

Chemi-Sense
SYSTEM

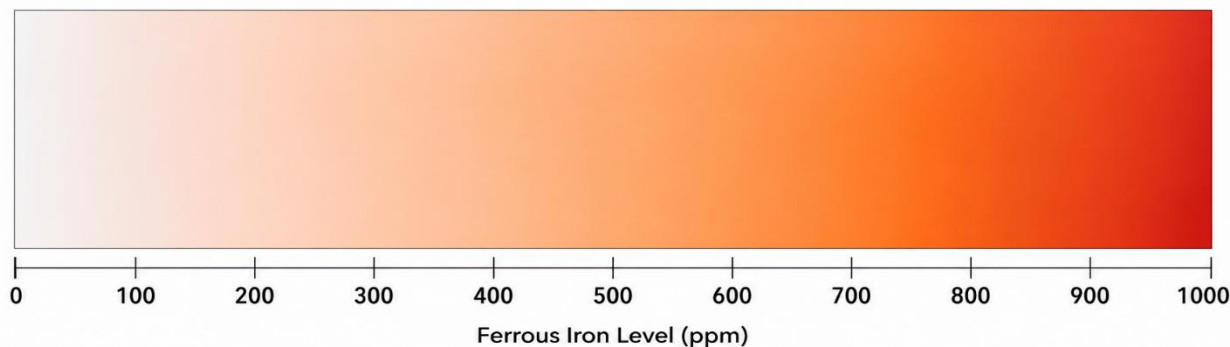
IMPORTANT, READ PRIOR TO USAGE

Chemi-Sense Ferrous Ion Sensor

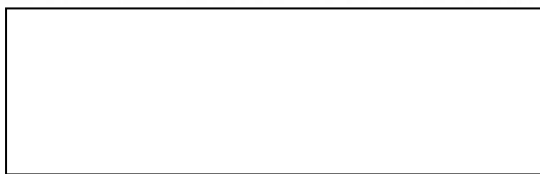
Chemi-Sense System's Ferrous Iron (Fe^{2+}) Sensor provides repeatable and reliable estimation of ferrous ion concentration in crude and natural gas water samples directly at the source. Ferrous Iron ion (Fe^{2+}) content changes between the origin and ending of a segment of pipe can indicate active internal corrosion. Engineered for field testing, the sensor accurately detects **5–1000 ppm** ferrous iron ion levels with results available in **under 2 minutes**, providing **fast, accurate ferrous iron level detection in the field**.

How to Use

1. Collect a crude, natural gas, or produced water sample, ensuring the presence of some water phase.
2. Open the glass petri dish, take one test strip, and place the sensor film in the sample (make sure the liquid covers the sensor film) for at least 2 minutes.
3. Remove the sensor film from the solution, if there are any excess liquid or debris on the film, very gently removing it with a clean, soft laboratory tissue (provided) to remove excess liquid. Some red-colored material may leach into the solution; this helps remove any loosely bound red-colored conjugate remaining on the film surface.
4. Match the final sensor film color to the provided calibration color chart below (or on the second page with segmented color chart) to determine the ferrous concentration of your sample in parts per million (ppm).
5. Place the final sensor film in the empty box below and take a photo using your phone for record/documentation (app is available to take the photo and documentation at <https://test-strip-reader.vercel.app/>, future app improvement for reading test strip is in progress).



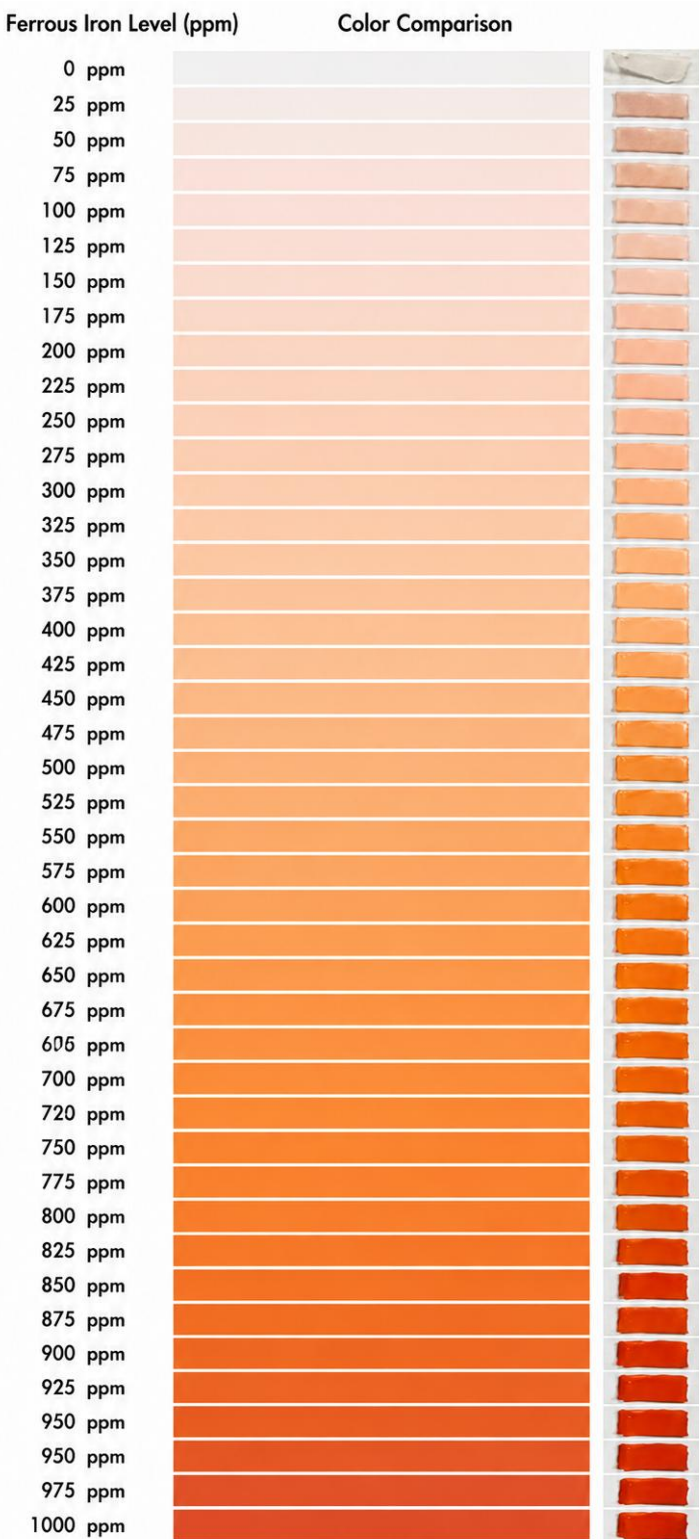
(Reference Grey Color for Lighting Correction)



Place final sensor film in the box above for a photo as a record

Questions refer to: contact@resparkinnovations.com

Storage Instruction: If the Chemi-Sense Ferrous Iron sensor film is not expected to be used within the next 24 hours, storage the sensors in the provided petri dish in a fridge or refrigerator of 4 °C without direct sun/heat contact for best results of future use.



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