



# Quick Start Guide: **Advanced 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 Overview

LOAMS provides you with several graph types to give you the visual data needed to take decisive action.

## Trend Graphing

- Track trends in abnormal test results for individual pieces of equipment using multiple test 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 that you want to see, in the order that you see fit.

# Trend Graph

Inbox Search **Details** History



**Trend Graph** Send Email Download PDF  Include User Comments in PDF

- Frank Gilboy  
4932 BEECH STREET

Status: on Jan 14, 2014

Unit ID : 80162 Worksite: Circleville Reference No.: 2934207 PO/Reference Number:  
Component: ENGINE Component Type: ENGINE Component Mack E7-330/350 Serial Number:  
Unit Mack 1998 CH613 Oil Type: SHELL ROTELLA Manufacturer / Model: Manufacturer / Model: Serial Number:  
Manufacturer / Model: TRACTOR 15W40 Lab Contact No.: 800-248-7778

**Maintenance Recommendations for Lab No.:** LOU201401300106  
**Reported On:** Jan 30, 2014  
**From:** Acme - 70260, Circleville

ANALYSIS INDICATES ABNORMAL COMPONENT & LUBRICANT CONDITIONS! FUEL dilution is MODERATE. VISCOSITY is LOW. Test result(s) have been checked and verified. Cylinder area wear. CHECK the fuel system for leaks, component serviceability and proper settings. CHANGE the OIL and FILTER(s) if not already performed. RESAMPLE after diagnostics / corrective action to confirm conditions.

**Activity**   
No activity

**Spectrochemical Analysis in Parts Per Million**

Sampled Date	Fe ppm	Cr ppm	Ni ppm	Al ppm	Pb ppm	Cu ppm	S ppm
Jan 14, 2014	137	1	2	6	2	3	<

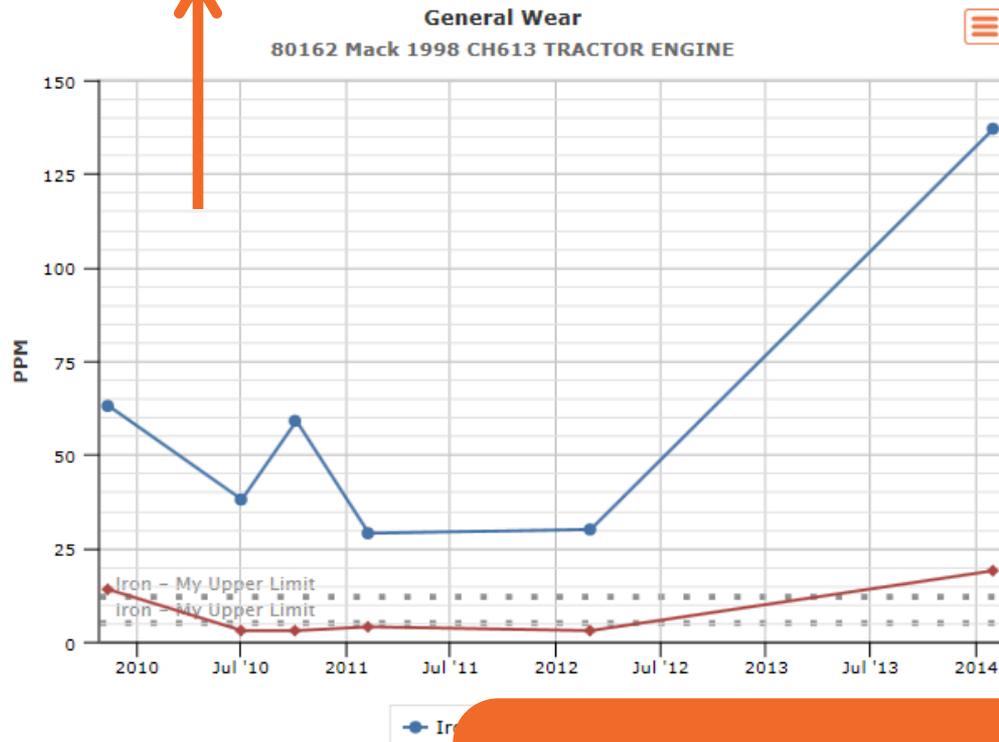
To run a trend graph, select on a sample from your Inbox, or from an advanced search to get to the sample details screen. From there click on the **Trend Graph** button .

