



How-to guide

CASTROL LABCHECK

The right decisions for
maximum performance



IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.®



INTRODUCTION

Working in the Marine and Energy industry, you no doubt have to constantly adapt to challenging conditions and new regulations. As a result, monitoring and maintaining your machinery and equipment have become more important today than ever – helping minimise costs and unplanned downtime.

At Castrol, we wanted to help you navigate your way around these challenges, mitigating any risks that might affect the performance of your critical assets. How? With Castrol LabCheck: our new digital solution that optimises used-oil analysis (UOA), sampling, trending and reporting. When used in conjunction with data from your other condition-monitoring techniques, these assessments allow you to understand the condition of your equipment. This allows you to identify developing issues at an earlier stage and plan maintenance activities to improve and maintain reliability and efficiency.

This short guide provides a walk-through of how to get started with Castrol LabCheck. We think you'll find it quite intuitive, but further guidance is available on request.

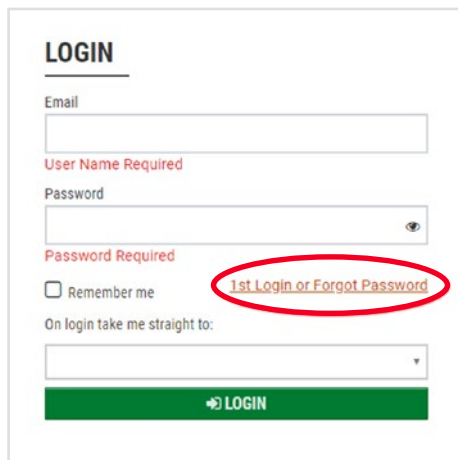


CONTENTS

+ LOGGING IN FOR THE FIRST TIME	4
+ LOGGING IN	5
+ FORGOTTEN PASSWORD	5
+ WELCOME TO YOUR HOMEPAGE	6
+ YOUR DASHBOARD	6
+ VESSEL/ASSET	7
+ SAMPLES	8
+ SAMPLE SCHEDULE	9
+ DATA EXTRACT	10
+ HELP	10
+ TOOLS	11
+ MAINTAINING USERS	11
+ LABCHECK INSIGHT	12
+ RESULTS PAGE	12
+ EQUIPMENT DETAILS AND SAMPLE DETAILS	12
+ SAMPLE RESULTS	13
+ SAMPLE HISTORICAL RESULTS	13
+ LABCHECK INSIGHT FOR TRENDS	14
+ LABCHECK INSIGHT EQUIPMENT COMPARISON TRENDING	17

LOGGING IN FOR THE FIRST TIME

In order to complete your account setup and first-time login, visit the LabCheck site (labcheck.castrol.com) and click on **1st Login or Forgot Password** circled in red below.



LOGIN

Email

User Name Required

Password

Password Required

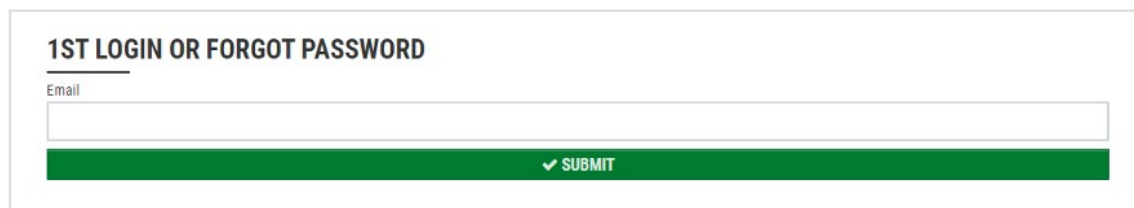
☐ Remember me

[1st Login or Forgot Password](#)

On login take me straight to:

LOGIN

You will see the following screen, where you will need to enter your email address and click **Submit**:

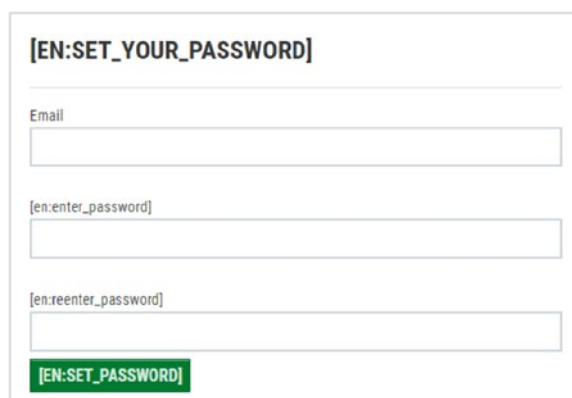


1ST LOGIN OR FORGOT PASSWORD

Email

SUBMIT

You will then receive an email from labcheck@castrol.com containing a link. Click this link to visit the following page to set up your password:



[EN:SET_YOUR_PASSWORD]

Email

[en:enter_password]

[en:reenter_password]

[EN:SET_PASSWORD]

Your password must include:

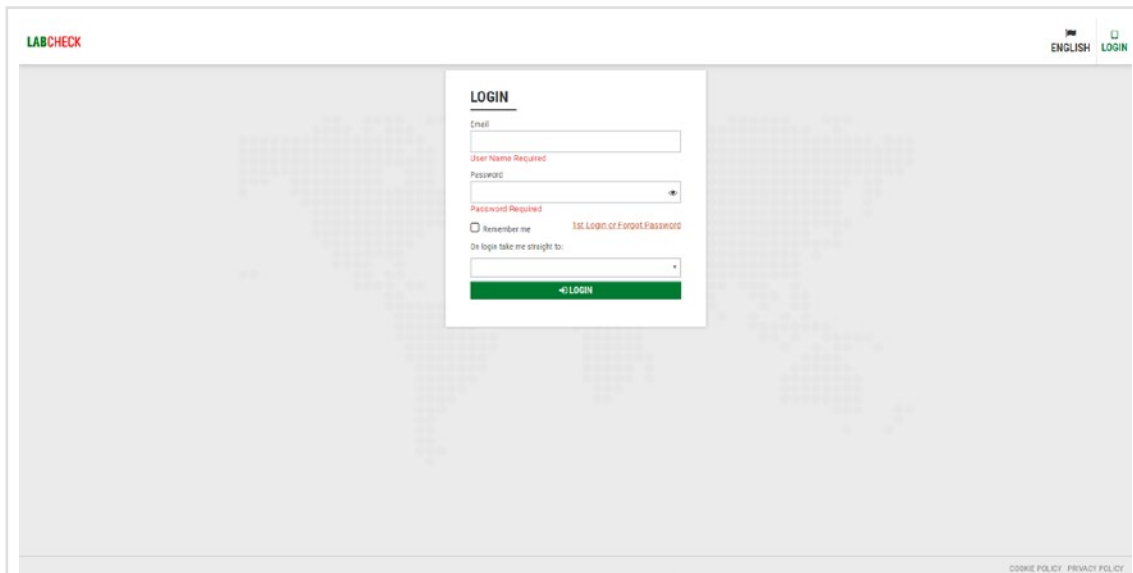
- 16 characters
- At least 1 uppercase and lowercase letter
- 1 number
- 1 special character (. !?# etc.)

