Drew Marine®

Periodic Analysis Program & Onshore Analytical Services

Analytical Services for Water Management

Prevent Costly System Failures by Detecting Corrosion Early

Onboard test kits are vital crew tools used to monitor water treatment programs. Their test results enable your crew to make timely adjustments to water treatment, which translates to systems running smoothly, and to the protection of your vital assets. Without onboard testing at recommended frequencies, there is no management of the water treatment program. Ultimately, if water treatments are not monitored at recommended daily or weekly frequencies, critical assets are at risk for damage and for costly repairs. HOWEVER, for a deeper understanding of system health, relying on onboard testing alone isn't enough.

That's where onshore laboratory analysis, through our Periodic Analysis Program, adds value and enhances protection of assets. With advanced instrumentation, our onshore labs detect a broader range of critical metals—iron, copper, zinc, calcium, magnesium—and identify contaminants at very low concentrations. This level of detail is vital for diagnosing hidden corrosion, verifying treatment effectiveness, and preventing costly system failures. Periodic Analysis catches anomalies before damage is done.

Why combine both?

- Onboard test kits support routine checks and immediate operational decisions.
- Periodic Analysis uncovers early warning signs and provides the data needed for long-term system reliability.

Together, they give you complete visibility, a holistic approach to water system monitoring—empowering smarter maintenance, better compliance with OEM guidelines, and lower total operating costs.

Periodic Analysis Program

Onboard Testing + Periodic Analysis = A Holistic Strategy

The Periodic Analysis (PA) Program is a structured onshore testing service designed by Drew Marine to enhance — not replace — routine onboard testing for boiler and cooling water systems. By combining onboard monitoring with expert laboratory analysis, our PA program supports long-term system health, early problem detection, and better corrective decisions. While daily or weekly onboard testing is critical for real-time management, PA Program provides deeper insight through lab testing. Our two-tier, holistic approach of onboard and shoreside testing delivers stronger system control and supports proactive maintenance, compliance, and cost efficiency by protecting critical assets. Periodic Analysis mitigates system damage, costly repairs, and downtime.

1. Choose the analysis

One PCN for three analysis types. Choose which analysis you need.

PERIODIC ANALYSIS

PCN: 1AB5425 +

BOILER WATER ANALYSIS

Confirms standard boiler water sample parameters such as pH, alkalinity, phosphate, chloride, nitrite, conductivity, and hardness but also tests for elemental and corrosion metals.

COOLING WATER ANALYSIS

Confirms standard cooling water sample parameters such as corrosion inhibitors, contaminants including chloride and hardness, but also tests for elemental and corrosion metals.

MAKEUP WATER ANALYSIS

Establish and verify standard makeup water quality parameters to ensure that contaminants introduced through the makeup stream do not negatively impact the performance and stability of the treatment program.

2. Use standardized sampling bottles

Consistent, ready-to-fill bottles make sampling easy, keep samples organized, and reduce errors.

PA SAMPLE SHIPPER

PCN: 1AB6284 +

Sample kit to be used for collection of water samples; includes 6 x 500 mL HDPE plastic bottles, 6 caps, 6 labels for proper sample identification, Request For Analysis form (RFA), and sampling & shipping instructions.

