



QUICK START GUIDE

ANALYTICS & GRAPHING

Learn How To:

- 1. Create Trend Graphs to Analyze Individual Components**
- 2. Create Compare Graphs to Compare Units by Make/Model**
- 3. Save and Print Graphs to Share**

GRAPHING EXPLANATION

Trend Graphing

- Track trends in abnormal test results for individual pieces of equipment using multiple parameters
- Overlay maintenance events and alarm limits
- Normalize the data

Compare Graphing

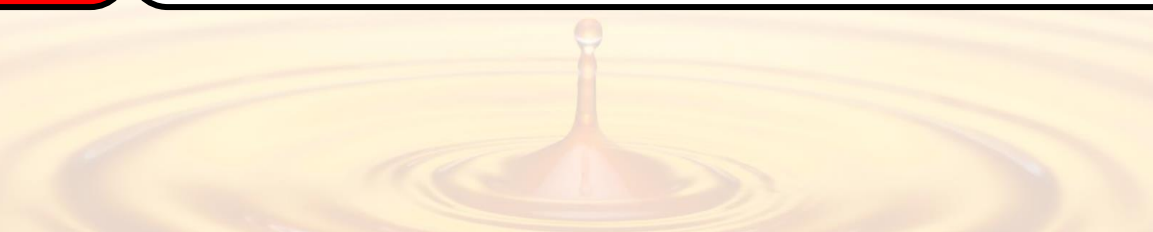
- Overlay test results by make or model to compare equipment performance between individual units or across populations of units.

Static Graphs

- View up to 15 static graphs on your Sample Details page. You can export these graphs into multiple formats and print these graphs.

Widget Graphs

- Customize widgets on the Home tab to display the data you want to see, in the order you see it.



TREND GRAPH

← BACK

TREND GRAPH

SEND EMAIL

DOWNLOAD PDF

Graphs Attachments Comments Actions

Sample Condition Acceptable

Status **A**

ACCOUNT INFORMATION

Lab Customer ID#: 319182
Company Name: ACME Demo
Worksite: Houston, TX
Address: 123,
Edmonton, Alberta, T6B 3M9

SAMPLE INFORMATION

Lab No.: 202111010678
Sample Tracking #: E202110270873
Sampled Date: 10/05/2021
Received Date: 11/01/2021
Completed Date: 11/02/2021

OTHER SAMPLE INFORMATION

PO No.:
Work Order No.:
Reference No.: 3177404
Filter Age:
Make Up Oil Amount:

UNIT INFORMATION

Unit ID: 632407
Unit Manufacturer: Freightliner
Unit Model: M2106
Unit Serial:
Unit Worksite: Houston, TX

COMPONENT INFORMATION

Component Description: ENGINE
Component Manufacturer: Mercedes-Benz
Component Model: MBE 906
Component Serial:
Component Type: ENGINE

FLUID INFORMATION

Fluid Manufacturer: CASTROL
Fluid Brand/Product: VECTON CK-4
Fluid Grade: 15W40

RECOMMENDATIONS

Maintenance for Lab No.: 202111010678
Test results are acceptable. No corrective action indicated. Resample at normal interval.
Evaluated By: TGIBBONS

Results History Actions Graphs Attachments Comments

SPECTROCHEMICAL ANALYSIS IN PARTS PER MILLION

LAB NO.	SAMPLE DRAWN	WEAR METALS								CONTAMINANTS				ADDITIVES				
		Iron	Chromium	Nickel	Aluminum	Lead	Copper	Tin	Silver	Aluminum	Iron	Chromium	Nickel	Aluminum	Iron	Chromium	Nickel	Aluminum
0678	10/05/2021	5	<1	<1	2	<1	1	<1	<0.1									
0383	02/10/2021	10	<1	<1	4	<1	2	<1	<0.1									

To run a **Trend Graph**, from the Sample Details page, simply click on the **Trend Graph** button.

TREND GRAPH

Trend Compare

Component

632407, Freightliner M2106, ENGINE

Date

All Data

Test List

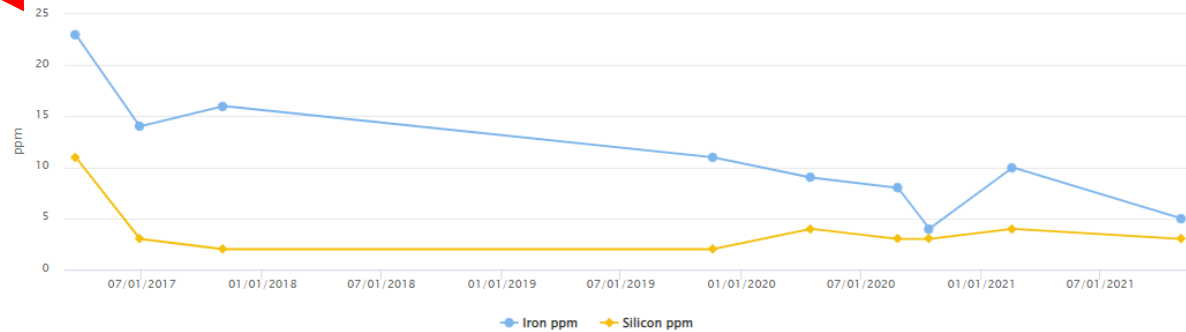
General Wear

Test

- Aluminum
- Antimony
- Barium
- Boron
- Calcium
- Chromium
- Copper
- Fuel %
- Glycol Pos/Neg
- Iron
- Lead
- Magnesium
- Molybdenum
- Nickel

Trend Graph

632407, Freightliner M2106, ENGINE



After selecting the *Trend Graph* button, the **ANALYTICS** tab will open. The trend graph will display with the Date and Test List pre-selected. Simply click on the drop down to change the selection.