LOGGING IN

Start by simply entering your login details and password. Don't worry if you can't remember them; you can reset your password by clicking **1st Login or Forgot Password**. More details on this can be found in the forgotten password section of the guidance sheet.

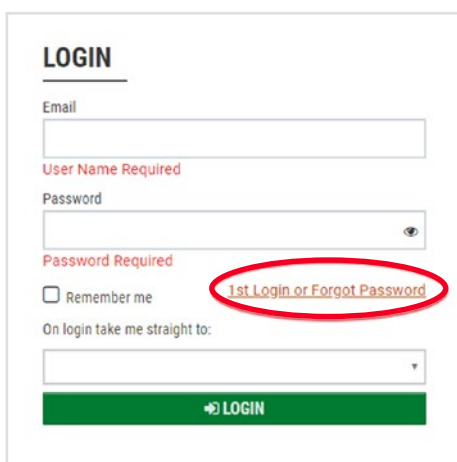
If you want to double-check what you've typed, click on the eye icon, which will reveal your characters.

The language is set to English by default, but you can always change it by clicking on the flag icon in the top-right corner of your browser.

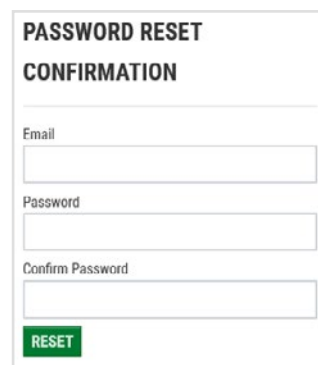


FORGOTTEN PASSWORD

If you forget your password, you can easily reset it by clicking on **1st Login or Forgot Password** circled in red below.



You will then receive an email from labcheck@castrol.com containing a link. Click this link to visit the following page to reset your password:



WELCOME TO YOUR HOMEPAGE



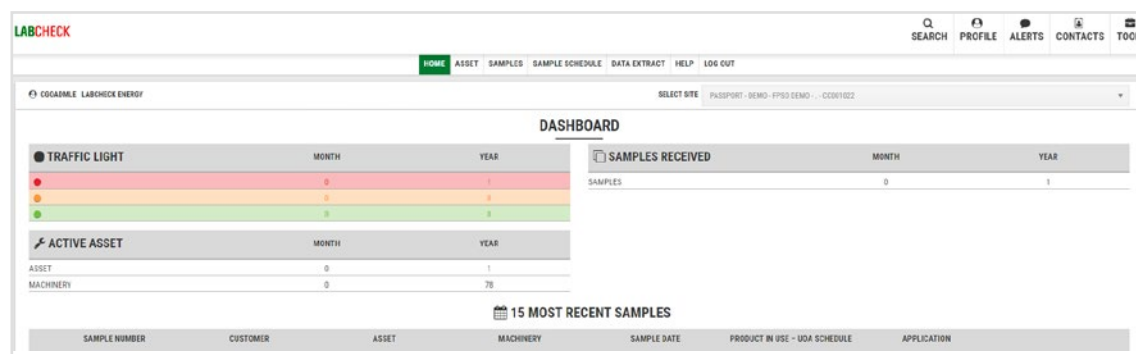
The first thing you'll see is the menu bar, which provides quick and easy ways to:

- Return to your dashboard screen
- View a comprehensive list of your registered equipment
- Access information on your samples
- Head to your scheduling page
- Extract data from the Castrol LabCheck database
- Find help through FAQs and links to other Castrol webpages
- Log out of Castrol LabCheck

YOUR DASHBOARD

At the top of your dashboard, you'll see a snapshot of key information, including:

- How many samples in the latest month and current year you have received
- Which samples are rated green, amber or red
- A total of your active equipment and sample points



Scroll down and you'll reveal more information on the last 15 samples submitted, which are colour-coded to highlight their diagnosis status.

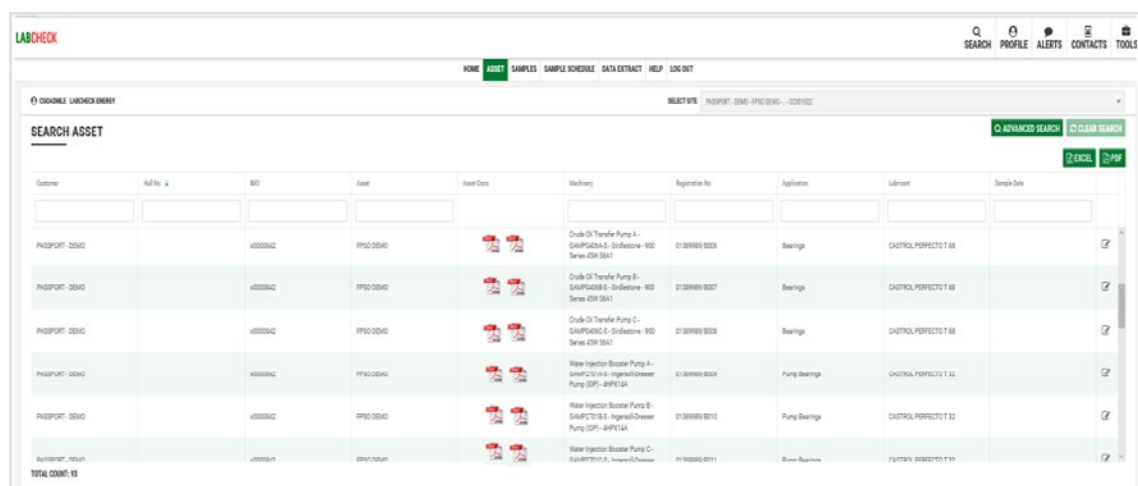
15 MOST RECENT SAMPLES						
SAMPLE NUMBER	CUSTOMER	ASSET	MACHINERY	SAMPLE DATE	PRODUCT IN USE - ODA SCHEDULE	APPLICATION
CE113623	PKSUPPORT - DEMO	FP50 DEMO	Air Compressor Feed - G4M22161 - Ingersoll Rand - 100	27-12-2019	ISF ULTRA COOLANT	Reservoir
CE113559	PKSUPPORT - DEMO	FP50 DEMO	Crane 1 Feed - G4G155A-GR - Hydralift - DMCHC	27-12-2019	CASTROL SPHEROL SPL 2	Sewering Air
CE113549	PKSUPPORT - DEMO	FP50 DEMO	Crane 1 Feed - G4G155A-GR - Hydralift - DMCHC	27-12-2019	CASTROL SPHEROL SPL 2	Sewering Feed
CE113609	PKSUPPORT - DEMO	FP50 DEMO	Crane 1 Feed - G4G155A-GR - Hydralift - DMCHC	27-12-2019	CASTROL SPHEROL SPL 2	Sewering Part
CE113601	PKSUPPORT - DEMO	FP50 DEMO	Crane 1 Feed - G4G155A-GR - Hydralift - DMCHC	27-12-2019	CASTROL SPHEROL SPL 2	Sewering Sides
CE113629	PKSUPPORT - DEMO	FP50 DEMO	Crane 2 - G4G255A-GR - Hydralift - DMCHC	27-12-2019	CASTROL SPHEROL SPL 2	Sewering Feed
CE113665	PKSUPPORT - DEMO	FP50 DEMO	Crane 2 - G4G255A-GR - Hydralift - DMCHC	05-12-2019	CASTROL SPHEROL SPL 2	Sewering Air
CE113613	PKSUPPORT - DEMO	FP50 DEMO	Crane 2 - G4G255A-GR - Hydralift - DMCHC	05-12-2019	CASTROL SPHEROL SPL 2	Sewering Part
CE113671	PKSUPPORT - DEMO	FP50 DEMO	Crane 2 - G4G255A-GR - Hydralift - DMCHC	05-12-2019	CASTROL SPHEROL SPL 2	Sewering Sides
CE113568	PKSUPPORT - DEMO	FP50 DEMO	Thruster 1 - G4M271617-4 - Bala-Roca Marine - TCMC 120105-280	04-12-2019	CASTROL ALPHA SP 100	PWCs
CE113617	PKSUPPORT - DEMO	FP50 DEMO	Oilco Cnc Pump 8 - G4SMP100785 - David Brown Linear Pump Company - T3 100	04-12-2019	CASTROL ENDURON MT 100-40	Clackcase
CE113656	PKSUPPORT - DEMO	FP50 DEMO	Thruster 1 - G4M271617-4 - Bala-Roca Marine - TCMC 120105-280	04-12-2019	CASTROL ALPHA SP 100	PWCs
CE113603	PKSUPPORT - DEMO	FP50 DEMO	Thruster 2 - G4M271617-4 - Bala-Roca Marine - TCMC 120105-280	04-12-2019	CASTROL ALPHA SP 100	PWCs
CE113607	PKSUPPORT - DEMO	FP50 DEMO	AT Values HPV - G4M250211 - DARTOSS	03-12-2019	CASTROL HYDRA AWN-M 32	Reservoir
CE113685	PKSUPPORT - DEMO	FP50 DEMO	Direct Generator 2 - G4M250211 - DARTOSS	03-12-2019	CASTROL MHP 100	Engine Clackcase

