.3	10.0	7.5	17.4	24.3	26.6	15.5	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0	1.3	3.9	133.9	
Sunday, October 29, 2023	28.7	0.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7	13.5	34.6	12.6	8.7	11.6	7.1	1.3	0.0	0.5	6.7	30.5	0.0	18.7	19.0	202.4	
Saturday, October 28, 2023	6.8	1.4	3.4	0.0	0.0	0.0	0.0	0.0	4.3	17.3	26.2	30.5	7.4	1.3	0.0	10.5	0.8	0.0	0.0	2.9	0.0	2.4	4.6			

Sum of Gallons																									KAW_R_AGDR1_NUM037_082925	
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total	
Thursday, September 28, 2023	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	19.8	8.6	18.7	37.5	7.6	10.6	1.4	0.0	4.5	4.0	12.6	1.9	0.0	28.5	4.6	10.4	172.6	
Wednesday, September 27, 2023	14.4	0.0	0.0	0.0	0.0	0.0	29.5	4.6	17.0	4.8	1.9	26.9	28.2	16.1	23.3	15.8	16.0	50.2	22.3	0.0	1.9	1.8	0.5	0.0	275.1	
Tuesday, September 26, 2023	18.5	0.6	0.0	0.0	0.0	0.0	22.0	1.1	34.0	15.3	41.3	18.2	34.9	0.0	5.5	0.0	0.0	2.7	1.5	0.1	0.1	0.0	1.9	12.1	209.8	
Monday, September 25, 2023	27.3	0.0	0.6	0.0	0.0	0.0	30.0	0.5	16.6	4.8	17.3	32.2	22.1	1.5	4.5	0.0	0.0	23.4	0.1	0.0	1.4	0.0	0.0	12.8	195.2	
Sunday, September 24, 2023	10.4	10.5	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	35.4	34.3	21.7	0.0	0.1	0.2	0.2	17.7	0.5	0.0	1.5	0.0	16.3	5.5	155.7	
Saturday, September 23, 2023	2.9	0.0	2.0	0.0	0.0	0.0	18.7	10.6	0.0	0.0	0.3	7.6	0.0	2.1	39.4	0.0	0.0	0.0	0.9	0.5	0.3	0.3	1.9	0.3	88.0	
Friday, September 22, 2023	0.0	0.0	0.0	0.0	0.0	0.0	17.2	0.2	24.3	14.5	20.2	18.2	12.3	16.8	222.1	269.0	272.2	271.4	266.6	271.6	273.4	264.1	20.7	13.7	2,268.5	
Thursday, September 21, 2023	9.6	0.0	0.0	0.0	0.0	0.0	27.7	6.4	13.5	3.5	10.5	18.8	21.8	1.9	2.0	0.1	6.5	3.7	2.0	1.4	1.4	2.8	13.5	14.8	161.7	
Wednesday, September 20, 2023	9.6	0.0	0.0	0.0	1.3	0.0	22.6	2.6	24.7	7.0	5.1	18.5	18.4	16.6	2.1	4.7	17.4	47.4	20.0	17.4	27.5	31.9	8.2	0.0	303.2	
Tuesday, September 19, 2023	2.5	0.0	0.0	0.0	3.5	0.0	16.5	5.8	14.4	8.4	11.1	19.5	10.3	20.6	2.8	0.0	0.0	23.3	0.0	0.0	0.0	0.0	5.9	7.7	152.4	
Monday, September 18, 2023	10.8	0.0	0.0	0.0	0.0	0.0	16.9	4.6	38.9	10.0	0.0	2.5	28.3	3.8	0.0	0.0	0.0	16.3	0.4	1.7	0.3	2.5	8.2	19.0	164.2	
Sunday, September 17, 2023	31.5	4.0	1.5	0.0	0.0	0.0	0.0	0.0	1.4	7.3	23.2	47.4	280.8	271.6	265.6	269.7	275.0	272.6	294.7	20.6	30.1	8.3	1.4	5.3	2,111.7	
Saturday, September 16, 2023	263.2	265.0	266.9	267.7	268.2	265.3	281.5	204.6	0.0	9.9	29.0	32.0	21.5	35.6	7.2	3.0	1.5	3.9	0.1	0.1	0.0	1.4	1.4	2.9	2,231.8	
Friday, September 15, 2023	7.2	0.9	0.7	0.8	1.2	1.4	20.5	6.2	34.8	8.5	5.8	30.4	2.6	0.0	6.6	1.1	1.4	7.6	8.1	173.0	298.5	251.2	85.7	267.9	1,222.4	
Thursday, September 14, 2023	0.3	0.2	0.1	0.1	0.2	0.2	17.5	4.5	64.4	18.1	7.3	29.5	3.9	3.9	3.1	95.8	21.0	34.4	26.5	35.4	2.5	5.3	15.2	1.5	390.8	
Wednesday, September 13, 2023	13.3	16.9	0.0	0.0	0.0	0.0	5.6	5.0	24.9	19.7	16.8	16.6	31.9	20.9	0.1	9.1	0.2	35.3	12.2	21.9	61.5	1.9	4.3	1.4	319.2	
Tuesday, September 12, 2023	24.3	11.5	11.5	11.3	11.0	10.9	17.0	13.7	15.9	5.5	0.4	1.3	14.3	29.9	2.2	1.5	0.1	0.3	3.2	0.2	0.2	1.7	3.4	8.9	200.3	
Monday, September 11, 2023	27.8	12.5	12.1	12.5	11.5	13.5	26.1	7.5	21.3	4.7	25.1	29.5	13.4	20.6	1.7	1.2	0.0	27.1	7.2	7.0	8.5	6.9	12.2	15.6	325.5	
Sunday, September 10, 2023	21.9	2.0	0.1	0.1	0.1	0.1	15.6	4.3	3.1	13.4	32.6	32.6	7.1	0.5	3.2	0.4	0.3	3.2	2.3	0.6	0.5	0.3	2.1	25.4	171.8	
Saturday, September 9, 2023	18.9	9.4	0.1	0.0	0.0	0.0	4.0	0.0	0.0	4.5	15.2	24.0	23.2	20.3	7.2	7.9	4.6	42.0	44.7	3.0	1.4	2.2	2.8	19.0	254.3	
Friday, September 8, 2023	0.0	0.0	0.0	0.0	2.9	1.4	14.6	13.8	17.7	7.7	10.5	16.4	22.8	17.3	0.0	0.0	0.0	1.6	1.4	0.0	42.0	0.2	0.0	6.3	176.7	
Thursday, September 7, 2023	23.2	0.0	1.9	0.0	0.0	0.0	17.7	11.6	22.7	1.5	0.1	0.1	9.6	18.0	15.7	12.1	16.7	14.4	19.0	15.3	8.9	17.9	1.6	1.9	229.8	
Wednesday, September 6, 2023	10.6	0.0	0.0	1.4	0.0	0.0	9.0	0.9	18.0	7.2	9.4	22.0	28.9	1.8	0.0	0.0	0.0	2.9	3.5	4.0	0.0	0.0	1.4	9.9	131.0	
Tuesday, September 5, 2023	20.5	0.0	0.0	0.0	0.0	0.0	12.9	0.4	30.3	18.9	18.0	0.0	0.0	0.0	0.6	0.0	3.0	1.8	1.4	0.0	0.0	1.5	16.9	9.7	135.7	
Monday, September 4, 2023	3.3	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4	8.8	17.1	21.8	0.3	25.2	7.6	4.2	14.9	10.5	1.6	0.4	3.5	22.1	8.5	2.2	154.8	
Sunday, September 3, 2023	24.4	0.6	0.0	0.0	0.0	0.0	0.0	1.9	2.5	3.8	22.0	29.4	1.6	0.0	0.0	1.3	17.2	13.7	8.4	9.5	1.2	16.4	5.5	8.9	168.1	
Saturday, September 2, 2023	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.9	20.3	21.2	31.2	48.5	3.4	0.0	0.6	2.3	0.1	0.0	0.0	1.7	2.3	0.0	6.8	15.0	156.8	
Friday, September 1, 2023	0.0	0.0	0.0	0.0	0.0	0.0	12.4	1.0	2.1	5.2	8.2	40.2	26.0	21.2	4.0	1.5	0.0	2.2	0.3	1.2	0.0	4.3	27.7	4.4	161.8	
Thursday, August 31, 2023	0.3	0.0	1.4	0.1	0.0	0.0	13.0	4.1	16.2	5.5	6.1															

Sum of Gallons		Hour																								Page 10 of 10
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total	
Monday, July 31, 2023	1.9	1.7	0.1	0.0	0.0	0.1	13.9	3.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	1.7	3.6	16.1	51.0	14.8	7.6	0.1	117.3	
Sunday, July 30, 2023	1.7	0.1	0.1	0.1	0.1	0.1	10.0	2.9	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	12.8	19.8	0.1	0.1	0.1	0.2	0.1	49.6	
Saturday, July 29, 2023	0.1	0.1	0.1	0.1	0.0	0.1	13.8	1.6	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	18.6	
Friday, July 28, 2023	0.1	0.0	0.0	0.0	0.0	0.0	14.0	0.6	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	12.9	0.1	29.2	
Thursday, July 27, 2023	0.0	0.0	0.0	0.0	0.0	0.0	18.4	1.9	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1	1.8	23.6	
Wednesday, July 26, 2023	0.0	0.0	0.0	0.0	0.0	0.0	11.9	2.9	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	1.5	0.1	0.4	0.1	0.1	0.1	0.1	17.8	
Tuesday, July 25, 2023	0.0	0.0	0.0	0.0	0.0	0.0	16.6	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	0.0	0.0	1.5	0.0	0.0	9.0	31.5	
Monday, July 24, 2023	0.1	0.0	0.0	0.0	0.0	0.0	13.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.8	8.6	0.0	1.4	30.8	
Sunday, July 23, 2023	15.1	2.8	0.2	0.2	0.1	0.1	13.6	17.7	38.8	22.1	3.8	0.1	0.1	0.1	0.1	0.1	0.2	0.1	1.5	0.2	0.1	0.1	1.6	0.1	118.7	
Saturday, July 22, 2023	0.1	0.1	0.1	0.1	0.0	0.1	15.7	33.7	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.1	0.0	0.0	0.0	1.5	0.0	26.8	82.6	
Friday, July 21, 2023	13.9	0.0	0.0	0.0	0.0	0.0	11.3	44.5	0.0	0.0	0.0	0.0	0.0	13.0	0.8	0.0	0.0	7.7	1.6	0.0	0.0	0.4	12.2	22.5	128.1	
Thursday, July 20, 2023	7.0	2.9	0.0	0.0	0.0	0.0	10.6	0.7	5.1	10.4	29.3	0.0	0.0	8.9	4.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.6	9.5	90.4	
Wednesday, July 19, 2023	14.8	0.0	0.0	0.0	0.0	0.0	11.0	1.0	5.1	9.0	10.1	21.5	12.9	1.0	12.9	18.3	1.9	3.2	4.7	0.0	9.6	4.1	0.0	4.0	145.0	
Tuesday, July 18, 2023	17.4	4.0	0.0	0.0	0.0	0.0	9.0	30.3	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0	4.0	17.9	10.6	102.1	
Monday, July 17, 2023	0.0	0.0	0.0	0.0	0.0	0.0	7.9	3.1	0.0	8.4	0.0	0.0	6.3	20.2	14.5	9.5	12.6	0.0	0.3	1.4	0.0	5.5	14.2	22.9	126.6	
Sunday, July 16, 2023	1.5	0.0	0.0	0.0	1.4	0.0	11.3	0.0	4.6	14.1	17.2	16.7	4.7	0.1	1.5	0.0	1.5	2.4	18.3	5.8	8.9	5.2	13.2	12.4	140.7	
Saturday, July 15, 2023	5.5	0.6	0.0	0.0	0.0	0.0	11.9	6.4	27.3	7.5	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.7	5.2	0.4	13.3	3.4	5.1	19.3	107.9	
Friday, July 14, 2023	12.1	22.5	0.5	0.0	0.0	0.0	6.1	2.1	1.4	12.0	5.8	20.3	28.9	18.9	13.2	0.0	0.0	1.4	0.0	3.6	0.0	0.3	1.4	0.0	150.7	
Thursday, July 13, 2023	0.0	1.4	0.0	0.0	0.0	0.0	7.7	1.6	0.0	6.3	20.8	17.4	22.2	4.0	19.0	2.0	10.8	6.2	14.7	2.0	6.1	0.8	4.7	7.7	155.2	
Wednesday, July 12, 2023	0.0	0.0	0.0	0.0	0.0	0.0	1.4	7.5	1.5	2.5	16.8	24.4	9.0	14.1	7.0	18.3	31.4	24.3	1.8	5.9	0.0	0.8	12.0	0.0	178.6	
Tuesday, July 11, 2023	0.0	12.4	1.3	0.0	0.0	0.0	5.2	8.7	9.6	0.0	16.5	9.3	8.6	19.1	24.3	1.7	9.0	24.9	1.7	9.8	7.4	2.9	15.2	13.7	201.2	
Monday, July 10, 2023	0.0	0.0	0.0	0.0	1.4	3.6	5.5	1.8	1.4	29.8	26.9	17.5	1.2	2.5	0.0	19.0	13.7	26.5	8.2	14.1	4.9	4.1	34.0	8.5	224.6	
Sunday, July 9, 2023	6.4	21.1	0.0	0.0	0.0	0.0	0.0	1.3	18.0	0.0	21.0	25.0	1.3	0.0	1.4	22.5	31.7	21.1	17.5	4.5	3.7	4.5	22.3	16.0	239.3	
Saturday, July 8, 2023	16.6	5.0	0.0	0.0	0.0	0.0	7.7	2.8	8.8	14.9	14.4	17.3	29.8	14.3	3.9	5.2	2.8	1.4	2.0	1.4	10.8	1.4	1.4	0.0	161.7	
Friday, July 7, 2023	5.0	18.6	0.7	0.0	0.0	0.0	11.0	4.3	0.0	21.0	0.2	14.4	13.2	30.7	25.3	3.3	0.0	0.0	0.1	0.0	3.0	7.5	0.3	1.6	159.9	
Thursday, July 6, 2023	4.6	0.0	0.0	0.0	0.0	0.0	12.5	2.0	0.0	3.1	20.1	27.1	16.3	5.2	1.3	0.0	1.5	1.4	0.0	0.0	0.0	0.0	1.4	0.0	96.6	
Wednesday, July 5, 2023	9.7	2.4	0.0	0.0	0.0	0.0	9.0	29.9	0.7	0.1	7.4	0.0	0.0	1.6	1.9	0.0	9.7	9.9	0.0	0.0	0.0	0.2	11.8	11.7	106.1	
Tuesday, July 4, 2023	14.3	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	20.7	40.3	26.8	8.4	2.1	23.8	0.0	0.0	0.0	0.0	0.0	0.0	2.8	19.0	160.6	
Monday, July 3, 2023	1.4	0.0	0.0	0.0	0.2	2.8	0.0	0.0	0.0	1.9	6.2	26.1	31.5	9.8	10.6	1.4	0.2	0.2	0.0	0.0	0.0	19.6	19.8	3.9	135.8	
Sunday, July 2, 2023	2.0	13.7	0.0	0.0	0.0	1.4	0.0	2.0	4.1	16.8	18.7	21.4	3.7	0.0	1.8	0.0	0.0	0.0	0.0	8.8	0.0	0.0	4.3	7.5	106.3	
Saturday, July 1, 2023	5.7	9.6	0.0	0.0	0.0	0.0	1.4	0.0	8.2	0.0	16.0	2														

