IOREX

SUSTAINABLE WATER & PIPE PROTECTION

EXHIBIT A

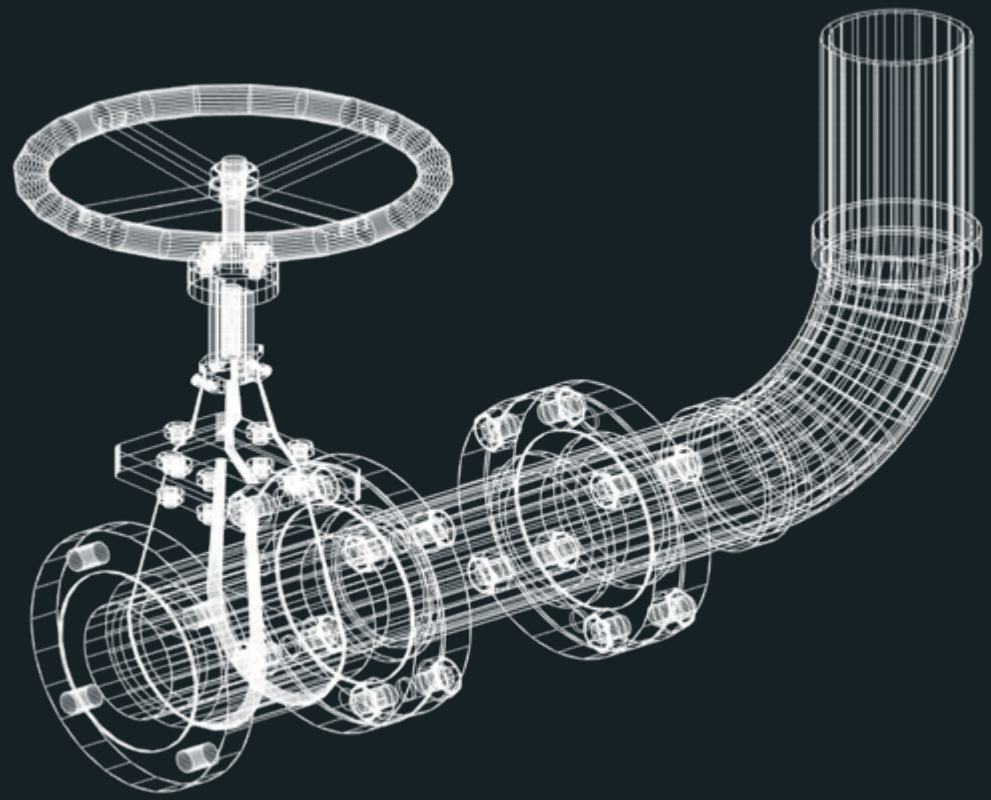
IOREX SMMARY for CARMEL AREA WASTWATER DISTRICT

WHAT is IOREX
- WHAT IOREX DOES
- WHY IOREX IS DIFFERENT
- IOREX SUMMARY

IOREX DECLARE LABEL

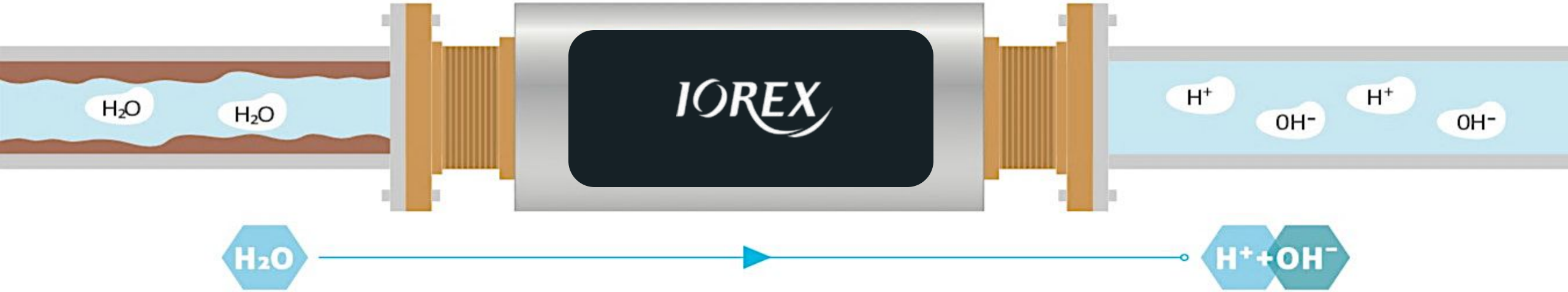
IOREX APPLICATIONS:
- 72 HOUR TESTING
- 336 HOUR TESTING
- 12 MONTH TESTING & MAGNETITE

