



Oil Analysis Web Database User Guide

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Introduction

At STS/OAS our vision is for the online results database to become an essential daily tool for reliability and maintenance engineers. In addition it should link the end customer, any third party maintenance service provider and the lab in a virtuous communication loop. This is why we insist on bespoke in-house software and dedicate significant resources to its development. There are many useful features in the software already and there are many new features in the development plan.

Logging In, My Account, Messages, Navigation

You will find the database at www.oasdb.net. It is also accessible through our web site www.oas-online.co.uk by clicking on **Customer Login** at the top of the page¹. The site should then redirect you to the **Login page**, however if this does not happen automatically (some of the older browsers may not support this feature) please type <http://www.oasdb.net/system/default.php> instead. Once at the **Customer Access** screen please use your username and password to log in.

The next page will alert you of any messages that may have been issued for you. You can read them in via **My Account/View Messages** section. If this is your first time using the software you may find that some messages are already waiting for you with information on previously added features and other relevant information. Please note that if you access the database on several computers or share log in details with colleagues then new message tracking may not display new message notifications as a different user may have read them. You will however find the subjects of the latest three messages displayed on the welcome page, which will help track any new announcements. It is still a good practice to check your inbox for new messages every now and then.

While at the **Welcome Screen** press continue to arrive at the **Quick Tasks** page. Here you can use **Navigation Icons** and links along the **Navigation Bars** at the top and bottom of the page to access sample reports and other key areas of the site. You can always return to the Quick Tasks page by clicking on the

¹ Any updates from the previous version of this document will be inserted as *italics* to make catching up with the new features easier.



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Quick Tasks link in the top navigation bar. *If any of the icons seen in this document are not available to you it may be because the feature hasn't been enabled for your account. Some features are not needed by every customer and may not be enabled to reduce clutter. Others require close supervision during the roll-out stage and are enabled gradually across customer base while we stress test systems. In any case – if you see something you like but cannot access it – get in touch and we will be glad to enable it for you and talk you through using it.*

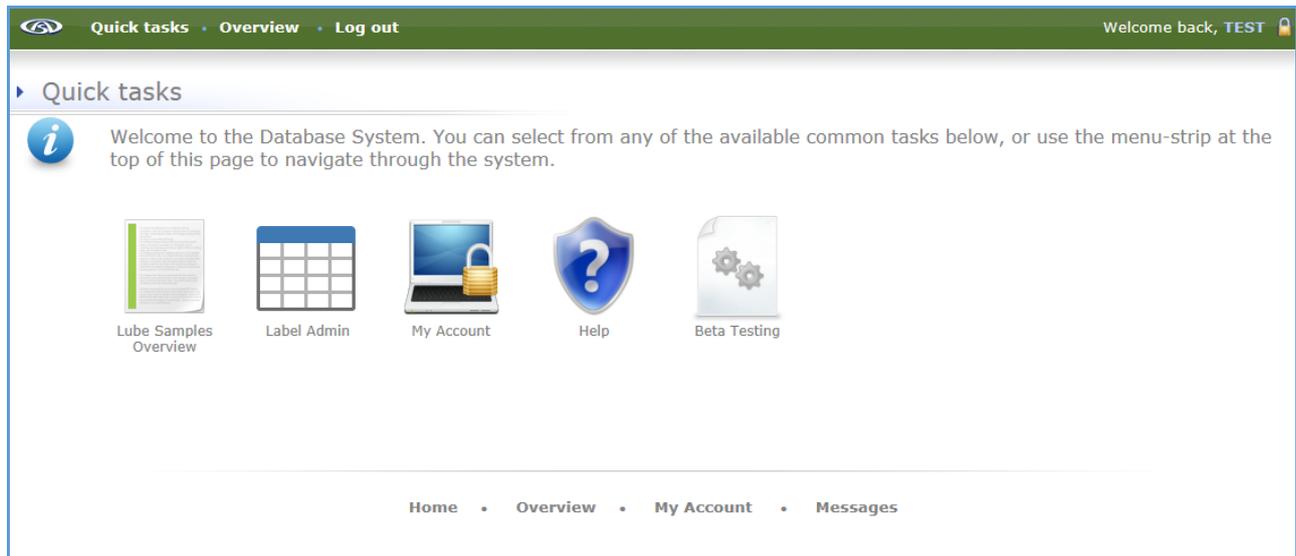


Figure 1 Quick Tasks Area

My Account area contains various tools allowing you to update your company and personal details, change your password and certain preferences for export files as well as to read any messages. *Here you can also change the background colour for a number of commonly used pages (this is cosmetic, however some find that replacing the white background with grey can help reduce eye strain, try D1D1D1 colour code). This is also where **Label Dimensions** can be adjusted to ensure that labels fit the margins for any browser and printer combinations.*

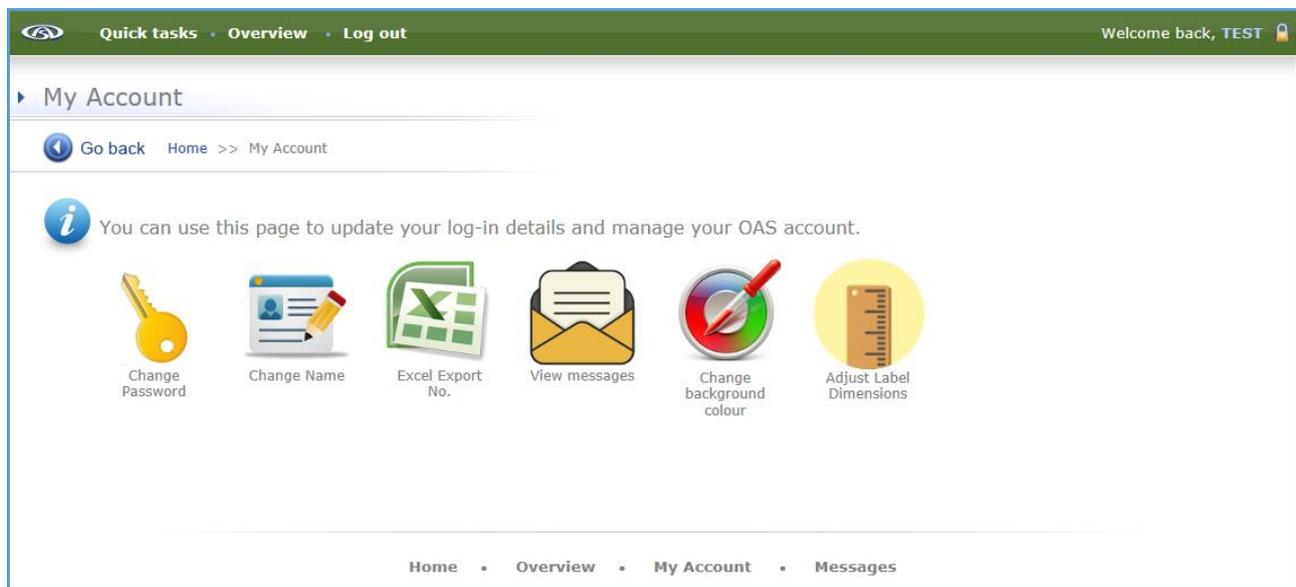


Figure 2 My Account Area



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Sample Overview, Unit List, Analysis Report, History Table

The **Lube Samples Overview** icon and **Overview** navigation bar links take you to the list of samples tested. These are presented in a table and give you access to analysis reports, *Ferrogaphy reports*, history tables, graphs, etc. They also summarise sample condition for a quick assessment of the situation.