KAW_R_AGDR1_NUM037_082925

Sum of Gallons

Hour

Date

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Grand Total

Friday, June 2, 2023

15.2

31.9

0.7

0.0

1.4

0.0

10.1

8.8

16.0

12.4

10.6

28.6

11.1

18.3

33.5

0.0

0.0

0.0

2.8

0.0

0.6

2.9

0.0

9.9

214.8

Thursday, June 1, 2023

1.7

21.0

0.0

0.0

0.0

0.0

10.7

1.1

44.3

11.9

1.7

2.3

18.4

9.6

29.6

0.3

0.0

1.4

0.0

1.4

0.0

0.0

1.4

1.8

158.5

Wednesday, May 31, 2023

1.7

14.8

0.0

1.3

0.0

0.0

8.7

0.4

37.4

24.0

10.8

14.9

19.3

21.4

3.6

0.0

0.0

0.0

1.4

0.0

2.8

0.0

0.0

8.4

171.0

Tuesday, May 30, 2023

20.8

3.4

0.0

0.0

0.0

0.0

9.5

5.8

27.6

17.4

13.1

8.1

25.5

1.4

0.0

4.6

0.0

0.0

1.4

1.4

0.0

1.4

0.0

1.8

143.1

Monday, May 29, 2023

6.1

18.4

1.6

0.0

0.0

0.0

0.0

1.8

0.0

0.0

15.7

21.8

20.5

18.4

46.4

20.3

1.1

0.0

0.0

0.0

0.0

0.4

1.4

33.7

207.7

Sunday, May 28, 2023

10.9

39.0

0.8

0.0

0.0

0.0

0.0

0.0

0.0

1.5

16.3

46.4

8.3

9.1

15.1

8.6

0.3

2.1

1.8

0.3

1.7

0.3

0.3

18.1

180.9

Saturday, May 27, 2023

6.4

24.4

1.7

0.1

0.1

1.5

0.1

0.1

3.8

29.9

23.1

22.7

24.0

6.0

3.5

3.1

1.9

0.1

0.0

0.0

0.0

2.9

0.0

0.0

155.1

Friday, May 26, 2023

2.5

17.7

0.0

0.0

0.0

0.0

6.7

0.5

0.0

9.2

0.0

7.0

27.7

12.7

19.0

0.0

0.0

0.0

5.9

0.1

0.1

1.5

0.1

2.6

113.5

Thursday, May 25, 2023

23.4

1.5

0.0

0.0

0.0

0.0

11.0

5.1

23.7

25.8

10.0

21.3

15.7

27.5

4.2

0.0

0.0

1.4

0.0

0.0

0.0

1.5

0.0

3.6

175.5

Wednesday, May 24, 2023

10.3

4.2

0.0

0.0

0.0

0.0

9.0

1.1

20.3

9.4

18.0

27.4

14.8

21.2

2.5

1.8

0.0

0.0

0.0

0.0

1.4

1.4

1.4

0.0

144.1

Tuesday, May 23, 2023

18.1

6.8

0.0

0.0

0.0

0.0

1.4

0.0

19.1

0.8

8.5

26.7

6.0

13.1

23.9

10.5

1.0

0.0

0.0

1.5

0.0

1.5

5.5

2.1

146.3

Monday, May 22, 2023

10.4

21.6

0.8

0.0

0.0

3.0

7.7

1.8

18.3

22.0

6.5

14.5

23.7

20.5

0.0

0.0

1.6

2.3

0.0

1.4

1.6

0.0

0.0

4.8

162.6

Sunday, May 21, 2023

7.8

35.0

0.0

1.9

0.0

0.0

0.0

0.0

0.0

15.7

27.9

33.1

5.0

2.2

4.5

0.0

10.2

0.5

0.7

2.5

3.2

29.3

17.9

7.0

204.5

Saturday, May 20, 2023

5.9

18.6

2.0

0.1

0.1

0.1

1.9

0.1

2.0

10.5

16.0

26.2

27.7

32.1

8.5

9.5

0.2

0.0

1.8

0.0

1.4

0.0

1.4

1.7

167.7

Friday, May 19, 2023

23.5

15.1

0.1

0.1

0.0

1.5

6.5

1.7

33.8

22.2

2.5

18.5

12.4

26.0

1.5

0.2

0.2

0.2

0.1

1.5

0.2

4.8

0.2

0.3

173.1

Thursday, May 18, 2023

11.9

8.3

0.0

0.0

0.3

1.1

8.5

3.2

32.4

21.2

4.3

13.6

27.4

21.2

21.9

2.5

0.3

0.5

0.8

0.4

0.4

1.8

4.5

0.5

187.1

Wednesday, May 17, 2023

21.9

12.8

0.0

4.3

0.0

0.1

13.2

3.8

34.1

16.7

5.9

15.4

9.5

29.7

3.9

1.4

0.1

2.2

0.1

1.5

0.1

0.1

11.8

12.1

200.9

Tuesday, May 16, 2023

15.1

17.5

0.0

0.0

1.4

0.0

9.0

1.1

19.6

26.3

12.0

13.0

12.6

28.6

2.6

0.1

0.1

0.1

1.0

0.1

3.2

0.3

0.2

10.6

174.7

Monday, May 15, 2023

9.5

11.3

0.1

0.1

0.1

0.1

6.3

0.6

15.3

13.0

34.0

17.7

16.8

22.5

4.4

3.6

0.2

0.1

4.5

0.2

1.6

0.1

0.2

8.5

170.8

Sunday, May 14, 2023

33.0

16.6

0.5

0.0

0.0

0.0

0.0

1.4

16.7

40.2

18.4

41.7

12.0

0.2

5.6

2.9

8.0

0.1

1.4

0.1

0.8

5.3

10.8

19.9

235.8

Saturday, May 13, 2023

5.4

21.7

0.0

0.0

0.0

0.0

0.0

1.4

0.0

15.6

21.0

29.3

16.8

1.0

31.5

4.4

0.0

0.1

9.0

1.9

2.1

3.2

9.8

6.5

180.6

Friday, May 12, 2023

6.8

6.7

0.0

0.0

1.8

0.0

7.1

2.5

39.8

16.9

4.8

10.9

16.0

28.9

4.3

0.0

0.0

0.0

0.0

0.0

2.7

0.2

2.5

0.0

152.1

Thursday, May 11, 2023

5.5

22.7

2.2

0.0

1.4

0.0

6.1

5.5

30.7

27.0

10.6

25.5

0.0

4.0

11.0

3.1

0.0

6.3

0.0

1.4

0.0

1.1

9.3

10.0

183.3

Wednesday, May 10, 2023

8.0

15.4

3.7

0.0

0.0

0.0

8.8

2.5

19.2

21.2

10.8

24.4

16.4

0.0

13.5

0.0

0.0

5.7

1.4

1.6

0.0

0.0

6.9

10.6

170.0

Tuesday, May 9, 2023

0.2

1.9

0.0

1.4

0.0

0.0

6.4

2.1

40.3

11.4

3.5

0.0

3.5

41.9

13.5

0.0

0.0

6.4

0.0

0.0

0.0

0.0

8.3

3.4

144.1

Monday, May 8, 2023

5.2

17.9

0.0

0.0

0.0

1.4

8.3

0.0

20.9

20.8

13.6

10.5

21.9

14.8

34.5

4.8

0.0

4.2

1.4

5.7

3.1

6.0

7.3

9.0

211.3

Sunday, May 7, 2023

6.3

11.5

0.0

2.0

0.0

0.0

0.0

0.0

1.5

20.5

21.3

35.4

6.6

0.6

18.5

6.1

0.0

8.2

11.2

1.5

0.1

0.1

11.9

6.7

170.0

Saturday, May 6, 2023

3.0

15.9

2.1

0.0

0.0

1.4

2.3

0.0

0.0

7.0

22.0

31.7

22.8

24.7

0.0

6.4

0.0

1.5

0.0

1.4

1.8

7.7

0.0

3.8

155.7

Friday, May 5, 2023

4.3

14.8

0.0

Sum of Gallons		Hour																							
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total
Tuesday, April 4, 2023	10.4	0.8	0.0	0.0	0.0	0.0	8.9	1.3	18.0	4.4	0.0	28.1	25.9	20.9	20.9	2.4	0.0	1.7	0.0	1.4	0.0	0.0	1.4	5.8	152.0
Monday, April 3, 2023	0.0	1.4	0.0	0.0	0.0	0.0	10.8	5.7	0.0	0.7	0.0	6.7	1.6	2.5	0.0	1.9	2.2	10.0	0.0	0.0	1.6	0.0	7.6	4.5	57.5
Sunday, April 2, 2023	1.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	3.9	14.5	0.0	0.1	2.9	31.0	3.5	0.1	25.5	3.0	0.0	0.0	7.9	4.8	102.2
Saturday, April 1, 2023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4	15.6	8.2	0.4	20.7	1.0	2.0	31.0	0.3	9.5	8.7	6.8	23.4	18.7	149.0
Friday, March 31, 2023	2.3	21.7	1.4	0.0	0.0	1.8	15.9	45.6	0.8	0.0	0.0	0.0	0.0	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.1	0.0	93.9
Thursday, March 30, 2023	24.6	8.8	1.8	0.0	0.0	0.0	7.5	2.3	10.9	14.4	20.0	23.7	13.8	24.7	13.8	5.8	0.0	10.7	0.0	0.0	0.0	1.4	1.5	6.7	192.3
Wednesday, March 29, 2023	26.1	0.3	0.0	0.0	0.0	1.4	7.2	7.5	0.0	49.4	1.0	0.0	0.8	17.9	14.7	4.9	0.0	12.8	0.0	0.1	0.0	1.4	0.0	1.5	147.1
Tuesday, March 28, 2023	8.1	15.5	0.0	0.0	0.0	1.9	0.0	5.4	0.0	8.8	15.5	23.0	25.7	26.3	42.2	3.8	0.2	12.9	0.0	0.0	0.0	0.0	5.6	3.6	198.6
Monday, March 27, 2023	17.5	9.0	0.0	0.0	0.0	0.0	7.6	1.7	0.0	13.9	49.1	1.8	1.8	12.1	28.2	1.2	4.6	3.6	0.0	0.0	1.6	0.0	2.6	2.3	158.5
Sunday, March 26, 2023	10.6	15.7	1.8	0.0	0.0	0.0	0.0	3.3	0.0	0.0	18.2	34.1	22.2	2.2	12.7	13.7	0.0	0.0	2.1	0.1	0.0	2.6	1.3	10.9	151.6
Saturday, March 25, 2023	14.2	3.2	0.0	0.0	0.0	1.4	0.0	0.0	6.9	6.0	1.4	43.0	10.6	41.2	0.7	4.2	1.9	2.2	0.1	0.6	0.0	2.3	11.4	0.0	151.2
Friday, March 24, 2023	15.0	10.1	0.1	0.1	0.0	1.8	8.9	1.8	0.1	41.8	14.5	7.3	25.8	24.5	13.8	5.1	0.0	1.2	7.3	0.0	10.1	1.6	0.6	16.0	207.4
Thursday, March 23, 2023	2.9	22.0	0.0	0.0	0.0	0.1	6.7	2.1	13.1	5.3	0.2	15.7	21.5	0.1	10.9	4.7	0.0	5.0	1.7	1.6	0.2	0.2	1.6	0.2	115.8
Wednesday, March 22, 2023	12.7	15.4	0.1	0.1	0.1	0.1	8.3	1.4	20.1	9.9	13.0	18.3	16.4	1.0	3.3	0.1	0.1	0.1	1.5	0.1	0.1	0.1	3.8	12.5	138.8
Tuesday, March 21, 2023	5.7	31.8	11.6	0.0	0.0	0.0	8.4	1.6	10.9	8.5	19.7	16.8	17.3	25.2	27.3	0.2	0.2	0.2	0.2	0.2	0.2	6.1	0.1	0.1	192.2
Monday, March 20, 2023	7.3	18.1	0.0	0.0	0.0	0.0	6.9	1.8	10.6	11.0	15.6	33.0	19.4	21.1	19.9	3.0	0.0	2.0	0.3	0.1	1.6	1.5	9.2	7.2	189.7
Sunday, March 19, 2023	11.7	19.4	1.6	1.4	0.0	0.0	1.4	0.0	0.1	1.5	0.1	41.9	19.7	3.0	15.4	1.4	3.0	0.1	6.8	0.1	0.0	0.1	0.0	18.2	147.1
Saturday, March 18, 2023	19.4	21.2	0.0	0.1	1.5	1.5	0.1	0.1	0.1	2.6	13.6	22.1	16.6	24.4	0.3	8.2	0.6	11.3	0.1	0.1	1.5	0.1	1.4	19.3	166.2
Friday, March 17, 2023	18.8	7.8	0.0	0.0	0.1	0.1	10.0	7.9	0.1	0.1	0.1	14.0	27.5	10.0	3.9	2.0	1.6	0.4	1.5	0.1	4.2	0.1	1.5	14.2	126.3
Thursday, March 16, 2023	14.1	15.5	1.8	0.0	0.0	0.0	13.6	1.5	13.3	15.6	20.4	22.0	1.2	8.2	7.8	1.6	0.2	0.2	1.0	1.5	0.1	0.1	0.2	26.8	166.8
Wednesday, March 15, 2023	27.3	3.6	0.0	0.0	0.0	0.0	12.9	0.5	21.1	12.8	0.2	16.0	5.2	9.8	22.2	0.3	0.0	0.0	0.0	2.7	1.4	5.5	0.0	1.4	142.9
Tuesday, March 14, 2023	3.0	23.7	4.3	0.0	0.0	0.0	8.6	1.5	14.4	2.0	0.1	19.0	14.2	4.2	29.5	0.1	0.1	0.1	1.6	0.3	0.1	0.1	1.4	4.4	132.2
Monday, March 13, 2023	2.0	11.4	0.0	0.0	0.0	0.0	8.4	1.5	13.0	4.6	2.6	15.7	18.3	1.4	0.0	3.0	0.0	0.2	3.6	0.0	0.0	1.3	1.9	11.7	100.5
Sunday, March 12, 2023	17.3	2.7		0.0	0.0	0.0	2.0	1.4	0.0	5.7	16.2	47.6	2.7	0.0	1.4	0.1	1.4	0.0	3.1	0.0	0.1	6.7	19.8	7.3	135.5
Saturday, March 11, 2023	15.4	18.2	0.0	0.0	0.0	0.0	2.4	0.0	1.4	1.3	30.0	20.9	12.3	12.3	11.7	6.8	0.0	0.1	0.5	4.6	21.3	1.4	0.1	20.3	181.0
Friday, March 10, 2023	23.3	8.3	2.3	0.0	0.0	1.4	9.8	0.4	15.4	5.5	20.0	13.5	0.0	17.0	3.9	0.0	0.0	0.0	1.7	0.3	0.0	1.4	0.0	10.8	134.9
Thursday, March 9, 2023	18.1	3.7	0.0	1.8	1.3	0.0	16.3	5.4	11.8	13.0	20.5	1.9	0.0	0.0	13.2	0.0	0.0	0.0	1.4	1.6	1.4	0.0	3.3	6.1	120.7
Wednesday, March 8, 2023	18.2	3.5	0.0	0.0	0.0	0.0	10.3	2.0	21.2	2.5	6.8	15.1	12.8	25.8	1.4	0.0	0.0	0.0	3.0	0.6	0.0	3.6	0.0	5.9	132.6
Tuesday, March 7, 2023	12.4	3.7	0.0	1.4	0.0	0.0	10.9	30.4	0.1	0.1	0.1	0.1	10.2	29.0	11.6	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	25.2	136.8
Monday, March 6, 2023	22.9	5.4	0.0	0.0	0.0	0.0	9.4	0.1	37.9	6.2	0.0	12.7	17.9	2.7	0.0	0.0	0.0	0.0	0.0	1.4	0.3	1.4	0.0	11.5	130.0
Sunday, March 5, 2023	9.2	32.5	2.7	0.0	0.0	0.0	0.0	0.0	5.5	26.2	19.8	22.1	0.1	0.2	10.5	0.7	0.0	0.0	0.0	1.4	1.4	0.0	0.1	21.7	154.3
Saturday, March 4, 2023	23.3	1.6	0.0	0.0	0.0	0.0	1.9	0.0	0.0	31.8	29.7	0.0	12.4	3.9	2.0	34.3	1.3	3.7	0.0	0.1	1.3	0.0	2.2	9.1	158.8
Friday, March 3, 2023	21.3	2.7	0.0	0.0	0.0	0.0	9.0	3.8	20.8	15.2	7.3	21.7	8.4	24.4	9.0	4.9	1.4	1.4	1.7	0.0	0.0	1.4	1.4	0.0	155.7
Thursday, March 2, 2023	23.1	2.1	0.0	0.0	0.0	0.0	0.0	5.4	21.1	14.9	14.0	0.0	0.0	9.4	0.5	0.3	0.0	0.0	1.8	1.5	0.7	1.3	9.5	11.1	116.6
Wednesday, March 1, 2023	21.3	2.7	0.0	1.9	0.0	0.0	0.0	1.4	10.8	10.5	24.3	8.7	0.0	0.0	13.3	0.0	0.0	1.6	1.4	0.3	0.0	1.4	7.8	0.0	107.3
Tuesday, February 28, 2023	31.9	5.6	0.0	0.0	0.0	0.0	8.2	0.0	16.3	15.8	12.8	20.9	14.2	13.1	20.6	1.4	0.0	0.0	0.1	1.4	0.0	5.7	3.2	9.1	180.4
Monday, February 27, 2023	5.6	13.0	0.0	0.0	0.0	0.0	1.4	0.0	21.5	19.3	30.7	1.4	9.8	26.6	2.3	0.0	0.0	0.0	2.9	0.2	0.0	0.0	3.9	39.5	178.2
Sunday, February 26, 2023	16.2	2.4	0.0	0.0	0.0	1.3	0.0	0.0	0.0	10.6	35.2	32.2	2.2	12.5	15.7	2.5	9.1	2.8	0.1	0.1	0.1	0.1	3.4	7.0	153.5
Saturday, February 25, 2023	9.3	15.0	0.0	0.0	0.0	0.0	8.9	0.1	0.6	32.9	35.1	2.9	23.3	28.1	3.5	0.0	1.4	0.4	5.0	0.0	0.0	0.0	0.0	16.6	183.0
Friday, February 24, 2023	11.4	23.7	0.0	0.0	0.0	1.9	9.5	0.0	26.2	10.5	0.0	32.4	5.3	12.0	3.4	0.0	0.0	0.0	1.4	2.3	1.4	1.4	2.9	0.2	145.7
Thursday, February 23, 2023	0.0	0.0	0.0	0.0	0.0	0.0	7.8	5.1	0.1	1.5	0.1	27.2	11.5	12.9	23.9	0.0	0.0	0.0	0.1	0.0	1.4	0.0	0.0	7.5	99.2
Wednesday, February 22, 2023	6.0	11.5	0.0	0.0	0.0	0.1	13.7	3.1	6.4	6.1	9.7	19.2	13.4	4.4	7.0	0.0	7.6	1.9	0.0	0.0	0.0	0.0	1.6	1.4	113.4
Tuesday, February 21, 2023	0.8	0.0	0.0	0.0	0.0	0.0	7.9	8.2	0.1	2.6	0.1	11.8	15.0	15.1	24.1	2.1	0.0	0.0	2.5	1.3	1.3	6.5	16.6	1.6	117.7
Monday, February 20, 2023	2.9	0.0	0.0	0.0	0.0	0.0	9.8	0.0	0.0	24.7	3.0	40.2	19.0	23.0	11.7	0.0	2.2	0.0	4.8	0.0	1.4	1.5	7.5	10.9	162.9
Sunday, February 19, 2023	0.1	1.5	0.0	0.0	0.0	0.0	0.0	0.1	4.1	22.0	11.1	39.5	14.6	10.9	13.8	4.2	6.3	2.3	7.3	4.9	0.2	0.0	4.2	2.2	149.5
Saturday, February 18, 2023	5.1	21.0	0.0	0.0	0.0	0.0	13.1	1.0	0.0	1.7	18.7	41.7	8.8	13.2	12.7	19.8	19.7	0.1	0.1	5.3	12.8	16.2	4.4	15.9	231.2
Friday, February 17, 2023	0.4	0.0	0.0	0.0	0.0	1.4	7.5	4.6	0.0	11.1	5.9	19.3	18.8	1.8	5.5	0.0	0.0	2.8	0.3	1.3	0.5	0.0	1.4	4.1	86.9
Thursday, February 16, 2023	21.7	0.0	0.0	0.0	1.5	0.0	11.9	0.8	16.8	22.5	3.4	26.2	17.6	8.9	16.2	1.4	0.0							11.8	160.6
Wednesday, February 15, 2023	26.1	0.0	0.0	0.0	0.0	0.0	8.2	8.0	11.9	28.3	9.4	17.4	14.5	0.0	2.3	0.0	0.0	2.4	0.0	0.0	3.7	0.0	0.0	8.4	140.7
Tuesday, February 14, 2023	10.0	8.5	0.0	0.0	0.0	1.4	7.8	0.6	19.1	23.5	12.4	23.0	12.5	11.9	15.8	0.2	0.2	0.2	1.3	0.0	1.4	0.0	1.4	3.8	155.0
Monday, February 13, 2023	5.3	22.7	0.0	0.0	0.0	0.0	9.5	3.8	11.1	3.1	2.3	0.1	0.2	8.8	41.8	1.8	0.0	3.0	2.1	0.3	0.0	5.2	13.9	5.9	140.8
Sunday, February 12, 2023	9.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0	11.4	29.0	25.5	28.2	6.2	2.4	9.5	2.4	10.2	13.9	0.0	0.0	4.1	8.6	22.5	4.2	194.4

KAW_R_AGDR1_NUM037_082925

Page 13 of 13

Sum of Gallons	Hour																								
Date	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Grand Total
Saturday, February 4, 2023	1.8	23.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	1.5	25.7	18.9	7.7	39.0	0.8	6.8	20.8	6.2	0.2	1.5	0.2	0.1	0.1	8.1	165.6
Friday, February 3, 2023	18.7	0.0	0.0	0.0	2.1	0.0	7.7	0.0	18.2	9.6	0.6	11.1	0.1	0.3	13.6	2.1	0.0	1.2	1.8	2.0	0.0	0.9	8.2	1.5	99.6
Thursday, February 2, 2023	2.4	25.5	0.0	0.0	0.0	0.0	8.2	7.8	17.3	15.4	9.8	24.1	6.2	1.9	3.7	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	4.7	130.4
Wednesday, February 1, 2023	0.2	0.2	0.3	0.2	0.2	0.2	8.0	1.3	0.0	1.5	0.0	14.5	14.0	23.5	30.4	3.0	0.0	0.0	0.4	0.5	0.2	0.0	10.5	0.1	109.3
Tuesday, January 31, 2023	8.1	28.2	1.4	0.0	0.0	0.0	0.0	1.7	11.6	6.8	3.0	19.1	11.6	19.9	26.7	1.6	0.0	0.0	0.0	1.4	0.0	0.0	5.3	6.5	152.8
Monday, January 30, 2023	1.4	23.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	3.7	35.7	7.0	29.5	6.3	0.0	6.1	0.0						2.8	116.8	
Sunday, January 29, 2023	10.4	2.5	15.0	0.0	0.0	0.0	0.0	1.8	2.8	13.8	0.0	0.0	7.8	12.5	32.2	2.1	0.0						0.0	101.0	
Saturday, January 28, 2023	0.3	21.0	2.5	0.0	0.0	0.0	0.0	0.0	1.4	9.9	30.2	17.7	13.7	6.3	6.3	1.7	0.0	1.4	1.4	1.6	0.4	0.0	0.0	1.3	116.9
Friday, January 27, 2023	0.0	0.0	1.3	0.0	0.0	2.0	11.7	0.0	0.0	8.5	12.5	9.2	19.4	28.5	1.8	0.0	4.9	1.6	1.4	0.0	0.0	1.9	0.0	1.4	106.1
Thursday, January 26, 2023	20.0	0.5	0.0	0.0	0.0	0.0	10.1	2.3	6.9	2.7	0.0	3.7	23.5	16.0	20.9	2.0	2.8	0.0	4.0	3.9	1.8	21.4	12.7	1.1	156.4
Wednesday, January 25, 2023	45.2	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.0	16.1	14.2	36.4	10.1	0.1	19.5	0.3	0.3	1.3	0.0	0.0	9.8	10.5	202.6
Tuesday, January 24, 2023	12.2	17.6	0.0	0.0	1.3	0.0	6.6	2.7	13.7	0.0	0.0	4.0	22.2	20.0	34.4	6.0	6.0	6.2	5.0	3.3	2.0	0.0	1.4	1.3	166.0
Monday, January 23, 2023	37.2	4.8	0.0	0.0	0.0	0.0	10.5	0.8	0.0	0.0	34.0	20.3	27.1	4.1	2.9	0.0	0.0	0.0	0.0	1.3	2.7	0.0	0.0	6.3	152.0
Sunday, January 22, 2023	4.6	25.8	1.1	0.0	0.0	0.0	0.0	2.0	3.1	21.0	10.9	34.3	0.7	1.8	1.7	1.3	2.6	0.0	0.0	0.0	1.7	0.0	1.2	18.5	132.4
Saturday, January 21, 2023	6.6	19.8	0.0	1.5	0.0	0.0	9.0	4.1	4.7	35.1	25.1	20.9	1.3	1.4	0.0	0.0	1.4	0.0	1.3	0.0	0.0	1.9	1.3	1.4	136.7
Friday, January 20, 2023	1.8	0.0	0.0	0.0	1.3	0.0	9.1	2.9	0.0	5.5	36.8	20.9	0.0	2.7	11.1	3.5	0.0	3.8	5.4	6.6	0.3	11.1	3.7	0.0	126.4
Thursday, January 19, 2023	18.7	1.3	0.0	0.0	0.0	0.0	8.1	4.1	12.4	5.8	4.6	18.8	15.2	16.4	10.9	0.0	0.0						11.5	127.8	
Wednesday, January 18, 2023	16.2	2.0	0.0	0.0	0.0	0.0	9.7	0.6	16.0	28.6	1.4	0.0	4.0	10.2	0.5	2.9	0.0						13.4	105.5	
Tuesday, January 17, 2023	26.9	4.8	0.0	0.0	0.0	0.0	7.0	3.2	14.9	2.8	16.4	12.5	4.1	15.3	8.4	2.1	0.0	0.0	1.4	1.4	2.7	1.3	0.0	10.9	135.9
Monday, January 16, 2023	7.6	18.2	1.4	0.0	0.0	0.0	9.6	2.0	0.0	5.0	11.1	19.8	10.0	15.5	25.4	3.4	1.4	0.8	0.0	0.9	3.7	1.4	0.0	14.3	151.4
Sunday, January 15, 2023	7.7	31.0	0.0	0.0	0.0	0.0	0.0	1.3	1.5	0.0	19.0	26.3	14.2	30.1	24.7	10.8	11.6	5.7	3.2	0.0	1.4	1.4	2.4	4.9	197.2
Saturday, January 14, 2023	18.1	1.4	0.2	0.0	1.4	0.0	0.0	1.9	27.0	11.6	16.7	4.1	0.7	1.2	0.0	1.4	7.4	8.1	18.3	15.3	9.7	22.3	5.6	2.0	174.2
Friday, January 13, 2023	8.9	1.4	0.0	0.0	0.0	0.0	5.8	2.3	0.0	13.4	16.7	29.3	6.8	5.6	8.1	0.3	0.0						10.0	108.6	
Thursday, January 12, 2023	12.3	18.3	0.0	0.0	0.0	0.0	7.2	3.0	8.3	15.6	4.0												92.9	161.6	
Wednesday, January 11, 2023	2.4	21.7	0.0	0.0	0.0	0.0	6.3	3.2	12.3	11.5	0.0	18.4	12.5	10.0	23.5	1.9	0.0	2.9	0.1	1.4	0.0	0.0	0.0	8.8	136.9
Tuesday, January 10, 2023	5.8	20.1	0.0	0.0	0.0	1.3	6.3	4.1	12.6	19.4	14.7	8.9	0.0	1.4	8.0	0.0	0.0	1.0	0.5	1.0	1.4	0.0	4.3	6.5	117.3
Monday, January 9, 2023	0.0	0.0	0.0	0.0	0.0	0.0	9.3	4.7	0.0	8.8	8.2	18.9	23.9	18.1	24.4	2.1	0.0	1.3	0.0	0.2	1.4	0.0	7.1	11.1	139.6
Sunday, January 8, 2023	3.3	26.1	0.0	0.0	0.0	0.0	1.9	0.0	0.0	6.3	35.0	15.7	8.3	0.1	15.5	3.0	0.1	8.0	0.4	0.3	0.0	0.0	12.8	1.8	138.6
Saturday, January 7, 2023	1.4	21.3	0.2	0.0	0.0	0.0	9.4	2.3	0.0	0.2	29.3	38.4	3.4	5.6	28.6	6.7	0.0	0.0	2.0	0.0	0.0	0.0	1.5	1.5	151.7
Friday, January 6, 2023	28.3	0.0	0.0	0.0	0.0	0.0	8.4	5.1	15.6	1.3	11.4	16.3	3.2	28.5	2.8	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.4	3.8	127.5
Thursday, January 5, 2023	37.5	1.0	0.0	0.0	0.0	0.0	7.6	3.6	10.8	1.5	0.0	11.3	7.3	18.3	1.4	0.0	0.0						13.9	114.3	
Wednesday, January 4, 2023	4.6	0.0	0.0	0.0	0.0	1.4	6.2	2.7	0.0	23.1	9.0	18.0	15.1	19.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0	4.2	5.8	3.8	114.4
Tuesday, January 3, 2023	8.9	29.7	0.0	0.0	0.0	0.0	8.3	3.9	15.1	6.4	5.4	23.5	16.1	16.6	31.9	2.1	0.0	2.8	0.0	0.3	0.0	1.3	0.0	8.1	180.5
Monday, January 2, 2023	0.3	0.3	1.9	0.3	0.4	0.3	8.8	4.9	0.0	0.0	9.3	10.8	23.2	15.3	26.4	1.5	0.0	0.0	4.5	2.3	20.4	0.0	0.0	0.0	130.7
Sunday, January 1, 2023	0.0	17.3	0.0	1.4	0.0	0.0	0.0	0.0	5.2	24.6	15.0	7.8	32.7	10.2	12.3	4.8	15.1	12.7	3.7	18.1	2.4	0.7	8.6	4.5	197.2

