



AWWA Free Water Audit Software: Worksheet

FWAS v6.0

American Water Works Association.

Water Audit Report for: **VEOLIA - Nuremburg**
 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: MG/Yr
 WI Water Imported:
 WE Water Exported: MG/Yr

VOSEA
WIEA
WEEA

WATER SUPPLIED: 7.612 MG/Yr

AUTHORIZED CONSUMPTION

BMAC Billed Metered: MG/Yr
 BUAC Billed Unmetered:
 UMAC Unbilled Metered:
 UUAC Unbilled Unmetered: MG/Yr

choose entry option:

MG/Yr

AUTHORIZED CONSUMPTION: 5.564 MG/Yr

WATER LOSSES

2.048 MG/Yr

Apparent Losses

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

SDHE Systematic Data Handling Errors: MG/Yr
 CMI Customer Metering Inaccuracies: MG/Yr
 UC Unauthorized Consumption: MG/Yr

choose entry option:

MG/Yr
 MG/Yr

[under-registration](#)

Apparent Losses: 0.093 MG/Yr

Real Losses

Real Losses: 1.955 MG/Yr

WATER LOSSES: 2.048 MG/Yr

NON-REVENUE WATER

NON-REVENUE WATER: 2.120 MG/Yr

SYSTEM DATA

Lm Length of mains: miles (including fire hydrant lead lengths)
 Nc Number of service connections: (active and inactive)
 Service connection density: conn./mile main

Lp Are customer meters typically located at the curbstop/property line?
 Average length of (private) customer service line: ft (average distance between property line and meter)

AOP Average Operating Pressure: psi

COST DATA

CRUC Customer Retail Unit Charge: \$/1000 gallons (US) **Total Annual Operating Cost**
 VPC Variable Production Cost: \$/Million gallons \$/yr (optional input)

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: gal/conn/day
 Unit Apparent Losses: gal/conn/day
 Unit Real Losses^A: gal/conn/day
 Unit Real Losses^B: gal/mile/day

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