# Trend Graph

## Trend Graph

Need Help ? X

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



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

- Titanium
- Silicon
- Boron
- Sodium
- Potassium
- Molybdenum
- Phosphorus

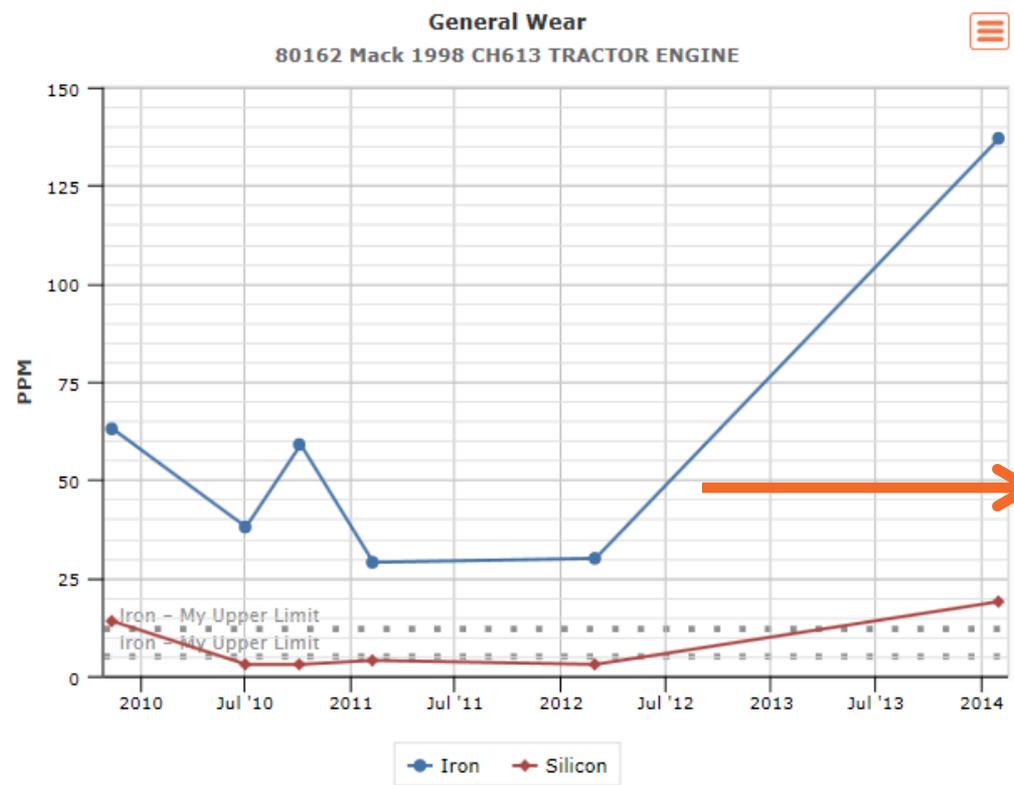
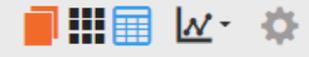
First, select a date range of data you'd like to view; you can also specify a start and end date. Next select on a preset graph type from the drop down list.

# Trend Graph

## Trend Graph

Need Help ? X

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



### Graph Type

General Wear

- Iron
- Chromium
- Nickel
- Aluminum
- Lead
- Copper
- Tin
- Silver
- Titanium
- Silicon
- Boron
- Sodium
- Potassium
- Molybdenum
- Phosphorus
- Zinc
- Calcium

Save Save As  
Manage Graph Types

You can add individual test values to customize your trend graph by selecting the check box next to each element. To save this as a customized graph click on the **Save As** button