Sample Number	Sample Date	Company Name	Site Name	Plant ID	Unit Name	Sample Point	Lubricant Type	Ferrogaphy	Graphs	History	Report	Elements	Physical	Acidity	Viscosity	InfraRed
30001.001	18/01/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.002	18/02/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.003	16/03/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.004	18/04/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.005	20/05/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.006	18/06/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.007	18/07/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.008	29/07/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.009	05/08/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.010	25/08/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.011	10/09/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.012	09/10/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.013	16/11/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.014	26/11/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.015	29/11/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.016	13/12/2016	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.017	09/01/2017	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.018	13/02/2017	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.019	27/02/2017	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									
30001.020	14/03/2017	DEMO	FACTORY 1	ABC 123	LINE 3 CONVEYOR	GEARBOX	MOBILGEAR 600 XP 220									

[HomeNext 200](#)

Figure 3 Overview Page

In the **Overview** table samples are listed by invoice number with Sample Date, Customer Company Code, Site Name, Plant ID, Unit Name, Sample Point and Lubricant type displayed. Icons linking to *Ferrogaphy Reports*, Graphs, History Tables and a Quick Report function as well as a traffic light system for test group statuses are available on the right hand side of the table (as seen in Figure 4).

Following a recent update, diagnostic comments will pop up as a tool tip if you hover over the status colour icons for each sample.

The **Quick Search** function covers Company, Site, Plant ID, Unit and Sample point fields and will help you find the results you need.



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Quick search: <input type="text"/>							Go
Set number of items to display: 200							Go
Lubricant Type	Ferrography	Graphs	History	Report	Elements Physical Acidity Viscosity InfraRed		
MOBILGEAR 600 XP 220							
MOBILGEAR 600 XP 220							

Figure 4 Overview table navigation with Quick Search and Icons for *Ferrography*, *Graphs*, *History Table* and *Quick Reports*. Also shown is a status summary for *Elemental Analysis*, *Physical Tests*, *Acidity*, *Viscosity* and where available *FTIR*,

A useful alternative to the Overview table is the **Unit List**, which is accessible through the top Navigation Bar and is arranged in a similar way to the overview table. The major difference is that for each unique Unit/Sample Point combination only the latest sample is shown (note this feature may initially display the oldest sample for certain units where no recent samples (after 2015) have been taken – this issue is resolved once a recent sample is entered into the system). This page can be used as a useful summary of your assets as it displays the latest oil sample status for each asset and helps track when samples were last taken.

The **Unit List** page comes with a number of additional features including its own search function and sorting feature, where the table can be arranged in ascending or descending order by Sample Number, Date, Site, Plant ID, Unit, Sample Point or Lubricant. Combination of Sorting, Quick Search and browser search will make it easy to narrow down and arrange results in the most convenient way.

When it comes to **viewing the results** there are two primary options – **Analysis Report** and **History Table**.

Analysis Report, accessible by clicking on the **Sample/Invoice Number**, will have all the available results for the chosen sample. It will also allow you to Add Comments (if enabled for your account), view the History Table and Graphs and generate export files in one or more predetermined formats, depending on your account settings.

The **Add Comments** function is designed to enable a feedback mechanism between the client and the lab – you can use it to inform us and your colleagues of oil changes, maintenance activities, changes in usage patterns, feedback from other condition monitoring techniques and any other relevant information. This may not be enabled by default, so if you think you will find it useful please contact the lab and it will be enabled for you. *To highlight the presence of these additional comments for a particular sample its sample number will be written in a green font across the Overview, Unit List, Quick Search and History Table pages (see Figures 3 and 6). You can quickly read the comments by hovering over the traffic light status icons for the Overview style pages and over the sample number on the History Table page – a pop up listing the lab and the additional comments will appear.*



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Quick tasks · Overview · Search · Customers · Filter · Log out

Analysis Report

Go back Home >> Overview >> Analysis Report

[New Report](#)
[Edit Report](#)
[Add Comments](#)
[History Table](#)
[Graphs](#)
[Print CSR](#)
[Generate File](#)
[Batch to Excel](#)

Sample: 407988001 EQ/Serial: 88888888
 Customer: MOBIL OIL LTD Unit: MOBIL GEARBOX 5000
 Site: U.S. OILFIELD SERVICES Sample pt: GEARBOX
 Lubricant: MOBIL 600 XP 150

Date Sampled: 24/09/2015 Date Received: 07/10/2015 Date Tested: 09/10/2015

Fe PPM: 54	ISO Code: 20/19/15
Cr PPM: 1	PQ: 899**
Al PPM: 12*	Water (%): 20**
Cu PPM: 7	Water (PPM): 200000**
Pb PPM: 0	Flash Point:
Ni PPM: 1	Insolubles %:
Sn PPM: 0	Physical status: ✘
Mn PPM: 1	TBN:
Ti PPM: 4	TAN: 0.55
Ag PPM: 0	Acidity status: ✔
Mo PPM: 0	Soot:
Zn PPM: 15	Oxidation:
P PPM: 280	Nitration:
Ca PPM: 57	Sulphation:
Ba PPM: 1	Glycol %:
Mg PPM: 3	Fuel %:
Si PPM: 35*	Water %:
Na PPM: 2	Antiwear:
B PPM: 6	InfraRed status:
V PPM: 0	NAS 1638:
S PPM:	ISO 4406/BS 5540:
Elements status: ⚠	5-15µm:
Visc @ 40c: 149	15-25µm:
Visc @ 100c:	25-50µm:
Viscosity status: ✔	50-100µm:
Freezing Point:	>100µm:
Bio:	NAS Code status:
RPVOT:	Demulsification:
Air Release:	Report Type: Select

Equip Hours: Lube Hours: Resample in:

Comments: Water contamination, with some signs of resulting wear. Inspect unit for damage/proper operation. If acceptable condition consider changing oil to remove contamination. Resample at reduced intervals to verify problem corrected.

