



FLUID ANALYSIS PROGRAM

In an initiative to help our customers achieve an even higher level of operational efficiency, U.S. Lubricants is proud to offer the OilChek® fluid analysis program designed to:

- **Effect positive change in daily maintenance practices**
- **Provide actionable recommendations that can dramatically extend equipment life and dependability**

With OilChek® as an integral part of your preventive maintenance program, you can detect equipment failures in progress and identify and correct the root cause of the problem. This prevents catastrophic failures and avoids costly downtime.

With the challenges of today's marketplace, it is more important than ever to implement a cost-effective, preventive maintenance tool that:

- **Extends drain intervals**
- **Extends equipment life**
- **Maximizes asset reliability**

Quality testing and analysis and actionable maintenance recommendations can dramatically extend equipment life and dependability - ultimately, saving you both valuable time and money.

Getting Started

The U.S. Lubricants Fluid Analysis Program, OilChek®, provides basic and advanced diagnostic, preventive maintenance testing designed to evaluate lubricant condition, component wear and contamination in:

- **Engines**
- **Cooling Systems**
- **Hydraulic Systems**
- **Transmissions**
- **Gear Boxes**
- **Differentials and Final Drives**

Technical Support

CALL: (833) 268-0223

EMAIL: service@eoilreports.com

See page 5 for HORIZON® information.

When placing an order, you'll need to provide a shipping address and a PO number for invoicing.

Sample Registration

Click on each step to find out how to register and submit your sample.



Fluid Analysis Test Slates

These fluid analysis test kits provide diagnostic, preventive maintenance testing designed to evaluate fluid condition, component wear and contamination in engines, hydraulic systems, transmissions, gears, cooling systems and diesel fuel storage tanks. Additional information, including pricing, is available at usoilchek.com.

How to Read an Analysis Report

Click on each letter to learn about each aspect of your analysis report.



Lubricant Analysis Report

North America: +1-833-268-0223

0	1	2	3	4
NORMAL	ABNORMAL			CRITICAL

Overall report severity based on comments.

Account Information	Component Information	Sample Information
Account Number: Company Name: Contact: Address: Phone Number:	Component ID: Secondary ID: Component Type: DIESEL ENGINE Manufacturer: EMD Model: 16-645-E3 Application: RAILROAD Sump Capacity: 350 gal	Tracking Number: Lab Number: I - 232042 Lab Location: Indianapolis Data Analyst: ARF Sampled: 01-Aug-2024 Submitted: 08-Aug-2024 Received: 15-Aug-2024 Completed: 16-Aug-2024
Filter Information	Miscellaneous Information	Product Information
Filter Type: CARTRIDGE Micron Rating: 12		Product Manufacturer: US LUBRICANTS Product Name: THRIVE DIESEL HP RAILROAD OIL Viscosity Grade: SAE 40
Comments	Is this EMD engine configured with SILVER wrist pin bushings? Some EMD engines are configured with bronze copper bushings.; If so, Suggest sweetening sump by adding fresh lubricant. Please contact your lubricant supplier for recommendations. Zinc is above the manufacturer's limit of 10 parts per million for EMD engines containing SILVER wrist pin's and/or bushings; Cylinder region metals (pistons, rings, liners etc.) are at a MODERATE LEVEL; Unit and/or lubricant TIME missing.	

Sample #	Wear Metals (ppm)										Contaminant Metals (ppm)			Multi-Source Metals (ppm)					Additive Metals (ppm)					
	Iron	Chromium	Nickel	Aluminum	Copper	Lead	Tin	Cadmium	Silver	Vanadium	Silicon	Sodium	Potassium	Titanium	Molybdenum	Antimony	Manganese	Lithium	Boron	Magnesium	Calcium	Barium	Phosphorus	Zinc
10	31	2	0	6	34	8	8	0	0	0	6	7	0	0	54	0	1	0	28	8	3328	0	25	11
11	28	2	0	3	31	5	8	0	0	0	5	2	1	0	53	1	0	0	28	9	3508	0	28	12
12	31	2	1	3	35	7	8	0	0	0	6	2	0	0	54	1	1	0	28	8	3514	0	24	11
13	39	3	0	4	41	8	11	0	0	0	6	5	0	0	52	0	1	0	28	10	3509	0	26	12
14	42	3	0	5	44	8	10	0	0	0	6	6	2	0	52	0	1	0	26	10	3318	0	28	14

Sample #	Sample Information				Contaminants					Fluid Properties						
	Date Sampled	Date Received	Lube Time	Unit Time	Lube Change	Lube Added	Filter Change	Fuel Dilution	Soot	Water	Viscosity 40°C	Viscosity 100 °C	Acid Number	Base No.	Oxidation	Nitration
			h	h		gal		%	%	%	cSt	cSt	mg KOH / g	mg KOH / g	abs / cm	abs / 0.1mm
10	18-Apr-2024	26-Apr-2024	0	0	No	0	No	<2 - Estimate	0.5 - E2412	<.1 - FTIR		14.5				
11	01-May-2024	10-May-2024	0	0	No	0	Yes	<2 - Estimate	0.6 - E2412	<.1 - FTIR		14.4				
12	03-Jun-2024	13-Jun-2024	0	0	No	0	Yes	<2 - Estimate	0.9 - E2412	<.1 - FTIR		14.5				
13	01-Jul-2024	15-Jul-2024	0	0	No	0	No	<2 - Estimate	1.1 - E2412	<.1 - FTIR		14.6				
14	01-Aug-2024	15-Aug-2024	0	0	No	0	No	<2 - Estimate	1.1 - E2412	<.1 - FTIR		14.7				

Sample #	Particle Count (particles/mL)								Test Method
	ISO Code	> 4	> 6	> 10	> 14	> 21	> 38	> 70	
	Based On	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL	particles / mL
10	4/6/14	/ /							
11	4/6/14	/ /							
12	4/6/14	/ /							
13	4/6/14	/ /							
14	4/6/14	/ /							

Comments are advisory only and are based on the sample information provided by the customer being valid. Results related only to the items tested. Missing fluid or component information limits the



Managing Preventive Maintenance Online with HORIZON®

To get started, you must register for a HORIZON account. HORIZON is a robust fluid analysis management platform accessible online or via a mobile app. To create your HORIZON account, go to oilreports.com. Once registered, you'll receive a confirmation email that your account has been created and is ready to activate.

Once you activate your account, you can log in and begin adding your equipment and sample information. By default, your account is set up to receive sample reports via email. Sample analysis reports are also accessible online or via the mobile app.


In addition to email and mobile app notices, you can also set up and customize HORIZON report subscriptions to deliver to different email addresses for each sample result or as a daily or weekly summary.

HORIZON's Management Reports stretch the user's fluid analysis dollar by providing information that can affect significant change in everyday maintenance practices by:

- **Keeping sampling schedules on track**
- **Identifying bottlenecks in turnaround time**
- **Influencing future purchasing decisions**
- **Registering sample information online**
- **Graphing that quickly pinpoints trends**
- **Updating equipment information or missing data your laboratory needs**

To learn more about the HORIZON web and mobile app features, visit the HORIZON Technical Library. This collection of videos and printable PDFs will help you navigate the program, run management reports, and offer best practices to integrate fluid analysis into your maintenance program.

Send your samples to the laboratory location nearest you.

Click on which  you would like to send your sample to.