on Jan 14, 2014

800-248-7778



Sb ppm	V ppm	Mn ppm
<30	<1	

# Trend Graph

LOAMS™  
Lube Oil Analysis Manag

Select Language English

Last login on 05/11/2015

HOME SAMPLES

## Trend Graph

Need Help

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



Need Help

Inbox Search

Trend Gra

- Frank Gilboy  
4932 BEECH ST

Unit

Compon

Manufacturer /

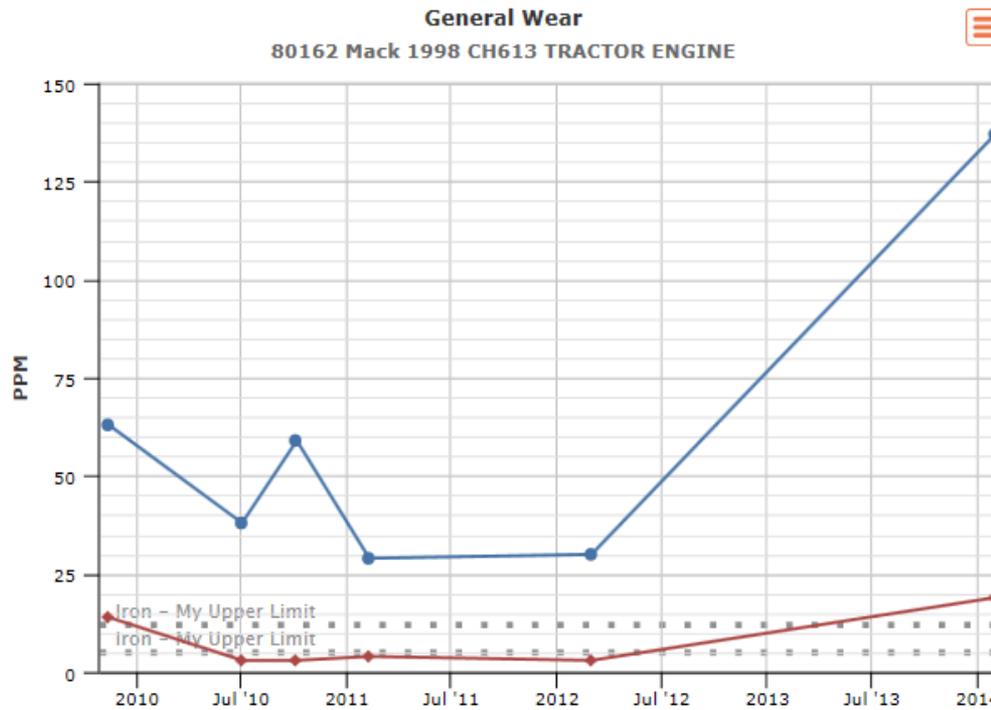
Maintenanc  
Reported On  
From: Acme

ANALYSIS IN  
FUEL dilution  
checked and  
component s  
(s) if not alr  
to confirm im

Spectrochemic

Sampled Date

Jan 14, 2014



Graph Type

General Wear

- Iron
- Chromium
- Nickel
- Aluminum
- Lead
- Copper
- Tin
- Silver
- Titanium
- Silicon
- Boron
- Sodium
- Potassium
- Molybdenum
- Phosphorus



This icon allows you to copy the graph to a clipboard.



This icon allows you to disable the gridlines.



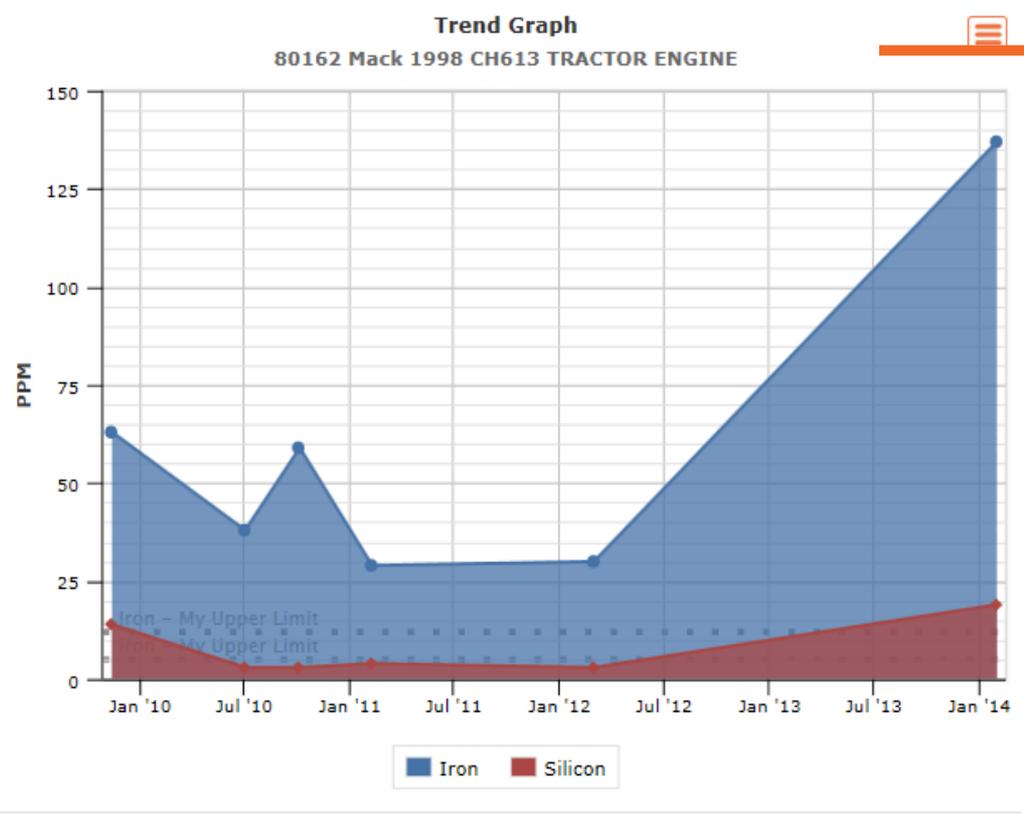
This icon allows you to view the data table.