**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Krista Citron

38. Reference the AMI plan, page 19, figure 12. Please provide the 2025 combined price of the meter and the endpoint for each meter size.

Response:

Refer to the AMI Plan, page 26, Figure 17 for meter and endpoint pricing by meter size.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

39. Reference the AMI plan, page 21. Please provide vendor information, including specifications, sizes, design, and typical pricing for composite lids.
- a. Would these composite lids also work for existing AMR meters? Please explain.

Response:

Refer to KAW_R_AGDR1_NUM039_082925_Attachment A_CONFIDENTIAL for the specification sheet for the composite meter lid. The current vendor is Bingham & Taylor and the 2025 per lid price is shown in KAW_R_AGDR1_NUM039_082925_Attachment B_CONFIDENTIAL. These attachments are confidential and are being provided pursuant to a petition for confidential protection.

- a. Yes, one of the benefits of the composite lids is that they work for both AMR and AMI meters.

**KAW_R_AGDR1_NUM039_082925_Attachment A_CONFIDENTIAL AND
KAW_R_AGDR1_NUM039_082925_Attachment B_CONFIDENTIAL
FILED UNDER SEAL PURSUANT TO THE PETITION FOR
CONFIDENTIAL TREATMENT FILED ON AUGUST 29, 2025**

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Justin Sensabaugh / Krista Citron

40. Reference the AMI plan, page 21 discussion on geographic diversity. Please explain if the KAWC territory and 4g or 5g cellular coverage will require utilizing more than one cellular provider and if so, the difference in plan pricing per meter.

Response:

Yes. The KAWC territory will require utilizing more than one cellular provider. Note that the meter and endpoint are separate pieces of equipment; the cellular provider will not impact the meters themselves, but the cellular provider may determine the endpoint used in a given area. For the purposes of the cost benefit analysis, only the following options were evaluated:

- i. For Badger endpoints, Verizon or AT&T are available networks. Badger endpoint pricing does not vary based on cellular provider.
- ii. For Neptune endpoints, FirstNet is the available network.

Please see the cellular provider and endpoint pricing options in the workpapers for KAW_R_AGDR1_NUM008_082925_Attachment A, "CONF-MeterPrice" tab, in the table located in columns J-S, rows 22-29.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

41. Reference the AMI plan, page 22 discussion on technological considerations. Please explain how often AMI endpoints are updated by the preferred vendor, when the last major hardware update was issued and the expected technical life of the hardware, including firmware and software update support.

Response:

The approved meter vendors are able to push updates to the cellular endpoint as needed with approval from American Water. These updates are as needed based on feature/functionality enhancement or security patches. Firmware updates do not change the expected technical life of the hardware.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

42. Reference the AMI plan, page 23 discussion on technological considerations. Please explain on how often AMR endpoints are updated by the preferred vendor, when the last major hardware update was issued and the expected technical life of the hardware, including firmware and software update support.

Response:

While it is possible to update the firmware of an AMR device locally at the device it is not common practice by the vendor. The AMR device functionality is limited and does not have a high demand for update. Typically, when enhancements are available for an AMR endpoint, an updated version of the endpoint is released.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

43. Reference the AMI plan, page 23 discussion on the meter selection process. Please provide the following:
- a. Provide American Water's minimum established criteria used to compare RFI results.
 - b. Explain the statement "current cellular solution" and "back-up cellular solution." Are some vendor systems only compatible with specific cellular networks?
 - c. Provide a "modernized contract" model being utilized or any contracts that have been entered into with the RFP vendors.

Response:

- A. Please reference the attachments to PSC 1-19 "RFI Results Review."
- B. Back-up Cellular solution is meant to read as a back-up to the cellular solution in the instance where cellular connectivity is unavailable.
- C. Please see the following attachments:
 - KAW_R_AGDR1_NUM043_082925_Attachment_C1
 - KAW_R_AGDR1_NUM043_082925_Attachment_C2

These contracts are confidential and are being provided pursuant to a petition for confidential protection.

**KAW_R_AGDR1_NUM043_082925_Attachment_C1 AND
KAW_R_AGDR1_NUM043_082925_Attachment_C2
FILED UNDER SEAL PURSUANT TO THE PETITION FOR
CONFIDENTIAL TREATMENT FILED ON AUGUST 29, 2025**

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Krista Citron

44. Reference the AMI plan, and the discussion on the CBA beginning on page 23. Please provide the following:
- a. All assumptions used in the analysis, including any assumptions used on technological obsolescence.
 - b. All calculations, including electronic copies of spreadsheets, etc., with formulas intact, that were used to calculate the net present value and cost per customer per year for both AMI and AMR.
 - c. All calculations, including electronic copies of spreadsheets, etc., with formulas intact, that were used to calculate the average cost of AMI and AMR for both brands.
 - d. 4g and 5g coverage maps on KAWC territory for all cellular providers considered.

Response:

- a. Please see pages 24-29 of Exhibit A, which includes detailed assumptions in Figures 15, 16, 17, 18, 19, and 20.
- b. Refer to the workpapers in KAW_R_AGDR1_NUM008_082925_Attachment A.
- c. Refer to the workpapers in KAW_R_AGDR1_NUM008_082925_Attachment A.
- d. Coverage maps from Verizon, AT&T, and FirstNet were accessed on August 25, 2025. KAW_R_AGDR1_NUM044_082925_Attachment A shows each map displaying KAWC's service areas.

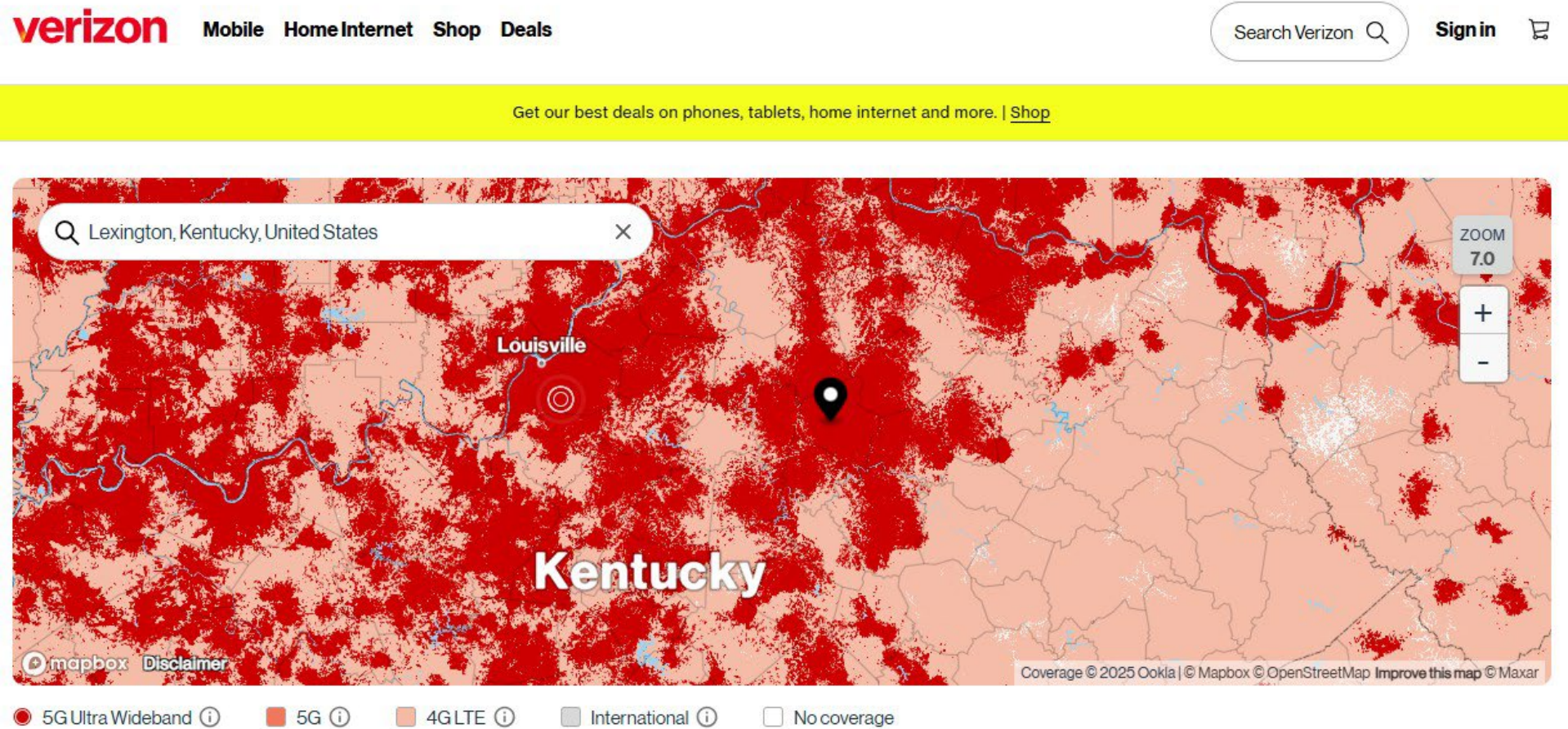
Figure 1 – Verizon 5G/4G LTE <https://www.verizon.com/coverage-map/>

Figure 2 – Verizon 4G <https://gismaps.verizon.com/map4/?token=920hJbTf4B5i5f26V1ijGSRxAVX5U5qomWxPXg1cJ4HOLvq6iffk>

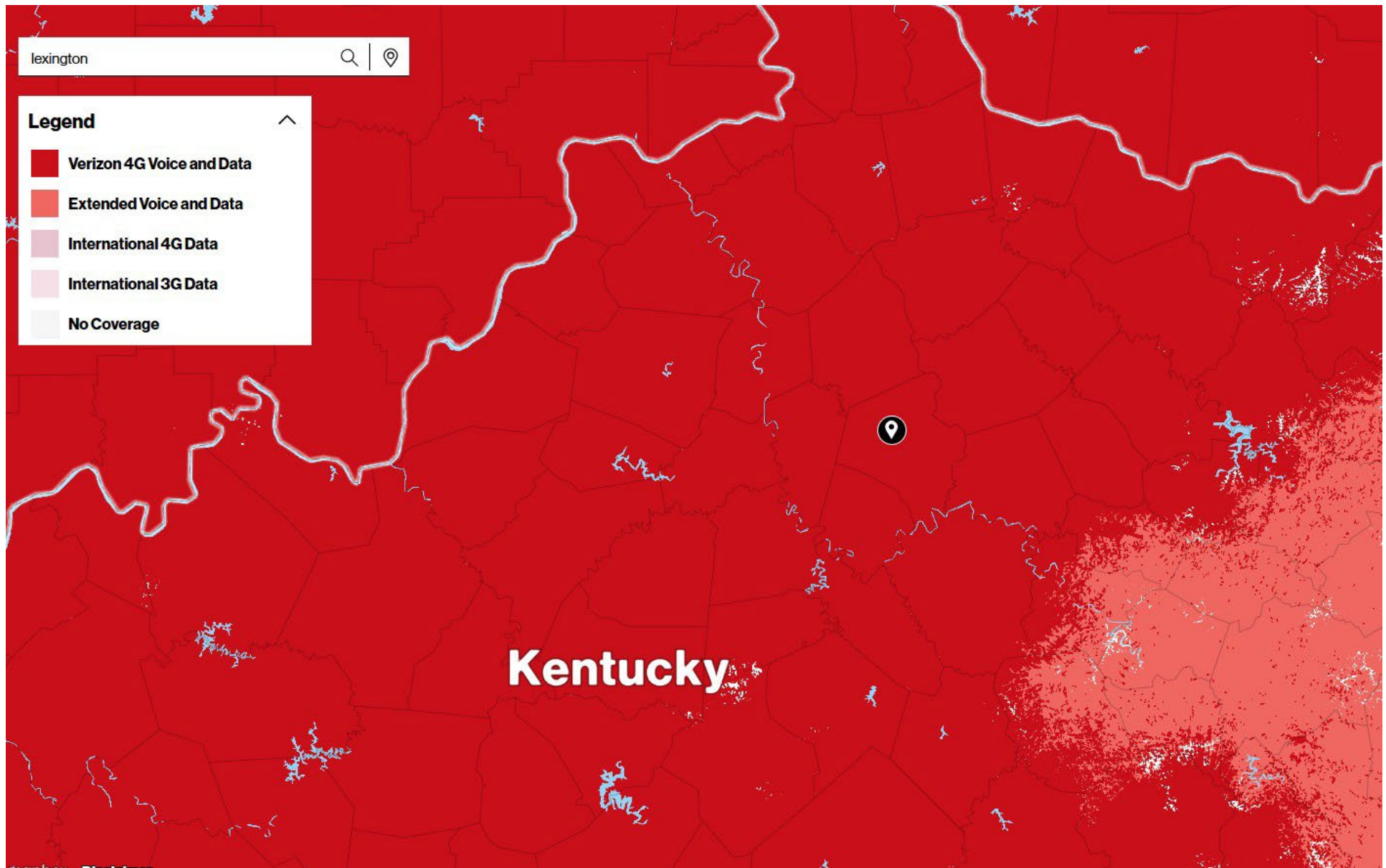


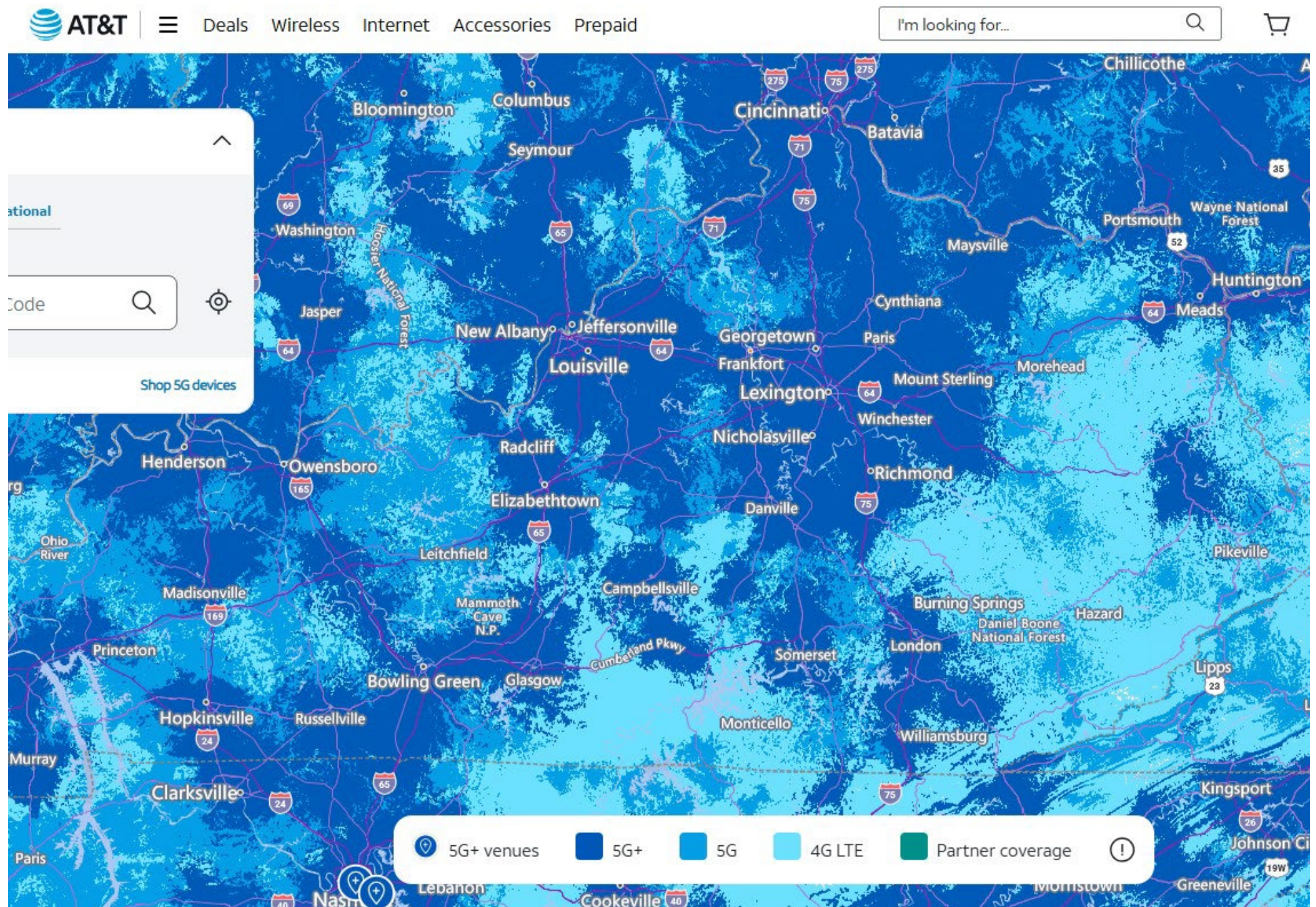
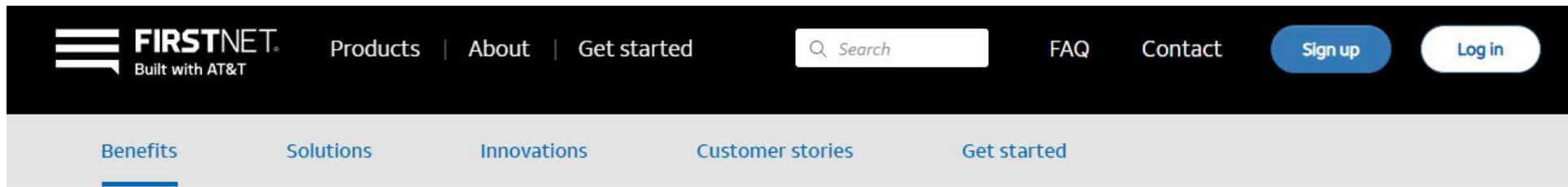
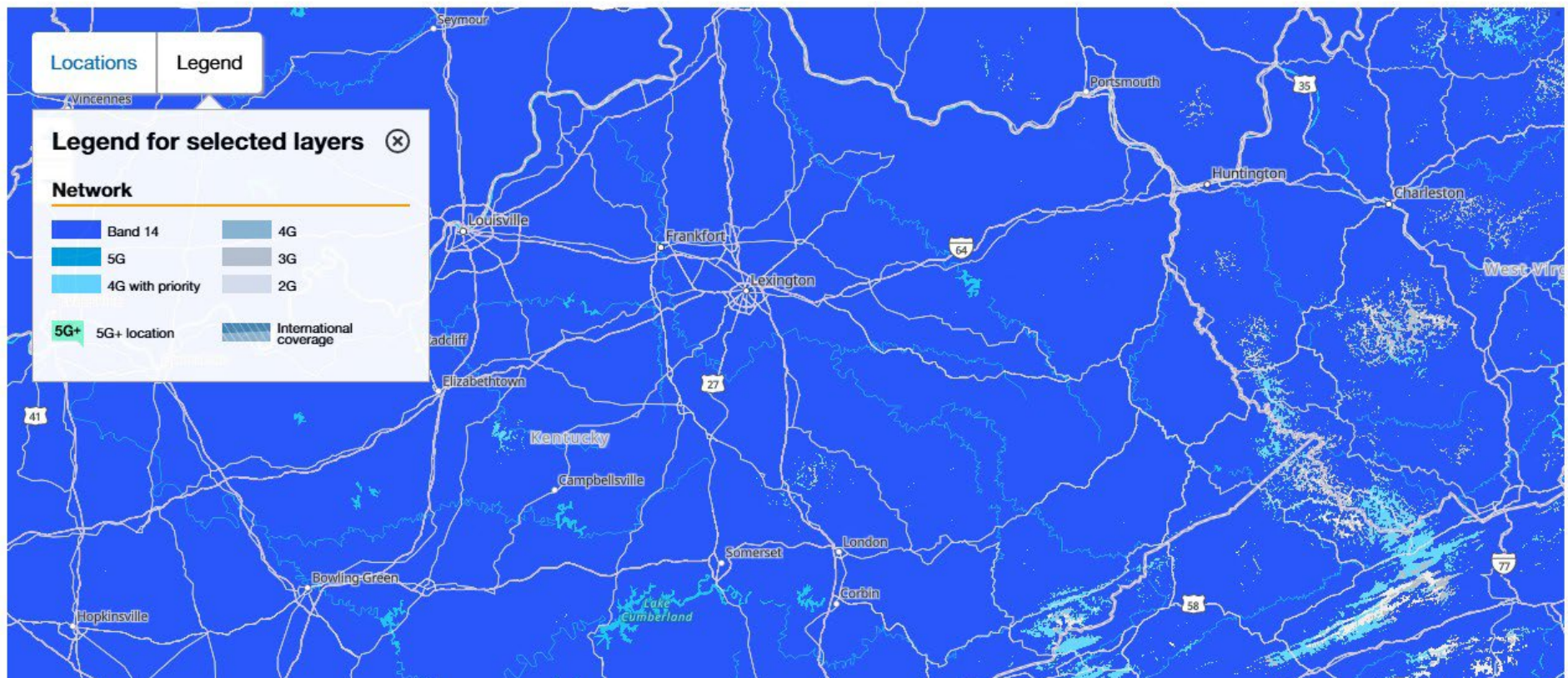
Figure 3 – AT&T <https://www.att.com/maps/wireless-coverage.html>