VESSEL/ASSET

When selecting **Vessel** or **Asset** within the navigation menu you'll find a list of all your equipment registered to your vessels/assets.

The boxes at the top of each column allow you to search for specific equipment quickly and easily. You can also click on the **Advanced Search** button to display more vessels/ assets registered to your profile.

The fifth column – Asset Docs – will show whether a PDF of the asset's UOA and/or Lubrication schedule is available in the portal. Click on a PDF icon to view the document.



Customer	Ref No.	S/N	Asset	Asset Docs	Machinery	Registration No.	Application	Lubricant	Sample Date
INISPORT - SEDAO		4000042	PP50-0040		Crude Oil Transfer Pump A - SAIP540A-0 - Onshore - 900 Series 4391 3041	01389889 9008	Bearings	CASTROL PERFECTO T 68	
INISPORT - SEDAO		4000042	PP50-0040		Crude Oil Transfer Pump B - SAIP540B-0 - Onshore - 900 Series 4391 3041	01389889 9007	Bearings	CASTROL PERFECTO T 68	
INISPORT - SEDAO		4000042	PP50-0040		Crude Oil Transfer Pump C - SAIP540C-0 - Onshore - 900 Series 4391 3041	01389889 9009	Bearings	CASTROL PERFECTO T 68	
INISPORT - SEDAO		4000042	PP50-0040		Water Injection Suction Pump A - SAIP540A-0 - Onshore - 900 Series 4391 3041	01389889 9008	Pump Bearings	CASTROL PERFECTO T 68	
INISPORT - SEDAO		4000042	PP50-0040		Water Injection Suction Pump B - SAIP540B-0 - Onshore - 900 Series 4391 3041	01389889 9007	Pump Bearings	CASTROL PERFECTO T 68	
INISPORT - SEDAO		4000042	PP50-0040		Water Injection Suction Pump C - SAIP540C-0 - Onshore - 900 Series 4391 3041	01389889 9009	Pump Bearings	CASTROL PERFECTO T 68	
TOTAL COUNT: 10									

At the end of each row, you'll see an icon that resembles a piece of paper and a pen: 

Click on this to edit information about your equipment. Any changes you make will be sent to the Castrol Technical team to validate and accept.

Once you're happy with your list of equipment, you have the option to export it in Microsoft Excel or pdf format.

SAMPLES

This is where a list of all completed submitted samples are stored.

Again, you can use the boxes at the top of each column to search for samples quickly and easily, and the **Advanced Search** button to access a more in-depth list.

Samples are listed with a coloured dot to help you recognise their diagnosis status. You can also register newly taken samples and track any that have been submitted for analysis.

By clicking on the graph icon  you can view online reporting and trends.

You can go to the results page to view your sample.

You also have the option to view your sample reports in either Microsoft Excel or as a pdf document by clicking on the xls or pdf icon. If you select more than one report, you can consolidate them into a single pdf by ticking the box in column one of the sample's row and clicking on the **Merge Export pdf** button.

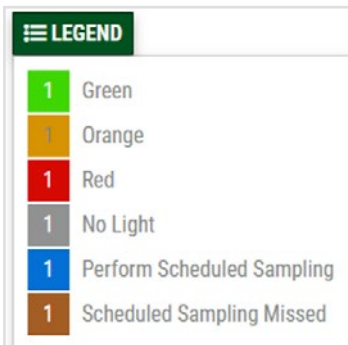
LABCHECK										
HOME ASSET SAMPLES SAMPLE SCHEDULE DATA EXTRACT HELP LOG OUT										
CORGAMBLE LABCHECK ENERGY										
SELECT SITE PASSPORT - DEMO - FPSO DEMO - CC001022										
ADVANCED SEARCH CLEAR SEARCH SAMPLES REGISTRATION SAMPLE TRACKING										
SAMPLE REPORTING										
MERGE EXPORT PDF										
			Sample Number	Customer	Label ref	Asset Number	Asset	Machinery	Registration No	Application
										Product In Use - USA sched.
+	☐		CE013677	PASSPORT - DEMO	Y202269	x0000842	FPSO DEMO	Lifboat 2 - GALBO S-SABR - SABR NA 295 ORLS	01389985/M003	Engine Crankcase
+	☐		CE013675	PASSPORT - DEMO	Y202276	x0000842	FPSO DEMO	Thruster 1 - GAMES7916/7-H - Rolls Royce Marine - TCNC 120-85-280	01389985/H015	Pitch
+	☐		CE013674	PASSPORT - DEMO	Y202248	x0000842	FPSO DEMO	Crane 1 Fed - GAO1/SRA-GR - Hydraulic - OMCVC	01389985/R006	Slewing Aft
+	☐		CE013673	PASSPORT - DEMO	Y202298	x0000842	FPSO DEMO	Thruster 2 - GAMES7920/21 H - Rolls Royce Marine - TCNC 120-85-280	01389985/H017	Pitch
+	☐		CE013671	PASSPORT - DEMO	Y202258	x0000842	FPSO DEMO	Crane 2 - GAO2/SRS-GR - Hydraulic - OMCVC	01389985/R013	Slewing Stbd
								Thruster 2 - GAMES7916/19 H - Rolls		

SAMPLE SCHEDULE

This tab opens a search box to find specific sample locations. Select your asset and the desired time period.