# Trend Graphs

## Trend Graph

Need Help ? X

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



Graph Style Selection Menu:

- Line
- Area
- Curve
- Column
- Bar
- Scatter

- General Worksheet
- Iron
  - Chromium
  - Nickel
  - Aluminum
  - Lead
  - Copper
  - Tin
  - Silver
  - Titanium
  - Silicon
  - Boron
  - Sodium
  - Potassium
  - Molybdenum
  - Phosphorus
  - Zinc
  - Calcium

Save Save As

Click on the icon to change the style of your graph.

# Trend Graphs

**Trend Graph Settings**

- Show Maintenance Events
- Show My Limits
- Show Time Component:  Horizontal (X-axis)  Vertical (Y-axis)
- Logarithmic Data Scale
- Normalize Data Scale
- Multiplier:

**OK** **Cancel**

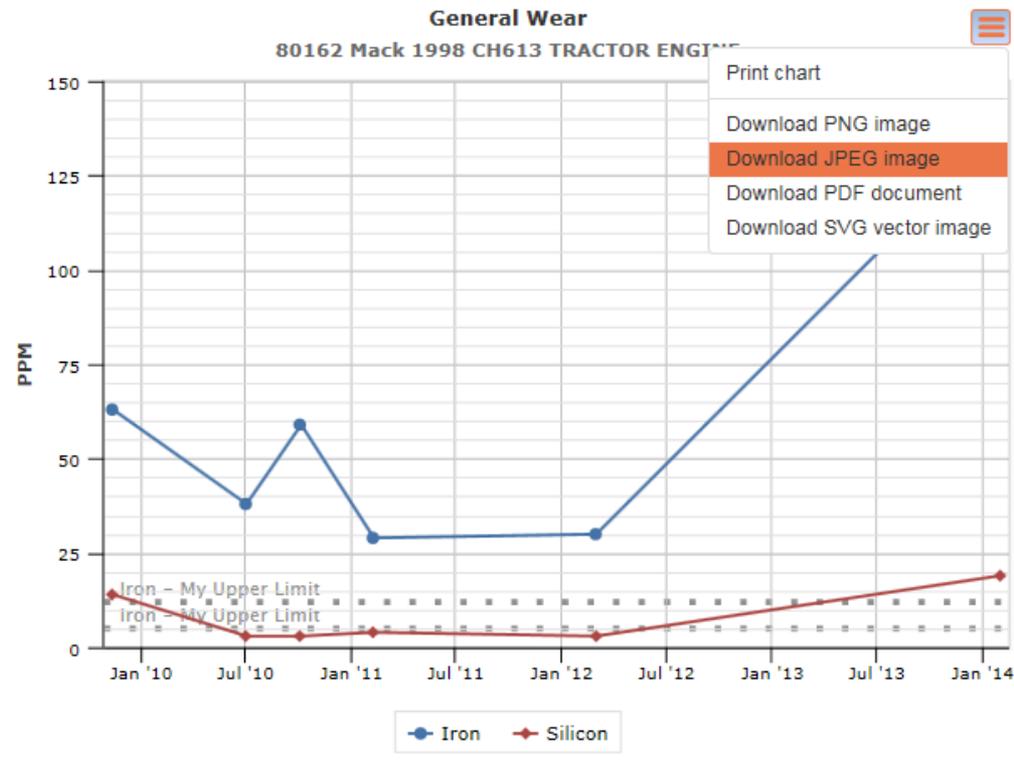
To open additional graph settings click on the  icon. This will open the Trend Graph Settings. Make your selections and click **OK**.