Additional Info:

Figure 5 Analysis Report



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OAS - DB

https://oasdb.net/system/runprint_hist_cust.php?NewL=0&NewI=0

Bck 8 - Fwd 8 - Latest - Overview - Print report - Print Paperwork - Save as Excel - Export All

STs
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SITE: OIL TEST RESULTS
UNIT: Site
SAMPLE POINT: UNIT ID
LUBRICANT: COMPRESSOR
Oil Type

DATE SAMPLED	21/10/2015	07/12/2015	04/05/2016	12/09/2016	17/10/2016	07/03/2017	28/06/2017	13/09/2017
DATE RECEIVED	29/10/2015	17/12/2015	19/05/2016	03/10/2016	31/10/2016	14/03/2017	07/07/2017	22/09/2017
DATE TESTED	04/11/2015	22/12/2015	20/05/2016	05/10/2016	08/11/2016	16/03/2017	13/07/2017	26/09/2017
EQUIP / LUB HRS								
IRON (ppm)	1	0	1	1	1	1	1	1
CHROMIUM (ppm)	0	0	0	0	0	0	0	0
ALUMINIUM (ppm)	0	0	0	0	0	0	0	0
COPPER (ppm)	0	0	0	0	0	0	0	0
LEAD (ppm)	0	0	0	1	0	0	0	0
NICKEL (ppm)	0	0	0	0	0	0	0	0
TIN (ppm)	0	0	0	0	0	0	0	0
MANGANESE (ppm)	0	0	0	0	0	0	0	0
TITANIUM (ppm)	0	0	0	0	0	0	0	0
SILVER (ppm)	0	0	0	0	0	0	0	0
MOLYBDENUM (ppm)	0	0	0	0	0	0	0	0
ZINC (ppm)	0	0	0	0	1	0	1	1
PHOSPHORUS (ppm)	0	0	1	0	1	0	0	0
CALCIUM (ppm)	1	0	0	0	1	0	1	0
BARIUM (ppm)	0	0	0	0	0	0	0	3
MAGNESIUM (ppm)	0	0	0	0	0	0	0	0
SILICON (ppm)	2	1	5	1	1	1	1	1
SODIUM (ppm)	0	0	0	0	1	0	0	0
BORON (ppm)	0	0	0	0	0	0	0	0
VANADIUM (ppm)	0	0	0	0	0	0	0	0
SULPHUR (ppm)								
ISO CODE	18/17/14	16/15/13	17/16/13	17/16/14	17/16/13	19/18/15*	18/17/14	17/16/13
PQ	33*	40*	529*	7	6	10	10	8
WATER (%) / (ppm)	- / 34	- / 23	- / 16	- / 19	- / 18	- / 18	- / 19	- / 22
FLASH POINT (°C)								
INSOLUBLES (%)								
TBN (mgKOH/g)								
TAN (mgKOH/g)	0.15	0.08	0.14	0.08	0.06	0.33*	0.28*	0.18
VISC @ 40°C	66	67	65	65	66	66	66	65
VISC @ 100°C								
NAS 1638								
BIO								
RPVOT (min)								
DEMULSIFICATION (s)								
SAMPLE NUMBER	3.036	0.001	0.017	0.001	9.018	1.001	5.032	3.001

Normal. Continue in Service. Resample at regular intervals. (Comments refer to Sample No. 42443.001, as highlighted above.)

ISO Image for sample No. 3.036. ISO Image for sample No. 0.001. ISO Image for sample No. 0.017. ISO Image for sample No. 0.001. ISO Image for sample No. 9.018. ISO Image for sample No. 1.001. ISO Image for sample No. 5.032. ISO Image for sample No. 3.001.

Figure 6 History Table, now showing up to 8 patch images where available

The **History Table** page for each unit is accessible from the Analysis Report as well as from the Overview and Unit List tables via the **HT Icon** . It shows up to 8 of the latest sample results. Where more results are available use **Bck 8**, **Fwd 8** and **Latest** links at the top of the History Table page to navigate. For samples where ISO Cleanliness Code is reported you can see the corresponding **Patch Images** as well. The selected sample's data and patch image are highlighted with a light blue shade. Comments and lubricant information change depending on the selected sample – click on date sampled to change between samples. The software also highlights lines of results depending on the position of the mouse cursor making it easier to identify values and explore trends. You can navigate to the Analysis Report page by clicking on a sample/invoice number of any sample. To access an enlarged image of the filter patch, click on the photo and a new window will pop up. Where additional comments have been left by either the customer or the lab, the sample number will be displayed in a **green font** to indicate that additional information is available.



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Graphs

Another useful tool for exploring the results and evaluating trends is the graph. We have now completed a complete overhaul of the graphing engine, switching from Flash to HTML 5 and adding a host of new features in the process. One of the key features was a change to **true date spacing** for the horizontal axis instead of the previously used incremental equally spaced system. You can now see a true representation of the sampling frequency on the graphs. This can be used to review sampling frequencies, identify periods when no samples were taken and get an accurate representation of the rates of change in measured values. You can find a selection of **graphs** by following a link from the Analysis Report page or by clicking on the graphs icon  in the Overview or Unit List. This will take you to the **Graph Overview**.