The screen below, which lists all sample points and information about your schedule, will appear when you click **Cancel**.

Legend explains what the different-coloured squares indicate, while the numbers inside each square highlight the total amount of samples submitted during that particular calendar month. You can open relevant lab reports by hovering over each number.



Finally, you can print sample labels or stickers by clicking on the white box(es) allocated to the whole calendar month or specific pieces of equipment. (We'll cover this feature in more detail later on.)

SAS CHECK

[SEARCH](#)
[PROFILE](#)
[ALERTS](#)
[CONTACTS](#)
[TOOL](#)

[HOME](#)
[ASSET](#)
[SAMPLES](#)
SAMPLE SCHEDULE
[DATA EXTRACT](#)
[HELP](#)
[LOG OUT](#)

[VIEW AVAILABLE LABCHECK ENTRY](#)

SELECT SITE: P000007 - 0000 - PPO00000 - 00000002

SAMPLE SCHEDULE VIEW

GO LATEST

Asset	01-2020	02-2020	03-2020	04-2020	05-2020	06-2020	07-2020	08-2020	09-2020	10-2020
01000000-N008 - APPO00000 - Crane 1 Fuel <00000000>										
01000000-N007 - APPO00000 - Crane 1 Fuel <00000000>										
01000000-N008 - APPO00000 - Crane 1 Fuel <00000000>										
01000000-N008 - APPO00000 - Crane 1 Fuel <00000000>										
01000000-N010 - APPO00000 - Crane 1 <00000000>										
01000000-N011 - APPO00000 - Crane 2 <00000000>										
01000000-N012 - APPO00000 - Crane 2 <00000000>										
01000000-N013 - APPO00000 - Crane 2 <00000000>										
01000000-N014 - APPO00000 - Crane 3 <00000000>										

< BACK

FORWARD >

ADD NEW SCHEDULE

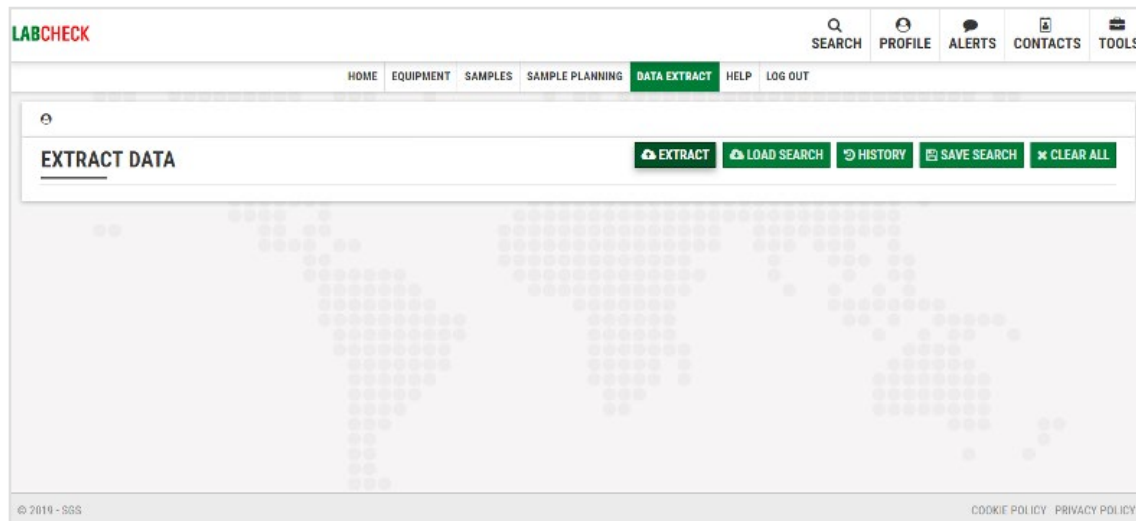
PRINT LABELS / STICKERS

CLEAR SEARCH

DATA EXTRACT

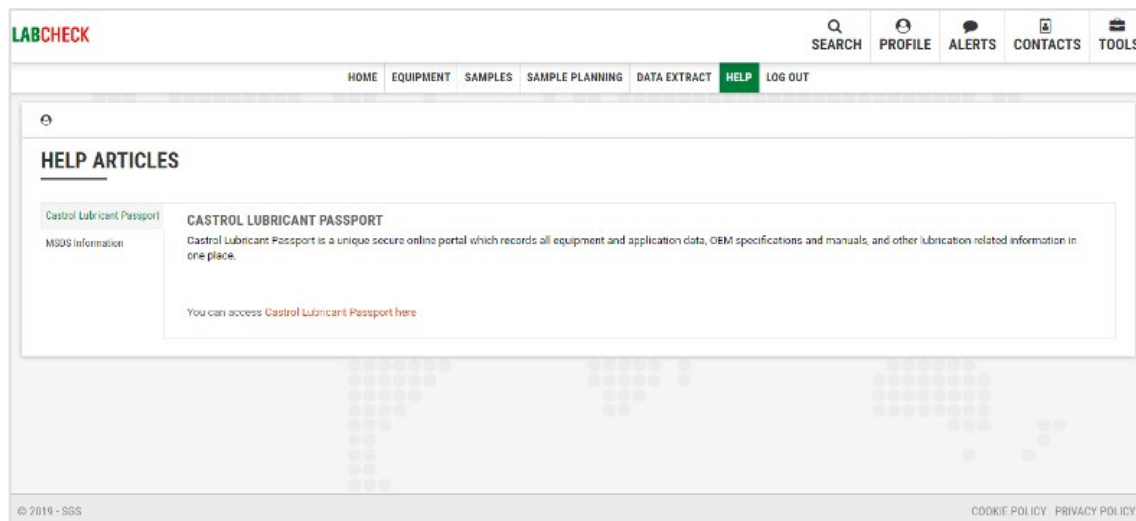
This page is where you can search for and extract data from Castrol LabCheck based on the criteria you specify. You can also save criteria and rerun searches multiple times by using the **Save Search** and **Load Search** buttons.

If you'd like to receive any results, all you need to do is provide your email address. You will then receive an email with a link to your data.

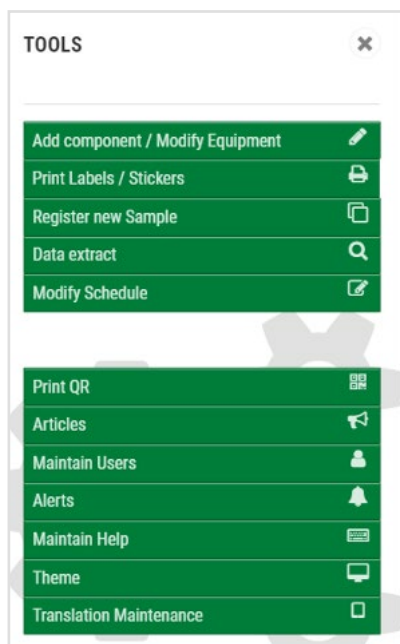


HELP

Here, you can read our FAQs and access other webpages to learn more about Castrol offerings.