# Trend Graph

## Trend Graph

Need Help ? X

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



- Print chart
- Download PNG image
- Download JPEG image
- Download PDF document
- Download SVG vector image

### Graph Type

- General Wear
- Iron
  - Chromium
  - Nickel
  - Aluminum
  - Lead
  - Copper
  - Tin
  - Silver
  - Titanium
  - Silicon
  - Boron
  - Sodium
  - Potassium
  - Molybdenum
  - Phosphorus
  - Zinc
  - Calcium

To print your graph or export it to different file types click on the  icon.

# Setting Upper & Lower Limits

Manage Filters

My Tests



<input checked="" type="checkbox"/>	Test Code	Test Name	My Limits
<input checked="" type="checkbox"/>	Fe ppm	Iron	
<input checked="" type="checkbox"/>	Cr ppm	Chromium	
<input checked="" type="checkbox"/>	Ni ppm	Nickel	
<input checked="" type="checkbox"/>	Al ppm	Aluminum	
<input checked="" type="checkbox"/>	Pb ppm	Lead	
<input checked="" type="checkbox"/>	Cu ppm	Copper	
<input checked="" type="checkbox"/>	Sn ppm	Tin	
<input checked="" type="checkbox"/>	Ag ppm	Silver	
<input checked="" type="checkbox"/>	Ti ppm	Titanium	
<input checked="" type="checkbox"/>	Si ppm	Silicon	
<input checked="" type="checkbox"/>	B ppm	Boron	
<input checked="" type="checkbox"/>	Na ppm	Sodium	
<input checked="" type="checkbox"/>	K ppm	Potassium	
<input checked="" type="checkbox"/>	Mo ppm	Molybdenum	
<input checked="" type="checkbox"/>	P ppm	Phosphorus	
<input checked="" type="checkbox"/>	Zn ppm	Zinc	
<input checked="" type="checkbox"/>	Ca ppm	Calcium	
<input checked="" type="checkbox"/>	Ba ppm	Barium	

To add Upper and Lower limits to your Trend Graph click on the Preferences tab, and then select My Tests. From here click on the  icon next to a specific test to create your custom limits.

# Setting Upper & Lower Limits

### My Limits ✕

**Component**  **Lower**  **Upper**  Save Clear

Component	Lower	Upper
ENGINE	5	12

Delete

Close

Manage Filters

- 
- Fe ppm
- Cr ppm
- Ni ppm
- Al ppm
- Pb ppm
- Cu ppm
- Sn ppm
- Ag ppm
- Ti ppm
- Si ppm
- B ppm
- Na ppm
- K ppm
- Mo ppm
- P ppm
- Zn ppm
- Ca ppm
- Ba ppm

- Silicon
- Boron
- Sodium
- Potassium
- Molybdenum
- Phosphorus
- Zinc
- Calcium
- Barium



The *My Limits* window will open up. Here select the component you want the limit to apply to. Next enter in your lower and upper limits. Once complete click **Save** and then click **Close**.

# Compare Graph

Browse Tree

Find Units

Quick filter here...

 Compare Graph

 Print Labels

- ACME CORPORATION - PARTS, Cincinnati, O
- ACME - CENTRAL OHIO MARKET
  - Acme - 180680, Chillicothe Recycling
  - Acme - 180690, MT. Vernon Recycling
    - 1222 Mack MR690S
    - 1225 Mack MR688S
      - ENGINE
      - HYDRAULIC
      - TRANS-AUTO
    - 1227 Mack MR688S
    - 1228 Mack MR688S
    - 1230 Mack MR688S
    - 12312 Caterpillar 988F
    - 1232 Mack MR688S
    - 1234 Mack MR688S
    - 12345 Caterpillar
    - 1235 Autocar ACX64
    - 1236 Autocar ACX64
    - 1237 Autocar ACX64
    - 1238 Autocar ACX64
    - 1239 Autocar ACX64
    - 1240 Autocar ACX64
    - 1241 Autocar ACX64
    - 1242 Autocar ACX64
    - 1243 Autocar ACX64
    - 1245 Autocar ACX64