TREND GRAPH

Trend Compare

Component

632407, Freightliner M2106, ENGINE

Date

All Data

Test List

Select A Graph Type

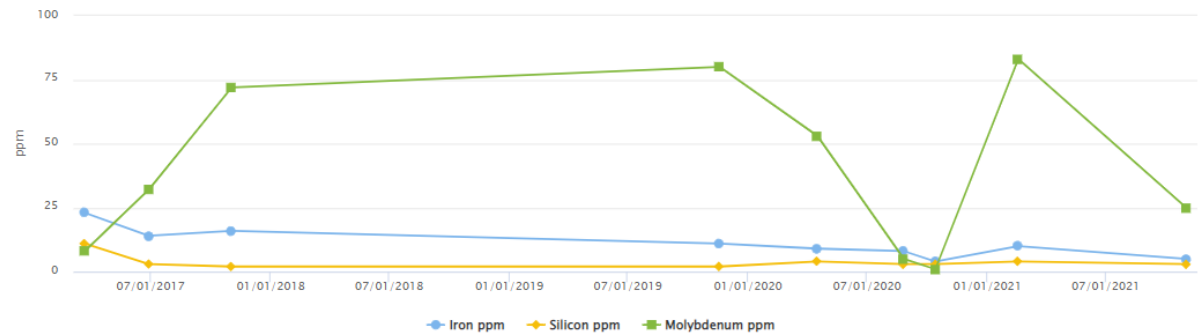
Test

- Aluminum
- Antimony
- Barium
- Boron
- Calcium
- Chromium
- Copper
- Fuel %
- Glycol Pos/Neg
- Iron
- Lead
- Magnesium
- Molybdenum
- Nickel



Trend Graph

632407, Freightliner M2106, ENGINE



You can add individual test values by selecting the checkbox next to each element.

TREND GRAPH

Trend Compare

Component

632407, Freightliner M2106, ENGI...

Date

All Data

Test List

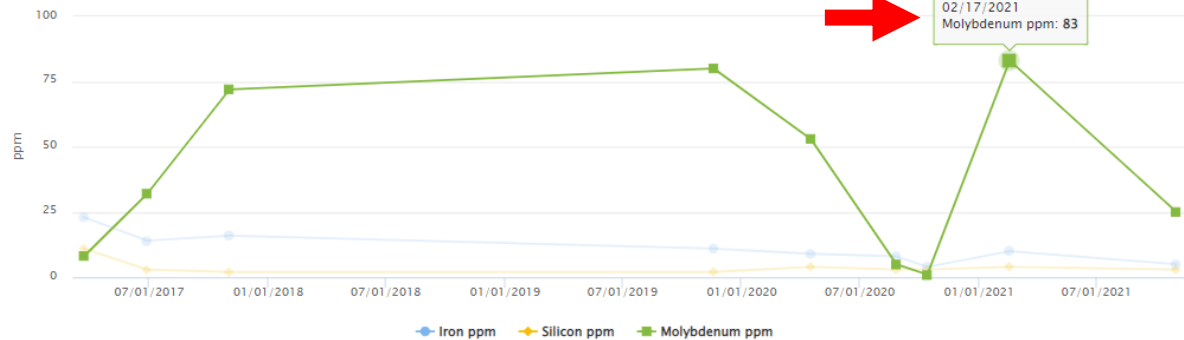
Select A Graph Type

Test

- Aluminum
- Antimony
- Barium
- Boron
- Calcium
- Chromium
- Copper
- Fuel %
- Glycol Pos/Neg
- Iron
- Lead
- Magnesium
- Molybdenum
- Nickel

Trend Graph

632407, Freightliner M2106, ENGINE



Hover over a point on the graph to reveal more information.

TREND GRAPH

Trend Compare

Component

632407, Freightliner M2106, ENGINE

Date

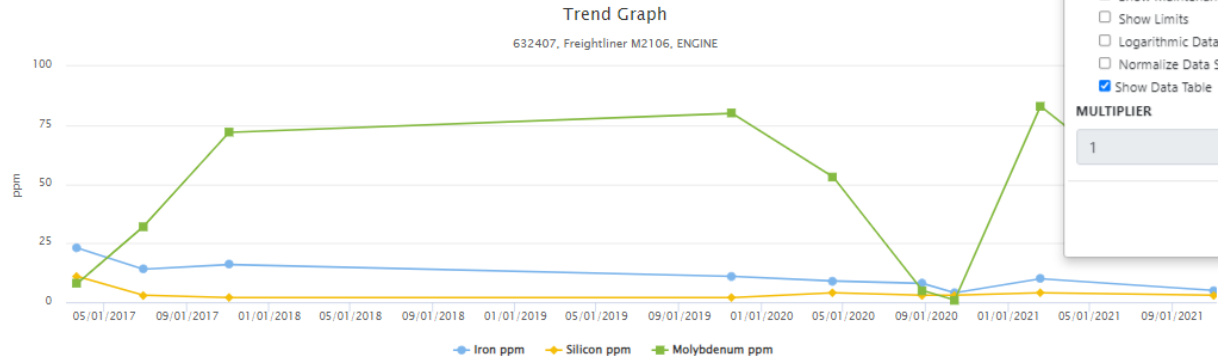
All Data

Test List

Select A Graph Type

Test

- Aluminum
- Antimony
- Barium
- Boron
- Calcium
- Chromium
- Copper
- Fuel %
- Glycol Pos/Neg
- Iron
- Lead
- Magnesium
- Molybdenum
- Nickel



DATA OPTIONS

- Show Maintenance Events
- Show Limits
- Logarithmic Data Scale
- Normalize Data Scale
- Show Data Table

MULTIPLIER

1

OK

Click on the gear icon to open your data options. Make your selections and click the OK button.

