



# Why Check Standards?

The TOP 5 reasons check standards should be the *cornerstone* your quality control.

## Letter from the Authors

ASI Standards, formerly Analytical Services Inc., was founded by PhD chemist John B. Sardisco. Over the last 20 years of its history, ASI has led the way in custom standard formulation. We specialize in giving you the right tools to verify applications to meet your specific needs to ensure you have the right standards for the job every time.

The right standards also mean high quality standards. ASI is extremely passionate about the quality of our standards as well as the reasons for them. Therefore, we have put together this eBook to enhance the knowledge of check standards and why they are integral to your quality control program.

We hope you enjoy,

Team ASI



# What are check standards?

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## Calibration standards:

- Used to evaluate and adjust the precision and accuracy of instrumentation
- Designed to be used once in a while.

## Check standards:

- Used at regular intervals, often daily, to check the health of the curve or instrumentation.
- The primary tool for every Quality Control program.

The main regulations they help to satisfy are **EPA applications**, such as:

- Ultra Low Sulfur in Diesel Fuel (ULSD)
- Tier 3 Low Sulfur in Gasoline
- MARPOL Annex VI (Sulfur in Marine Diesel)

They are also an important part of many **ASTM Methods**, such as:

- D2622
- D4294
- D6443, and more.



One of the many things you want to keep in mind when selecting standards is an associated Certificate of Analysis (COA). The COA tells you what your expected value is of the standard.

# What are the top 5 reasons check standards are important?

Check samples, or standards, are the cornerstone of a consistent quality control program.

In the fast-traveling communication world that we live in, you cannot afford to leave a customer dissatisfied. Check samples will give you a clear indicator of where the line between acceptable and unacceptable is. They give you and your customer the reassurance needed to feel confident in your product and secure in your business.

Don't save a dollar today, only to pay thousands of dollars in the future.

Let's do this right the first time.

## 1. Change is inevitable

Process requirements, materials, and methods are always shifting and changing.

The only way that we can best stay on top of them is to be able to constantly monitor, using check samples, that your analytical measurement system is providing accurate results.

## 2. To avoid costly mistakes (and increase profits!)

With accurate sample preparation and the proper check standard, you are better able to avoid even the slightest mistakes that could prove to be large monetary costs in the future. Therefore, by using check standards you not only help your company to avoid costly mistakes but also to increase customer and employee confidence in your product. This, in turn, increases your profits.

## What are the top 5 reasons check standards are important?

Continued...

### 3. Customer Loyalty



With the added confidence that you will have with your materials, your customer will also receive this satisfaction and contentment. Knowing that you consistently maintain a high-integrity quality control system with check standards, you will build a strong trust with your customers that will deter them from looking elsewhere for your product or service.



### 4. Get the most out of your equipment investment

Essentially, your equipment is only as good as the result it gives you. By using check standards to routinely check your equipment, you are ensuring that you get the truest results from your equipment and therefore, more value out of it.

### 5. Comply with test method requirements



Last, but not least, we all need check samples to comply with current and future test method requirements, such as: [D2622](#), [D5453](#), and [D6443](#).



*Still not convinced? Because it's about to get real.*

Here are some relevant articles regarding the use (or lack thereof) of the need for consistent quality assurance:

- Example of what not to do: [BP and the Deepwater Horizon Disaster of 2010](#)

- "One of the key findings highlighted in the Baker Report was that the company had cut back on maintenance and safety measures at the plant in order to curtail costs, and that responsibility for the explosion ultimately rested with company senior executives" (5)

- "Despite the hazards of the Macondo well site, the known maintenance issues on the rig, and the setbacks that had caused the project to be over budget, BP felt confident that it had found oil." (8)

- "In concert with the decision to do a partial circulation, BP managers chose not to run a test called a "cement bond log" to check the integrity of

As we can see, cutting initial cost, ignoring quality control measures, and exchanging quality for speed *is not* the best formula for company longevity.

- Example of what to do: [BSI Case Study Shed Grounds](#)

- "Our successful certification to ISO 9001 sends out a clear message that Shed is committed to providing a top class service. All works are subject to this rigorous quality management system, which provides clients with confidence that we have the technical competence and the resources to undertake the tasks required."

- "Our certification means clients can rest assured that we have been thoroughly assessed and deemed to be a quality operator in our sector. It ensures that we are striving to meet and exceed clients' requirements and demonstrates our commitment to continuous improvement of our services."

There is a clear benefit in maintaining a rigorous quality management system, both to your company and to your customers.

- Example of High Quality Standard Report: [ExxonMobile Preferred Status](#)

## So who uses check standards?

Check standards are used by a myriad of industries. The most common users work in regards to refineries, pipelines and terminals, testing and inspection labs, polymers/plastics manufacturing, lube oil manufacturing, chemical plants, biofuels, instrument manufacturing, and handheld XRF applications (metals, mining, lead in paint).

To break down the petroleum and lubricants industries more specifically, there is a chain that we need to be aware of, a process. The product starts out in the oil well, continues to the terminals, then the refineries, and then the storage tanks. From there it either goes to further terminals (sulfur, nickel, sulfur & nickel) or lube oil manufacturers. If we go a step further, the product then makes it to cars and then additives recyclables.

## What technologies are used with check standards?

Some technologies to look for are XRF (WDXRF, EDXRF, HXRF), ICP (ORGM and Wear Metals Analysis), AA (ORGM and Wear Metals Analysis), Titration (Total Acid/Base Number), and FTIR (Phthalates, Additives).







Standards – Consumables – Radiation Safety –  
Lab Software – Technical Assistance

For more information on Check Standards, check out [asistandards.com](http://asistandards.com)