Figure 4 – FirstNet <https://www.firstnet.com/coverage.html>

FirstNet coverage map

Your connection is always at its peak. FirstNet is the only network with a mandate against throttling, now reaching 2.99M+ square miles.



KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Krista Citron

45. Reference the AMI plan, Appendix A, p.37-38. Please explain the difference between figure 27 and figure 28.

Response:

Figures 27 and 28 in the Appendix were inadvertently the same image. Updated figures can be viewed in KAW_R_AGDR1_NUM049_082925_Attachments_B and C.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

46. Reference the AMI plan, Appendix A, Orion Cellular Water Endpoint. Please provide the following:
- a. Is this the endpoint being deployed for both vendors (p.23 of AMI Plan implies that two vendors have been selected)?
 - b. Is cellular communication over a private cellular VPN? If not, explain how communications are secured.
 - c. Vendor data states the battery may not be replaced. Does this mean if endpoint battery runs down the entire endpoint must be replaced?
 - d. Please provide additional vendor information, including battery duration curves vs data transmission. Vendor information states "up to 4 reads a day" are the design criteria.
 - e. Can the endpoint actually be programmed to send an alarm? Please discuss how this works in detail if the endpoint actually sends an alarm or if the data must be analyzed after it is received for flow or backflow alerts.
 - f. What actual communication instructions can the endpoint receive, process and act upon?
 - g. What configuration of the ORION endpoint is being considered? Please provide a discussion of why this configuration was chosen, including reasoning and considerations.

Response:

- a. No, p. 23 of the AMI Plan is correct, there are two vendors approved as part of the RFP. The Orion Cellular Water Endpoint is the Badger meter vendor Cellular Endpoint Solution. The Neptune Cellular Endpoint Solution is the R900 Cellular Endpoint.
- b. Cellular endpoint broadcast fixed network reading data through the secure cellular network within the service area.
- c. That is correct, the battery is fully potted in a single enclosure and cannot be replaced. If the battery runs down, the endpoint must be replaced. Both vendors provide a 20-year (10 full replacement, 11-20 prorated) warranty on the endpoints.
- d. Vendor product sheets state that the device is configured to communicate 4 times per day (every 6 hours). During each of the 4 communications the endpoint will transmit all interval reads stored since the previous communication.
- e. Meters/Encoders can have the ability to detect alarms such as reverse flow or continuous flow. These alarms can be communicated to the endpoint and the endpoint will transmit this alarm to the Head End System. The endpoint itself has the ability to detect tampering and can trigger an alarm back to the Head End System.
- f. The endpoint can receive inbound communications to provide an On-Demand Read, Firmware updates and configuration changes such as comm scheduler.

- g. The configuration is determined by the premise and where the meter and endpoint are currently installed. For a premise with a meter pit, the solution would be a pit configuration with a non-metal lid. It is important to follow the vendors installation instructions to ensure successful performance of the endpoint

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

47. Reference the AMI Plan, Appendix A, vendor information for several types of meters and one endpoint are provided. However, p.23 of the AMI Plan implies that 2 vendors have qualified under the RFP. Is the vendor information provided in Appendix A inclusive of all types of equipment the two vendors will provide? If not, please provide all equipment information reviewed for the vendors with qualified RFP responses, identifying the equipment associated with each vendor.

Response:

The Appendix only references the Badger products used by American Water, which are the Ultrasonic and Recordall Disc meters and their Cellular endpoint. Please see attached the Product Sheets for the Neptune vendor meter and endpoints. Attachments can be found in the KAW_R_AGDR1_NUM047_082925_Attachments.

AMI Your Way

Neptune® R900® System: Cellular Endpoint



Neptune's cellular endpoint allows you to progress at your own pace to AMI when integrated into your Neptune® R900® System. Neptune's cellular endpoint provides all of the benefits of an advanced meter reading solution without the operational burden of network infrastructure while allowing you to protect existing asset investments. An easily deployable AMI solution, the cellular endpoint allows you to start collecting actionable meter data immediately. Powered by nationwide cellular network carriers, you are assured a reliable, highly secure, and easy-to-deploy cellular AMI data solution for both current and future needs.

- No AMI fixed network infrastructure installation, maintenance, operations, or upgrade costs for the life of the deployment.
- Seamless integrations with existing R900 technology for a flexible AMI solution.
- Access all of your meter data from anywhere at any time with Neptune® 360™.
- Improve operations and customer service with real-time, high-resolution AMI data and advanced analytics.
- Automatically recover from network outages with 96 days of stored data.
- Two-way solution using nationwide cellular carriers.
- LTE-M cellular technology helps ensure robust coverage.
- Network resources available to support network connectivity during disaster recovery.

Specifications

Environmental Conditions

- Operating temperature:
-22°F to +149°F (-30°C to +65°C)
- Storage temperature:
-40°F to +158°F (-40°C to +70°C)
- Operating humidity: 100%
condensing

Antennas

- Wall: standard internal antenna
- Pit: internal or external antenna

Encoded Register Compatibility

- Neptune® MACH 10®, ARB® V,
ProRead™, E-CODER®,
and ProCoder™
- Sensus ECR II, ICE, iPerl,
Electronic Register and OMNI
- Hersey/Mueller Translator
- Badger ADE, HR E|LCD, E-Series
- Elster/AMCO InVision (Sensus
protocol version)

Operation

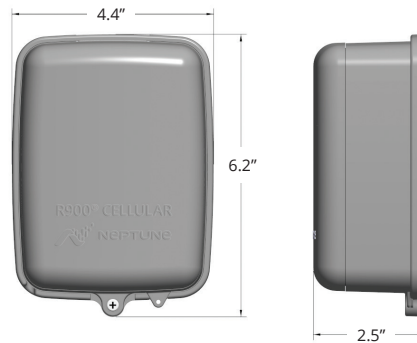
- Regular cellular LTE-M
transmissions with configurable
transmission windows
- Mobile 900 MHz backup
transmissions
- Verify installation via the cellular
endpoint manager tool
- 15-minute interval data with
automatic back-fill
- Priority alerts

Warranty

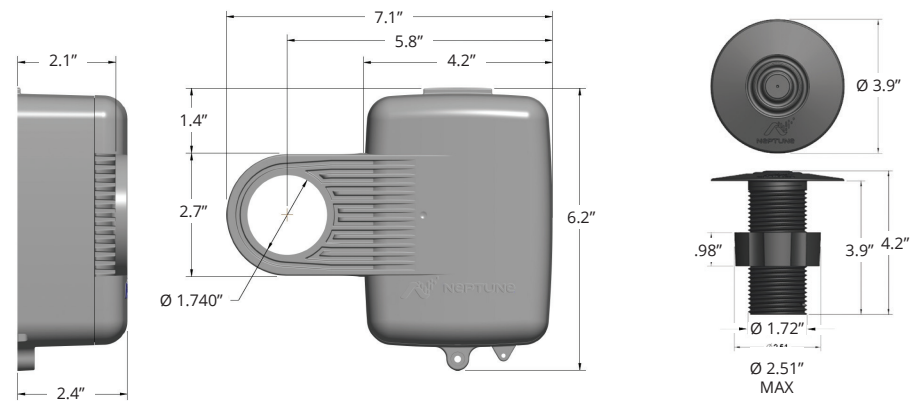
- Neptune provides a limited
warranty for performance,
materials, and workmanship.
See warranty statement for details.

Dimensions

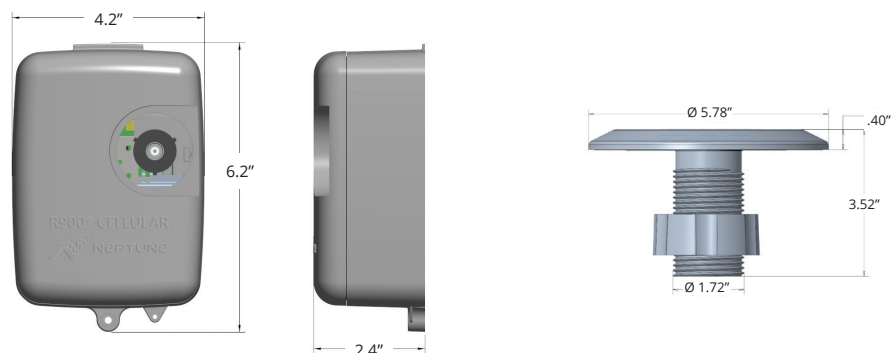
Wall Endpoint



Pit Endpoint (Internal Antenna)



Pit Endpoint with External Through-the-Lid Antenna



Neptune Technology Group
1600 Alabama Highway 229
Tallahassee, AL 36078
800-633-8754 f 334-283-7293

Critical Communication and Easy Migration

Neptune® R900® System Endpoints



Neptune's R900® System endpoints greatly improve access to meter readings while delivering accurate, detailed, and timely consumption information to proactively identify and resolve high bill complaints, reduce delinquent payments, and eliminate write-offs to maximize revenue. The user-friendly, intuitive endpoint design simplifies the installation process and increases operational efficiency.

Neptune R900 wall and pit endpoints provide continuous transmission of meter data and the flexibility of mobile or fixed network reading methods. Migrate easily to AMI when you're ready without separate reading systems, site visits, or endpoint reconfiguration.

- Improve meter reading efficiency with robust walk-by, mobile, and fixed network connectivity
- Build on to existing technology investments with forward and backward compatible endpoints
- Improve quality of service and billing accuracy with detailed consumption data
- Fast installation and no programming required
- Works seamlessly with existing assets and future enhancements
- Pinpoint trouble areas quickly with flags that identify leaks, reverse flow, and tampering
- Peace of mind with access to 96 days of stored history



NEPTUNE
TECHNOLOGY GROUP

#winyourday

Technical Specifications

Electrical Specifications

- Endpoint power: Lithium battery with capacitor

Transmitter Specifications

- Two-way endpoint
- Transmit period (interleaved mobile and fixed network messages):
 - Standard mobile message every 14 seconds at 100 mW
 - Standard fixed network message every 7½ minutes at 1 Watt
- FCC verification: Part 15.247
 - Transmitter channels: 50; frequency-hopping, spread-spectrum
 - Frequency range: 910 to 920 MHz
- Encoder register reading interval:
 - Every 15 minutes
- Data logging interval:
 - 96 days of hourly data

Environmental Conditions

- Operating temperature: -22°F to +149°F (-30°C to +65°C)
- Storage temperature: -40°F to +158°F (-40°C to +70°C)
- Operating humidity: 100% condensing

Antennas

- Wall endpoint: standard internal antenna
- Pit endpoint: standard through-the-lid antenna
 - 18" Coax
 - 6' Coax
 - 20' Coax

Encoded Register Compatibility

- Neptune ARB® V, ProRead™, ProCoder™, and E-CODER®
- Sensus ECR II, ICE, iPerl, Electronic Register and OMNI
- Hersey/Mueller Translator
- Badger ADE and HR E|LCD
- Elster/AMCO InVision (Sensus protocol version)

Options

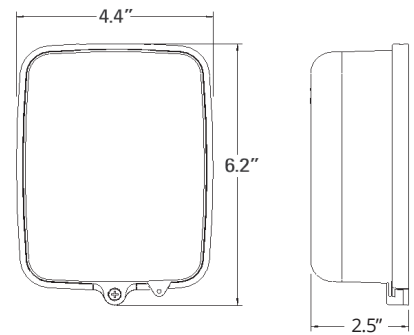
System Compatibility

- Handhelds with R900® belt clip transceiver - mobile RF
- R900 mobile data collector - mobile RF
- R900 gateways - fixed network RF

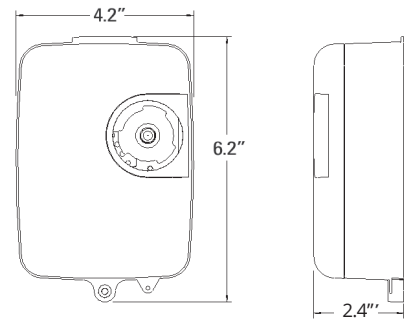
Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

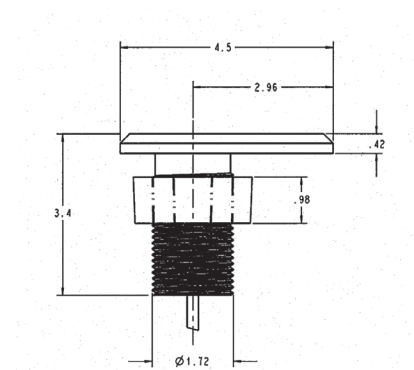
Dimensions



R900 Wall Endpoint



R900 Pit Endpoint



R900 Pit Antenna

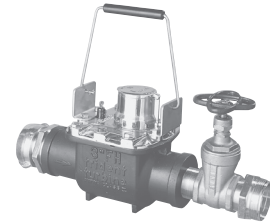




A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

Fire Hydrant Meter

SIZE: 3"



The Neptune® Fire Hydrant water meter is designed for mobile use in metering flows from fire hydrants. The meter measures a wide flow range to maximize revenue. It meets or exceeds the latest performance requirements of AWWA. Maximum flow rates may be exceeded by 25% for intermittent flows.

The Fire Hydrant water meter consists of a lightweight, aluminum maincase fitted with a 2" gate valve, a turbine measuring element, and a roll-sealed register.

Construction

The aluminum maincase is Xylan® coated for corrosion resistance and is lightweight, compact, and easy to handle. This meter features a unique "balanced handle" which makes carrying and installing it easier than any other fire hydrant meter on the market. A 2" gate valve enables the user to regulate the water flow without opening and closing the fire hydrant.

The unitized measuring element (UME) allows for quick and easy interchangeability.

Exclusive dual graphite bearings provide equalized rotor loading for accuracy over a broad flow range. The thrust-compensated rotor configuration relieves pressure on the thrust bearings, which minimizes wear and provides sustained accuracy over an extended operating life. A tamper-resistant stainless steel calibration vane allows recalibration of the UME to lengthen service life and to ensure accurate registration.

The roll-sealed register eliminates leaking and fogging. A magnetic drive couples the register with the measuring element.

Warranty

Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

KEY BENEFITS

Roll-Sealed Register

- Permanently-sealed, magnetic-driven register assembly eliminates leaking and fogging
- Locking register lid secures during transportation, protecting register lens
- Glass lens ensures readability and scratch resistance
- Tamperproof design prevents vandalism and allows in-service replacement of register

Cast Aluminum Maincase

- NSF/ANSI 372
- Xylan coating ensures maximum corrosion resistance
- Lightweight material ensures easy handling
- Single, balanced carrying handle provides for easy, one-person installation
- 2" gate valve allows safe pressurization of measuring element and regulation of water flow

Turbine Measuring Element

- Wide flow ranges at 98.5%-101.5% accuracy ensure maximized revenues
- Direct coupling of rotor to gear train ensures accurate registration
- UME makes maintenance easier and faster
- Stainless steel calibration vane ensures accurate registration and makes calibration easier

Specifications

Application

- Cold water measurement of flow in one direction

Maximum operating pressure

- 150 psi

Normal operation range

- 5-450 gpm (at accuracy of 100 +/- 1.5%)

Register type

- Direct reading, center sweep, roll-sealed magnetic drive with low-flow indicator

- Bronze box with locking cover

Strainer

- Die cast aluminum

Registration

- Per sweep hand revolution: 100 gallons, 10 cubic feet, 1 cubic metre

Register capacity (six-wheel odometer)

- 100,000,000 gallons
- 10,000,000 cubic feet
- 1,000,000 cubic metres

Measuring element

- AWWA Class II Turbine

Options

Size

- 2½" outlet (with 2½" gate valve)

Strainer

- Stainless steel (internal)

Orifice plate

- Size for application

Units of measure

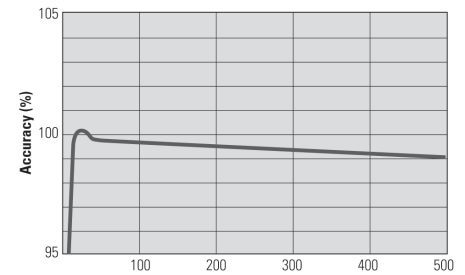
- U.S. gallons, cubic feet, cubic metres

Connections

- Less Coupling: 3" x 2" NPT
- With Coupling: 2½" NH

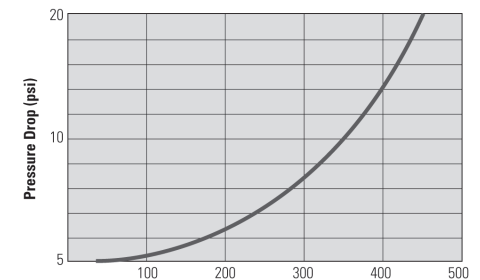
ACCURACY CHART

(Rate of Flow in Gallons per Minute)



PRESSURE LOSS CHART

(Rate of Flow in Gallons per Minute)



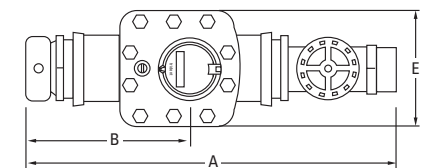
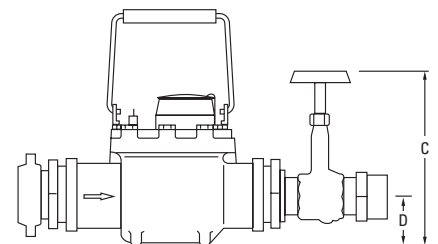
These charts show typical meter performance. Individual results may vary.

Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	Maximum Intermittent Flow	AWWA Standard
3"	8 to 450 US gpm 1.8 to 102.2 m³/h	560 US gpm 127.2 m³/h	8 to 435 US gpm 1.8 to 98.8 m³/h

Dimensions

3" Fire Hydrant	A inches	B inches	C inches	D inches	E inches	Weight lbs.
Less Coupling	15 ½	7 ½	11 ½	2 ¾	7 ½	23
With Coupling	19 ¼	10	11 ½	2 ¾	7 ½	29





A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

High Performance PROTECTUS® III Stainless Steel (S) Fire Service Meter

SIZES: 4", 6", 8", and 10"

The Neptune® HP PROTECTUS® III Stainless Steel (S) fire service meter measures extremely wide flow ranges at 100% ± 1.5% accuracy. All HP fire service meters meet or exceed AWWA C703 Standard, are certified to NSF/ANSI 61 and 372 requirements, and are Underwriters Laboratory (UL) Listed and Factory Manual (FM) Approved for fire service use.

Application

The HP PROTECTUS III S fire service meter is designed to measure both domestic and fire service water usage through a single water line. A typical application would be in a warehouse, hotel, or hospital where one water line may supply any number of faucets or bathrooms as well as an automatic sprinkler system.

Operation

At low flow rates, all flow is through the bypass meter. As flow increases, pressure loss through the bypass meter increases and the detector check valve automatically opens. This condition occurs, for example, when a fire sprinkler system goes into operation. This permits flow through the mainline turbine meter. As flow decreases, reduced pressure loss closes the detector check valve and flow is again directed through the bypass meter.

Construction

The combined readings of the mainline turbine and the bypass meter indicate total consumption through the HP PROTECTUS III S meter.

- 300 series stainless steel mainline body
- Integral detector check valve (stainless steel spring-loaded type)
- 300 series stainless steel strainer body with stainless steel basket
- Epoxy-coated steel strainer and valve cover
- HP Turbine measuring element
- Lockable ball valves used on bypass
- Check valve used on bypass
- 1" T-10® meter (on 4" size)
- 1½" T-10 or 1½" HP Turbine meter (on 6" size)
- 2" T-10 or 2" HP Turbine meter (on 8" and 10" sizes)



KEY FEATURES

Compact Size

- Standard laying length fits existing installations

- Lowers new installation and replacement costs

Wide Operating Range

- Measures extremely wide flow ranges at 98.5%–101.5% accuracy
- Combines low-flow sensitivity of disc meter with high-flow capacity of turbine meter
- Registers leaks or unauthorized use of water from fire service lines

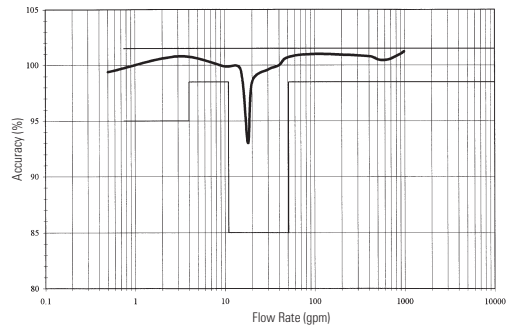
Component Repair and Maintenance

- Owner maintenance easily accomplished by replacement of major components
- Calibration vane allows in-field calibration of unitized measuring element (UME)

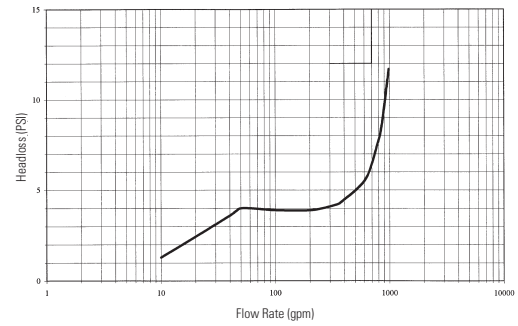
Roll-Sealed Registers

- Eliminates leaking and fogging
- In-line serviceability
- Magnetic driven, low-torque registration
- Tamperproof seal design

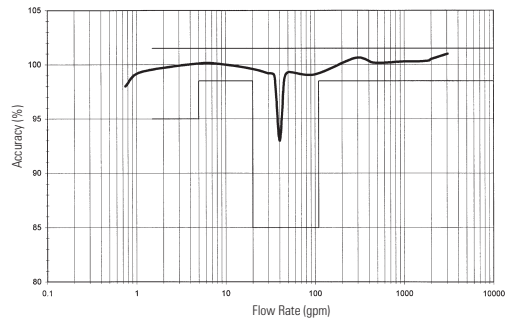
4" Accuracy



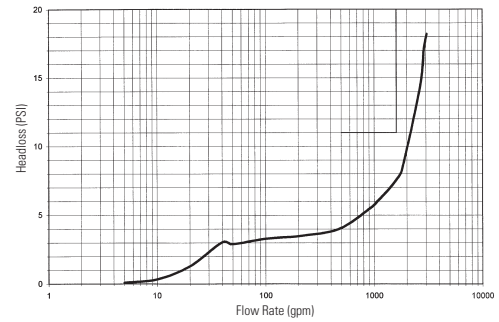
4" Headloss



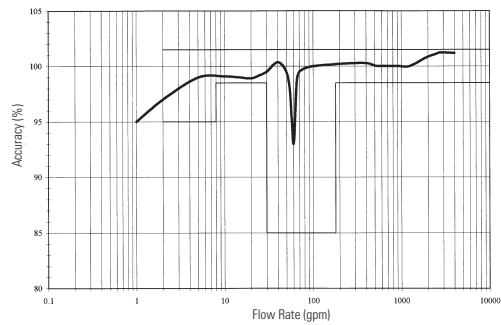
6" Accuracy



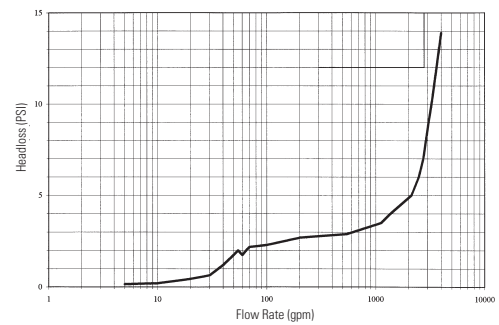
6" Headloss



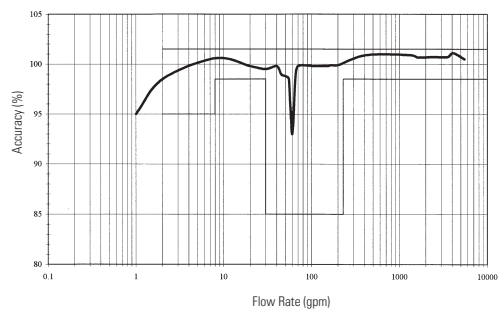
8" Accuracy



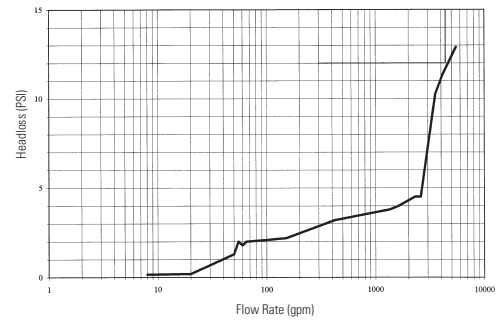
8" Headloss



10" Accuracy



10" Headloss



These charts show typical meter performance. Individual results may vary.

Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA Standard	Low Flow @ 95% - 101% Accuracy	Maximum Intermittent Flow Rate
4"	$\frac{3}{4}$ to 1200 US gpm 0.171 to 272.55 m ³ /h	4 to 700 US gpm 0.91 to 159 m ³ /h	$\frac{3}{8}$ US gpm 0.09 m ³ /h	1500 US gpm 340.7 m ³ /h
6"	1½ to 2500 US gpm 0.34 to 567.81 m ³ /h	5 to 1600 US gpm 1.14 to 363 m ³ /h	$\frac{3}{4}$ US gpm 0.17 m ³ /h	3100 US gpm 704.1 m ³ /h
8"	2 to 4000 US gpm 0.45 to 908.5 m ³ /h	8 to 2800 US gpm 1.8 to 636 m ³ /h	1 US gpm 0.23 m ³ /h	5000 US gpm 1135.6 m ³ /h
10"	2 to 6500 US gpm 0.45 to 1476.31 m ³ /h	8 to 4400 US gpm 1.8 to 999 m ³ /h	1 US gpm 0.23 m ³ /h	8000 US gpm 1817 m ³ /h

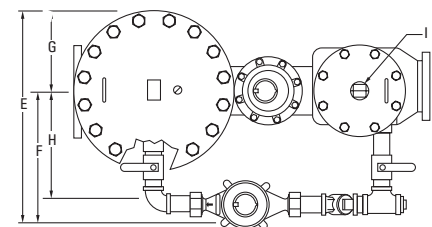
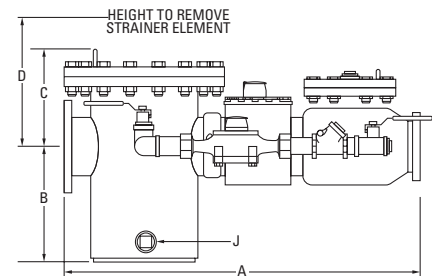
Dimensions

Meter Size	A in/mm	B in/mm	C in/mm	D in/mm	E in/mm	F in/mm	G in/mm	H in/mm	I in/mm	J in/mm	Weight lbs/kg
4"	33 838	10 254	10 $\frac{3}{4}$ 273	17 $\frac{1}{2}$ 445	22 559	15 $\frac{1}{4}$ 387	6 $\frac{3}{4}$ 171	12 305	2 51	2 51	215 98
6"	45 1143	11 $\frac{1}{16}$ 281	11 $\frac{3}{8}$ 289	21 $\frac{1}{4}$ 540	29 737	19 $\frac{1}{2}$ 495	9 $\frac{1}{2}$ 241	16 406	2 51	3 76	570 258
8"	53 1346	11 $\frac{13}{16}$ 300	13 $\frac{29}{64}$ 342	25 $\frac{7}{8}$ 657	34 $\frac{1}{4}$ 870	21 $\frac{3}{4}$ 552	12 $\frac{1}{2}$ 318	17 432	3 76	3 76	765 347
10"	68 1727	14 $\frac{13}{16}$ 376	15 381	30 $\frac{1}{16}$ 764	36 $\frac{1}{4}$ 921	22 $\frac{1}{2}$ 572	13 $\frac{3}{4}$ 349	18 457	3 76	3 76	900 408

Registration

Registration (per sweep hand revolution)	Disc Side			Turbine Side		
	1"	1½"	2"	4"	6"	8" & 10"
1,000 US Gallons					✓	✓
100 Gallons		✓	✓	✓		
100 Cubic Feet					✓	✓
10 US Gallons	✓					
10 Cubic Feet		✓	✓	✓		
1 Cubic Foot	✓					
10 Cubic Metres					✓	✓
1 Cubic Metre			✓	✓		
0.1 Cubic Metre	✓	✓				

Register Capacity (6 active wheel odometer)	Disc Side			Turbine Side		
	1"	1½"	2"	4"	6"	8" & 10"
1,000,000,000 Gallons					✓	✓
100,000,000 Gallons		✓	✓	✓		
100,000,000 Cubic Feet					✓	✓
10,000,000 Gallons	✓					
10,000,000 Cubic Feet		✓	✓	✓		
10,000,000 Cubic Metres					✓	✓
1,000,000 Cubic Metres			✓	✓		
1,000,000 Cubic Feet	✓					
100,000 Cubic Metres	✓	✓				



Specifications

Application

- Cold water measurement of flow in one direction

Maximum Operating Pressure

- 175 psi (1206 kPa)

Register

- Direct reading, center sweep, roll-sealed magnetic drive with low-flow indicator

Measuring Element

- AWWA Class II Turbine, hydrodynamically-balanced rotor, rotating disc

Flanges

- Round flanged ends per AWWA C207, Class D

Approvals

- NSF/ANSI 61
- NSF/ANSI 372
- UL Listed
- FM Approved

Options

Sizes

- 4", 6", 8", and 10"

300 Series Stainless Steel Strainer Cover and Valve Cover

300 Series Stainless Steel Bolts

Left Side Bypass

Units Of Measure

- U.S. gallons, Imperial gallons, cubic feet, cubic metres

Register types

- Remote reading systems*: ProRead™, ProCoder™, E-CODER®, E-CODER®)R900i™, E-CODER®)R450i™, TRICON®/S, TRICON/E®3

- Reclaim

Companion Flanges

- Cast iron
- Bronze (4" only)

Special Meter Flanges**

- 12" (for 10" meter size)

**Consult factory for meter performance specifications when fitted with ARB.*

***Non-UL/FM approved.*

Guaranteed Systems Compatibility

All HP PROTECTUS III S fire service meters are guaranteed adaptable to our ProRead, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, TRICON/S, TRICON/E3, and Neptune meter reading systems without removing the meter from service.

Warranty

Neptune provides a limited warranty with respect to its HP PROTECTUS III S fire service meter for performance, materials, and workmanship.

When desired, owner maintenance is easily accomplished by in-line replacement of the UME.



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A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

High Performance Turbine Meter



Neptune® High Performance (HP) Turbine water meters offer some of the widest flow ranges of any turbine meters on the market.

All HP Turbine water meters meet or exceed the latest performance and accuracy requirements of AWWA C701 and maximum continuous flow rates may be exceeded by as much as 25% for intermittent periods.

Construction

Each HP Turbine consists of a rugged, lead free, high-copper alloy maincase, an AWWA Class II turbine measuring element, and a roll-sealed register. The maincase is corrosion-resistant, lightweight, and compact. Inlet and outlet connections are flanged. Strainers are available to prevent debris from entering the meter and to reduce the effects of uneven water flow due to upstream piping variations.

The unitized measuring element (UME) allows for quick, easy, in-line interchangeability. Water volume is measured accurately at all flows by a specially-designed assembly. The hydrodynamically-balanced, thrust-compensated rotor relieves pressure on the thrust bearings to minimize wear and provide sustained accuracy over an extended operating life. Direct coupling of the rotor to the gear train eliminates revenue loss due to slippage during fast starts and line surges. A calibration vane allows in-field calibration of the UME to lengthen service life and to ensure accurate registration.

The roll-sealed register eliminates leaking and fogging. A magnetic drive couples the register with the measuring element.

Application

The HP Turbine water meter is designed for applications where flow rates are consistently moderate to high.

Systems Compatibility

Adaptability to all present and future systems for flexibility.

Warranty

Neptune provides a limited warranty with respect to its HP Turbine water meters for performance, materials, and workmanship.

When desired, owner maintenance is easily accomplished by in-line replacement of major components.

KEY FEATURES

Roll-Sealed Register

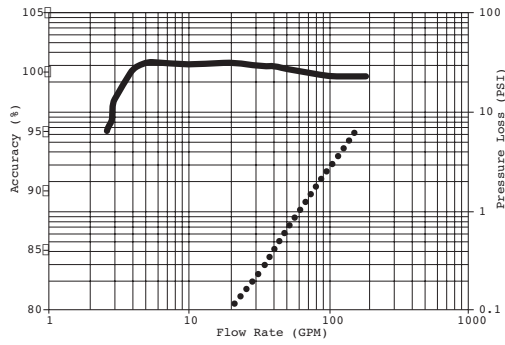
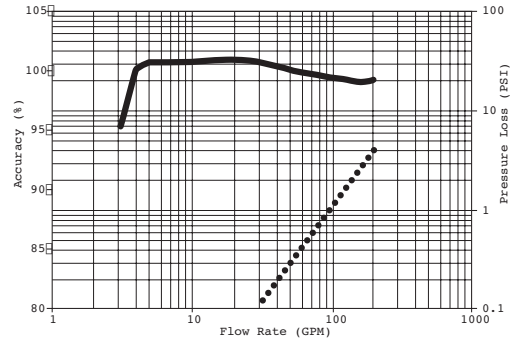
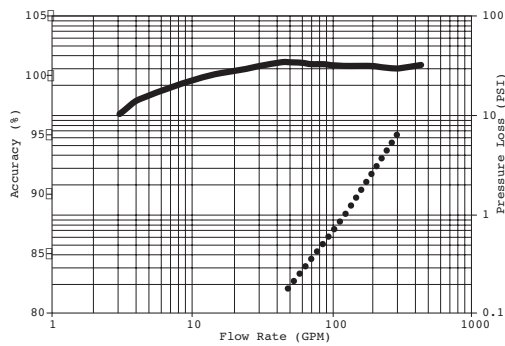
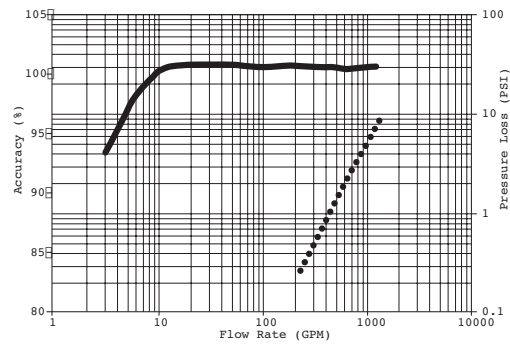
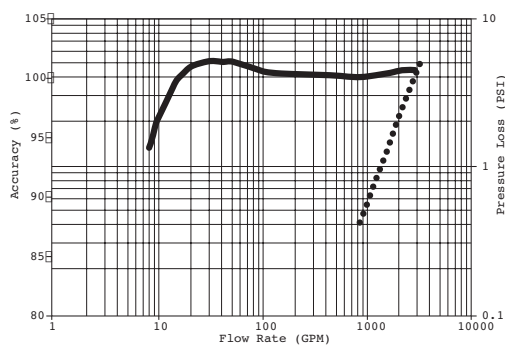
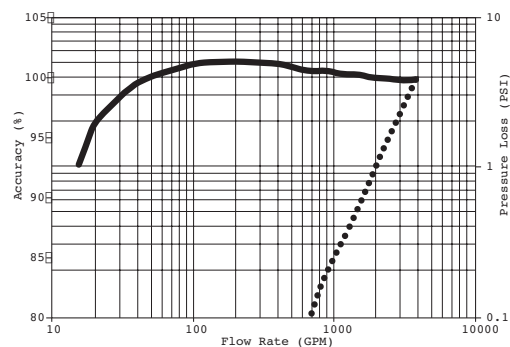
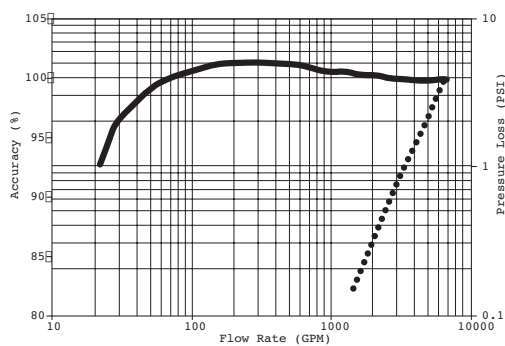
- Magnetic-driven, low-torque registration ensures accuracy
- Impact-resistant register design with flat glass for readability
- 1:1 ratio, low-flow indicator identifies leaks
- Bayonet mount allows in-line serviceability
- Tamperproof seal pin deters theft
- Date of manufacture, size, and model stamped on dial face

Lead Free Maincase

- Made from lead free, high-copper alloy
- NSF/ANSI 61 and 372 certified
- Compact design is lightweight and easy to handle
- Sturdy, durable, corrosion-resistant
- Resists internal pressure stresses and external damage
- Residual value

Turbine Measuring Element

- Excellent low-flow sensitivity and wide flow ranges available at 98.5% - 101.5% accuracy
- Direct coupling of rotor to gear train prevents slippage and ensures accurate registration
- Interchangeable measuring element allows for in-line service
- Hydrodynamically-balanced rotor
- Reusable O-ring gasket on 3" - 10" sizes

1½" Accuracy**2" Accuracy****3" Accuracy****4" Accuracy****6" Accuracy****8" Accuracy****10" Accuracy**

— Accuracy
 Head Loss

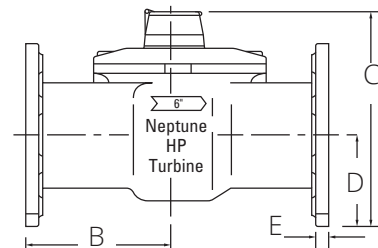
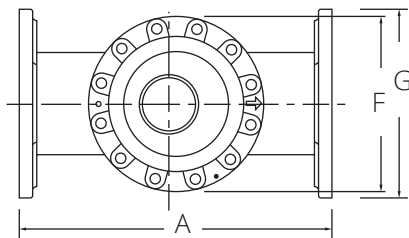
These charts show typical meter performance. Individual results may vary.