CASE STUDIES
- W HOTEL (WASHINGTON HOTEL)



WHAT IS IOREX?

IOREX is the only sustainable pipe protection solution that does **not require ongoing maintenance** and significantly reduces **pipe deterioration & bacterial contamination**.



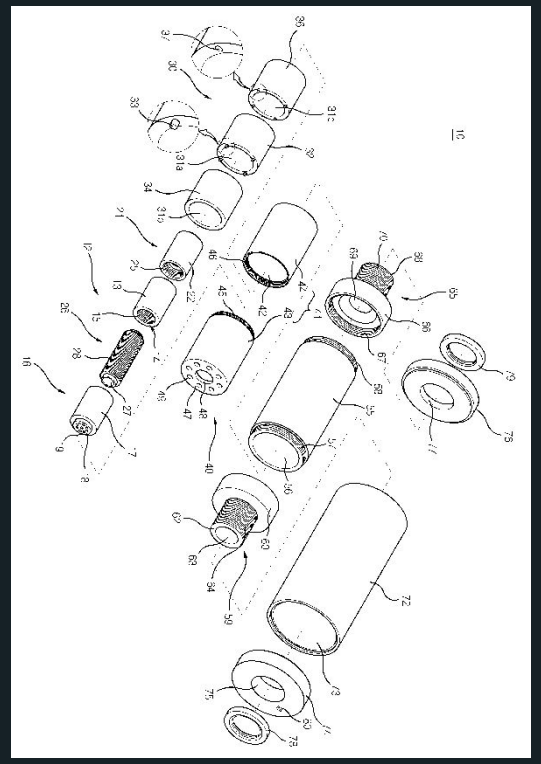
MICROBIAL CONTROL
(BACTERIA & PATHOGENS)

CORROSION CONTROL

SCALE CONTROL

WHY IOREX IS DIFFERENT?

- Base technology: IOREX is NOT a sacrificial anode-based, magnet-based, or coil-based technology.
- Energy Consumption: IOREX is Energy Neutral.
- Efficacy: Corrosion control, scale control and microbial control.
- Applications: IOREX works in all types of pipes.
- Consistency: Consistent effectiveness throughout its lifespan.
- IOREX converts rust into magnetite in iron and steel pipe.



01 **CORE SYSTEM**

CARBON

PLASTIC

02 **INNER CASING**

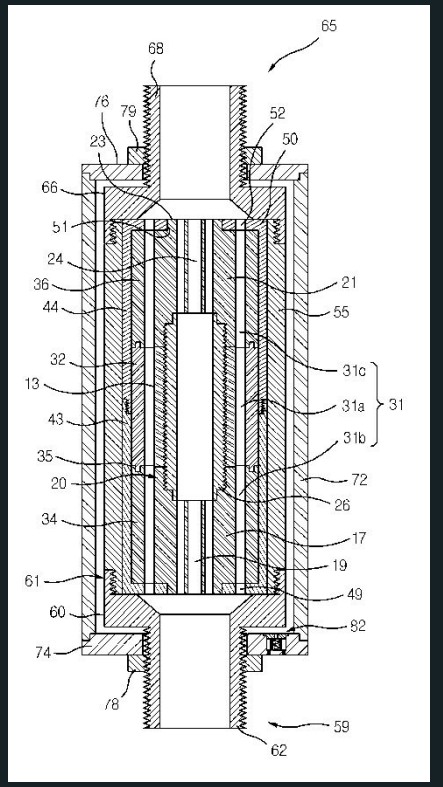
BRASS

03 **OUTER CASING**

STAINLESS STEEL

04 **OTHERS**

RUBBER BEARINGS (2)



