

Testing and Production Engineering Services for the Oil and Gas Industry

Six Questions To Ask Your Current Testing Services Lab

Most testing labs may be certified, and most will have experience in fabrication and construction testing for the oil and gas industry. But since reliable, on-time testing can save millions of dollars in lost production time and other costs, engineering professionals must carefully consider the following key issues when selecting a testing lab . . .



1.) If our test sample fails, can you tell us why it failed?

The main weakness found with many local testing labs is that most will provide results with no explanation of the outcome or cause of test failure. If the result is a failure and there is no explanation, then as the client you must perform all of the engineering work required to determine the cause whether by weld technique, materials, or metallurgy of the test material. Another typical weakness is that most labs lack the capability to produce weld procedures for many of the new materials which can now be used in oil and gas fabrication and exploration.

2.) What is your background in performing the test we require, and how many times have you performed this test for others?

When making a decision on which lab to use for a test, it is important to ask a testing lab beforehand about their past level of experience in conducting the kind of test you are sending to their lab. For example, knowledge of how to set up the test properly, such as where to place a notch on a piece of test sample material, or how to create a very straight weld on an RP2Z test, means that the test can be accomplished in fewer attempts, which will save you both material and time.

3.) Does your lab understand the testing protocol, and can you assure us of timely completion and reporting of our test results?

Timely delivery of test results can lead to millions of dollars in lost production time on large-scale oil and gas production and distribution projects. Other factors contributing to poor testing lab performance include the lab's poor setup and the lab's inability to understand the test protocol.

4.) Are your lab's staff being kept up-to-date on the latest testing procedures, and how recently have they received training on the key testing protocols related to our test?

Errors in production engineering services tests are made often, requiring workup of new samples and re-tests, causing added delays in oil and gas construction and fabrication projects. Due to constant innovation in materials and metalurgical science, it is important for your testing lab to be current on the latest procedures and requirements for each test. By making these inquiries of your testing lab, you can verify they have the sufficient background, expertise, and recent training to adequately conduct your specific test.



5.) What is your lab's track record of testing accuracy and on-time delivery, and can you provide positive referrals which are relevant to the tests you will be performing for us?

Since almost all testing labs have the required accreditations and are required to conform to the same testing standards, the more important criteria to follow when evaluating a testing lab for you needs is to examine the lab's track record of testing accuracy, on-time delivery, and positive referrals from current clients.

6.) If our test fails, what further steps can your lab take to determine the cause of this failure, and possible directions for eliminating this cause of failure?

Ask your testing lab about their depth of knowledge on materials, fracture mechanics or welding engineering. Without this depth of knowledge, an average lab would not be able to properly diagnose why the sample failed, and would not be able to make recommendations on how to change the welding process, filler material, or metallurgical composition of the test material to help the material pass a given test.