Operating Characteristics

Meter Size	Normal Operating Range @100% Accuracy ($\pm 1.5\%$)	Maximum Intermittent Flow	AWWA Standard
1½"	4 to 160 US gpm 0.91 to 36.3 m³/h	200 US gpm 45.4 m³/h	4 to 120 US gpm 0.91 to 27.3 m³/h
2"	4 to 200 US gpm 0.91 to 45.4 m³/h	250 US gpm 56.8 m³/h	4 to 190 US gpm 0.91 to 43.2 m³/h
3"	5 to 450 US gpm 1.14 to 102.2 m³/h	560 US gpm 127.2 m³/h	8 to 435 US gpm 1.8 to 98.8 m³/h
4"	10 to 1,200 US gpm 2.27 to 272.5 m³/h	1,500 US gpm 340.7 m³/h	15 to 750 US gpm 3.4 to 170.3 m³/h
6"	20 to 2,500 US gpm 4.55 to 567.8 m³/h	3,100 US gpm 704.1 m³/h	30 to 1,600 US gpm 6.8 to 306.6 m³/h
8"	35 to 4,000 US gpm 7.95 to 908.5 m³/h	5,000 US gpm 1135.6 m³/h	50 to 2,800 US gpm 11.4 to 635.9 m³/h
10"	50 to 6,500 US gpm 11.36 to 1476.3 m³/h	8,000 US gpm 1817 m³/h	75 to 4,200 US gpm 17.0 to 953.9 m³/h

Dimensions

Meter Size	A	B	C-STD	C-ProRead™	C-E-CODER® and ProCoder® Products	D	E	F	G	Weight
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	lbs (kg)
1½"	10 (254)	6½ (165)	7⅞ (181)	7⅞ (192)	7¾ (197)	1¾ (44)	¾ (19)	4½ (114)	5⅜ (137)	19 (8.6)
2"	10 (254)	6½ (165)	7⅞ (194)	8⅞ (204.8)	8¼ (210)	2⅞ (54)	1⅜ (21)	4½ (114)	5⅜ (137)	20 (9.1)
3"	12 (305)	6 (152)	10 (254)	10⅞ (265.1)	10⅞ (270)	3¾ (95)	⅝ (16)	6¼ (159)	7½ (191)	40 (18.1)
4"	14 (356)	6½ (165)	10⅞ (276)	11⅝ (287.3)	11½ (292)	4½ (114)	¾ (19)	8⅞ (206)	9 (229)	52 (23.6)
6"	18 (457)	8⅝ (219)	13 (330)	13⅞ (341.3)	13⅝ (346)	5½ (140)	1 (25)	10¼ (260)	11 (279)	115 (52.2)
8"	20 (508)	9⅝ (244)	15½ (394)	15⅝ (404.8)	16⅞ (409)	6¾ (171)	1⅞ (29)	10¼ (260)	13½ (343)	195 (88.4)
10"	26 (660)	12⅝ (321)	15½ (394)	15⅝ (404.8)	16⅞ (409)	8 (203)	1¼ (32)	10¼ (260)	16 (406)	275 (124.7)



Specifications

Application

- Cold water measurement of flow in one direction

Maximum operating pressure:

- 175 psi (1206 kPa)

Maximum operating temperature:

- 80°F

Register

- Direct reading, center-sweep, roll-sealed, magnetic drive with low-flow indicator

Measuring element

- AWWA Class II Turbine, hydrodynamically-balanced rotor

Options

Sizes

- 1½", 2", 3", 4", 6", 8", 10"

Units of measure:

- U.S. gallons, imperial gallons, cubic feet, cubic metres

Register Types

- Remote reading systems*: ARB V, ProRead, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, TRICON/S, TRICON/E3

* Consult factory for meter performance specifications when fitted with ARB.

- Reclaim

Companion flanges

- 1½" and 2" (oval): bronze
- 3", 4", 6": bronze or cast iron
- 8" and 10": cast iron

Strainer

- 1½" - 6" NSF/ANSI 61 lead free high copper alloy

Guaranteed Systems Compatibility

All HP Turbine water meters are guaranteed adaptable to our ARB® V, ProRead™ (ARB VI), ProCoder™, E-CODER®, E-CODER®)R900i™, E-CODER®)R450i™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

Registration

Registration (6-wheel odometer, per sweep hand revolution)		
	1½", 2", 3", 4"	6", 8", 10"
1,000 US Gallons		✓
1,000 Imperial Gallons		✓
100 US Gallons	✓	
100 Imperial Gallons	✓	
100 Cubic Feet		✓
10 Cubic Feet	✓	
10 Cubic Metres		✓
1 Cubic Metre	✓	

Register Capacity (6-wheel odometer)		
	1½", 2", 3", 4"	6", 8", 10"
1,000,000,000 US Gallons		✓
1,000,000,000 Imperial Gallons		✓
100,000,000 US Gallons	✓	
100,000,000 Imperial Gallons	✓	
100,000,000 Cubic Feet		✓
10,000,000 Cubic Feet	✓	
10,000,000 Cubic Metres		✓
1,000,000 Cubic Metres	✓	



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Be Confident with Sustained Accuracy Over Time

Neptune® MACH 10® Ultrasonic Meter



The MACH 10® ultrasonic water meter features solid state metrology with no degradation of accuracy over time. Combined with a corrosion-resistant, lead free, high-copper alloy maincase, the MACH 10 is built to withstand demanding service conditions and deliver sustained accuracy over the life of the meter.

- Sizes 1½ " and 2"
- Extended low-flow range for superior leak detection
- Accuracy sustained over meter life
- Can be installed in both horizontal and vertical applications
- Advanced ultrasonic technology
- Lead free, high-copper alloy maincase
- Certified to UL 327B (1½", 2") for residential fire service applications
- No maintenance

Specifications

AWWA C715 Compliant

NSF/ANSI 61 Certified

UL 327B Certified

(Optional for 1½", 2")

Application

- Cold water measurement of flow in potable, combination potable and fire service, and reclaim/secondary water applications.

Maximum Operating Water Pressure

- 175 psi

Operating Water Temperature Range

- +33°F to +122°F (+0.5°C to +50°C)

Environmental Conditions

- Operating temperature:
+14°F to +149°F (-10°C to +65°C)
- Storage temperature:
-40°F to +158°F (-40°C to +70°C)

Expected Battery Life

- 20 years

Options

Sizes

- 1½"
- 2"

Meter Options

- Potable water
- Reclaim water
- Residential fire service (combo or standalone meter service lines)

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

System Compatibility

- Compatible with all Neptune endpoints. Also available as MACH 10®)R900i™ for an integrated radio solution and MACH 10®)TC for Sensus Touch Coupler compatibility.

Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA C715 Standard Type 1	Extended Low Flow @ 100% Accuracy (+/- 3.0%)
1½"	0.80 to 125 U.S. gpm	2.0 to 100 U.S. gpm	0.30 U.S. gpm
2"	1.50 to 160 U.S. gpm	2.5 to 160 U.S. gpm	0.50 U.S. gpm

Dimensions

Meter Size	Length	Height	Flanges
1½"	10"	6¼"	Oval
	13"	6¼"	Oval
	12⅝"	6¼"	Internal Thread
	12⅝"	6¼"	External Thread
2"	10"	6½"	Oval
	15¼"	6½"	Oval
	17"	6½"	Oval
	15¼"	6½"	Internal Thread
	15¼"	6½"	External Thread

Available Units of Measure

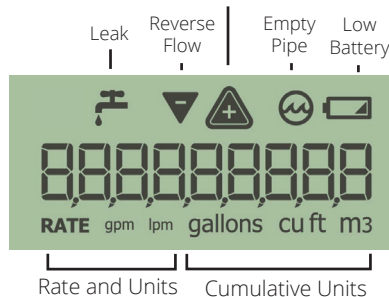
Consumption	Rate
Gallons	GPM
Cubic Feet	GPM
Cubic Metres	LPM
Cubic Meters (International)	LPM
Imperial Gallons	GPM
Acre-Feet*	GPM
Litres*	LPM
Kilolitres*	LPM

*Unit cannot be displayed on LCD

LCD Display

9-digit display for extra resolution on manual reads.

Forward Flow + Warning for Excessive Flow

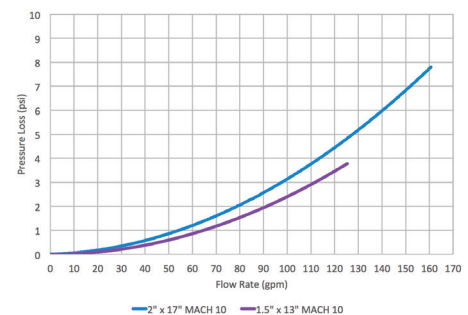


Registration

High Resolution (8-digit reading)		1½"	2"
1	U.S. Gallons	✓	✓
1	Imperial Gallons	✓	✓
0.1	Cubic Feet	✓	✓
0.01	Cubic Metres	✓	✓

Pressure Loss

Typical meter performance. Individual results may vary.



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Advanced Operational Insights and Accuracy with No Maintenance

Neptune® MACH 10® Ultrasonic Meter



The MACH 10® ultrasonic water meter features solid state metrology with no degradation of accuracy over time for enhanced revenue potential. The meter features embedded temperature monitoring with proactive freeze warning capabilities as well as an option for pressure monitoring for operational insights and quality of service. With a corrosion-resistant, lead free, high-copper alloy maincase, the MACH 10 is built to withstand demanding service conditions and deliver sustained accuracy over the life of the meter.

- Sizes $\frac{5}{8}$ ", $\frac{3}{4}$ ", and 1"
- Provides temperature data and alarms for proactive monitoring
- Extended low-flow range for superior leak detection
- Versatile mounting with both horizontal and vertical installation
- Certified to UL 327B ($\frac{3}{4}$ ", 1") for residential fire service applications
- No moving parts eliminates added cost of meter maintenance
- Optional pressure sensor enables proactive infrastructure monitoring

Specifications

AWWA C715 Compliant

NSF/ANSI 61 Certified

UL327B Certified

(Optional on ¾", 1")

Application

- Potable water
- Reclaim water
- Residential fire service (combo or standalone meter service lines)

Maximum Operating Water Pressure

- 175 psi

Operating Water Temperature Range

- +33°F to +122°F (+0.5°C to +50°C)

Environmental Conditions

- Operating temperature:
+14°F to +149°F (-10°C to +65°C)
- Storage temperature:
-40°F to +158°F (-40°C to +70°C)

Options

Embedded pressure monitoring
(PSI, kPa)

System Compatibility

- Compatible with AMR/AMI systems using either Neptune or Sensus protocol.
- Compatible with Neptune's R900, R900 LoRaWAN, and Cellular Endpoint.
- Also available as a MACH 10[®])R900i[™] and LoRaWAN[®] MACH 10[®])R900i[™] for an integrated radio solution or as a MACH 10[®])TC for Sensus TouchCoupler connectivity.

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA C715 Standard Type 1	Extended Low Flow @ 100% Accuracy (+/- 3%)
5/8"	0.10 to 25 U.S. gpm 0.02 to 5.68 m³/h	0.2 to 20 U.S. gpm 0.05 to 4.54 m³/h	0.05 U.S. gpm 0.01 m³/h
¾"	0.10 to 35 U.S. gpm 0.02 to 7.95 m³/h	0.5 to 30 U.S. gpm 0.11 to 6.81 m³/h	0.05 U.S. gpm 0.01 m³/h
1"	0.40 to 55 U.S. gpm 0.09 to 12.49 m³/h	0.75 to 50 U.S. gpm 0.17 to 11.35 m³/h	0.25 U.S. gpm 0.06 m³/h

Registration

High Resolution (8-digit reading)	
0.1	U.S. Gallons
0.1	Imperial Gallons
0.01	Cubic Feet
0.001	Cubic Metres

Available Units of Measure

Consumption	Rate
Gallons	GPM
Cubic Feet	GPM
Cubic Metres	LPM
Cubic Meters (International)	LPM
Imperial Gallons	GPM
Acre-Feet*	GPM
Litres*	LPM
Kilolitres*	LPM

*Unit cannot be displayed on LCD

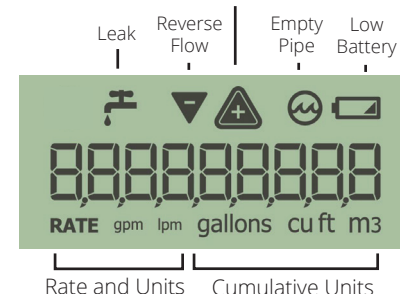
Dimensions

Meter Size	Length	Height	Threads (NPSM)
5/8"	7½"	3¾"	¾" - 14"
5/8" x ¾"	7½"	3¾"	1" - 11½"
¾"	9"	3¾"	1" - 11½"
¾" SL	7½"	3¾"	1" - 11½"
¾" x 1"	9"	3¾"	1¼" - 11½"
1"	10¾"	3¼"	1¼" - 11½"
1" x 1¼"	10¾"	3¼"	1½" - 11½"

LCD Display

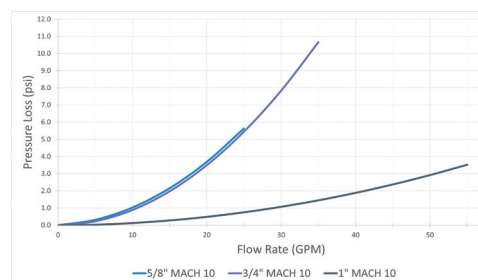
9-digit display for extra resolution on manual reads.

Forward Flow + Warning for Excessive Flow



Pressure Loss

This chart shows typical meter performance. Individual results may vary.



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Superior Accuracy. Zero Maintenance.

Neptune® MACH 10® Ultrasonic Meter



The MACH 10® ultrasonic water meter features solid state ultrasonic technology including a factory-calibrated, replaceable unitized measuring element (UME) with no degradation of accuracy over time. Combined with a corrosion-resistant, lead free, high-copper alloy maincase, the MACH 10 is built to withstand demanding service conditions and deliver sustained accuracy over the life of the meter.

- Sizes 3" through 12"
- Extended low-flow range for superior leak detection
- Accuracy sustained over meter life
- Can be installed in both horizontal and vertical applications
- Open flow path design with low pressure loss
- Advanced ultrasonic technology with easily replaceable UME design
- Lead free, high-copper alloy maincase
- UL Listed and FM Approved (standard)
- Available in standard turbine and compound lay lengths
- No maintenance

Specifications

AWWA C715 Compliant

NSF/ANSI 61 Certified

UL Listed/FM Approved
(Standard)

Maximum Operating Water Pressure

- 175 psi

Operating Water Temperature Range

- +33°F to +122°F (+0.5°C to +50°C)

Environmental Conditions

- Operating temperature:
+14°F to +149°F (-10°C to +65°C)
- Storage temperature:
-40°F to +158°F (-40°C to +70°C)

Expected Battery Life

- 10 years

Applications

- Potable water
- Fire service
- Reclaim water

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

System Compatibility

- Compatible with Neptune R900® System. Also available as MACH 10®)R900i™ for an integrated radio solution and MACH 10®)TC for Sensus Touch Coupler compatibility.

Operating Characteristics

Meter Size	Extended Low Flow @ 100% Accuracy (+/- 3.0%)	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	Safe Maximum Operating Capacity	
			Normal Operation (Non Fire Service)	Fire Service
3"	0.50 U.S. gpm	0.75 to 500 U.S. gpm	500 U.S. gpm	420 U.S. gpm
4"	0.75 U.S. gpm	1.5 to 1250 U.S. gpm	1250 U.S. gpm	1100 U.S. gpm
6"	1.0 U.S. gpm	2.0 to 2000 U.S. gpm	2000 U.S. gpm	1800 U.S. gpm
8"	4.0 U.S. gpm	6.0 to 4000 U.S. gpm	4000 U.S. gpm	4000 U.S. gpm
10"	6.0 U.S. gpm	10.0 to 6500 U.S. gpm	6500 U.S. gpm	6500 U.S. gpm
12"	8.0 U.S. gpm	12.0 to 8000 U.S. gpm	8000 U.S. gpm	8000 U.S. gpm

Registration

High Resolution (8-digit reading)		3"	4"	6" - 12"
1	U.S. Gallons	✓	✓	
10	U.S. Gallons			✓
0.1	Cubic Feet	✓	✓	
1	Cubic Feet			✓
0.01	Cubic Metres	✓	✓	
0.1	Cubic Metres			✓

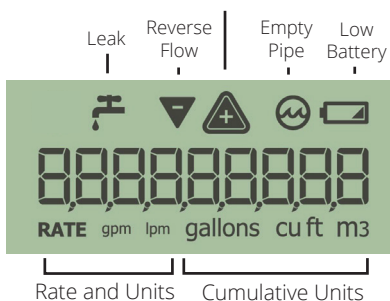
Dimensions

Meter Size	Length	Height	Weight
3"	12"	9½"	39 lbs
	17"	9½"	42 lbs
4"	14"	11"	51 lbs
	20"	11"	57 lbs
6"	18"	12¾"	79 lbs
	24"	12¾"	91 lbs
8"	20"	15 ⅜"	160 lbs
10"	26"	17 ⅞"	264 lbs
12"	19 ⅞"	20"	292 lbs

LCD Display

9-digit display for extra resolution on manual reads.

Forward Flow + Warning for Excessive Flow

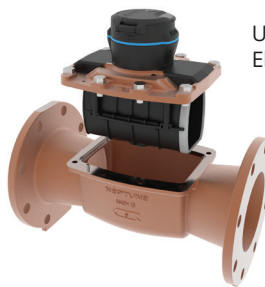
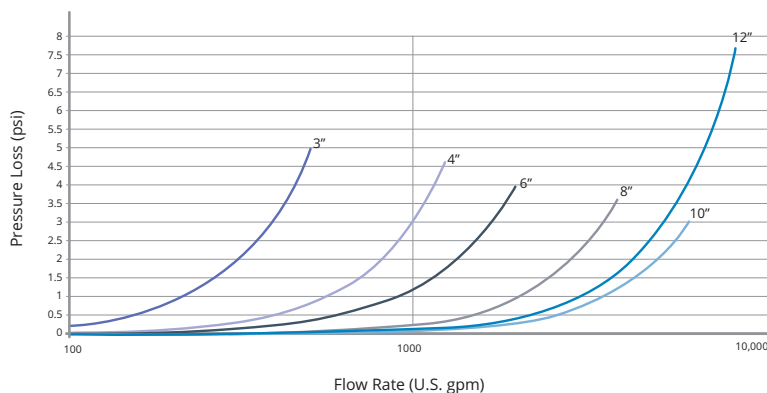


Available Units of Measure

Consumption	Rate
Gallons	GPM
Cubic Feet	GPM
Cubic Metres	LPM

Pressure Loss

This chart shows typical meter performance. Individual results may vary.



Unitized Measuring Element (UME)



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A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

T-10 Meter

SIZES $\frac{5}{8}$ ", $\frac{3}{4}$ ", AND 1"

Every T-10® water meter meets or exceeds the latest AWWA C700 Standard. Its nutating disc, positive displacement principle has been time-proven for accuracy and dependability since 1892, ensuring maximum utility revenue.

The T-10 water meter consists of three major assemblies: a register, a lead free, high-copper alloy maincase, and a nutating disc measuring chamber.

The T-10 meter is available with a variety of register types. For reading convenience, the register can be mounted in one of four positions on the meter.

The corrosion-resistant maincase will withstand harsh service conditions; internal water pressure, rough handling, and in-line piping stress.

The innovative floating chamber design of the nutating disc measuring element is unaffected by meter position or in-line piping stresses while the unique chamber seal extends the low-flow accuracy by sealing the chamber outlet port to the maincase outlet port. The nutating disc measuring element utilizes corrosion-resistant materials throughout and a thrust roller to minimize wear.