TOOLS



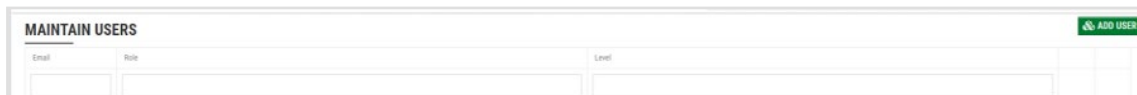
This is your shortcut to all the menu options we've discussed in this guide.

You can access any of them by clicking on the **Tools** icon. This opens a window where you can select your chosen feature (such as printing labels and stickers or registering a new sample).

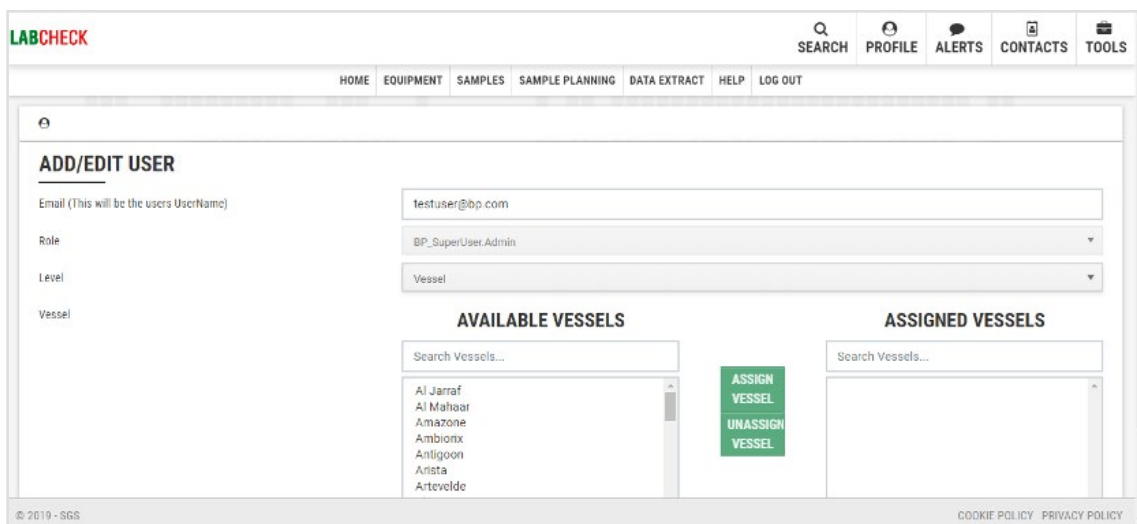
MAINTAINING USERS

From the Tool window, select **Maintain Users** from the list of features. This enables you to add new and edit existing users.

To edit or delete an existing user, simply click on the icon that resembles a piece of paper and a pen  or the bin .



To create a user, select **Add User**, enter the correct email address, select the appropriate level of access and click **Create User**.



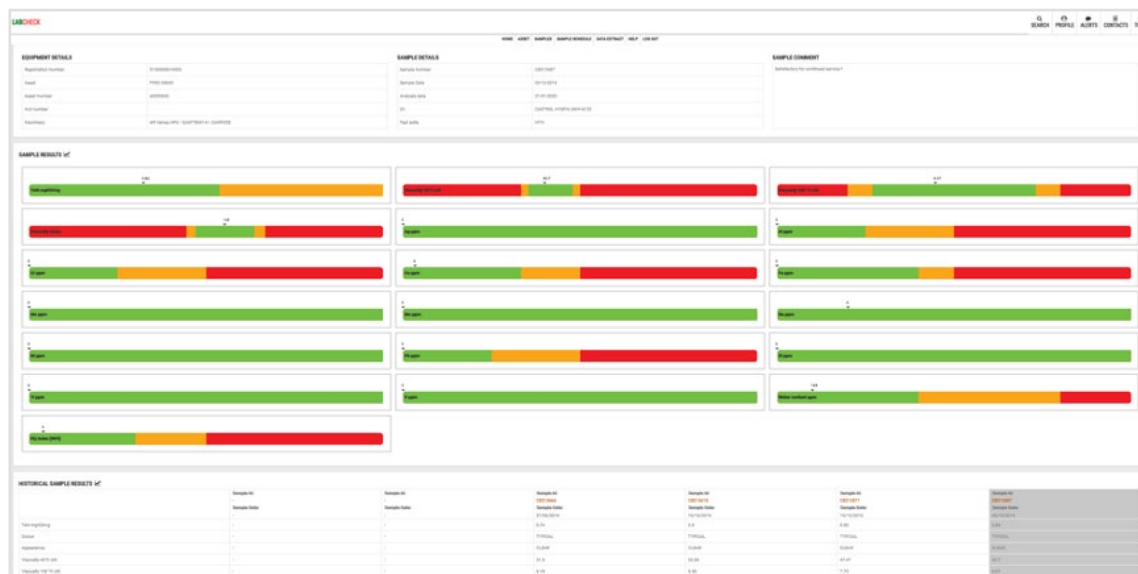
LABCHECK INSIGHT

LabCheck Insight is our new feature for reports and trends. Available within the LabCheck portal, it is where we really harness the benefits of having OEM data:

- Castrol’s hierarchy of limits
- Our deep knowledge and experience of Condition Monitoring (CM)
- UOA
- Maintenance
- Operations and lubrication strategies to record, show and assess lubricant condition trends
- Insights into machine/system condition (by comparing this data with that obtained by the end user from other CM techniques)

RESULTS PAGE

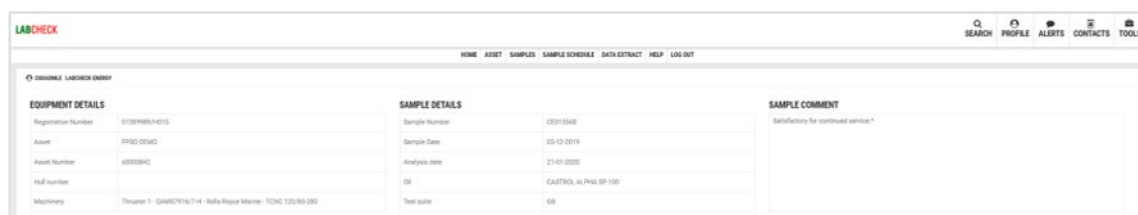
As mentioned earlier, clicking on the 🏠 icon in SAMPLES takes you through to Labcheck Insight.



There are distinct sections on this page. We’ll explain each in detail.

EQUIPMENT DETAILS AND SAMPLE DETAILS

As in the pdf reports, at the top of this page you have the Equipment Details, Sample Details and Sample Comment.



SAMPLE RESULTS

Below this, we have the first feature of LabCheck Insight: individual tiles for the result of each test parameter that is being reported; the value; and where that result sits in the limits that we have set on our system. Each tile will show the limit zones (RED/AMBER/GREEN) and will differ according to which parameter is tested.



SAMPLE HISTORICAL RESULTS

The final section on this page shows the historical sample result data for the current sample and the five previous sample reports. Unlike in the pdf, the latest results are displayed on the right and the oldest, on the left.