BI-DIRECTION AL

INLET SIDE

OUTLET SIDE

WATER SIMPLY FLOWS THROUGH THE DEVICE WITH NO LOSS OF PRESSURE

TURBULENCE JET

NANOBUBBL
E

IONIZATION

IOREX SOLUTION
3 TECHNOLOGIES IN 1 PRODUCT

FRICTION FROM WATER FLOW

Forms turbulence

Increases entropy

Establishes strong electrostatic field

SMALL WATER CLUSTER FORMED

Generates smaller hydrogen-bounded clusters

Favors isolation of mineral ions

Decreases scale formation potential

SIGNIFICANT ELECTROSTATIC POTENTIAL DIFFERENCE

Accumulates electrons

Delivers electrons to water

Promotes ionization

DECLARE LABEL

ILFI

The International Living Future Institute (https://living-future.org/) mission is “is to lead the transformation toward a civilization that is socially just, culturally rich, and ecologically restorative.”

DECLARE LABEL

The ILFI certifies certain products and systems which adhere to the criteria established by the ILFI as highly sustainable products and systems.

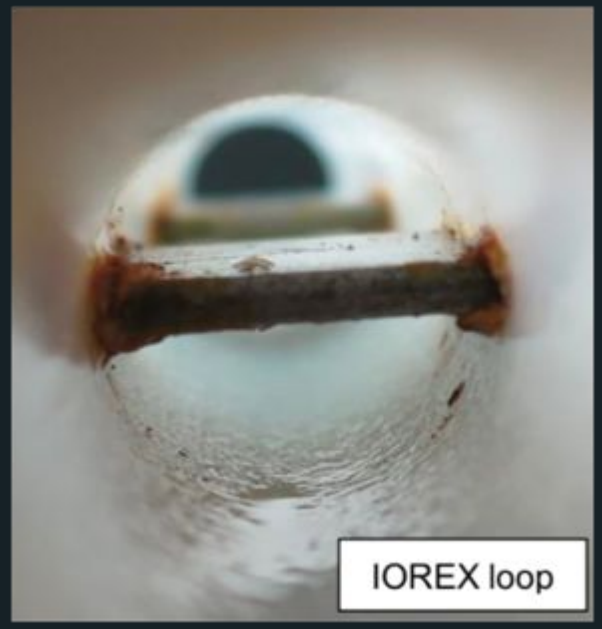
72-HOUR TEST

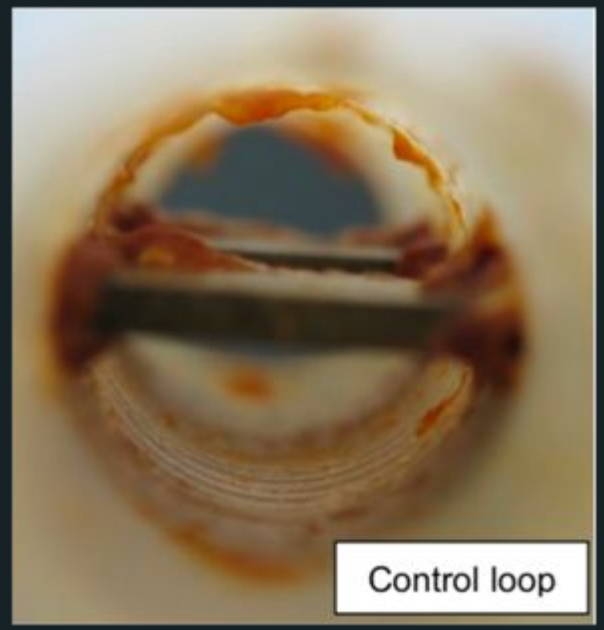
ADDITION OF 400 PPM Ca+ as $CaCl_2$

Dissolved iron in the water without the IOREX was 22 times greater by the end of the 72-hour test. In fact, there was a slight decrease in iron content in the water loop with the IOREX by the end of the test.