Customer Details

**Unit List**

Summary

Acme - 180690, MT. Vernon Recycling

Add Unit

Modify Unit

Copy Unit

Delete Unit

Download XLS

Upload Units

<input type="checkbox"/>	Unit ID	Equipment Type	Manufacturer	Model
<input type="checkbox"/>	1222	Refuse Truck	Mack	MR690S
<input type="checkbox"/>	1225	Refuse Truck	Mack	MR688S
<input type="checkbox"/>	1227	Refuse Truck	Mack	MR688S
<input type="checkbox"/>	1228	Refuse Truck	Mack	MR688S
<input type="checkbox"/>	1230	Refuse Truck	Mack	MR688S
<input type="checkbox"/>	12312	Backhoe Loader	Caterpillar	988F
<input type="checkbox"/>	1232	Refuse Truck	Mack	MR688S
<input type="checkbox"/>	1234	Refuse Truck	Mack	MR688S
<input type="checkbox"/>	12345	Trucks (Class 5-8)	Caterpillar	

To create a **Compare Graph** click on the Equipment tab. From here open the hierarchy on the left and select the check box next to the units and components you want to compare. Then select on the **Compare Graph** button.

# Compare Graph

## Compare Graph

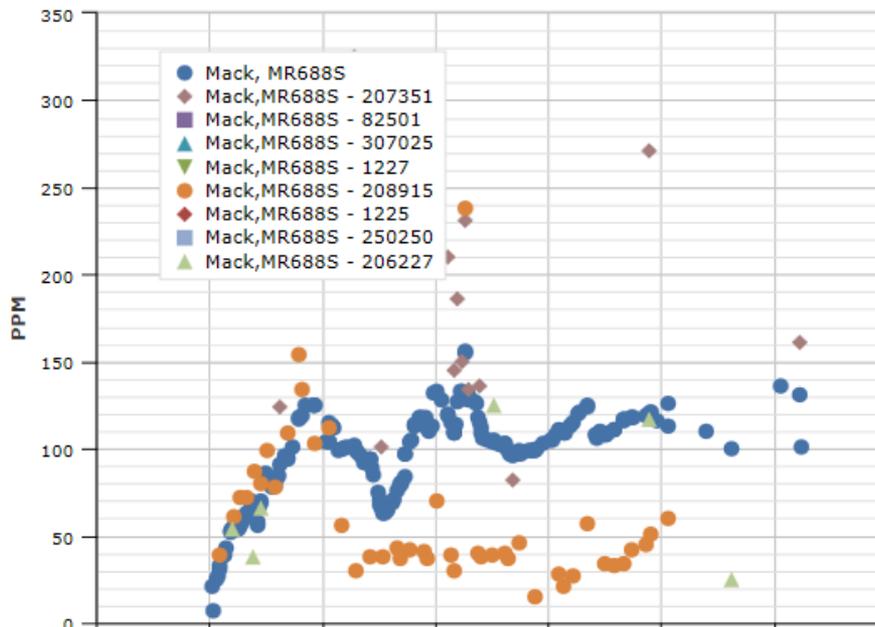
Need Help ? X

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



### Compare Make Models

Test: , Test Units: Hours, Component:



### Parameters

Tests: Iron

Units: Hours

Component: TRANS-AUTO

### Make / Models

- 1232
- 1234
- 200221
- 205929
- 206227
- 207351
- 208758
- 208913
- 208915
- 250250
- 307025
- 82501

Add

Remove

Select on the **date range** you like to view, you can also specify a specific start and end date. Next select your **Parameters** from the drop down lists, and then select the **checkboxes** next to the units you'd like to compare. You can add another make and model to compare by clicking the **Add** button.