KEY FEATURES

REGISTER

Magnetic-driven, low-torque registration ensures accuracy

Impact-resistant register

High-resolution, low-flow leak detection

Bayonet-style register mount allows in-line serviceability

Tamperproof seal pin deters theft

Date of manufacture, size, and model stamped on dial face

LEAD FREE MAINCASE

NSF/ANSI 372, NSF/ANSI 61

Lifetime guarantee

Resists internal pressure stresses and external damage

Handles in-line piping variations and stresses

Provides residual value vs. plastic or composite

Electrical grounding continuity

NUTATING DISC MEASURING CHAMBER

Positive displacement

Widest effective flow range for maximum revenue

Proprietary polymer materials maximize long-term accuracy

Floating chamber design is unaffected by in-line piping stresses

Specifications

- NSF/ANSI 372, NSF/ANSI 61
- National Type Evaluation Program (NTEP) certification

Application

- Cold water measurement of flow in one direction in residential service applications

Maximum Operating Water Pressure

- 150 psi (1034 kPa)

Maximum Operating Water Temperature

- 80°F

Measuring Chamber

- Nutating disc technology design made from proprietary synthetic polymer

Options

Sizes

- $\frac{5}{8}$ " , $\frac{5}{8}$ " x $\frac{3}{4}$ "
- $\frac{3}{4}$ " , $\frac{3}{4}$ " SL, $\frac{3}{4}$ " x 1"
- 1" , 1" x 1 $\frac{1}{4}$ "

Units of Measure:

- U.S. gallons, imperial gallons, cubic feet, cubic metres

Register Types

- Direct reading: bronze box and cover (standard)

Remote Reading:

- ProCoder™, E-CODER®, E-CODER®R900i™, ProCoder™)R900i™

Bottom Caps

- Synthetic polymer ($\frac{5}{8}$ " only)
- Cast iron
- Lead free, high-copper alloy

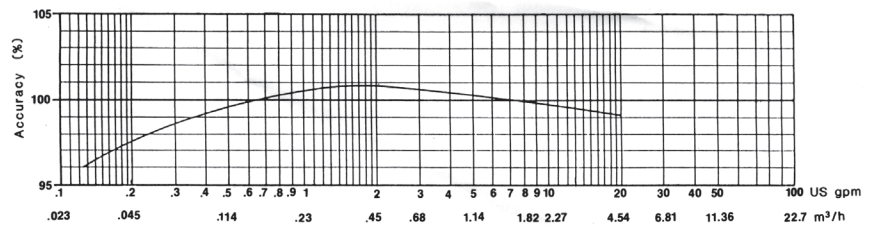
Connections

- Lead free, high-copper alloy, straight or bent

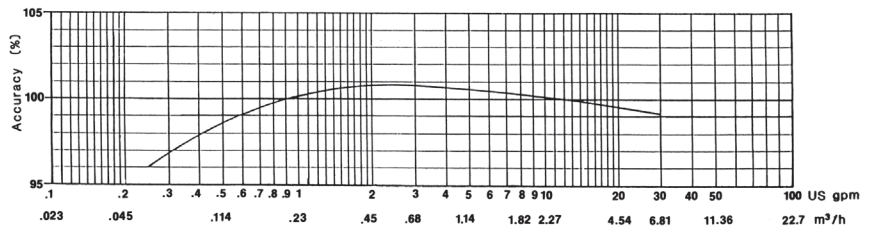
Environmental Conditions

- Operating temperature: +33° F to +149° F (0° C to +65° C)
- Storage temperature: +33° F to +158° F (0° C to +70° C)

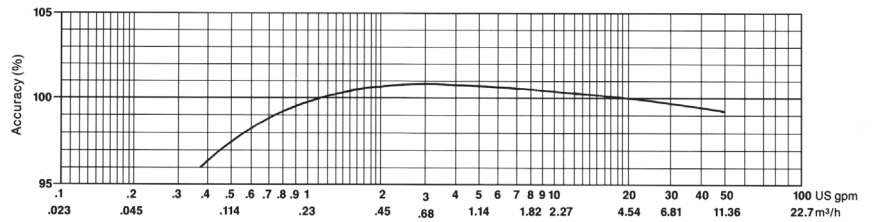
$\frac{5}{8}$ " ACCURACY



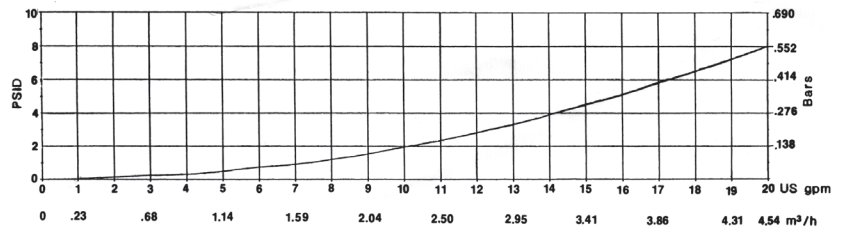
$\frac{3}{4}$ " ACCURACY



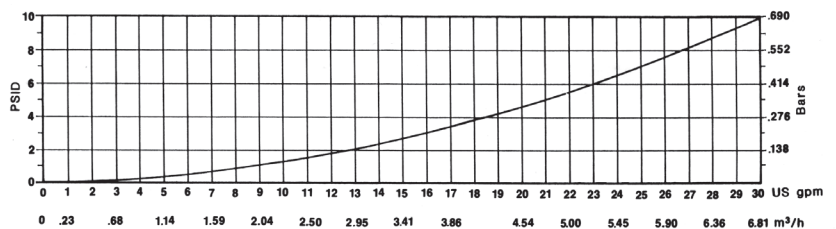
1" ACCURACY



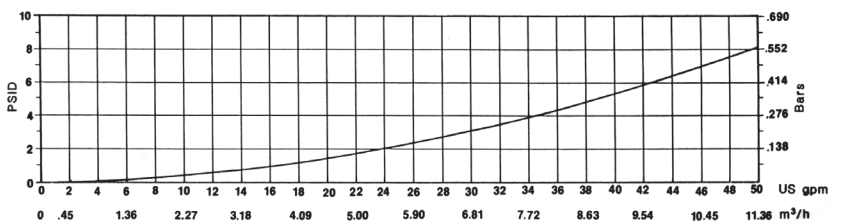
$\frac{5}{8}$ " PRESSURE LOSS



$\frac{3}{4}$ " PRESSURE LOSS



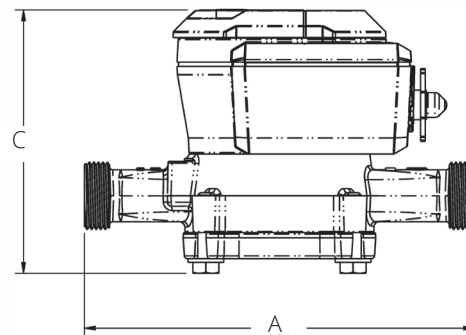
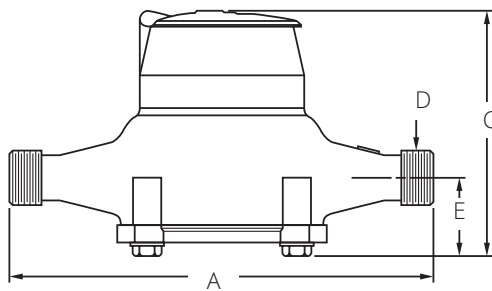
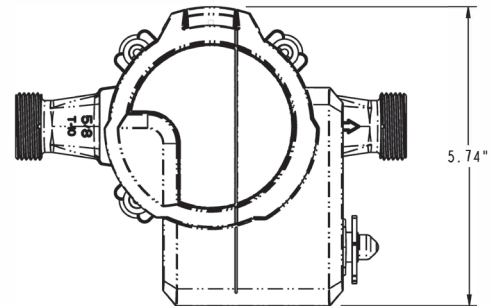
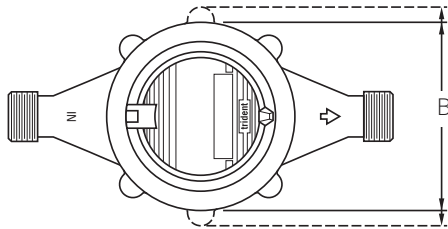
1" PRESSURE LOSS



These charts show typical meter performance. Individual results may vary.

Dimensions

Meter Size	A	B	C					D-	E-	Weight lbs/kg
	in/ mm	in/ mm	Std. in/mm	ARB in/mm	ProCoder™ or E-CODER®	ProCoder™) R900i™ or ProCoder™) R450i™	E-CODER®) R900i™ or E-CODER®) R450i™	NPSM Thread	in/ mm	
$\frac{5}{8}"$	7½ 191	3½ 92	4¾ 111	5¼ 133	5¼ 133	5¼ 133	5¼ 133	¾" - 14"	1½ 38	3¼ 1.4
$\frac{5}{8}" \times \frac{3}{4}"$	7½ 191	3½ 92	4¾ 111	5¼ 133	5¼ 133	5¼ 133	5¼ 133	1" - 11½"	1½ 38	3¾ 1.5
Pre 2011 $\frac{5}{8}"$	7½ 191	3½ 92	4¾ 124	5½ 146	5½ 139	5½ 139	5½ 139	¾" - 14"	1¾ 41	3¾ 1.7
Pre 2011 $\frac{5}{8}" \times \frac{3}{4}"$	7½ 191	3½ 92	4¾ 124	5½ 146	5½ 139	5½ 139	5½ 139	1" - 11½"	1¾ 41	4 1.8
$\frac{3}{4}"$	9 229	4¾ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1" - 11½"	1¾ 48	6 2.7
$\frac{3}{4}"$ SL	7½ 191	4¾ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1" - 11½"	1¾ 48	5½ 2.5
$\frac{3}{4}" \times 1"$	9 229	4¾ 111	5½ 140	6¼ 159	6¼ 159	6¼ 159	6¼ 159	1¼" - 11½"	1¾ 48	6½ 2.9
1"	10¾ 273	6½ 165	6¾ 162	7 178	7 178	7 178	7 178	1¼" - 11½"	2½ 54	9¾ 4.4
1" x 1¼"	10¾ 273	6½ 165	6¾ 162	7 178	7 178	7 178	7 178	1½" - 11½"	2½ 54	10¼ 4.6



Operating Characteristics

Meter Size	Normal Operating Range @ 100% Accuracy (+/- 1.5%)	AWWA Standard	Low Flow @ 95% Accuracy
5/8"	1/2 to 20 US gpm 0.11 to 4.55 m ³ /h	1 to 20 US gpm 0.23 to 4.5 m ³ /h	1/8 US gpm 0.03 m ³ /h
3/4"	3/4 to 30 US gpm 0.17 to 6.82 m ³ /h	2 to 30 US gpm 0.45 to 6.8 m ³ /h	1/4 US gpm 0.06 m ³ /h
1"	1 to 50 US gpm 0.23 to 11.36 m ³ /h	3 to 50 US gpm 0.68 to 11.4 m ³ /h	3/8 US gpm 0.09 m ³ /h

Registration

ProRead Registration (per sweep hand revolution)		5/8"	3/4" & 1"
10	US Gallons	√	√
10	Imperial Gallons	√	√
1	Cubic Foot	√	√
0.1	Cubic Metre	√	√
Register Capacity ProRead, ProCoder, and E-CODER		5/8"	3/4" & 1"
10,000,000	US Gallons	√	√
10,000,000	Imperial Gallons	√	√
1,000,000	Cubic Feet	√	√
100,000	Cubic Metres	√	√
ProCoder and E-CODER High Resolution (8-digit reading)		5/8"	3/4" & 1"
0.1	US Gallons	√	√
0.1	Imperial Gallons	√	√
0.01	Cubic Feet	√	√
0.001	Cubic Metres	√	√

Warranty

Neptune® provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.

Guaranteed Compatibility

All T-10 water meters are guaranteed adaptable to our ProRead™, AutoDetect, ProCoder™, E-CODER®, E-CODER®)R900i™, E-CODER®)R450i™, ProCoder™)R900i™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.



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A PRODUCT SHEET OF NEPTUNE TECHNOLOGY GROUP

TRU/FLO® Compound Meter

SIZES: 2"HP, 3", 4", 6", AND 6"X8"



All TRU/FLO® Compound water meters meet or exceed the latest performance and accuracy requirements set by the AWWA C702, and maximum continuous flow rates may be exceeded by as much as 25% for intermittent periods.

Application

The TRU/FLO Compound water meter is designed to register wide flow ranges where varying flow rates are typical. TRU/FLO meters combine the low-flow sensitivity of a disc-type meter with the high-flow capacity of a turbine-type meter.

Operation

The hydraulic valve transfers flow smoothly between the disc section and turbine section of the meter, minimizing the loss of accuracy in the crossover range. The turbine measuring element registers high flows and the disc measuring element registers low flows, ensuring accurate measurement at all flow rates.

Construction

The TRU/FLO consists of a durable, lead free, high-copper alloy maincase, Neptune® High Performance (HP) or Trident® Turbine measuring element, Neptune T-10® chamber, and two magnetic-driven, roll-sealed registers.

The 6" x 8" TRU/FLO assembly consists of two 6" x 8" concentric reducers, a 6" Neptune strainer, and a 6" Neptune TRU/FLO Compound meter.

The lead free, high-copper maincase is corrosion-resistant, lightweight, and easy to handle.

A calibration vane allows field calibration of the UME to lengthen service life and to ensure accurate registration.

The two magnetic-driven, roll-sealed registers simplify the meter's design and reduce long-term maintenance by eliminating complicated combining drive mechanisms. For reading convenience, the registers can be mounted in any one of four positions on the meter.

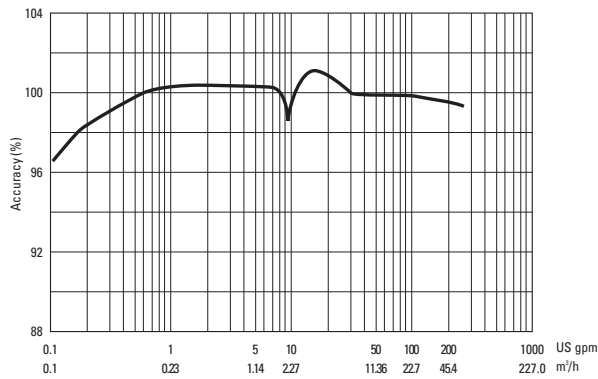
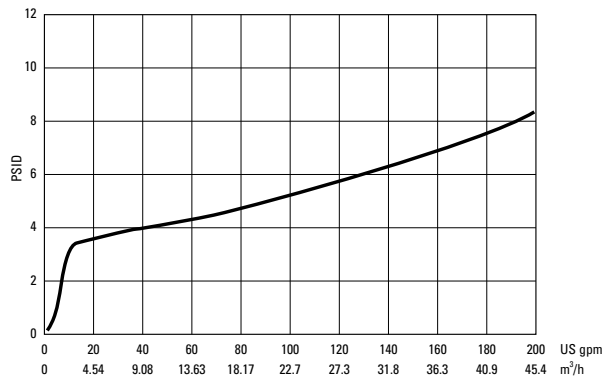
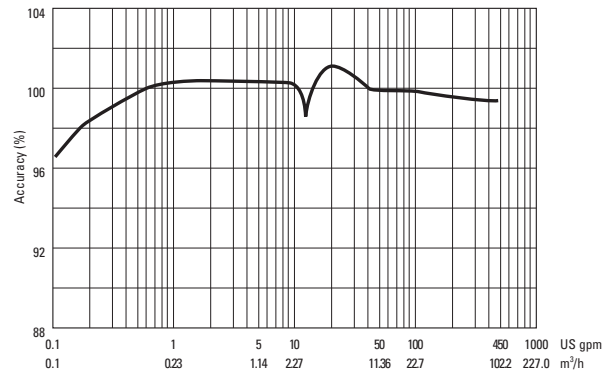
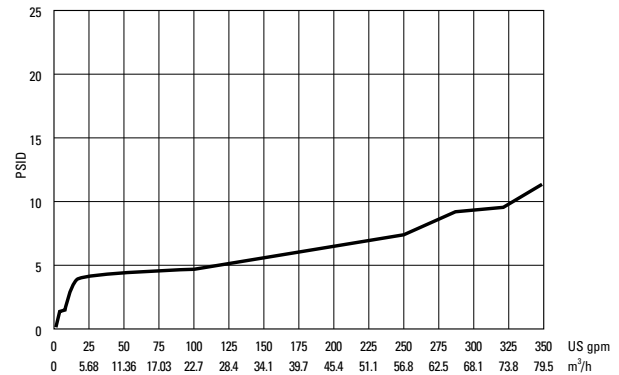
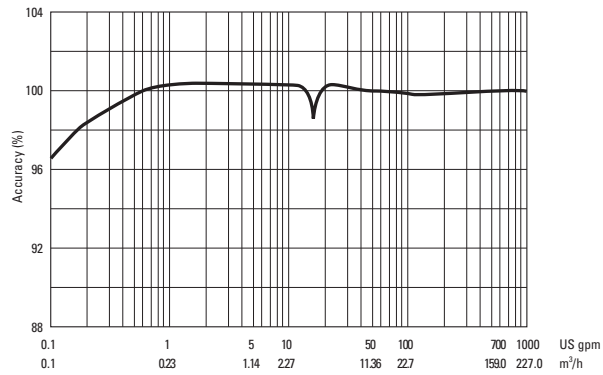
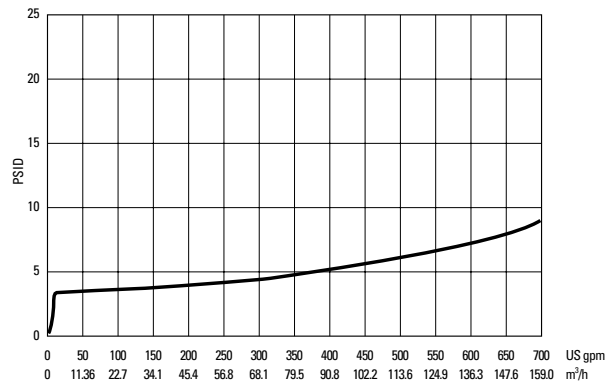
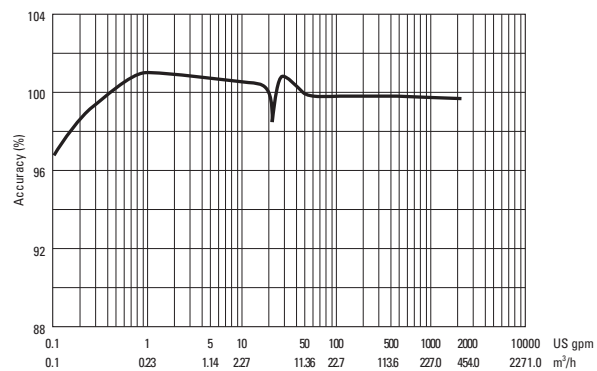
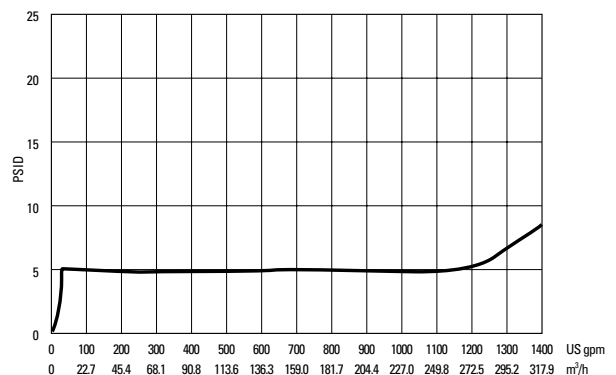
KEY FEATURES

Minimum loss of accuracy in the crossover range increases revenue

Spring-loaded valve eliminates need for frequent adjustment and service

Combined turbine and disc measuring elements

- Industry-leading flow ranges at 98.5%–101.5% accuracy ensure maximum revenue
 - Direct coupling of rotor to gear train ensures accurate registration
 - Unitized Measuring Element (UME) makes maintenance easier and faster with less downtime
 - Calibration vane allows in-line service to extend life and ensure accurate registration
- Compact maincase
- Made from lead free, high-copper alloy
 - NSF/ANSI 372 certified and NSF/ANSI 61 compliant
 - Lifetime guarantee
 - Compact, lightweight design provides for easy installation and in-line serviceability

2" Accuracy**2" Pressure Loss****3" Accuracy****3" Pressure Loss****4" Accuracy****4" Pressure Loss****6" Accuracy****6" Pressure Loss**

These charts show typical meter performance. Individual results may vary.

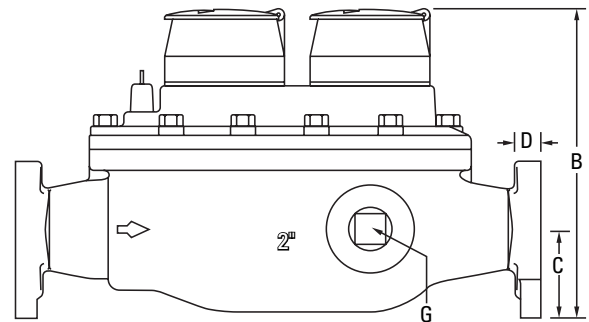
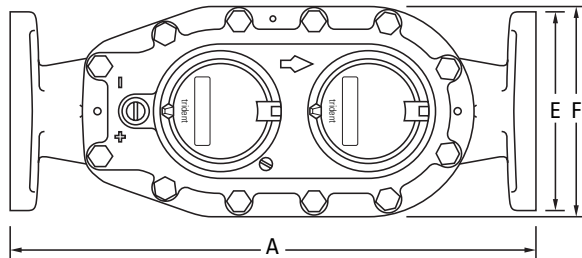
Operating Characteristics

Meter Size	Normal Operating Range @100% Accuracy (±1.5%)	AWWA Standard	Low Flow @ 95% - 101% Accuracy
2"	½ to 200 US gpm 0.11 to 45.4 m³/h	1 to 160 US gpm .227 to 36.34 m³/h	⅛ US gpm 0.03 m³/h
3"	½ to 450 US gpm 0.11 to 102.2 m³/h	2 to 350 US gpm .454 to 79.5 m³/h	⅛ US gpm 0.03 m³/h
4"	1 to 1000 US gpm 0.23 to 227.1 m³/h	3 to 600 US gpm .68 to 136.3 m³/h	½ US gpm 0.11 m³/h
6"	1 ½ to 2000 US gpm 0.34 to 454.2 m³/h	5 to 1350 US gpm 1.14 to 306.6 m³/h	¾ US gpm 0.17 m³/h
6" x 8"	1 ½ to 2000 US gpm 0.34 to 454.2 m³/h	16 to 1600 US gpm 3.63 to 363.4 m³/h	¾ US gpm 0.17 m³/h

*Accuracy at changeover 90% -103% per AWWA C702

Dimensions

		B									
Meter Size	A in/mm	E-CODER® OR ProCoder™ in/mm	ProRead™ in/mm	E-CODER®) R900i™ or ProCoder™) R900i™ in/mm	C in/mm	D in/mm	E in/mm	F in/mm	G in/mm	Flange Type	Weight lbs/kg
2" HP	15 ¼ 387	9 ⅜ 238	9 ⅞ 243	9 ⅜ 238	2 ½ 64	1⅜ 21	5 ⅞ 149	6 152	1 ½ NPT 38	2" Oval 150lb	32 14.5
3"	17 432	11 ½ 292	11 ¾ 298	11 ½ 292	3 ¾ 95	⅝ 16	7 ½ 191	8 ½ 216	1 ½ NPT 38	3" ANSI 150lb	72 32.7
4"	20 508	13 ⅜ 340	13 ⅞ 345	13 ⅜ 340	4 ½ 114	1⅞ 17	9 229	9 ⅞ 232	2 NPT 51	4" ANSI 150lb	100 45.4
6"	24 610	16 ⅜ 416	16 ⅞ 421	16 ⅜ 416	5 ½ 140	1 25	11 279	12 ¾ 324	2 NPT 51	6" ANSI 150lb	208 94.3
6" x 8"	55 ⅜ 1407	16 ⅜ 416	16 ⅞ 421	16 ⅜ 416	5 ½ 140	1 25	11 279	12 ¾ 232	2 NPT 51	8" ANSI 150lb	460 208.50



Specifications

Application

- Cold water measurement of flow in one direction

Maximum Operating Pressure

- 150 psi (1034 kPa)

Maximum Operating Temperature

- 80°F

Register

- Direct reading, center sweep, roll-sealed, magnetic drive with low-flow indicator

Measuring Element

- AWWA Class II Turbine, hydrodynamically balanced rotor
- Nutating disc

Options

Sizes

- 2" HP, 3", 4", 6", and 6" x 8"

Units of Measure

- U.S. gallons, imperial gallons, cubic feet, cubic metres

Register Types

- Remote reading systems: ProRead, ProCoder, E-CODER, E-CODER)R900i, E-CODER)R450i, ProCoder)R900i, TRICON/S, TRICON/E3
- Reclaim

Companion Flanges

- 2", 3", 4" bronze or cast iron
- 6", 6" x 8" cast iron

Strainer

- 2", 3", 4", 6" NSF/ANSI 372 and NSF/ANSI 61 lead free, high-copper alloy

Registration

		Turbine Side		Disc Side
Registration (per sweep hand revolution)		2", 3", 4"	6", 6" x 8"	2", 3", 4", 6", 6" x 8"
1,000 US Gallons			✓	
1,000 Imperial Gallons			✓	
100 US Gallons		✓		
100 Imperial Gallons		✓		
100 Cubic Feet			✓	
10 US Gallons				✓
10 Imperial Gallons				✓
10 Cubic Feet		✓		
10 Cubic Metres			✓	
1 Cubic Foot				✓
1 Cubic Metre		✓		
0.1 Cubic Metre				✓

		Turbine Side		Disc Side
Register Capacity (6-wheel odometer)		2", 3", 4"	6", 6" x 8"	2", 3", 4", 6", 6" x 8"
1,000,000,000 US Gallons			✓	
1,000,000,000 Imperial Gallons			✓	
100,000,000 US Gallons		✓		
100,000,000 Imperial Gallons		✓		
100,000,000 Cubic Feet			✓	
10,000,000 US Gallons				✓
10,000,000 Imperial Gallons				✓
10,000,000 Cubic Feet		✓		
10,000,000 Cubic Metres			✓	
1,000,000 Cubic Feet				✓
1,000,000 Cubic Metres		✓		
100,000 Cubic Metres				✓

Guaranteed Systems Compatibility

All Neptune TRU/FLO Compound meters are guaranteed adaptable to our ARB®V, ProRead™ (ARB VI), ProCoder™, E-CODER®, E-CODER®)R900i™, E-CODER®)R450i™, ProCoder™)R900i™, TRICON®/S, TRICON/E®3, and Neptune meter reading systems without removing the meter from service.