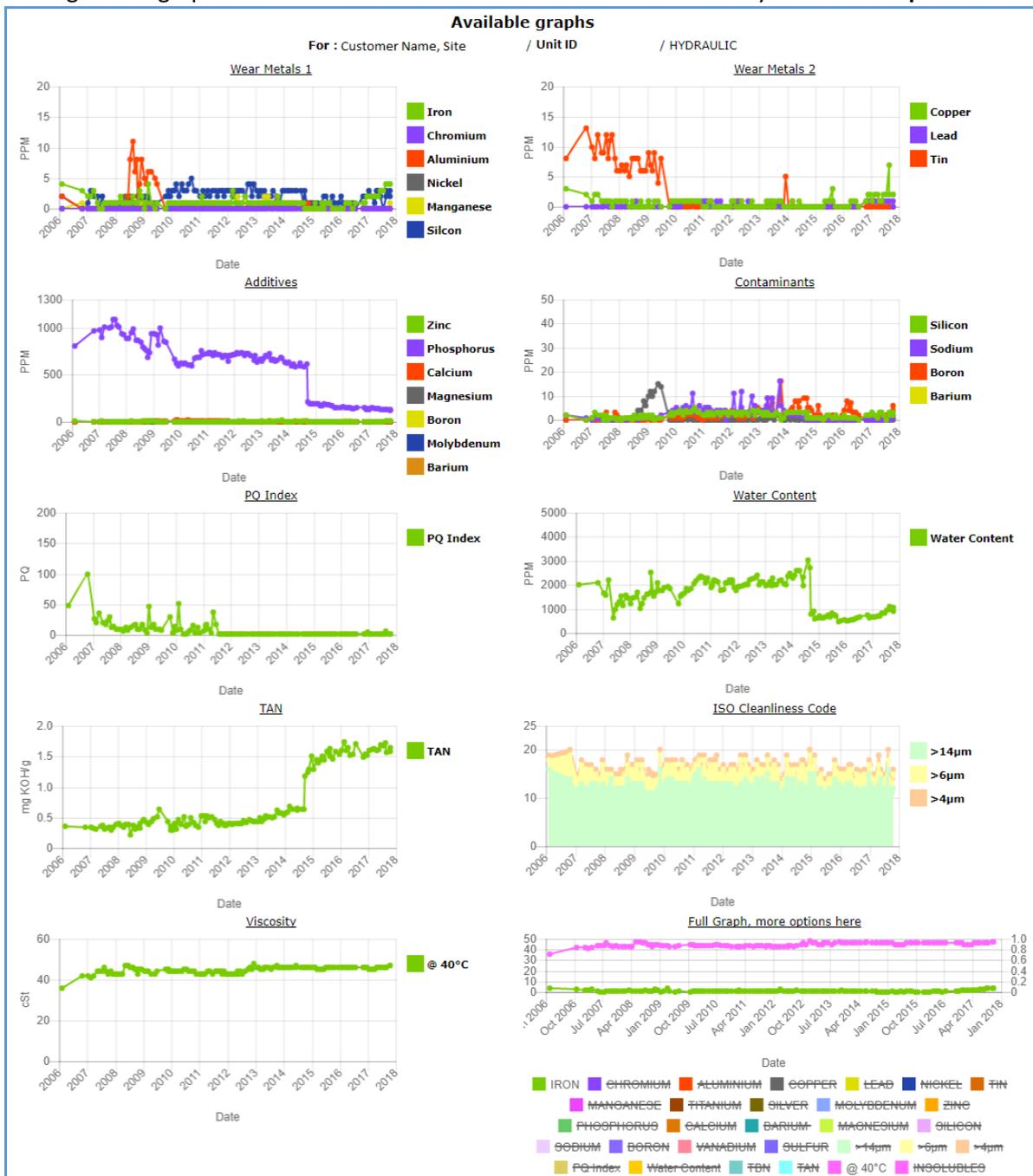


Figure 7 Graph Overview



The Graph Overview page is home to a collection of pre-set graphs grouped into several categories. The first set covers Elemental Analysis results, with two Wear Metal plots, a graph for common Additives and another for Contaminants. These are followed by PQ Index and Water Content, TAN/TBN, ISO Cleanliness Code, Viscosity and the customisable Full Graph.

Clicking on individual legend names will disable/enable the relevant parameter (the page will be reloaded). This may lead to a change of scale, allowing for previously suppressed detail within the trends of remaining elements to become apparent.

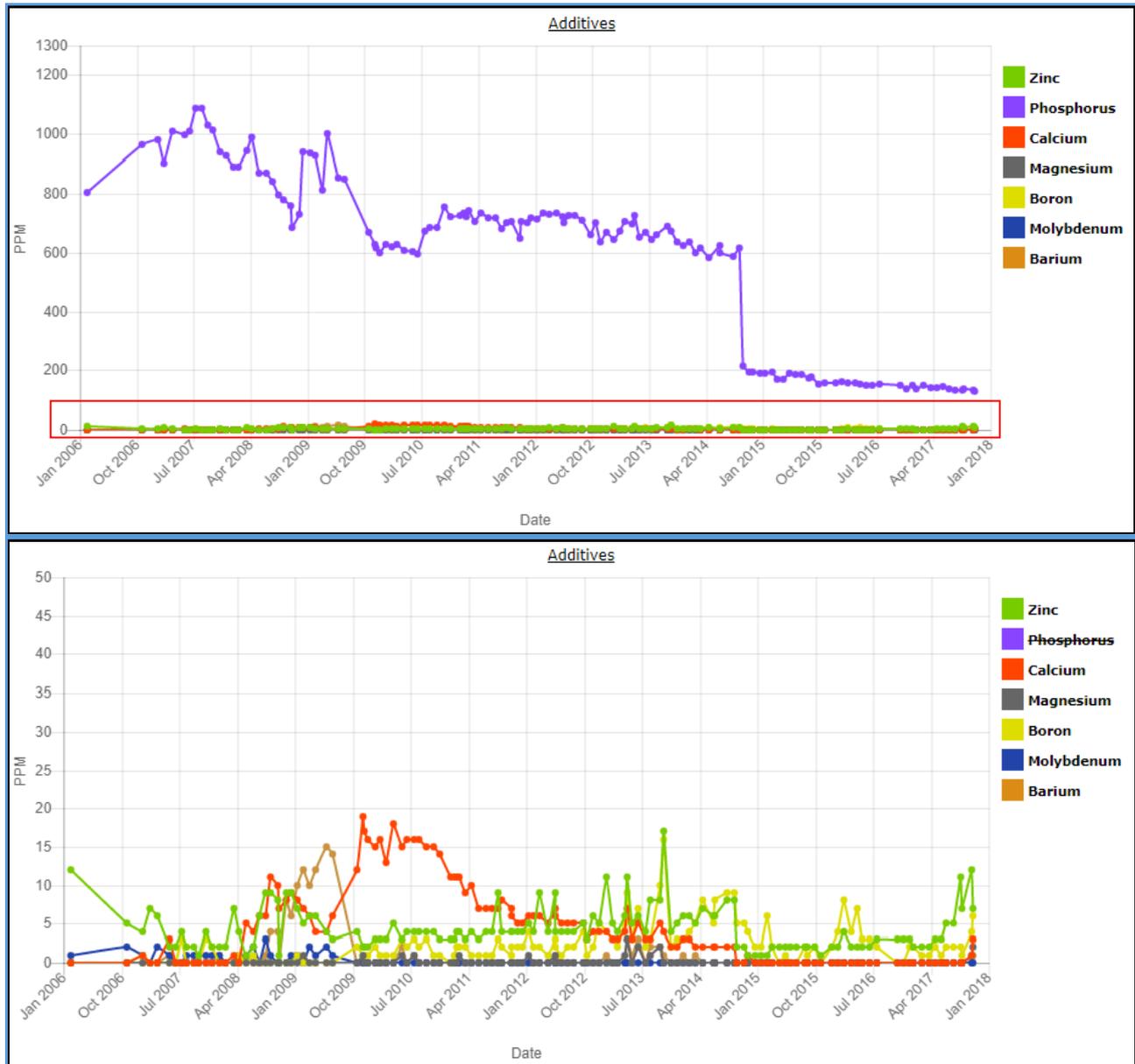


Figure 8 Scale adjustment following deselection of Phosphorus

Further adjustments to both horizontal and vertical axis scales can be accessed on the individual graph pages. Click on the desired **graph title** to proceed to a dedicated page for the specific graph. From each of the individual graphs you can navigate to any of the other graphs or back to Graph Overview. You can adjust the horizontal axis scale by using the mouse wheel and pan across the graph by holding the left mouse button and moving the mouse. You can also choose to display a set number of years, which will adjust the scale accordingly, see Figure 10.