TREND GRAPH

Trend Compare

Component

632407, Freightliner M2106, ENGINE

Date

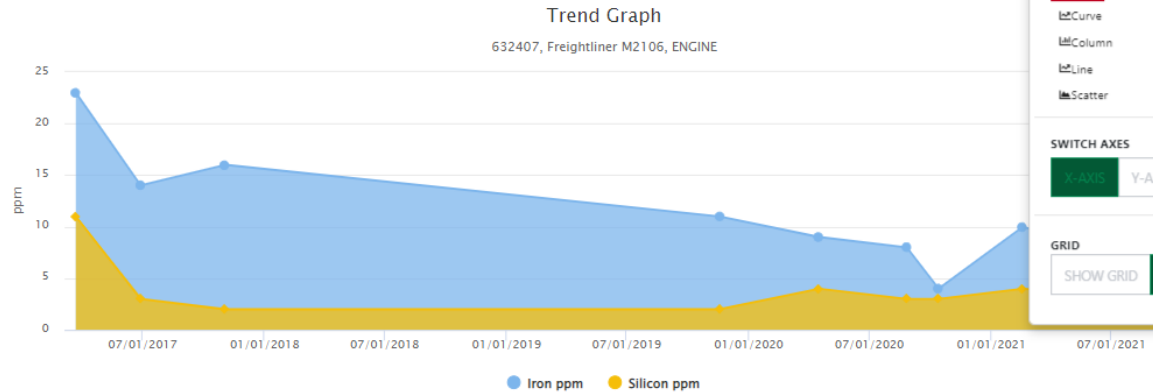
All Data

Test List

Select A Graph Type

Test

- Aluminum
- Antimony
- Barium
- Boron
- Calcium
- Chromium
- Copper
- Fuel %
- Glycol Pos/Neg
- Iron
- Lead
- Magnesium
- Molybdenum
- Nickel



GRAPH TYPES

- Area
- Curve
- Column
- Line
- Scatter

SWITCH AXES

X-AXIS Y-AXIS

GRID

SHOW GRID HIDE GRID

Click on the graph icon to open your graph types. Make your selection to update the display.

TREND GRAPH

Trend Compare

Component

632407, Freightliner M2106, ENGINE

Date

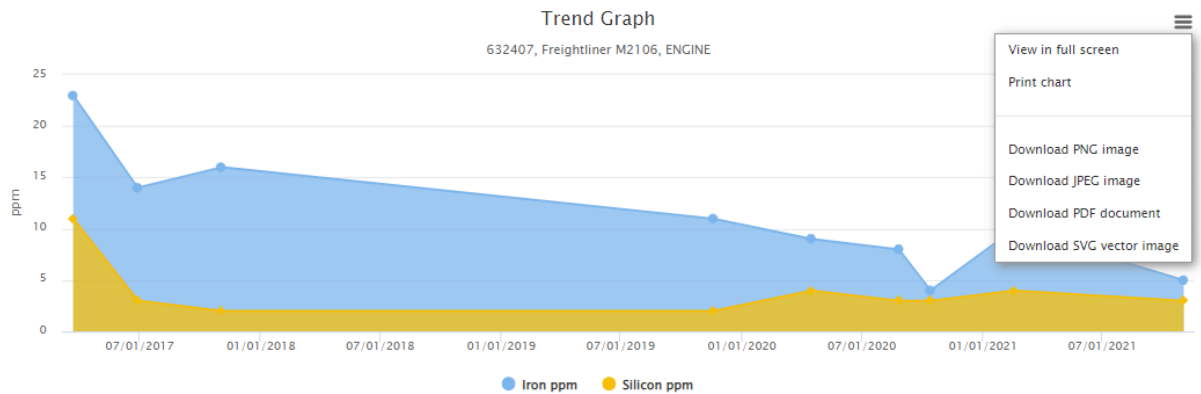
All Data

Test List


General Wear

Test

- Aluminum
- Antimony
- Barium
- Boron
- Calcium
- Chromium
- Copper
- Fuel %
- Glycol Pos/Neg
- Iron
- Lead
- Magnesium
- Molybdenum
- Nickel



- View in full screen
- Print chart
- Download PNG image
- Download JPEG image
- Download PDF document
- Download SVG vector image

To print your graph or export it to a different file type, click on the  icon.

COMPARE GRAPH

Equipment

[Equipment](#) / [Browse Equipment](#)

COMPARE PRINT LABELS

Search Equipment Hierarchy...

- 192/CUSTER 7/AUX Caterpillar 3512
- 2 Airman SDG65S
- 21039/ELMER FUDD/AUX
- 21039/ELMER FUDD/MAIN
- 25-326 Unknown/Unspecified UNKNOWN
- 302214 BLACK BEAN MAIN - -
- 302214/COLFAX ANTRIM 29 Caterpillar 3408
- 307581-018/MAIN Waukesha F3521
- 308565/EXCELSIOR B-124 Caterpillar 3512
- 345 Airman SDG65S
- 366215
- 3956/HAYES 34 AUX Caterpillar 3516
- 50831/ST KAL H-16/COOL Caterpillar 3306
- 50831/STKALH13/310 Waukesha -
- 632407 Freightliner M2106
 - BACK DIFFERENTIAL
 - COOLING SYSTEM
 - ENGINE**
 - HYDRAULIC
 - TRANS-AUTO
- 642/BRILEY 19B/ENG Caterpillar 3306
- 649/CHESTER 12-BOOSTER/MAIN Caterpillar

ENGINE DETAILS

MODIFY COMPONENT DELETE

Component	ENGINE	Position	
Manufacturer	Mercedes-Benz	Model	MBE 906
Serial		Fuel Type	Diesel
Oil Mfg.	CASTROL	Oil Brand	VECTON CK-4
Oil Grade	15W40	Oil Capacity	
Oil Units	GL	Cooling System Type	ANTIFREEZE
Sample Frequency	90	Next Sample	01/02/2022
Last Sample	10/05/2021		