	Sample Id: CE013675 Sample Date: 27/06/2019	Sample Id: CE013658 Sample Date: 03/08/2019	Sample Id: CE013676 Sample Date: 31/10/2019	Sample Id: CE013676 Sample Date: 30/11/2019	Sample Id: CE013658 Sample Date: 04/12/2019	Sample Id: CE013658 Sample Date: 05/12/2019
Colour	BROWN	BROWN	BROWN	BLACK	BLACK	HYDRAL
Appearance	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR
Viscosity 40°C cSt	101	101	101.5	101	102	100
Viscosity 100°C cSt	13.84	13.7	12	13.35	13.09	11.81
Viscosity Index	115	109	109	115	126	109
TAN mg/KOH/g	0.55	0.21	0.66	0.88	0.71	0.71
All ppm	0	0	0	0	0	0
Al ppm	0	0	0	0	0	0
Cl ppm	1	0	2	2	2	0
Cu ppm	2	2	0	0	2	0
Fe ppm	101	10	209	199	195	0
Mn ppm	1	0	2	2	2	0
Mo ppm	0	0	0	0	0	0
Na ppm	0	0	10	0	5	0
Ni ppm	0	0	1	1	1	0
Pb ppm	0	0	1	0	0	0
Se ppm	0	0	0	0	0	0
Ti ppm	0	0	0	0	0	0
V ppm	0	0	0	0	0	0
PG Index (API)	0	1	5	0	2	0
Water content ppm	360	146	279	193	61	76

The Sample ID shown above the sample date and sample data is also a hyperlink.

Sample Id: CE013675 Sample Date: 30/11/2019	Sample Id: CE013658 Sample Date: 04/12/2019	Sample Id: CE013658 Sample Date: 05/12/2019
--	--	--

By clicking on any of the previous sample hyperlinks, the view will change. The sample selected will become highlighted and move to the right of the screen, the preceding five samples will be shown and the result/limit tiles above will change to reflect the selected sample.

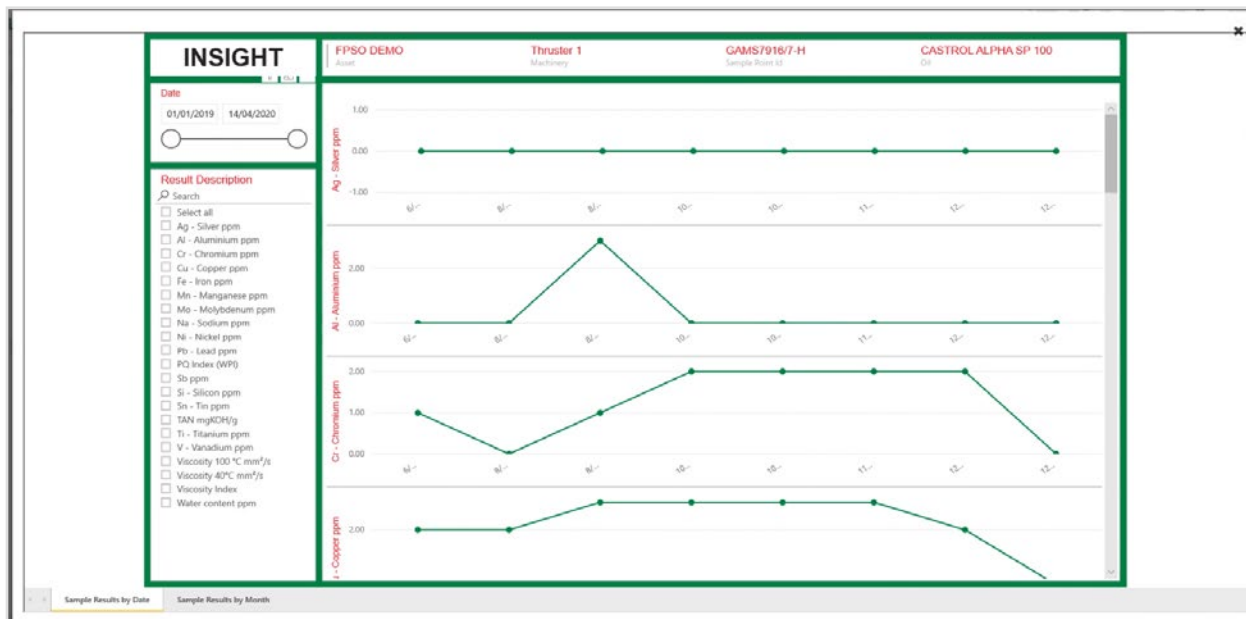
Sample Id: CE015805 Sample Date: 04/10/2019	Sample Id: CE013588 Sample Date: 31/10/2019	Sample Id: CE013675 Sample Date: 30/11/2019
--	--	--

LABCHECK INSIGHT FOR TRENDS

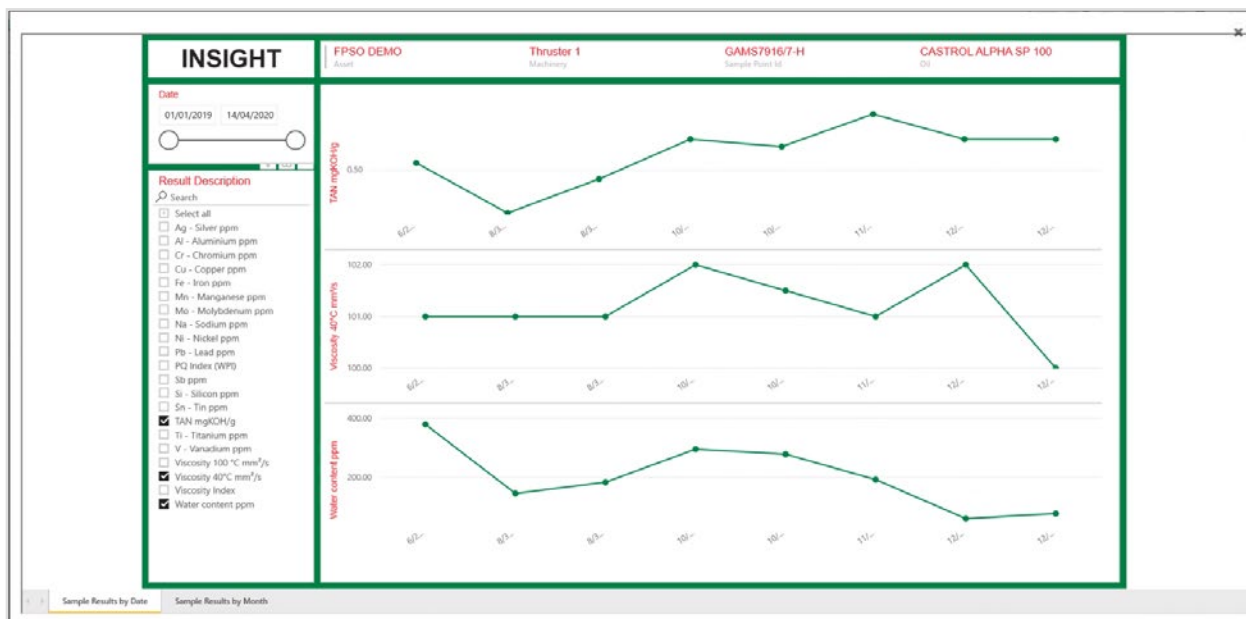
Click on the  icon which is located in two places (see below) on the sample reporting page to go to the trending package of LabCheck Insight.