# Compare Graph

## Compare Graph

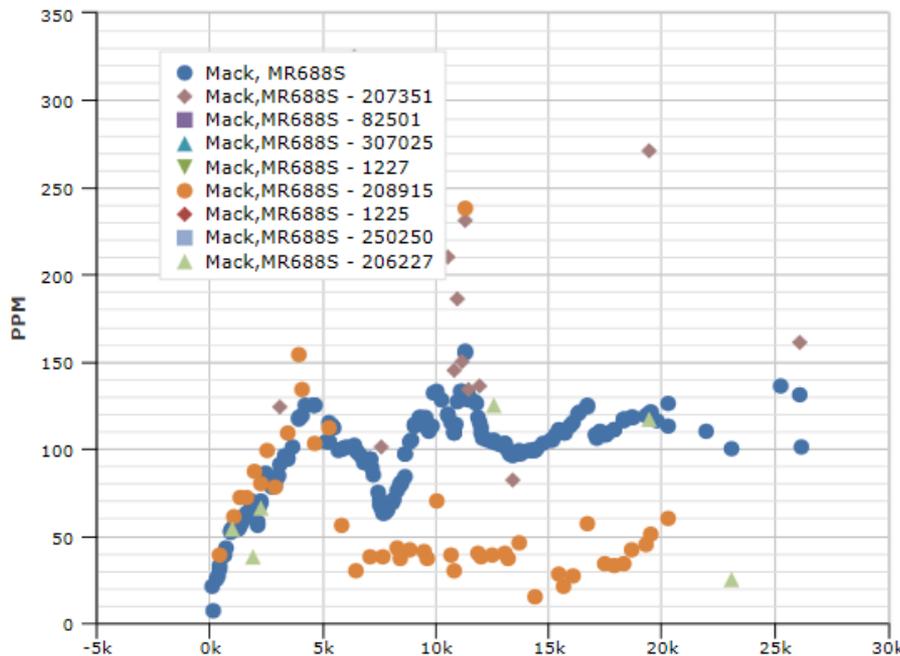
Need Help ? X

Date range: All Data Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



### Compare Make Models

Test: , Test Units: Hours, Component:



### Parameters

Tests: Iron

Units: Hours

Component: TRANS-AUTO

### Make / Models

- 1232
- 1234
- 200221
- 205929
- 206227
- 207351
- 208758
- 208913
- 208915
- 250250
- 307025
- 82501



This icon allows you to copy the graph to a clipboard.