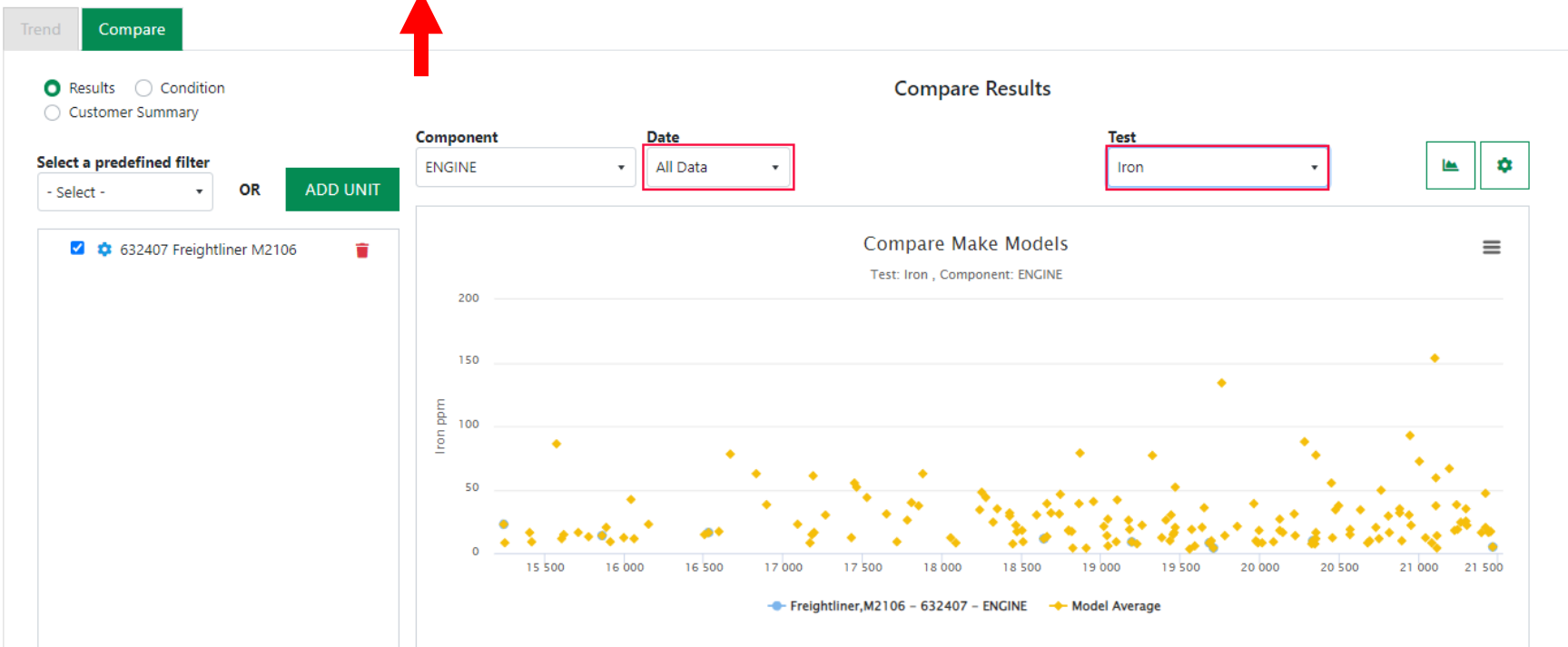
Sample History Actions Events

TREND GRAPH CONDITION SUMMARY HISTORY REPORT

SAMPLE ID	SAMPLED DATE	SEVERITY	COMPONENT AGE
202111010678	10/05/2021	A	21468
202102170383	02/10/2021	A	20333

To create a **Compare Graph** from the equipment hierarchy, locate and select the component and simply click on the **Compare Graph** button.

COMPARE GRAPH



By selecting the **Compare Graph** button, the **ANALYTICS** tab will open. The compare graph will display with the selected Component and the Date and Test pre-selected. Simply click on the drop down arrow to change the selection.

COMPARE GRAPH

Trend Compare

- Results Condition
 Customer Summary

Select a predefined filter

- Select -

OR

ADD UNIT

 632407 Freightliner M2106 

Compare Results

Component

ENGINE

Date

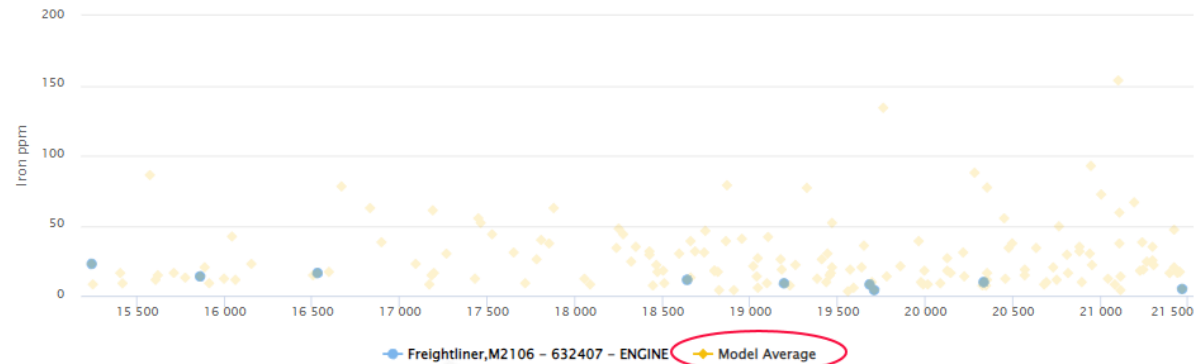
All Data

Test

Iron

Compare Make Models

Test: Iron , Component: ENGINE



By default, you will see your selected component and the Model Average. With your mouse, hover over the component on the x-axis to highlight the data points. To add units to compare, select the **ADD UNIT** button.

