

FieldXtract microbial genetic service

Fast, onsite and accurate microbial influenced corrosion DNA testing

Microbial influenced corrosion (MIC) is a serious asset integrity problem in the oil and gas industry, and can be difficult to accurately and quickly identify. If left unchecked, MIC can eventually destroy production assets, increasing operational costs for equipment repairs and maintenance, as well as escalate personnel safety and environmental concerns. When you suspect MIC is the source of the problem, the typical procedure is to ship field samples to an offsite laboratory for confirmation. This process is very tedious and delays timely treatment response, often taking 30+ days for remote locations to receive the needed results.

Now in as little as 24 hours you can get accurate DNA results from the fast, onsite Baker Hughes **FieldXtract™ microbial genetic service**. The service performs the same biotechnology tests as an offsite lab, but without the delay and hassle of shipping samples. With the FieldXtract service, you quickly confirm the identity of the microbe type,

allowing you to implement the optimal integrity management program to protect your assets from corrosion-related failures.

The FieldXtract service is performed by Baker Hughes field engineers who are technically trained in microbial monitoring and treatment solutions. The engineer extracts microbial DNA from field samples and conducts quantitative polymerase chain reaction (qPCR) DNA assays to efficiently identify the specific microbe type. This service can quantify the total-bacteria, total-archaea, sulfate-reducing bacteria (SRB), iron-reducing bacteria (IRB), and methanogens—all known to cause corrosion in various metal alloys in oil and gas production systems.

With the FieldXtract service, you can efficiently enhance your integrity management programs, produce more safely, and reduce operational costs and risks.

Applications

- Conventional production
- Unconventional production
- Deepwater production
- Oil and gas transmission lines

Benefits

- Delivers results in as little as 24 hours
- Reduces HSE risk with less chemical handling
- Decreases operational expenditures
- Enhances effectiveness of integrity management program
- Identifies microbial influenced corrosion
- Provides data to select optimal treatment