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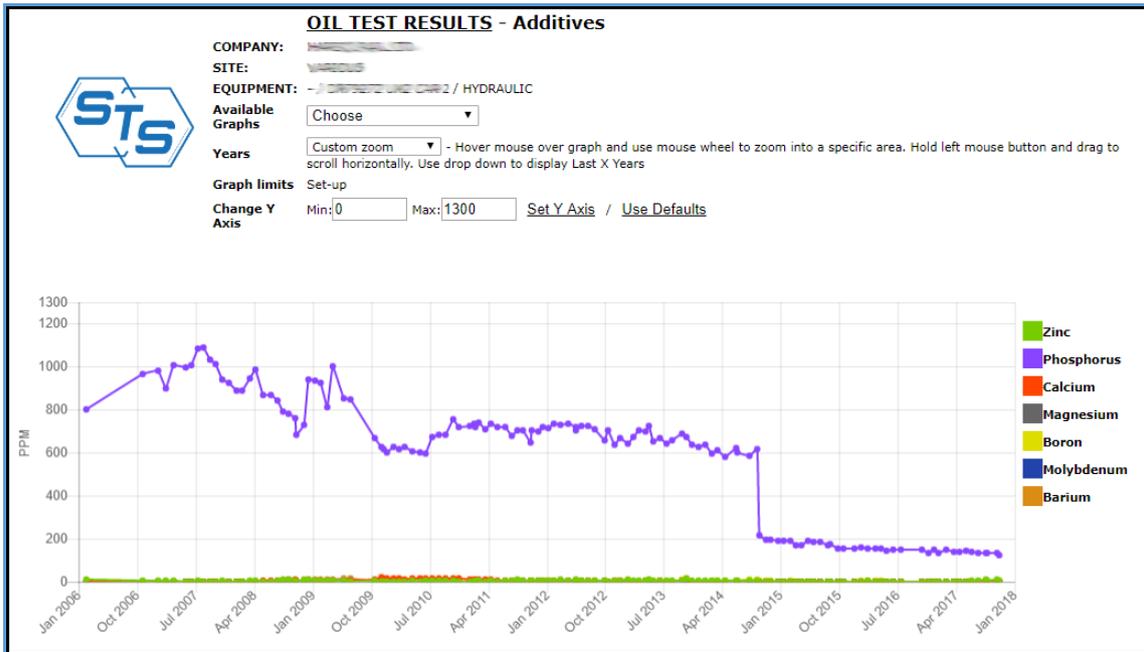


Figure 9 Additives Graph Page, default view

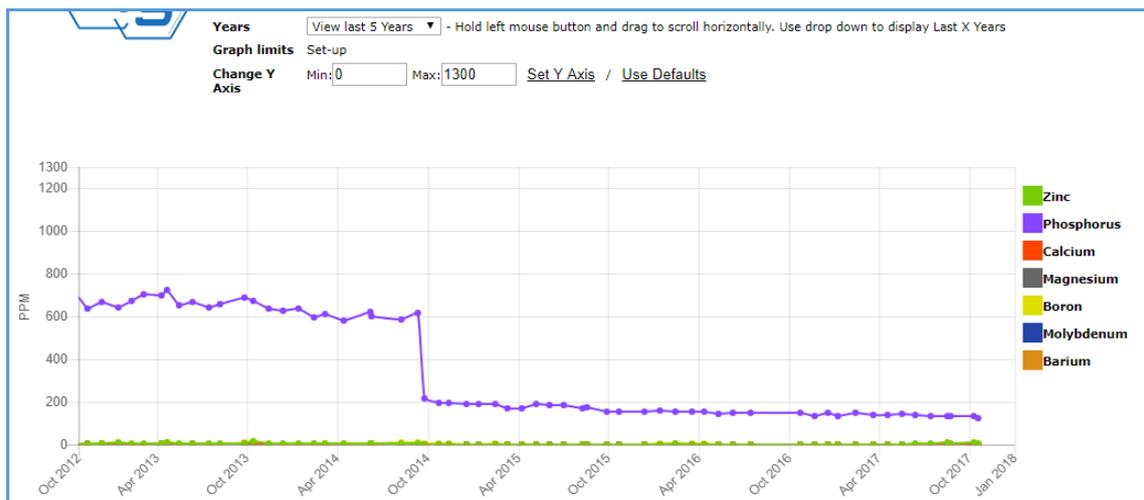


Figure 10 Additives Graph Page, last 5 years

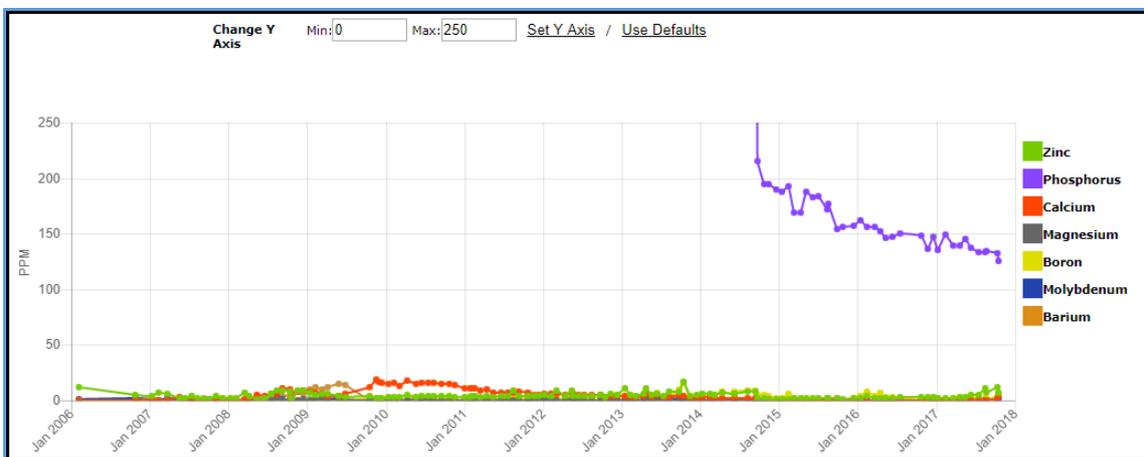


Figure 11 Additives Graph Page, 0-250 Y axis range



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By default, the Y axis is set up to scale in line with the largest value in the dataset. It can also be adjusted manually, allowing a more detailed examination of minor or trace elements, which can give important information about the metallurgy of the wearing component. Set the desired minimum and maximum values and click Set Y Axis to adjust. You can return to the default scaling by clicking on Use Defaults.

In some cases, it may be desirable to plot different properties against each other. For this purpose, we have created a fully customizable **Full Graph**. There you can select several different parameters to plot against each other. To allow for very disparate scales two Y Axis have been provided with full customisation options available for each axis, see Figure 13. The choice of axis for each parameter can be made using the Y-Axis Preferences Set-up dialogue, as seen in Figure 14. The standard adjustments to the scale of the horizontal axis are also available for the Full Graph.

Combination of these options will allow for a thorough interrogation of data and a deep understanding of the system being monitored.