WITH IOREX

WITHOUT IOREX

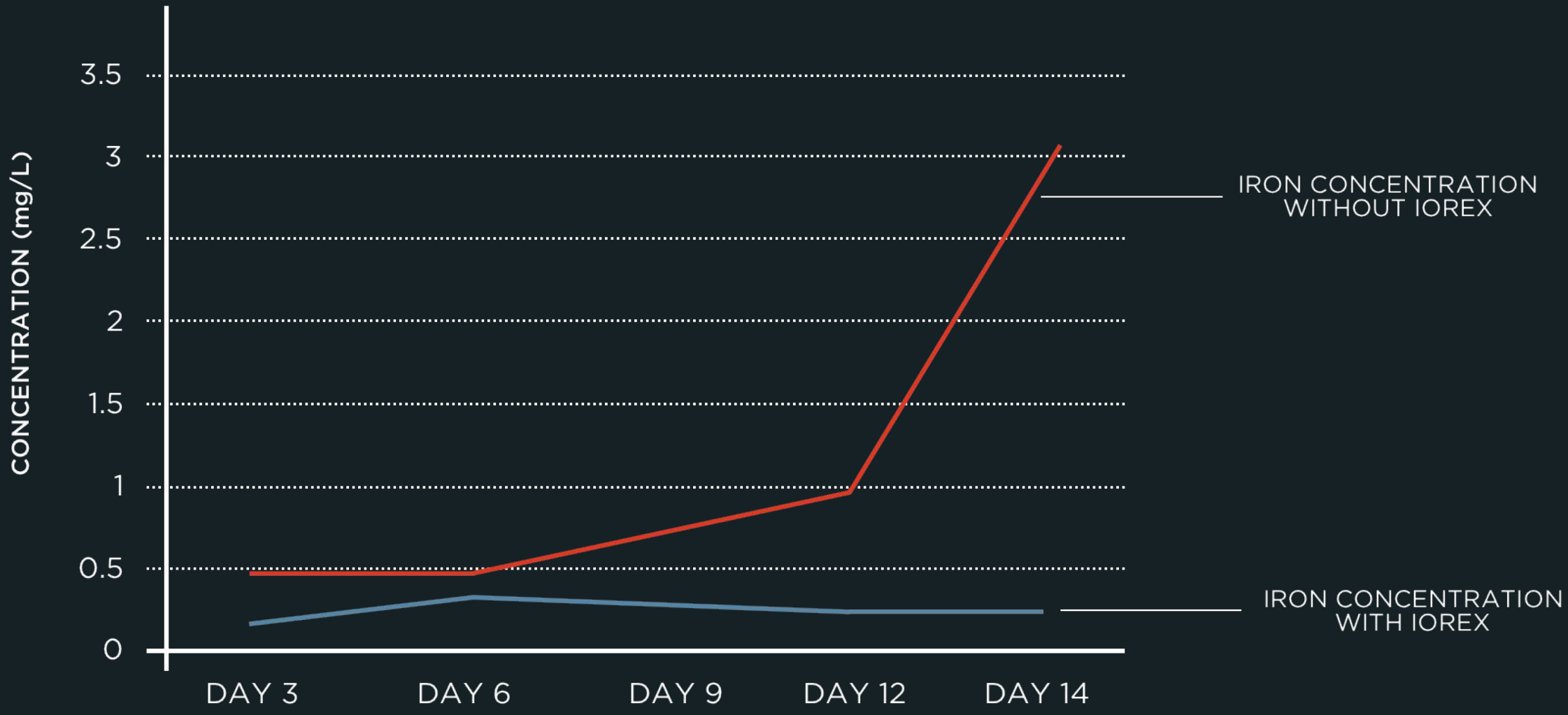




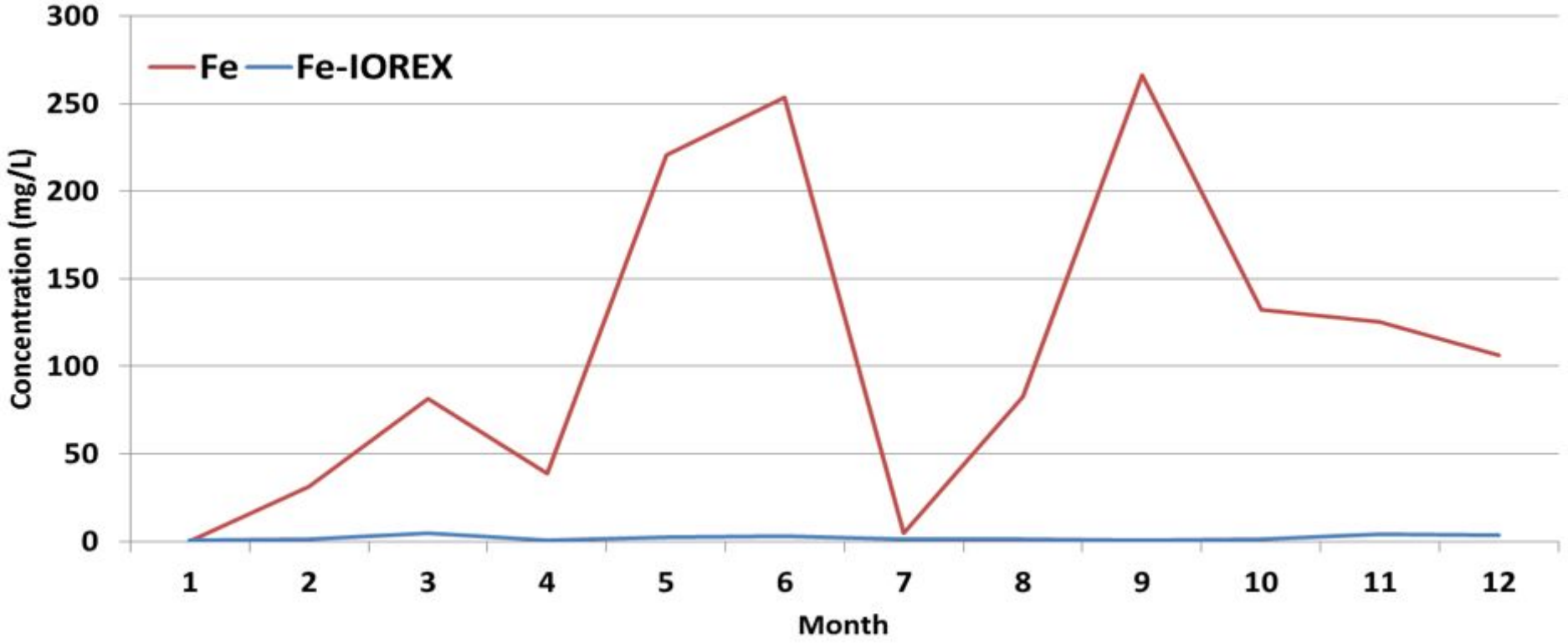
336-HOUR TEST
LAB LOOP SYSTEM

There was 11 times more dissolved iron ions in the control group than in the treatment group with IOREX.

336-HOUR TEST IN LAB LOOP SYSTEM



12-month test in lab loop system



“The metal ion concentration in the IOREX loop show little variability and never exceeded 5 mg/L; while the highest reading for the control loop was 266 mg/L.”

12-MONTH TEST IN LAB LOOP SYSTEM

The test pipes exposed to the water loops with the IOREX had fewer visible pits, and the pits appeared to be smaller when compared to the pipe samples exposed to the control loop.

The water samples obtained from the loop without the IOREX had 55 times more dissolved iron ions when compared to the samples obtained from the loop with the IOREX.

12-MONTH TEST IN LAB LOOP SYSTEM

The initial deposits were akaganeite and lepidocrocite (forms of hydrated iron oxide). The XRD analysis revealed that by the end of the test the deposits consisted mostly of magnetite (Fe_3O_4).

The pH values remained relatively constant throughout all the experiments with no clear trends of change.

BEFORE

6 MONTHS

12 MONTHS

IOREX CONVERTS RUST INTO MAGNETITE

Coats the inside of a pipe, helping to prevent pinhole leaks and sealing existing ones. Extends the pipe lifespan by more than 2 times.

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