COMPARE GRAPH

ADD UNIT

CUSTOMER	WORKSITE	UNIT ID	UNIT MAKE	UNIT MODEL	UNIT SERIAL	
<input type="checkbox"/>	Acme Demo	Worksite 2	632407	Freightliner	M2106	1N3498WD49026
<input type="checkbox"/>	Acme Demo	Worksite 2	70-3055	Freightliner	M2106	
<input type="checkbox"/>	Acme Demo	Worksite 2	70-3062	Freightliner	M2106	
<input type="checkbox"/>	Acme Demo	Worksite 2	70-0092	Freightliner	M2106	
<input type="checkbox"/>	Acme Demo	Worksite 2	9012	Freightliner	M2106	
<input type="checkbox"/>	Acme Demo	Worksite 2	9014	Freightliner	M2106	
<input type="checkbox"/>	Acme Demo	Worksite 2	1444	Freightliner	M2106	
<input type="checkbox"/>	Acme Demo	Worksite 2	8342	Freightliner	M2106	1FVACXFC9JHJL8
<input type="checkbox"/>	Acme Demo	Worksite 2	168	Freightliner	M2106	1FVACWFC9MHM
<input checked="" type="checkbox"/>	Acme Demo	Worksite 2	169	Freightliner	M2106	1FVACXFC7NHM

Showing 10 rows 1 of 167

CANCEL OK

Add units with the same Make & Model. Remove or change the filters to locate other units. Use the checkbox(es) to select those you want to add.

COMPARE GRAPH

Trend Compare

Results Condition
 Customer Summary

Compare Results

Select a predefined filter

OR

ADD UNIT

Component

ENGINE

Date

All Data

Test

Iron

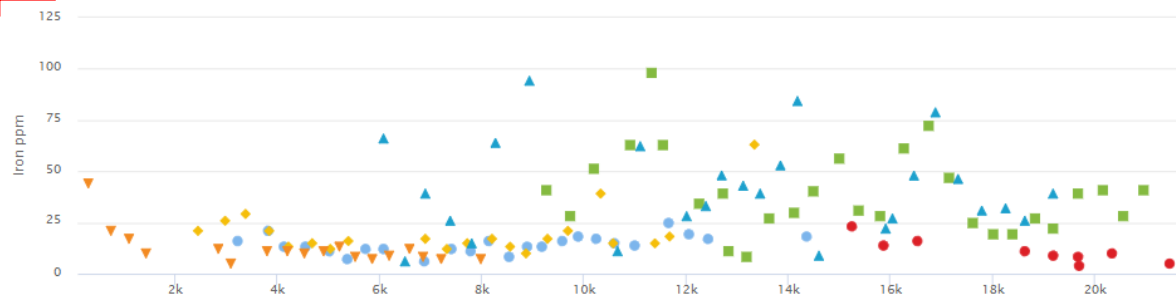


-  632407 Freightliner M2106 
-  C24 Freightliner M2106 
-  100 Freightliner M2106 
-  101 Freightliner M2106 
-  112 Freightliner M2106 
-  640 Freightliner M2106 



Compare Make Models

Test: Iron , Component: ENGINE



Click on the  icon to remove a unit.

COMPARE GRAPH

Trend Compare

Results Condition
 Customer Summary

Select a predefined filter

OR

ADD UNIT

- 632407 Freightliner M2106
- C24 Freightliner M2106
- 100 Freightliner M2106
- 101 Freightliner M2106
- 112 Freightliner M2106
- 640 Freightliner M2106

Component

ENGINE

Date

All Data

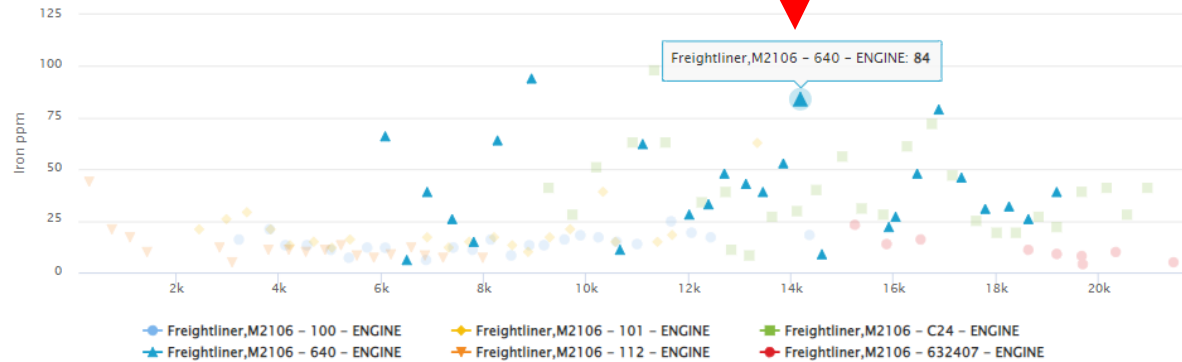
Test

Iron

Compare Results

Compare Make Models

Test: Iron , Component: ENGINE



Hover over a point on the graph to reveal more information.

COMPARE GRAPH

Trend **Compare**

- Results Condition
 Customer Summary

Select a predefined filter

OR

ADD UNIT

-  632407 Freightliner M2106 
-  C24 Freightliner M2106 
-  100 Freightliner M2106 
-  101 Freightliner M2106 
-  112 Freightliner M2106 
-  640 Freightliner M2106 