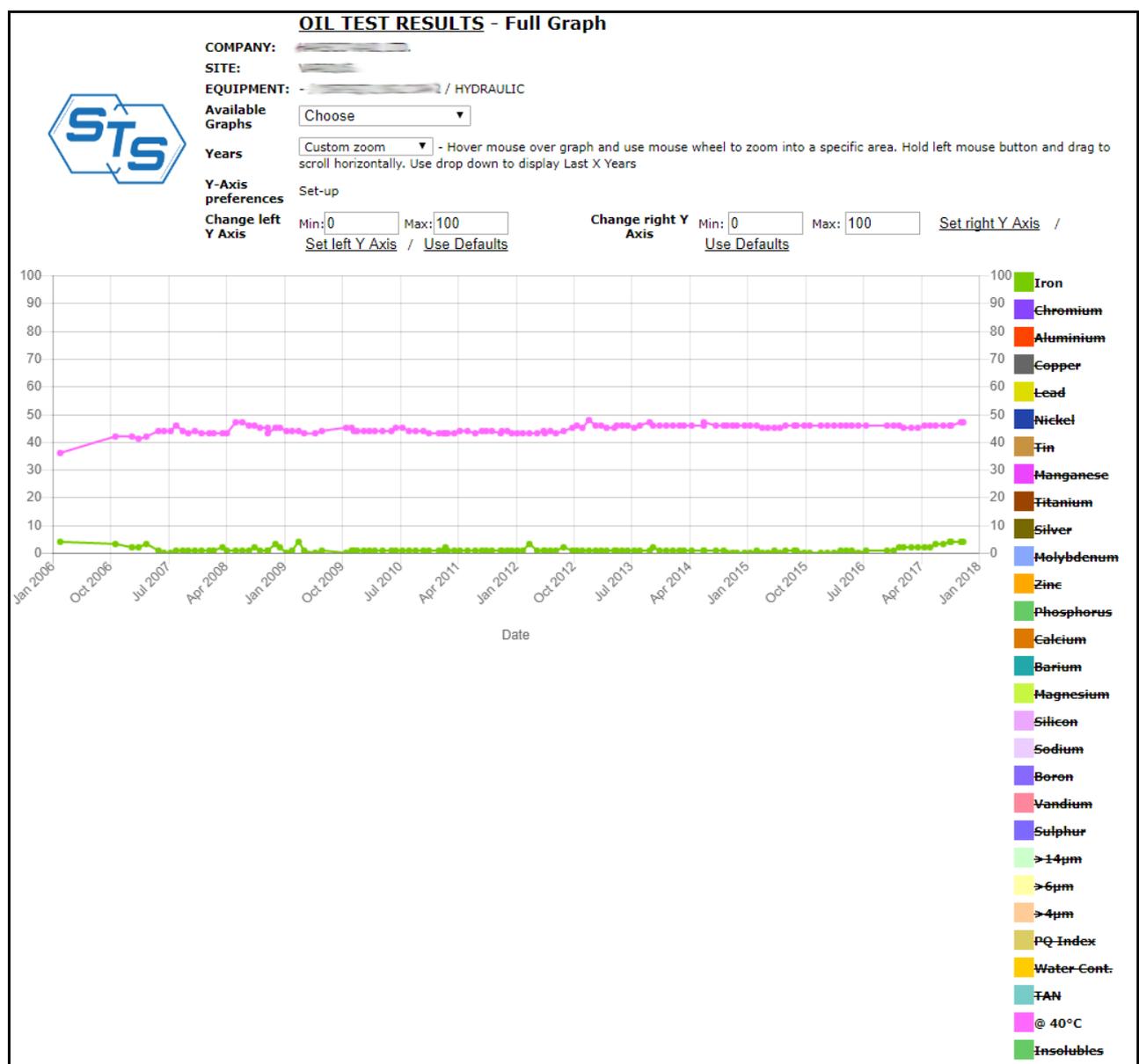


Figure 12 Full Graph Page, default view



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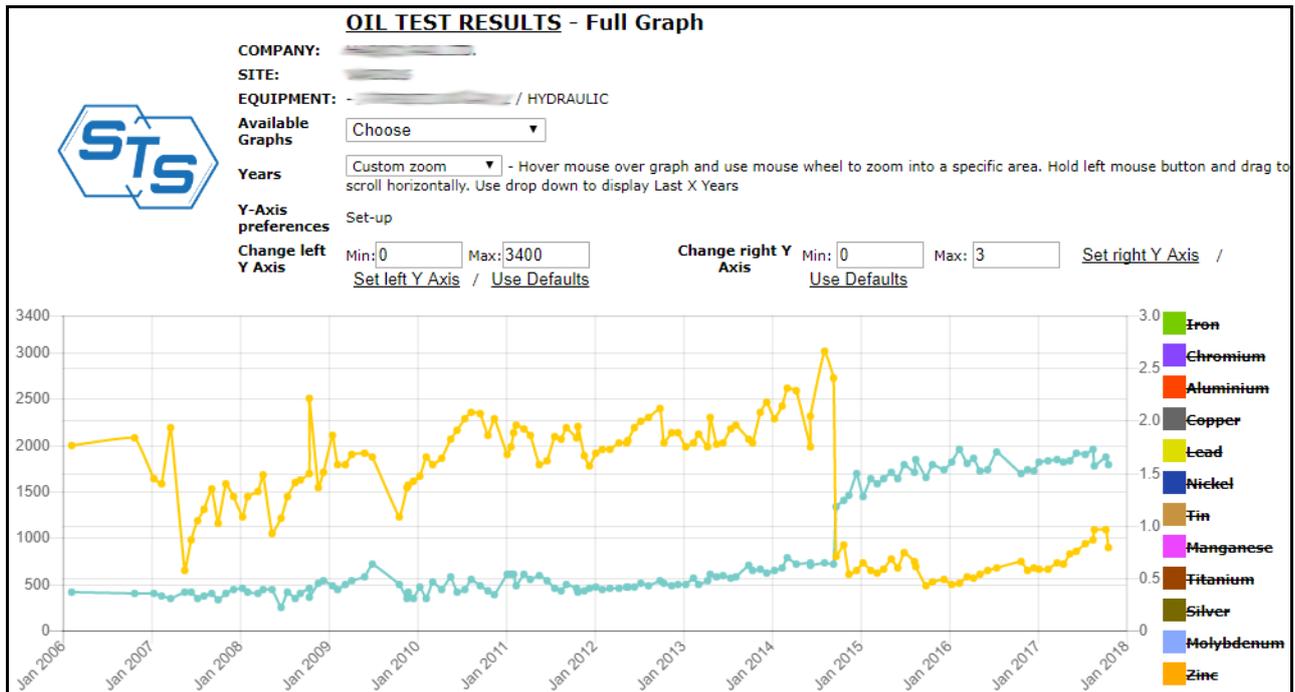


Figure 13 Full Graph Page, Water (left axis, 3400ppm maximum scale, orange) vs TAN (right axis, 3mg KOH/g maximum scale, light blue)

Elements	Physical
Fe - Iron <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	ISO Code <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Cr - Chromium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	PQ Index <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
Al - Aluminium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	Water <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Cu - Copper <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis	Acidity
Pb - Lead <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	TBN <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
Ni - Nickel <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	TAN <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
Sn - Tin <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	Viscosity
Mn - Manganese <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	Viscosity @ 40°C <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Ti - Titanium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	Viscosity @ 100°C <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Ag - Silver <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	Insolubles
Mo - Molybdenum <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	Insolubles <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Zn - Zinc <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	FTIR
P - Phosphorus <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis	IR Soot <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Ca - Calcium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	IR Oxidation <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis
Ba - Barium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	IR Nitration <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
Mg - Magnesium <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis	IR Sulphation <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
Si - Silicon <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	IR Glycol <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
Na - Sodium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	IR Fuel <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
B - Boron <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	IR Water <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
V - Vanadium <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	IR Antiwear <input type="radio"/> Left Axis <input checked="" type="radio"/> Right Axis
S - Sulphur <input checked="" type="radio"/> Left Axis <input type="radio"/> Right Axis	

[Change setup](#)

Figure 14 Full Graph Axis selection dialogue



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Ferrography

New for 2020 is the integration of the Analytical Ferrography report into the web database. The report itself has been improved with the addition of a composite overview image of the slide, see Figure 15.