Systems Compatibility

- Adaptability to all present and future systems for flexibility.

Warranty

- Neptune provides a limited warranty for performance, materials, and workmanship. See warranty statement for details.



**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Krista Citron

48. Reference the AMI Plan. Please provide the electronic spreadsheets, databases, etc., with all formulas intact, used to produce figures 9, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 22, 23, 24, and 25.

Response:

Refer to the workpapers in KAW_R_AGDR1_NUM008_0829025_Attachment A.

**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Krista Citron

49. Reference the AMI Plan, Appendix A, please provide electronic versions of figures 26-28 with enough detail that they are more legible when inspected at magnification.

Response:

See:

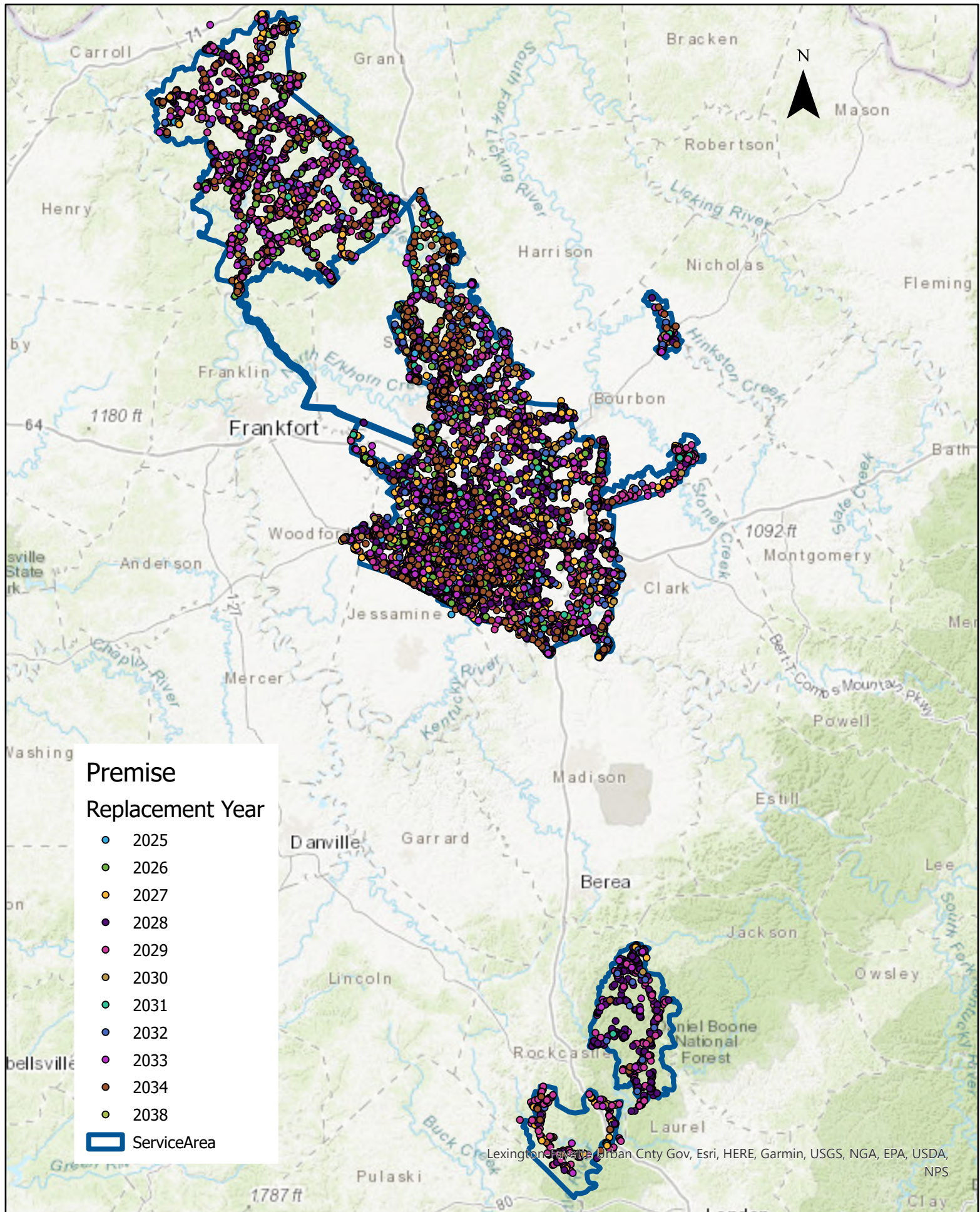
Figure 26: KAW_R_AGDR1_NUM049_082925_Attachment_A

Figure 27: KAW_R_AGDR1_NUM049_082925_Attachment_B

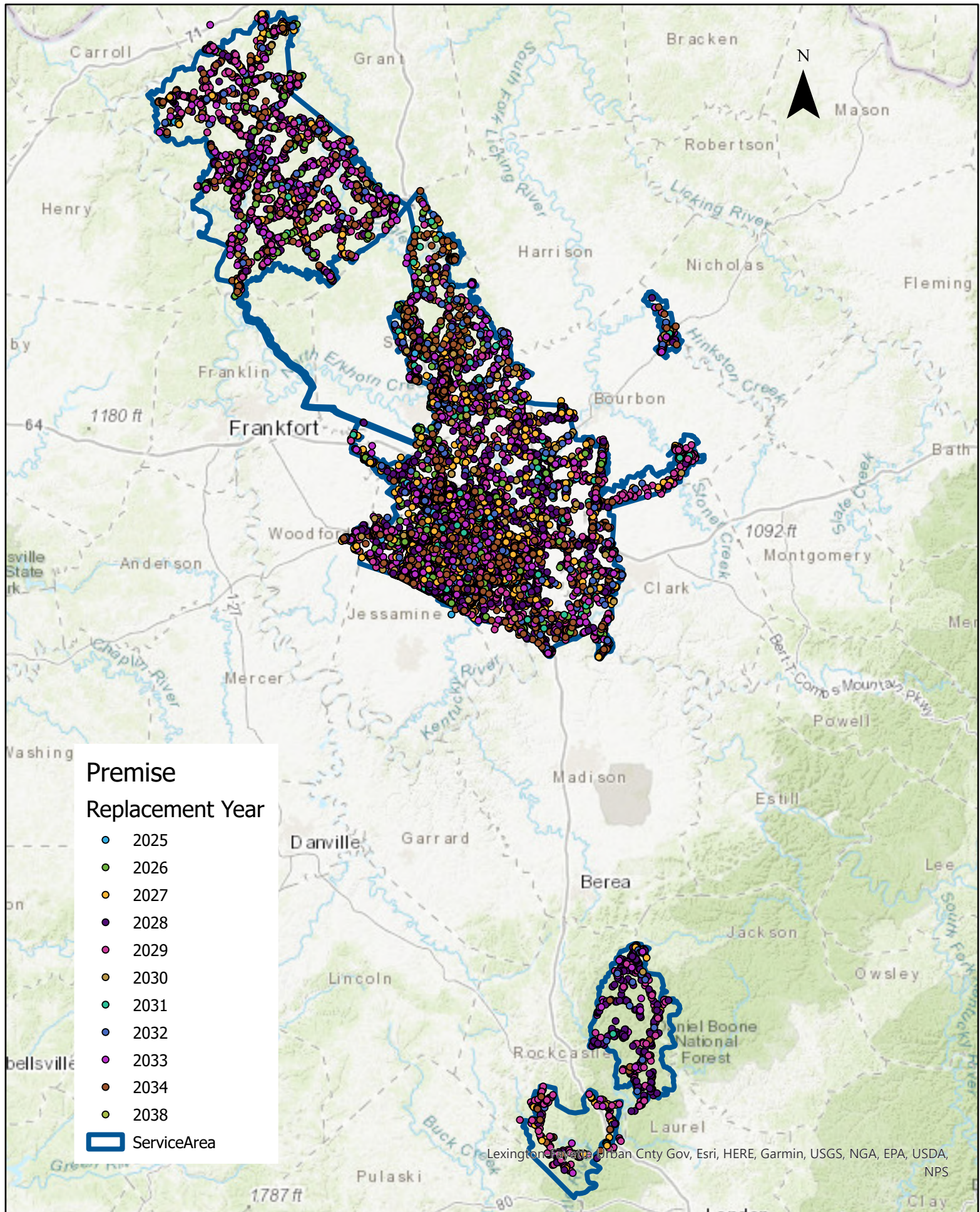
Figure 28: KAW_R_AGDR1_NUM049_082925_Attachment_C

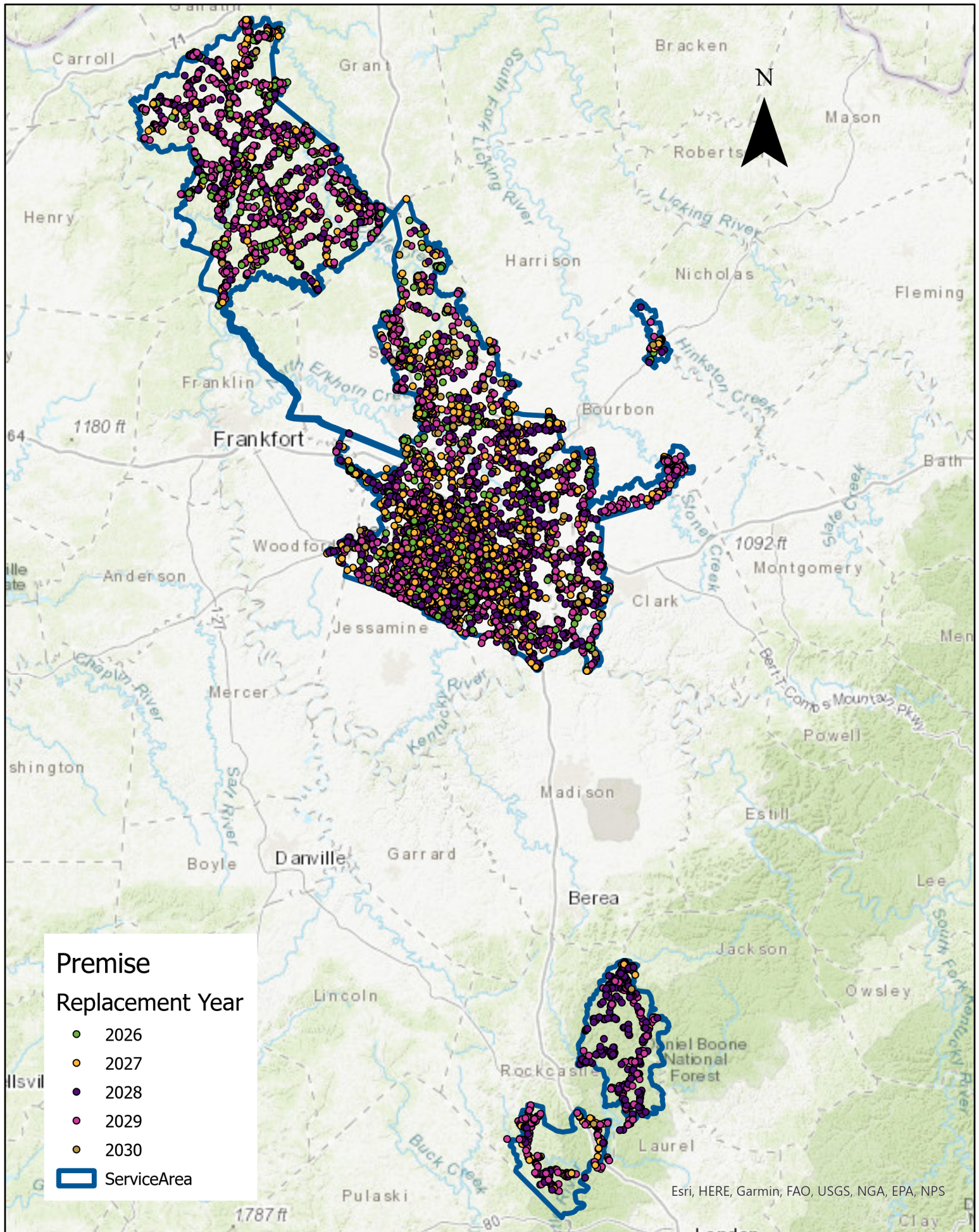
Also note that Figures 27 and 28 in Appendix A of the AMI Plan were inadvertently the same image. Updated Figure 28 can be found in the above Attachment C.

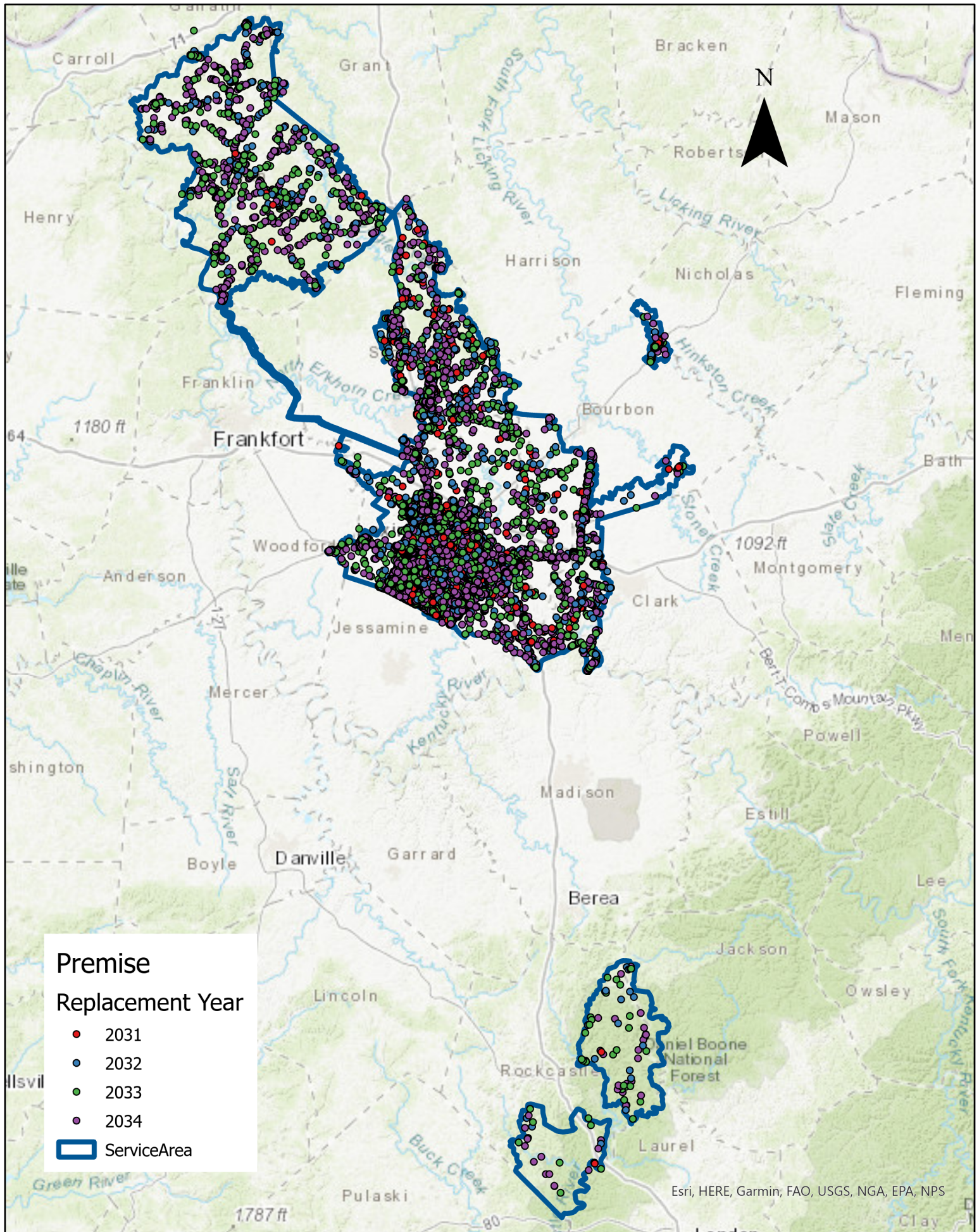
Meter Replacements by Year of Completion



Meter Replacements by Year of Completion







**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Krista Citron

50. Reference the Direct Testimony of Krista E. Citron (“Citron Direct”).² Please provide the spreadsheet or data base used to generate the graph on page 5 in electronic format with the formulas intact.

Response:

Refer to the workpapers in KAW_R_AGDR1_NUM008_0829025_Attachment A.

² Filed on July 11, 2025, in this proceeding.

**KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION**

Witness: Krista Citron

51. Reference Citron Direct on page 5. Please provide vendor data on the composite lids used for the cost benefit analysis and background data verifying basis of composite lid costs.

Response:

For vendor and cost data, see response to KAW_R_AGDR1_NUM039_082925.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Justin Sensabaugh

52. Reference the Direct Testimony of Justin Sensabaugh (“Sensabaugh Direct”).³ On page 8, lines 7-8, it is stated that an average of 8% of the 5/8-inch meters fail at 8 years. Please explain the following:
- a. If the plan is to upgrade and replace meters on a 10-year basis, won’t these early failed meters require manual reading?
 - b. How will the registers of failed meters be read if there are no meter readers left? Please explain how this will be handled with full AMI deployment.

Response:

- a. Sometimes yes, but KAWC replaces failed meters for an assortment of reasons during our normal business operations.
- b. If the Company could not retrieve a cellular read from an AMI meter, then the Company would likely generate a service order and dispatch a Field Service Representative to manage the resulting process exception.

³ Filed on July 11, 2025, in this proceeding.

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2025-00240
ATTORNEY GENERAL'S FIRST REQUEST FOR INFORMATION

Witness: Craig Dowell

53. Reference the AMI plan, pages 8 and 9. Please explain how advanced customer portal information will be deployed to coincide with the customer's meter being upgraded to AMI under the proposed plan for deploying AMI.

Response:

American Water utilizes Cellular AMI technology with two approved vendors. The Cellular AMI technology allows for seamless transition from AMR without the need of any additional infrastructure. The endpoint will begin communicating to the Head End System within 6 hours following installation. This interval data will be transmitted and made available via the existing Customer Portal. The customers' existing portal will automatically transition from displaying 1 monthly reading to displaying hourly readings.