

PUT OUR SERVICES TO THE TEST

THE WEATHERFORD OILFIELD WATER LABORATORY IS NOW OPEN FOR BUSINESS.

Oilfield water is an integral part of almost every stage of petroleum exploration and production. Improper water management can cause issues in fracking, drilling, completion, production, waste-water disposal, enhanced oil recovery, and more. Knowing the chemical composition and physical properties of your oilfield water is the first step in preventing these issues and combatting problems.

Our Houston-based laboratory services provides thorough analysis of waters in the oilfield. With deep understanding and extensive experience, our team of experts uses specialized knowledge in oilfield chemistry, geology, and engineering to design and perform water analyses. We focus on your issues, employ a holistic approach, and provide water analysis tailored to your specific goals. Since opening, we have served customers from the US, Canada, and Latin America on water projects that range from a full-field water-sourcing study to a small single-property measurement.

Extensive experience

With more than 100 years of combined oilfield water experience, we execute water analyses in the areas of production chemistry, flow assurance, corrosion, and produced water reuse processes. In a short turnaround time, you receive quality data and review on chemical compositions and physical properties. This information enables you to discern water production issues, understand formation damage potential, assess tubing corrosion, and much more.

Depending on the results, we can design and perform subsequent laboratory tests on scaling and water treatment processes. We also offer consulting services, such as scale tendency, corrosion-rate prediction, and water-production allocation.

Focused techniques

We conduct water-chemistry analyses with inductively coupled plasma-optical emission spectroscopy (ICP-OES) and ion chromatography (IC). We also measure physical properties with accurate results, even when handling small sample volumes. These capabilities enable us to provide a full suite of oilfield water measurements, including concentrations of major cations and anions (Na⁺, Ca⁺², Mg⁺², K⁺, Cl⁻, SO₄⁻²); minor to trace constituents (metal elements, nitrate, nitrite, and sulfide); organic acids, and amines. We employ the appropriate test and quality-control methods for the best-caliber measurements and data reporting.



FREQUENTLY ASKED QUESTIONS

Oilfield Water Analysis Services

What type of packages do you offer?

We offer four packages that range from basic to comprehensive water analyses. The below chart details the different data points that these packages cover.

Can the packages be adjusted to fit my interests?

Yes. The packages can be adjusted and customized to your needs.

I only need to monitor a couple of elements over a period of time. Do you provide standalone services of these measurements?

Yes. We offer many standalone analysis and measurement services in addition to the above packages. Please contact us for details.

What is the turnaround time for water analysis?

The time varies according to the level of analysis. Typical turnaround time for these packages is 1 week. We also provide express services for 1- to 2-day or 3- to 4-day turnaround times with rush surcharges.

Do you provide oilfield water sampling services at the wellsite?

Yes. We have experienced wellsite sampling teams at various locations. We mobilize the sampling team closest to your sampling site so that you will save on mileage charges.

We would like to sample ourselves. Do you provide sampling kits and instructions?

Yes. We provide sampling kits for sampling and preserving oilfield waters. The kits include pre-labeled sample bottles with different preservation methods, cooler, tapes, and instructions.

Applications

Our lab provides a suite of oilfield water services, including but not limited to:

- Water chemistry analysis of dissolved ions
- Water physical property measurements
- Fluid compatibility evaluations by bottle test
- Scale tendency predictions
- Scaling tests with and without inhibitors
- Scale inhibitor detections
- Waste water clean-up and component removal tests
- Stack screen filtration
- Scale flocculation tests
- Corrosion assessment by water analysis
- Corrosion inhibitor detection
- Organic acids measurements

Customizable testing

Rather than taking a one-size-fits-all approach, we devise and execute oilfield water projects that have your goals in mind. After taking measures for appropriate water sampling and preservation, we execute projects that help to resolve issues with fresh, formation, produced, injection, and disposal waters. Our test results and consulting services aid in water sourcing, flow assurance, corrosion mitigation, water injection, treatment efficiency, and many more oilfield issues.



weatherford.com