You can access the Ferrography report from the Overview/Unit List/Analysis Report pages by clicking on the pop up menu over the Ferrography Icons, as pictured to the right.

When no Ferrography Report is available the icon will be grey, with a light blue colour denoting a report that's currently being written up but has not yet been published. Published reports will be coloured according to the status of the report. Note that it is quite possible for the standard and Ferrography report status colours to be different as they are independent investigations.

	Not Present
	Not Published
	Very Low – Normal
	Normal to Caution - Caution
	Caution to High - Very High

Lab Ref: 30001.008		Report Date: 24/02/2020																																																																																																									
Customer: EXAMPLE CUSTOMER Site: FACTORY 1		Equipment: LINE 3 CONVEYOR(ABC 123) GEARBOX Sample Date: 29/07/2016																																																																																																									
		Lubricant: MOBILGEAR 600 XP 220 Equipment Hours: 1395 Lube Hours: 1215																																																																																																									
Comments: Medium to Heavy density deposit. PQ Index 785 (3ml slide). The majority of the particles present were normal rubbing/pitting wear ranging in size up to ~920µm but generally <15µm. Some fatigue chunks (up to ~18µm) , cutting wear particles (up to ~470µm) and oxide particles (up to ~65µm) also present. The occasional particle exhibited evidence of localised heating (temper colouring). The wear rate appears to be above normal and the wear situation is regarded as that of Caution. Considered Judgement of Wear Situation: Caution																																																																																																											
<table border="1"> <tr> <td>Elements</td> <td>Iron</td> <td>306*</td> </tr> <tr> <td>PPM</td> <td>Chromium</td> <td>8*</td> </tr> <tr> <td></td> <td>Aluminium</td> <td>35*</td> </tr> <tr> <td></td> <td>Copper</td> <td>9</td> </tr> <tr> <td></td> <td>Lead</td> <td>0</td> </tr> <tr> <td></td> <td>Nickel</td> <td>3*</td> </tr> <tr> <td></td> <td>Tin</td> <td>1</td> </tr> <tr> <td></td> <td>Silicon</td> <td>108**</td> </tr> <tr> <td></td> <td>Sodium</td> <td>0</td> </tr> <tr> <td></td> <td>Boron</td> <td>20</td> </tr> <tr> <td colspan="2">WATER (%)/(ppm)</td> <td>- / 206</td> </tr> <tr> <td colspan="2">Viscosity @ 40°C</td> <td>206</td> </tr> <tr> <td colspan="2">PQ Index</td> <td>608*</td> </tr> </table>		Elements	Iron	306*	PPM	Chromium	8*		Aluminium	35*		Copper	9		Lead	0		Nickel	3*		Tin	1		Silicon	108**		Sodium	0		Boron	20	WATER (%)/(ppm)		- / 206	Viscosity @ 40°C		206	PQ Index		608*	<table border="1"> <thead> <tr> <th>Particle type</th> <th>0</th> <th>Few</th> <th>Moderate</th> <th>Heavy</th> </tr> </thead> <tbody> <tr> <td>Normal Rubbing</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fatigue Chunks</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Spheres</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Laminar Particles</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Severe Wear Particles</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Cutting Wear Particles</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Corrosive Wear Particles</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Oxide Particles</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dark Metallo-Oxides</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Non Ferrous (Metallic)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Non Metallic (Crystalline)</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Non Metallic (Amorphous)</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Particle type	0	Few	Moderate	Heavy	Normal Rubbing					Fatigue Chunks					Spheres					Laminar Particles					Severe Wear Particles					Cutting Wear Particles					Corrosive Wear Particles					Oxide Particles					Dark Metallo-Oxides					Non Ferrous (Metallic)					Non Metallic (Crystalline)					Non Metallic (Amorphous)				
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	Silicon	108**																																																																																																									
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Figure 15 Example Ferrography Report



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Labels

Another new addition is the facility for both the lab and customers to create and print label sets from the database. Getting ID information right is crucial and pre-printed labels will go a long way to ensuring samples are identified correctly.

Use the **Label Admin** icon to access the list of label sets available for your account. Here you can **Create New** label sets and **Print, Edit, Add** to or **Save As** existing ones. Lab created label sets are write protected and can only be printed or saved as a new set, which will then be editable.



Label Admin

Label List

Go back Home >> Label List for All

Labels Available: All Filter

Create New

New Label Set Name... e.g Junes Labels Next >>

Label Name ▲ ▼	Company ▲ ▼	Lab or Cust created ▲ ▼	No. of Labels
dave	Demo Customer 1	Cust	1
Fire Water Diesel Engines	Demo Customer 2	Cust	5
April Schedule	Demo Customer 3	Lab	33
August Schedule	Demo Customer 3	Lab	38
December Schedule	Demo Customer 3	Lab	35
Print - Edit - Add - Save As... Enter new name Next >>			
February Schedule	Demo Customer 3	Lab	29
January Schedule	Demo Customer 3	Lab	37
July Schedule	Demo Customer 3	Lab	37

Figure 16 Label Admin table

The label layout is set up to print on a standard 16 to a page Avery label template (L7162), see Figure 17. To ensure correct placement of the labels using a specific browser/printer set up you may need to adjust scaling (should be set to "none") and margins settings. In addition you can adjust label dimensions by going to My Account/Label Dimensions setting of the web database, see Figure 18.



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@ IN AMENAS 01-C-101A REGENERATION GAS COMPRESSOR K BEFORE FILTER NAFTAL TORBA 46	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 02-C-101A REGENERATION GAS COMPRESSOR K BEFORE FILTER NAFTAL TORBA 46	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 03-C-101A REGENERATION GAS COMPRESSOR K BEFORE FILTER NAFTAL TORBA 46	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 01-C-101B EXPANDER/COMPRESSOR K NOT GIVEN CP 4601	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 02-C-101B EXPANDER/COMPRESSOR K NOT GIVEN CP 4601	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 03-C-101B EXPANDER/COMPRESSOR K NOT GIVEN CP 4601	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 00-CT-101A RESIDUE GAS COMPRESSOR K NOT GIVEN NAFTAL TORBA 32	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 00-CT-101B RESIDUE GAS COMPRESSOR K NOT GIVEN NAFTAL TORBA 32	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 00-CT-101C RESIDUE GAS COMPRESSOR K NOT GIVEN AGIP 32	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 01-P-101A LEAN AMINE PUMP I DRIVE END NAFTAL TORBA 68	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 01-P-101B LEAN AMINE PUMP I NON DRIVE END NAFTAL TORBA 68	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 02-P-101A LEAN AMINE PUMP I DRIVE END NAFTAL TORBA 68	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 02-P-101B LEAN AMINE PUMP I NON DRIVE END NAFTAL TORBA 68	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 03-P-101A LEAN AMINE PUMP I DRIVE END NAFTAL TORBA 68	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>
@ IN AMENAS 03-P-101B LEAN AMINE PUMP I NON DRIVE END NAFTAL TORBA 68	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>	@ IN AMENAS 01-C-101C VRU COMPRESSOR K NOT GIVEN NAFTAL TORBA 100	Date: / / <input type="text" value="100"/> <input type="text" value="Apr"/>

Figure 17 Label page layout

Adjust Labels

[Go back](#) Home >> Here you can adjust the Gutter, Height and Width of your L7162 labels.