Compare Results

Component

ENGINE

Date

All Data

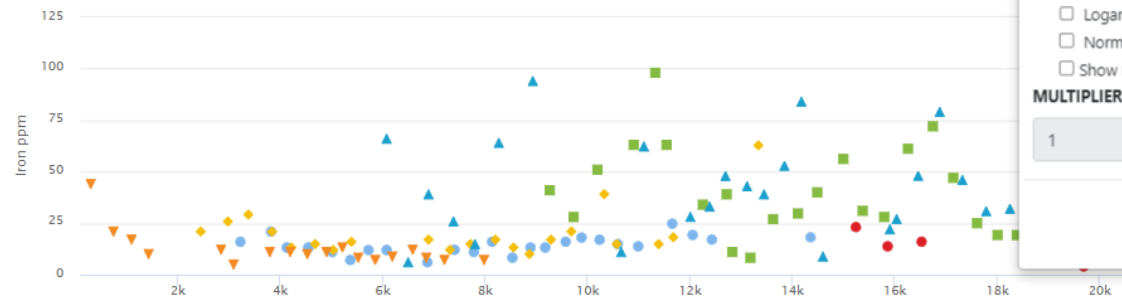
Test







Iron



Compare Make Models

Test: Iron , Component: ENGINE



-  Freightliner,M2106 - 100 - ENGINE
-  Freightliner,M2106 - 101 - ENGINE
-  Freightliner,M2106 - C24 - ENGINE
-  Freightliner,M2106 - 640 - ENGINE
-  Freightliner,M2106 - 112 - ENGINE
-  Freightliner,M2106 - 632407 - ENGINE

DATA OPTIONS

- Show Maintenance Events
- Show Limits
- Logarithmic Data Scale
- Normalize Data Scale
- Show Data Table

MULTIPLIER

1

OK

Click on the gear icon to open the data options. Make your selections and click the OK button.

COMPARE GRAPH

Trend **Compare**

- Results Condition
 Customer Summary

Select a predefined filter

OR

ADD UNIT

-  632407 Freightliner M2106 
-  C24 Freightliner M2106 
-  100 Freightliner M2106 
-  101 Freightliner M2106 
-  112 Freightliner M2106 
-  640 Freightliner M2106 

Compare Results

Component

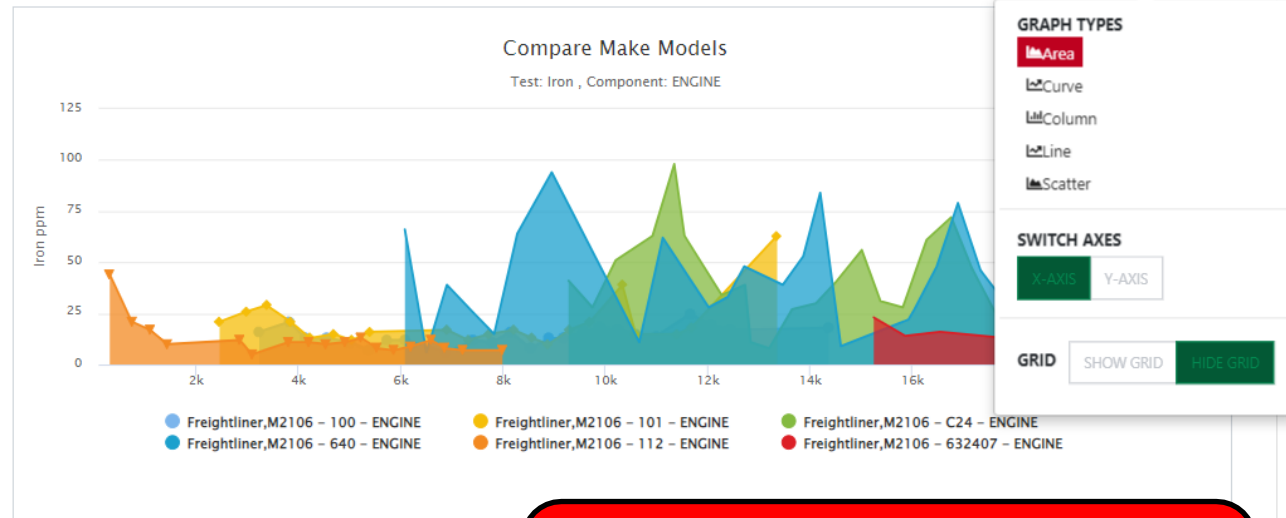
ENGINE

Date

All Data

Test

Iron



GRAPH TYPES

- Area
- Curve
- Column
- Line
- Scatter

SWITCH AXES

- X-AXIS
- Y-AXIS

GRID

- SHOW GRID
- HIDE GRID

Click on the graph icon to open your graph types. Make your selection to update the display.

COMPARE GRAPH


Trend **Compare**

- Results Condition
 Customer Summary

Select a predefined filter

OR

ADD UNIT

-  632407 Freightliner M2106 
-  C24 Freightliner M2106 
-  100 Freightliner M2106 
-  101 Freightliner M2106 
-  112 Freightliner M2106 
-  640 Freightliner M2106 

Compare Results

Component

ENGINE

Date

All Data

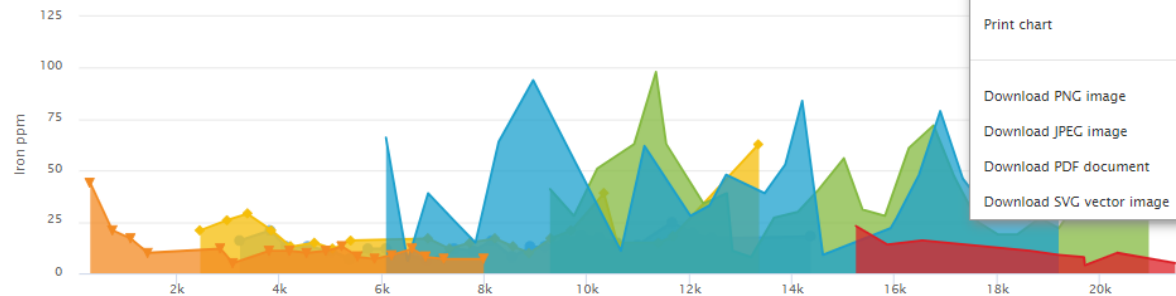
Test







Iron




Compare Make Models

Test: Iron , Component: ENGINE

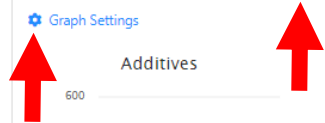


-  Freightliner,M2106 - 100 - ENGINE
-  Freightliner,M2106 - 101 - ENGINE
-  Freightliner,M2106 - C24 - ENGINE
-  Freightliner,M2106 - 640 - ENGINE
-  Freightliner,M2106 - 112 - ENGINE
-  Freightliner,M2106 - 632407 - ENGINE

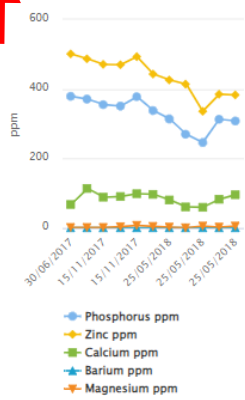
To print your graph or export it to a different file type, click on the  icon.