The default view of the LabCheck Insight trending package is to show trends for all of the test parameters over a small date range.

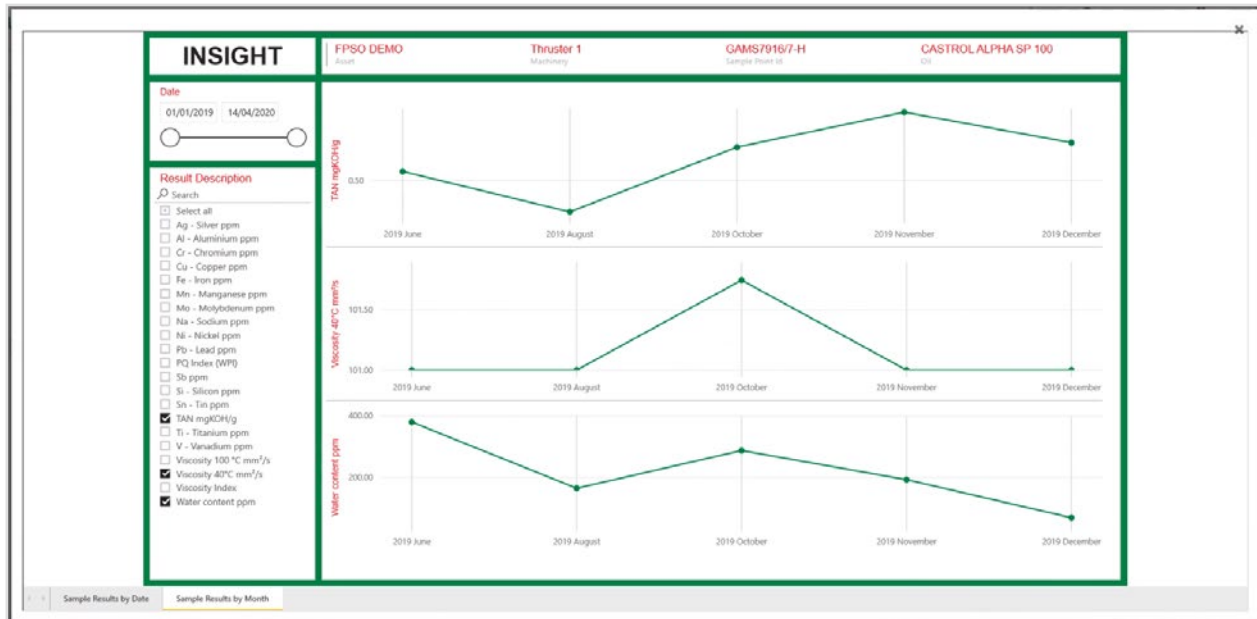


Each of the parameters is displayed vertically. To see the trend for single parameters or a combination, you just select them in the check boxes. Adjust the date range by moving the date sliders. In this illustration, we have selected V40, Water Content and TAN:



Moving the cursor over each data point on the trend shows the date and the result.

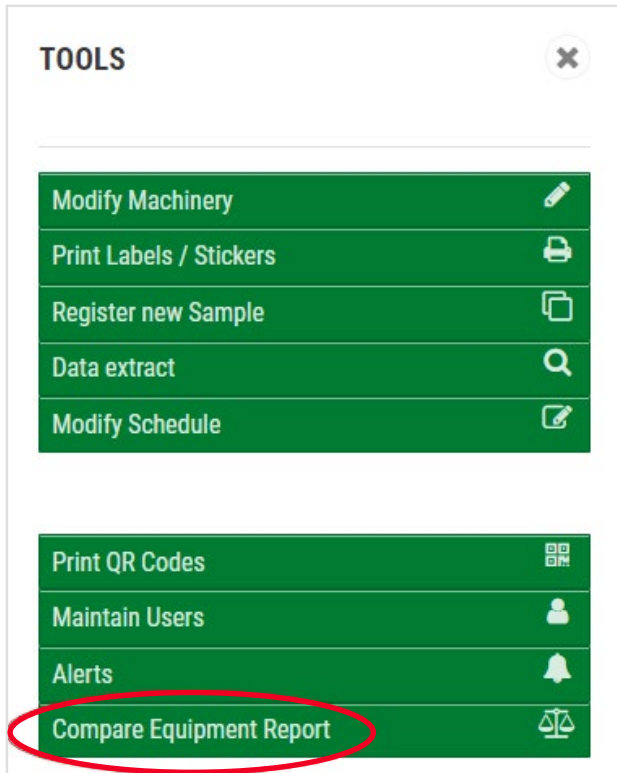
The x-axis default is to show results by date, to give greater clarity on any gap between samples (which is useful for identifying when samples have potentially been missed or repeat samples are sent in). By selecting the Sample Results by Month tab at the bottom left of the page, the view changes to each sample being spaced the same.



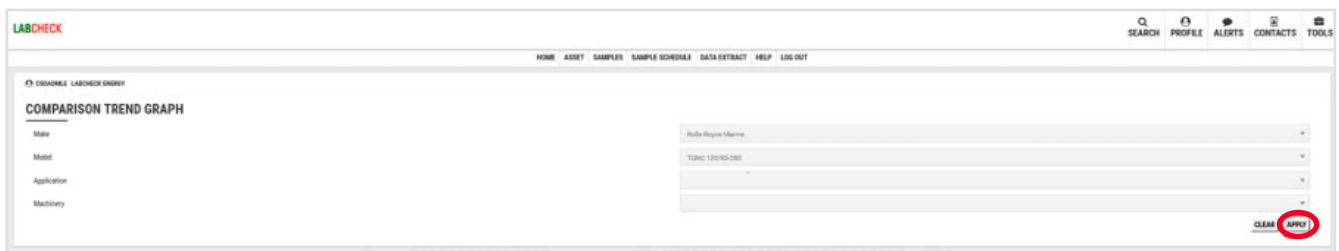
LABCHECK INSIGHT EQUIPMENT COMPARISON TRENDING

The OEM and model data that Castrol holds for each sample point allows us to provide comparison trending for the same models across an asset/vessel or for a customer fleet across all of their assets/vessels.