Make changes below:

Gutter: mm This is the gap between the columns of labels.

Width: mm

Height: mm

[Change Sizes](#)

Figure 18 Adjust Label Dimensions



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To create a new label set click on Create New and enter a suitable name for the set, see Figure 19.

Label List

Go back Home >> Label List for All

Labels Available: All Filter

Create New

New Label Set Name... e.g Junes Labels Next >>

Label Name ▲ ▼	Company ▲ ▼	Lab or Cust created ▲ ▼	No. of Labels
dave	Demo Customer 1	Cust	1
Fire Water Diesel Engines	Demo Customer 2	Cust	5

Figure 19 Creating a new label set

The label selection interface is somewhat similar to the Unit List layout. Note that at present no more than 50 lines of samples points can be shown at once due to the restrictions in the HTML code used. If you need to generate a large label set you could do it over several passes, using the Add feature to append more labels every time.

You can use the sort and search functions to narrow the list down to a suitable selection of sample points. To add a unit to the labels set tick the "Select" box on the left side of the desired row. Use the samples size tick boxes and custom fields to define sample size requirements, adjust quantity for multiple label copies and add short custom comments as required. Once the desired labels have been selected click on the "Create Labels" floating button in the top left of the browser window. Repeat this process via the "Add" labels feature to build up the set.

Create Labels

Go back Home >> Unit List - Displaying 75 records, ordered by Unit Ascending. Click to re-order to Descending

Quick search: [] Go

Set number of items to display: 1000 ▼ Go

Select	Sample Number	Date Sampled	Site Name	Plant ID	Unit Name	Sample Point	Lubricant Type	30ml	90ml	Custom ml	Qty (If > 1)	Custom Com
<input checked="" type="checkbox"/>	42	.021	30/09/2017	I	06-C	AIR COMPRESSOR C	ENERGOL RC-R-46	<input checked="" type="checkbox"/>	<input type="checkbox"/>			April
<input checked="" type="checkbox"/>	42	.020	30/09/2017	I	06-C	AIR COMPRESSOR C	NAFTAL TORBA 46	<input checked="" type="checkbox"/>	<input type="checkbox"/>			April
<input type="checkbox"/>	42	.019	30/09/2017	I	06-C	AIR COMPRESSOR C	ENERGOL RC-R-46	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	42	.018	30/09/2017	I	06-C	AIR COMPRESSOR C	ENERGOL RC-R-46	<input type="checkbox"/>	<input type="checkbox"/>			
<input checked="" type="checkbox"/>	42	.017	30/09/2017	I	06-C	AIR COMPRESSOR C	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	500		RPVOT
<input checked="" type="checkbox"/>	42	.016	30/09/2017	I	05-P	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>		7	Flush
<input type="checkbox"/>	42	.015	30/09/2017	I	05-P	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	41	.024	21/01/2017	I	05-P	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	41	.023	21/01/2017	I	05-P	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>			
<input checked="" type="checkbox"/>	42	.031	30/09/2017	I	08-G	C DIESEL GENERATOR ENGINE F	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input checked="" type="checkbox"/>			April
<input checked="" type="checkbox"/>	42	.030	30/09/2017	I	08-G	B DIESEL GENERATOR ENGINE F	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input checked="" type="checkbox"/>			April
<input checked="" type="checkbox"/>	42	.029	30/09/2017	I	08-G	A DIESEL GENERATOR ENGINE F	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input checked="" type="checkbox"/>			April
<input type="checkbox"/>	41	.029	24/01/2017	I	06-G	DIESEL GENERATOR ENGINE F	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	42	.009	30/09/2017	I	03-C	EXPANDER/COMPRESSOR K	CP 4601	<input type="checkbox"/>	<input type="checkbox"/>			

Figure 20 Creating a new label set



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If the same unit requires multiple labels, perhaps so that more than one bottle can be collected, you can adjust the sample volume details and comments using the "Edit" function, see Figure 21. Use the "delete" tick box to remove any labels which are no longer required.

Update Labels

Go back Home >> Label List - Displaying 13 of 13 labels, ordered by label print Ascending. Click to re-order to Descending

Quick search: Go

Make changes to label set "Demo Set" below then click Update Labels button. - [Click here to return to label list.](#)

Site Name	Plant ID	Unit Name	Sample Point	Lubricant Type	30ml	90ml	Custom ml	Custom Com	Tick to Delete
I	06-	AIR COMPRESSOR C	NOT GIVEN	ENERGOL RC-R-46	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	April	<input type="checkbox"/>
I	06-	AIR COMPRESSOR C	NOT GIVEN	NAFTAL TORBA 46	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	April	<input type="checkbox"/>
I	06-	AIR COMPRESSOR C	NOT GIVEN	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	500	RPVOT	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	05-	CONDENSATE PRODUCT PIPELINE MAIN PUMP I	NON DRIVE END	NAFTAL TORBA 46	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	Flush	<input type="checkbox"/>
I	08-	C DIESEL GENERATOR ENGINE F	NOT GIVEN	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	April	<input type="checkbox"/>
I	08-	B DIESEL GENERATOR ENGINE F	NOT GIVEN	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	April	<input type="checkbox"/>
I	08-	A DIESEL GENERATOR ENGINE F	NOT GIVEN	NAFTAL VPS CHELIA 20W40	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	April	<input type="checkbox"/>

Figure 21 Editing an existing label set



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Change Log and Feature List

We are very proud of our Web Database and are putting a lot of thought into making it a useful tool for our customers. Here you will find a simple list of some of the key features including those added recently and also a brief list of things to come. If you feel that something is missing or should be prioritised, please get in touch and let us know. Ultimately we wish that the software is useful to you in achieving your reliability goals.

In no particular order:

Sample Overview

Unit List

Analysis Report

History Table with access to full historical results

Up to 8 Patch Images with Click to View

Graph Overview

Individual Graphs

Customisable Full Graph

Text outputs in various formats

Excel data dumps

Customer Comments System

Internal Messaging

Help Section with Guide Documents

Tiered Customer Access by Site/Sample for 3rd Parties

Overview comments on hover

Custom background colour

Publish for data pre-entry

Summary/overview tables for pdf reports

Printable Labels

Integrated Ferrography Reports

Overview Rev 02

In the pipeline:

~~Integrated Ferrography Reports~~

Attachment of Additional Reports – In progress

Email Notifications

Schedules and Interval Tracking and Notifications

~~Printable Labels~~

Various minor improvements