STATIC GRAPHS

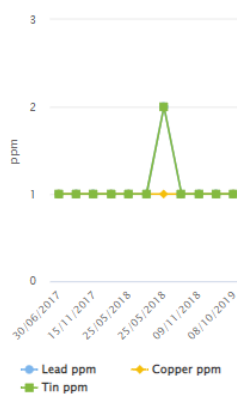
 Graph Settings



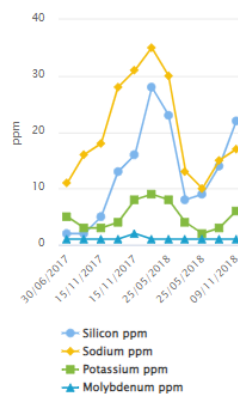
Additives



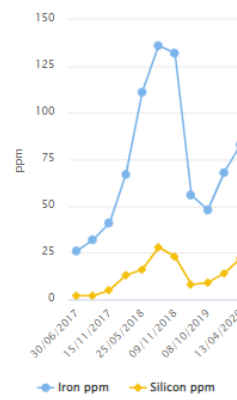
Bearing Wear



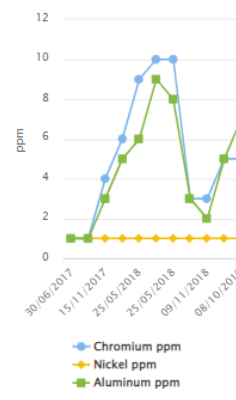
Contaminants



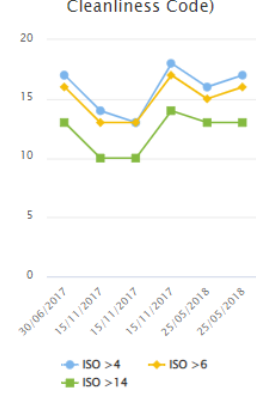
General Wear



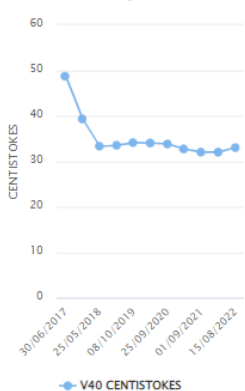
Other Wear



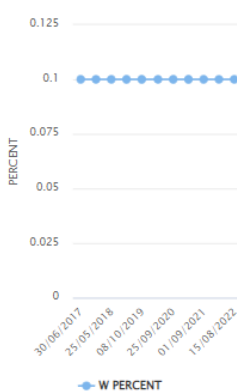
Particle Count (ISO Cleanliness Code)



Viscosity (V40)

