



**Your Complete Guide  
To Proper Lubricant  
Storage, Handling  
And Analysis**

Lubricants are some of the most critical components that help your business run smoothly and efficiently. That's why it's imperative to store, handle and monitor your lubricants with precision and care.

Properly storing your lubricants actually extends their shelf life, which in turn lowers costs for your business. Moreover, proper handling and application of your lubricants helps ensure long-lasting performance for your equipment. Lastly, monitoring the effectiveness of your lubricants helps you manage your costs and maximize the reliability and safety of your equipment.

Let's break down each of these so, by the time you're done reading this guide, you will have the comprehensive lubricant knowledge you need to increase the efficiency of your business.



## 1. Lubricant Storage.

Since it's typically a hands-off process, it's all too easy to neglect the importance of proper lubricant storage. Here are a few points to keep in mind when it comes to storing your lubricants:

- **Storage Conditions.** No matter whether you store your lubricants indoors or out, it's important to keep your storage containers in good condition. This means ensuring there are no cracks and no exposed parts of the storage container that may result in lubricant contamination. It's generally best to keep lubricants indoors whenever possible, since moderate indoor temperatures and protection against the elements help to ensure your lubricant storage containers remain dry and safe from weathering.

However, if you are storing your lubricants outside, do your best to protect the containers from outdoor elements. Rain and snow have the ability to seep into the tiniest of seals and cracks in containers, so it's best to keep your lubricant storage containers covered and slightly elevated off the ground.

• **Tank Inspection.** When it comes to inspecting your storage tanks, either delegate the responsibility to an employee or hire a professional tank-testing partner. Whichever route you decide to go, the two most important things to look for on a regular basis are contamination and leakage. Let's dive into each of those elements separately:

- **Contamination.** First and foremost, the mixing of oil types (e.g., engine oil and HYD oil) is the most common form of contamination you need to avoid. Next, keep an eye out for water contamination. Metal containers exposed to the elements become increasingly porous over time and pools of standing water on the lid may be an indication the contents have been contaminated by moisture. Last but not least, keep an eye out for sludge deposits. In general, deposits tend to form along the sides of the storage container.

- **Containment.** It's critical to ensure the storage container itself is doing its primary job: containment. Be wary of any noticeable cracks or stains, especially on the seals and seams along the sides of the tank. A properly functioning storage container is vital to the smooth operation of your business. Inspectors should also check pumps, lines and hoses since cracks in any of these areas may allow contaminants to enter into vital systems.

## 2. Tank Labeling.

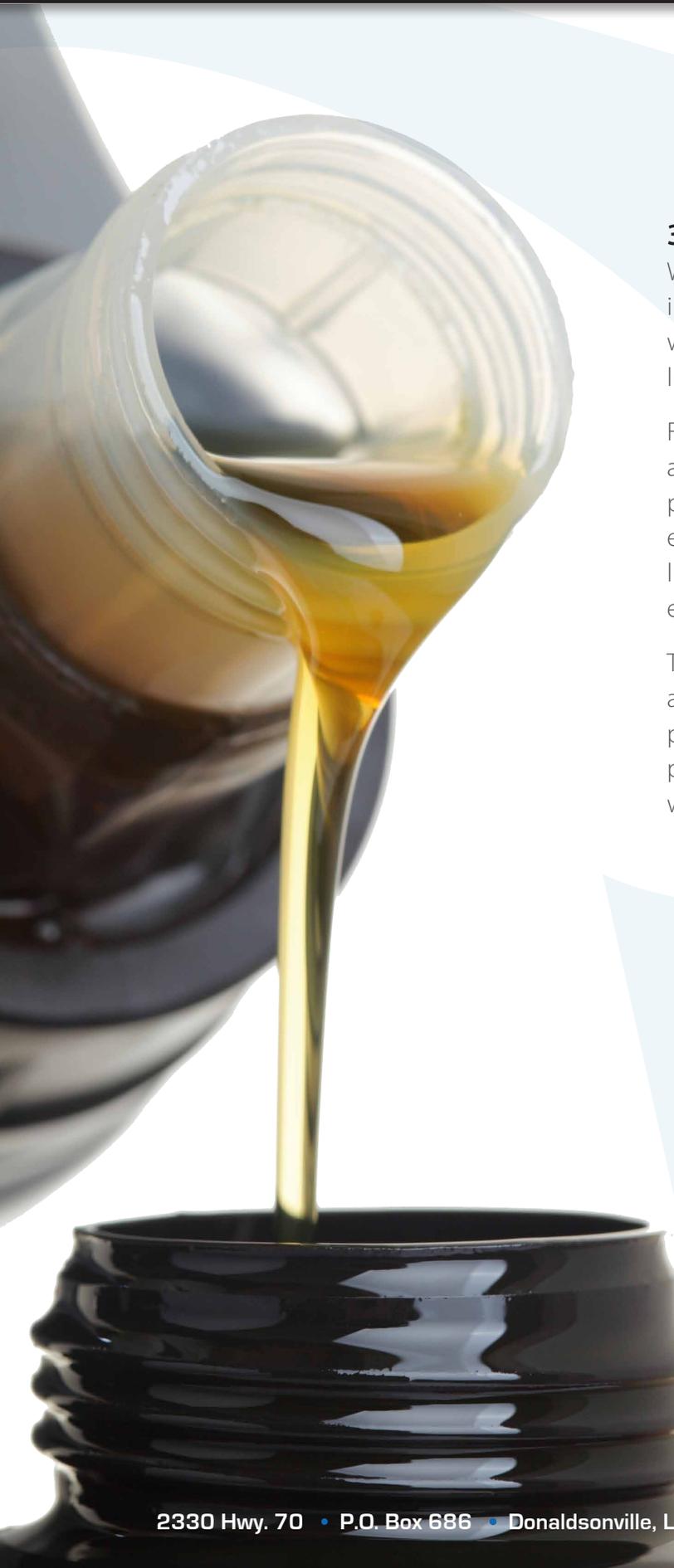
Labeling your tanks and storage containers correctly helps your business avoid applying the wrong lubricant to a particular engine or accidentally mixing different lubricants in a single container. One easy system for labeling storage containers is to have pre-written, peel-off labels attached to the storage tank itself. Use a color-coded system (e.g., red labels for diesel engine oils, blue for gasoline engine oils, etc.). These labels should include details about the lubricant inside, including supplier information and expiration date.