Water Treatment Monitoring That Protects Your Assets

Benefit from Expert Analysis

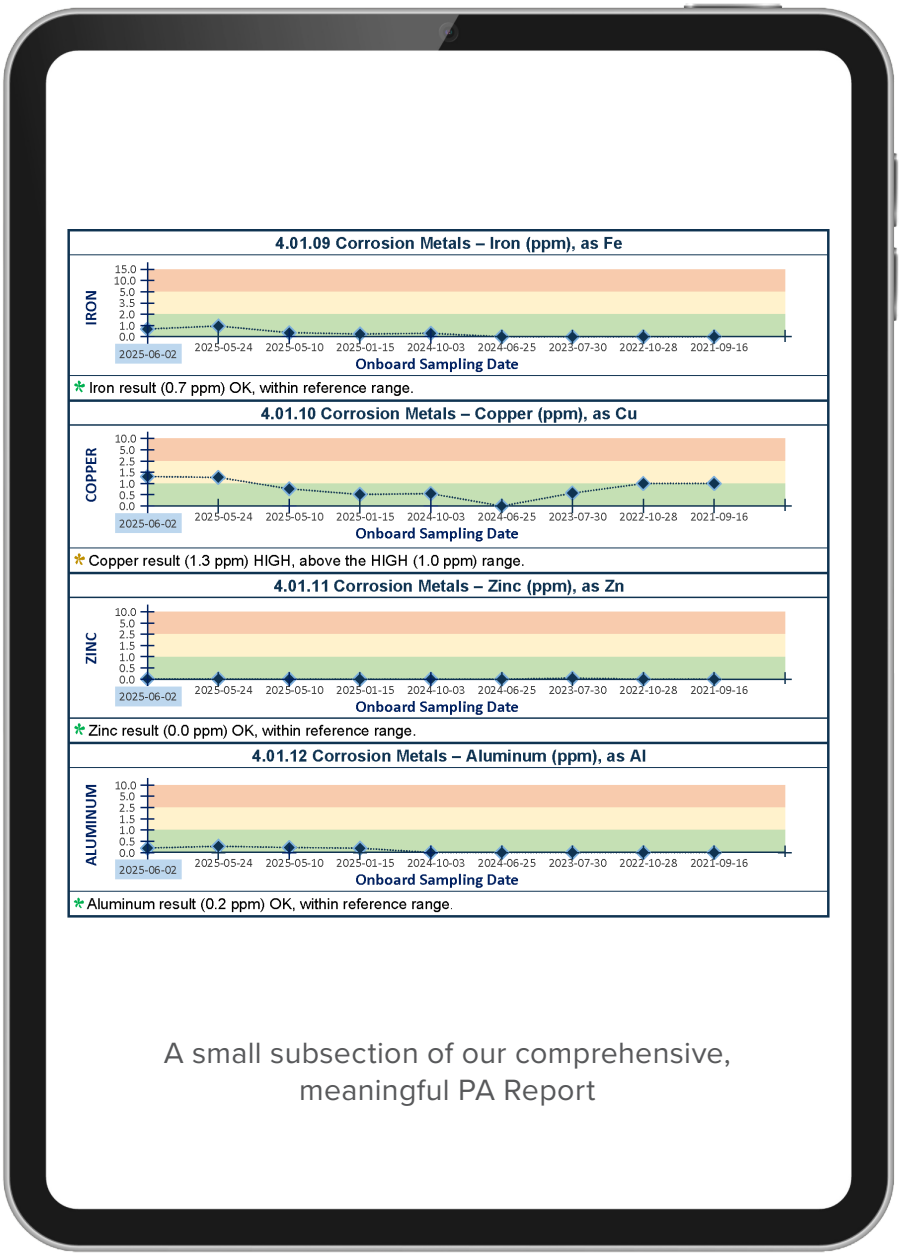
Drew Marine's PA Program does more than deliver lab results — it delivers clarity. Our expert team interprets the data, identifies early signs of corrosion or contamination, and provides clear, actionable recommendations to protect your systems.

We don't just tell you what's happening — we explain why it's happening and what you should do next. Our advanced reports track and trend critical parameters, such as corrosion metals, over time, offering a powerful tool for diagnosing issues early, verifying treatment effectiveness, and maintaining system integrity. If anomalies are detected, we flag them and guide you with expert advice tailored to your vessel's design and operating conditions.

Drew Marine helps reduce your workload and eliminates guesswork—turning complex water chemistry into simple, smart decisions.

Operational Risks from Skipping Periodic Analysis:

- Gradual corrosion or scaling that may go unnoticed
- Loss of visibility into long-term system health
- No historical data to support diagnostics or maintenance planning
- Treatment issues that go undetected until failure occurs



A small subsection of our comprehensive, meaningful PA Report

Periodic Analysis Program

Easy Ordering. Backed by Standardization.