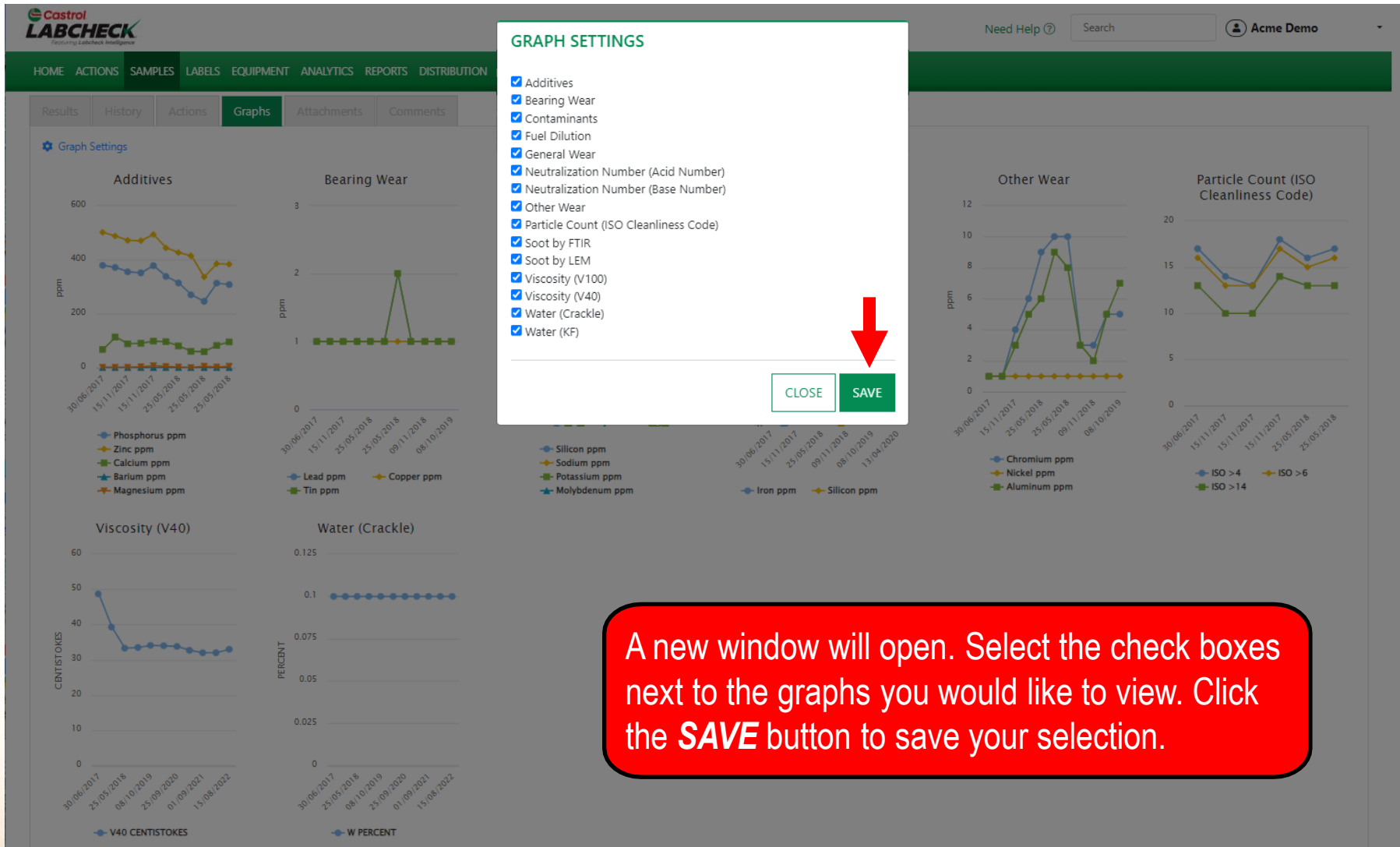


Water (Crackle)



To view **Static Graphs**, click on the **Graphs** tab on the Sample Details page. To choose which graphs you would like to display or hide, click on the **Graph Settings** link.

STATIC GRAPHS



GRAPH SETTINGS

- Additives
- Bearing Wear
- Contaminants
- Fuel Dilution
- General Wear
- Neutralization Number (Acid Number)
- Neutralization Number (Base Number)
- Other Wear
- Particle Count (ISO Cleanliness Code)
- Soot by FTIR
- Soot by LEM
- Viscosity (V100)
- Viscosity (V40)
- Water (Crackle)
- Water (KF)

Graphs:

- Additives:** Phosphorus ppm, Zinc ppm, Calcium ppm, Barium ppm, Magnesium ppm
- Bearing Wear:** Lead ppm, Tin ppm, Copper ppm
- Other Wear:** Chromium ppm, Nickel ppm, Aluminum ppm
- Particle Count (ISO Cleanliness Code):** ISO > 4, ISO > 6, ISO > 14
- Viscosity (V40):** V40 CENTISTOKES
- Water (Crackle):** W PERCENT

Callout: A new window will open. Select the check boxes next to the graphs you would like to view. Click the **SAVE** button to save your selection.

WIDGET GRAPHS

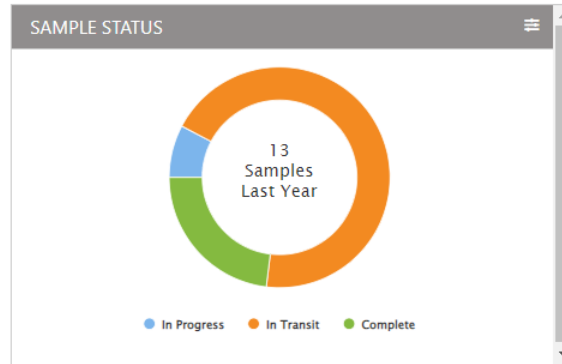

Dashboard



WELCOME

Welcome to Labcheck

Get the most out of your oil analysis program by using our brand new Management Report.



NEWS

USER UPDATE 03/23/2023
Acme Demo added user demoabc (Demo Abc) to CUSTOMER ACME Demo Area 1

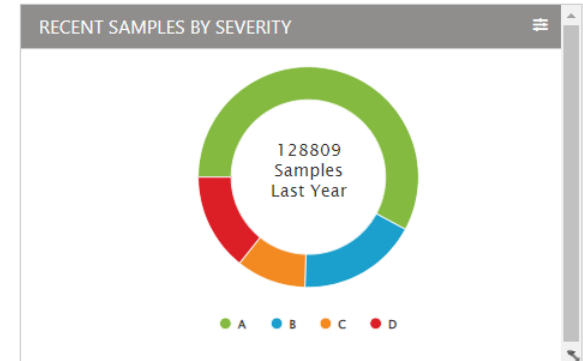
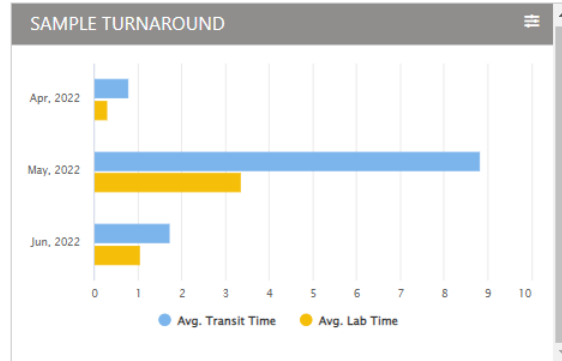
USER UPDATE 03/09/2023
Acme Demo added user JSmith@email.com (John Smith) to CUSTOMER ACME Worksite 1

USER UPDATE 03/09/2023
Acme Demo added user JSmith@email.com (John Smith) to CUSTOMER Acme Demo Worksite 2

USER UPDATE 03/09/2023

CRITICAL CONDITION

UNIT	COMPONENT	CONDITION
417037	TRANS-AUTO	Wear
310465	ENGINE	Coolant/Wear
413211	COOLING SYSTEM	Additive
212033	FRONT DIFFERENTIAL	Dirt/Wear



You can view additional graphs on your home tab. To view more information on these graphical widgets, see the **Widgets** quick start guide.



CASTROL LABCHECK SUPPORT DESK:

Phone: **866-LABCHECK (522-2432)**

Labchecksupport@bureauveritas.com

<https://www.labcheckresources.com/>