Labeling best practices like these help you avoid mixing lubricants in three key areas:

1. **At time of delivery**
2. **Dispensing on the job site**
3. **Refilling equipment**

Proper labeling should be on all tanks, jugs or pails used on the job site as well as on equipment that is being filled from these containers.



### **3. Lubricant Handling.**

Whether you are using engine oils, synthetic oils, industrial greases or a combination of all three with different equipment, it's critical to handle your lubricants with care.

First, by applying the right lubricant, you protect against cross-contamination and ensure the highest possible performance from each vehicle or piece of equipment. One way to make sure you use the right lubricant every time is to have a dedicated pump for each of the lubricants your equipment requires.

The ideal time frame for sampling and performing an analysis on each of your lubricant pumps is once per month. However, you might want to check any potentially problematic pieces of equipment on a weekly (or even daily) basis.

#### **4. Lubricant Analysis.**

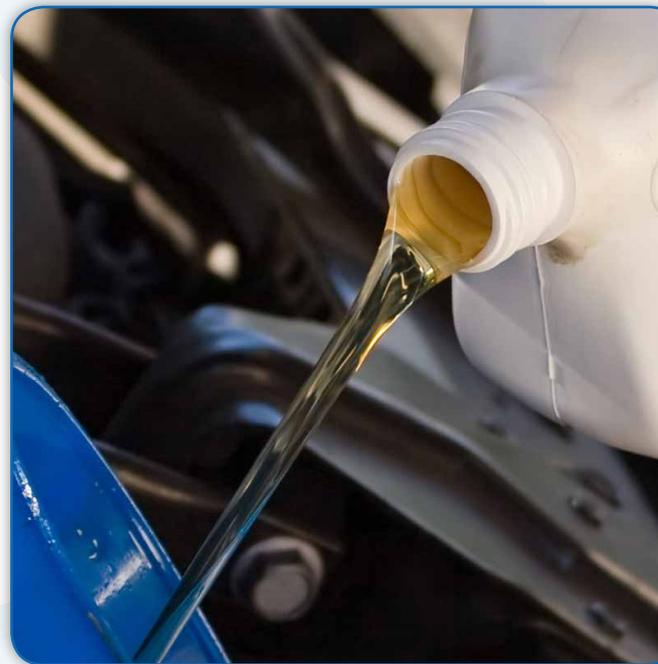
In order to keep your equipment running smoothly, regular testing of lubricants is essential. When your oil and lubricants are constantly monitored and adjusted, your equipment performs at optimal levels, improving the efficiency of your business.

Your engines, compressors, HYD systems, turbines and other equipment are fighting a constant battle against contaminants. If left unchecked, moisture and solid particulates (including sand and dust) build up in your equipment and can wreak havoc on your business.

Regular oil analysis reports help you track the life of your lubricants as well as oil contamination levels per milliliter of fluid. Regular oil sampling and analysis performed by a knowledgeable professional helps you monitor the wear, tear and oil contamination that could otherwise negatively impact the lifespan and performance of your equipment.

The best place to take your oil sample is from a line or point in direct flow of the system, prior to any filtration points. Once you've analyzed that sample, you are equipped with the knowledge you need to improve your oil cleanliness. The best way to do this is to implement a smart filtration system. The more filters you have in your filtration system, the more likely you are to catch contaminants and eliminate potential problems.

The lubricants you use are essential to the operations of your business. Even more important is how you carry out the processes of lubricant storage, handling and analysis. Make sure you are properly using the knowledge this guide has provided you to not only protect your equipment, but also to save your company money.



**For more information about proper lubricant storage, handling and analysis, visit [www.RichardOil.com](http://www.RichardOil.com) or call 800.375.8389 to speak with one of our Petroleum Pros at Richard Oil And Fuel.**