How the PA Program Works

1.

Initial Setup

- A dedicated sample shipper (PCN: 1AB6284 – PA SAMPLE SHIPPER) is supplied to ensure safe, compliant transport of samples to the lab.
- Sampling frequency is agreed upon (typically quarterly in Year to establish a baseline).

2.

Sample Collection & Submission

- Vessel crew member collects water samples at the agreed intervals.
- Samples are sent to Drew Marine's certified laboratory.

3.

Preparation, Analysis, & Reporting

- Lab prepares documentation and tests by sample type.
- Trained experts develop reports and provide clear summaries, data visualizations, and recommendations.

4.

Ongoing Monitoring

- Data trends are monitored to flag deviations.
- After baseline establishment, sampling may shift to a biannual or annual schedule.

Periodic Analysis Program

Make Our PA Program Part of Your Normal Routine

Our Program Helps

Protect Your Ships

Why This Program Is Essential

Detects subtle changes before they turn costly

Variations in operations, environment, and equipment condition can alter water chemistry. Periodic testing helps identify subtle changes that onboard kits may not detect immediately.

Protects critical assets

Even small chemical imbalances can lead to accelerated wear. Periodic analysis ensures that protective levels are maintained consistently.

Prevents issues before they escalate

Lab testing can catch early signs of corrosion, contamination, or scaling, reducing the risk of unplanned downtime or damage.

Supports compliance and surveys

Formal lab reports help meet OEM and operational requirements, offering a clear record of system conditions.

Confirms treatment effectiveness

Periodic Analysis validates that onboard treatment practices and chemical usage are aligned with best practices.

Enables proactive maintenance planning

Long-term trend data helps crews and operators make better informed decisions.

Other Onshore Analyses

Take Advantage of Our Other Analytical Services and Products

BRINE ANALYSIS

PCN: 1AB5431 +

This comprehensive analysis helps ensure proper system salinity and provides early warning signs of corrosion or contamination—supporting long-term chill water equipment protection and system reliability.

DEPOSIT BOILER ANALYSIS

PCN: 1AB5428 +

The analysis is used to identify the composition of deposits formed in steam boilers and to evaluate organic/inorganic content which helps to diagnose scaling, corrosion, and poor water treatment issues.

DEPOSIT COOLING SYSTEM ANALYSIS

PCN: 1AB5427 +

The analysis determines the composition of inorganic scales and other matter build up and helps to determine the origin of the deposits affecting heat exchanger efficacy and corrosion potential.

FIRE FIGHTING STORED H20 ANALYSIS

PCN: 1AB5435 +

The analysis is used to identify contamination in the stored medium that could impair firefighting efficiency or system integrity.

FRESH WATER BALLAST ANALYSIS

PCN: 1AB5434 +

The analysis is used to monitor stored ballast water for silica content (the active component of the chemical treatment program for freshwater ballast tank) to prevent corrosion.

OILY WATER ANALYSIS

PCN: 1AB5430 +

The analysis tests samples before and after the oily water separator to verify system performance and ensure compliance with discharge limits.

HIGH PURITY CONDENSATE ANALYSIS

PCN: 1AB5422 +

The analysis tests for ppb levels of iron and copper in high purity boiler condensate lines to ensure condensate lines are being protected.

HIGH PURITY FEEDWATER ANALYSIS

PCN: 1AB5423 +

The analysis tests for ppb levels of iron and copper in high purity boiler feedbwater lines to ensure feedwater lines are being protected.

FAILURE ANALYSIS

PCN: 1AB5439 +

The analysis is used to determine the root cause and contributing mechanisms of failure. The investigation involves detailed material characterization and advanced analytical techniques selected based on the failure mode.

For more information, contact your Drew Marine Representative.

OUR VISION

Drew Marine is the most trusted brand and preferred global resource for marine solutions that enhance the longevity and operating efficiency of ocean vessels.

OUR MISSION

To sustain the superiority of the Drew Marine brand by bringing environmentally and technologically superior products and services for the benefit of vessel owners and operators while increasing shareholder value.

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