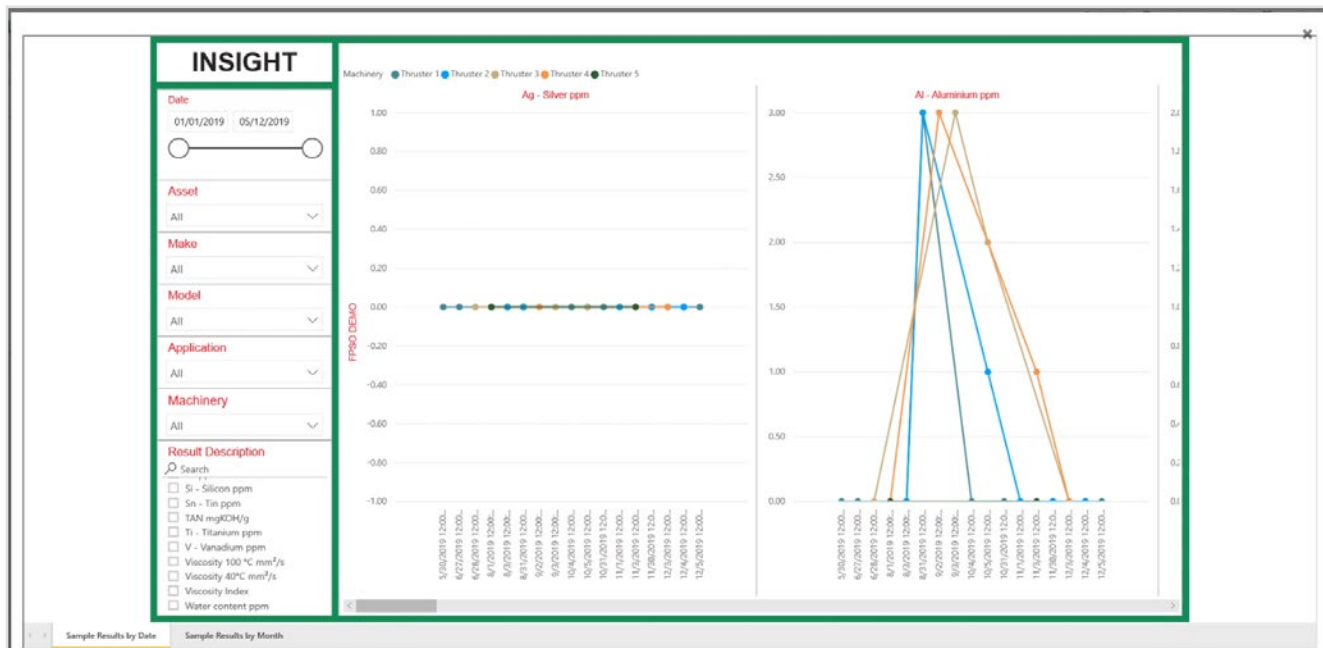
Start by going to **Tools** on the top toolbar and selecting **Compare Equipment Report**.



On the screen that is then displayed, select the OEM and model you are looking to compare. Simply typing part of an OEM will display options to select. Alternatively, use the dropdown menu (and if you know the model, complete that too). Then select **Apply**.



You will then see, by default, all of the test parameter trends horizontally for your asset/vessel. Each individual unit will have a trend in the same graph. If you have access to multiple assets/vessels that have this OEM/model, they will be displayed vertically. If no trends appear initially, widen the date range.

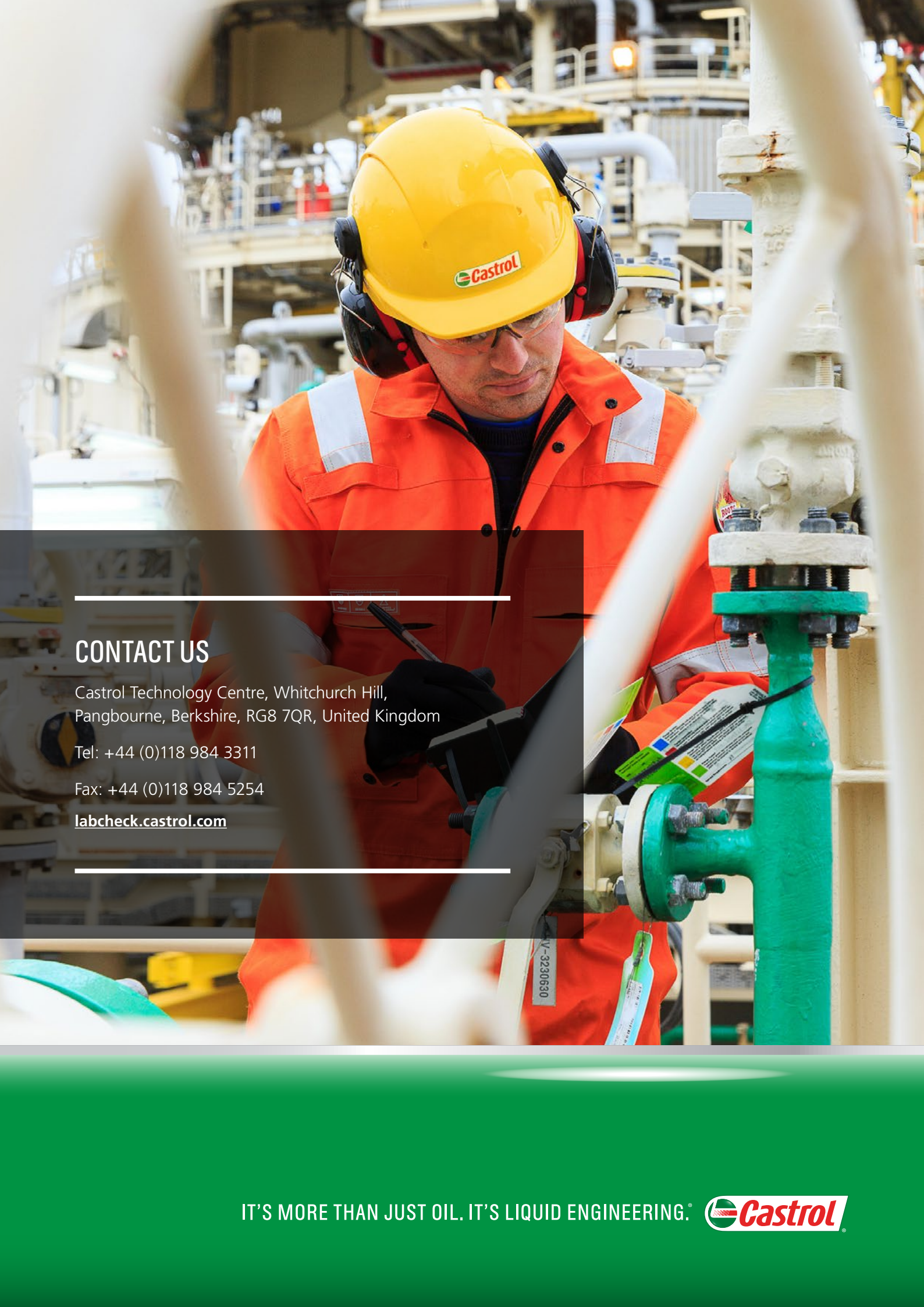


Again, select the test parameter you want to see overall trends for from the check boxes. The individual trends will be displayed colour-coded as per the key at the top of the graph.



If, as before in single sample point trending with LabCheck Insight, you want to compare multiple parameters, select another parameter. Its trends will appear on a graph adjacent to the original parameter's graph.



A full-page background image of an industrial worker. The worker is wearing a bright yellow hard hat with the Castrol logo, safety glasses, and large black earplugs. He is wearing an orange high-visibility safety jacket with reflective silver stripes. He is focused on a task, looking down at a piece of equipment. The background shows a complex industrial facility with pipes, valves, and structural steel. A green-painted valve or pipe fitting is prominent in the foreground on the right.

CONTACT US

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labcheck.castrol.com

IT'S MORE THAN JUST OIL. IT'S LIQUID ENGINEERING.®

