

**AWWA Free Water Audit Software: Worksheet**

FWAS v6.0  
American Water Works Association.

Water Audit Report for: **VEOLIA - Mechanicsburg**  
 Audit Year: **2023** | **Jan 01 2023 - Dec 31 2023** | **2023**

Click 'n' to add notes | Click 'g' to determine data validity grade | To edit water system info: [go to start page](#)

To access definitions, click the [input name](#)

All volumes to be entered as: MILLION GALLONS (US) PER YEAR

[Water Supplied Error Adjustments](#)

choose entry option:

**WATER SUPPLIED**

VOS	Volume from Own Sources:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	<input type="text" value="1,009.618"/>	MG/Yr	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="4"/>	<input type="text" value="percent"/>	
WI	Water Imported:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>		MG/Yr			VOSEA
WE	Water Exported:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>		MG/Yr			WIEA WEEA
<b>WATER SUPPLIED:</b>			<b>1,009.618</b>	MG/Yr			

**AUTHORIZED CONSUMPTION**

BMAC	Billed Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	<input type="text" value="756.825"/>	MG/Yr			
BUAC	Billed Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>		MG/Yr			
UMAC	Unbilled Metered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="n/a"/>		MG/Yr			
UUAC	Unbilled Unmetered:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="4"/>	<input type="text" value="1.875"/>	MG/Yr	<input type="text" value="custom"/>	<input type="text" value="1.875"/>	
<b>AUTHORIZED CONSUMPTION:</b>			<b>758.700</b>	MG/Yr			

**WATER LOSSES**

**250.918** MG/Yr

**Apparent Losses**

Default option selected for Systematic Data Handling Errors, with automatic data grading of 3

SDHE	Systematic Data Handling Errors:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="1.892"/>	MG/Yr	<input type="text" value="0.25%"/>	<input type="text" value="default"/>	
CMI	Customer Metering Inaccuracies:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="7.568"/>	MG/Yr	<input type="text" value="volume"/>	<input type="text" value="7.568"/>	MG/Yr
UC	Unauthorized Consumption:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="1"/>	<input type="text" value="2.525"/>	MG/Yr	<input type="text" value="custom"/>	<input type="text" value="2.525"/>	MG/Yr
<b>Apparent Losses:</b>			<b>11.985</b>	MG/Yr			

**Real Losses**

**Real Losses:** **238.933** MG/Yr

**WATER LOSSES:** **250.918** MG/Yr

**NON-REVENUE WATER**

**NON-REVENUE WATER:** **252.793** MG/Yr

**SYSTEM DATA**

Lm	Length of mains:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	<input type="text" value="164.1"/>	miles	(including fire hydrant lead lengths)
Nc	Number of service connections:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="8"/>	<input type="text" value="13,638"/>		(active and inactive)
<b>Service connection density:</b>		<input type="text" value="83"/>	<b>83</b>	conn./mile main	
Lp	Average length of (private) customer service line:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	<input type="text" value="75.0"/>	ft	(average distance between property line and meter)
AOP	Average Operating Pressure:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="7"/>	<input type="text" value="68.0"/>	psi	

**COST DATA**

CRUC	Customer Retail Unit Charge:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="5"/>	<input type="text" value="\$8.24"/>	\$/1000 gallons (US)	<b>Total Annual Operating Cost</b>
VPC	Variable Production Cost:	<input type="text" value="n"/> <input type="text" value="g"/> <input type="text" value="3"/>	<input type="text" value="\$588.30"/>	\$/Million gallons	<input type="text" value="\$21,312,543"/>

**WATER AUDIT DATA VALIDITY TIER:**

**\*\*\* The Water Audit Data Validity Score is in Tier III (51-70). See Dashboard tab for additional outputs. \*\*\***

[go to dashboard](#)

A weighted scale for the components of supply, consumption and water loss is included in the calculation of the Water Audit Data Validity Score

**PRIORITY AREAS FOR ATTENTION TO IMPROVE DATA VALIDITY:**

Based on the information provided, audit reliability can be most improved by addressing the following components:

- 1: Volume from Own Sources (VOS)
- 2: Customer Metering Inaccuracies (CMI)
- 3: Variable Production Cost (VPC)

**KEY PERFORMANCE INDICATOR TARGETS:**

OPTIONAL: If targets exist for the operational performance indicators, they can be input below:

Unit Total Losses:	<input type="text"/>	gal/conn/day
Unit Apparent Losses:	<input type="text"/>	gal/conn/day
Unit Real Losses <sup>A</sup> :	<input type="text"/>	gal/conn/day
Unit Real Losses <sup>B</sup> :	<input type="text"/>	gal/mile/day

If entered above by user, targets will display on KPI gauges (see Dashboard)