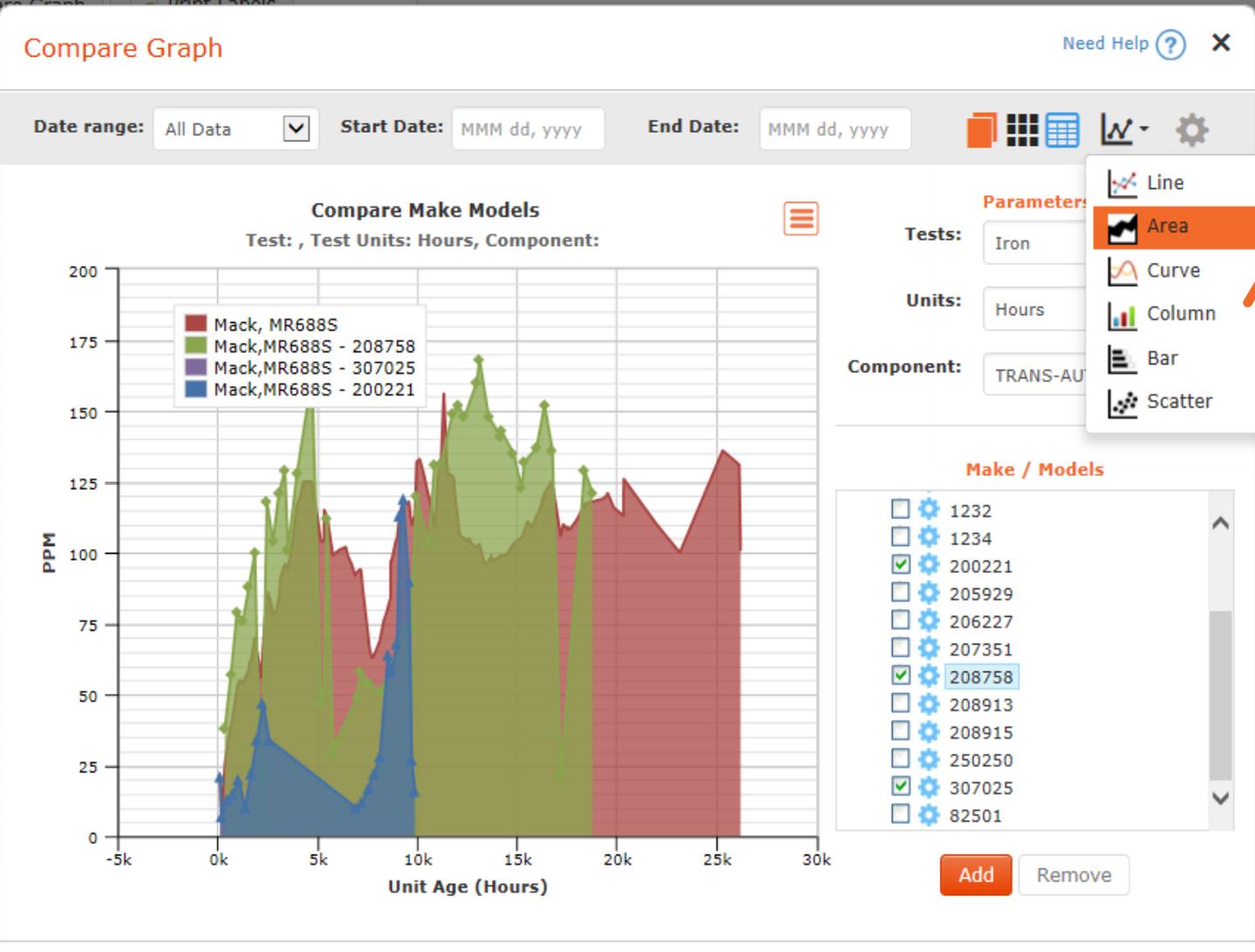


This icon allows you to disable the gridlines.



This icon allows you to view the data table.

# Compare Graph



Click on the  icon to change the style of your graph.

# Compare Graph

Browse Tree

Quick filter

Compare

ACME COI

ACME

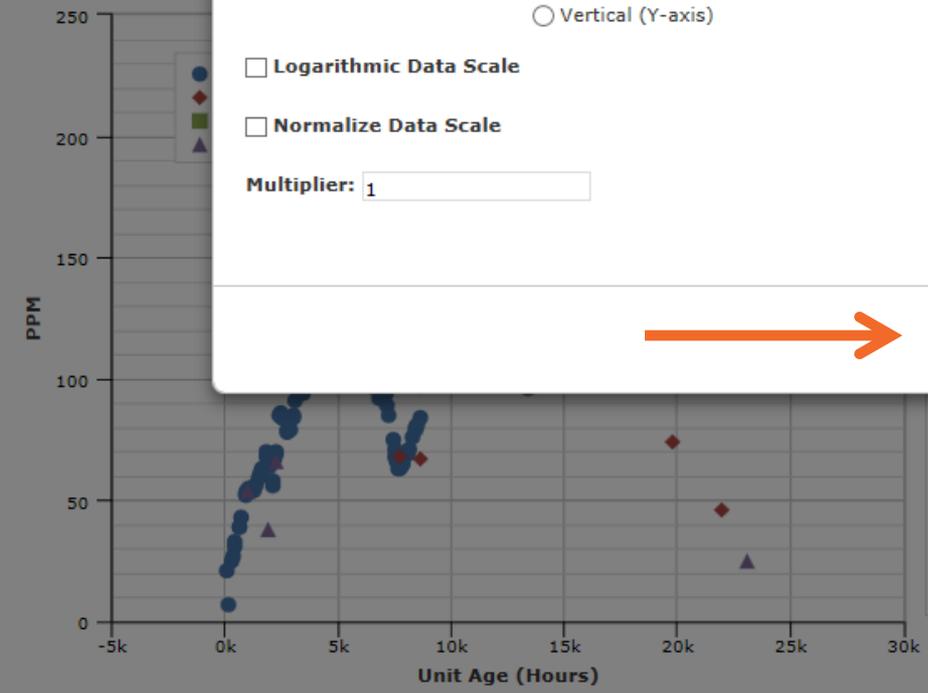
Acm

TRANS-AUTO

1227 Mack MR688S

Compare Graph

Date range: All D



To open additional graph settings click on the  icon. This will open the Trend Graph Settings. Make your selections and click **OK**.

# Compare Graph

## Compare Graph

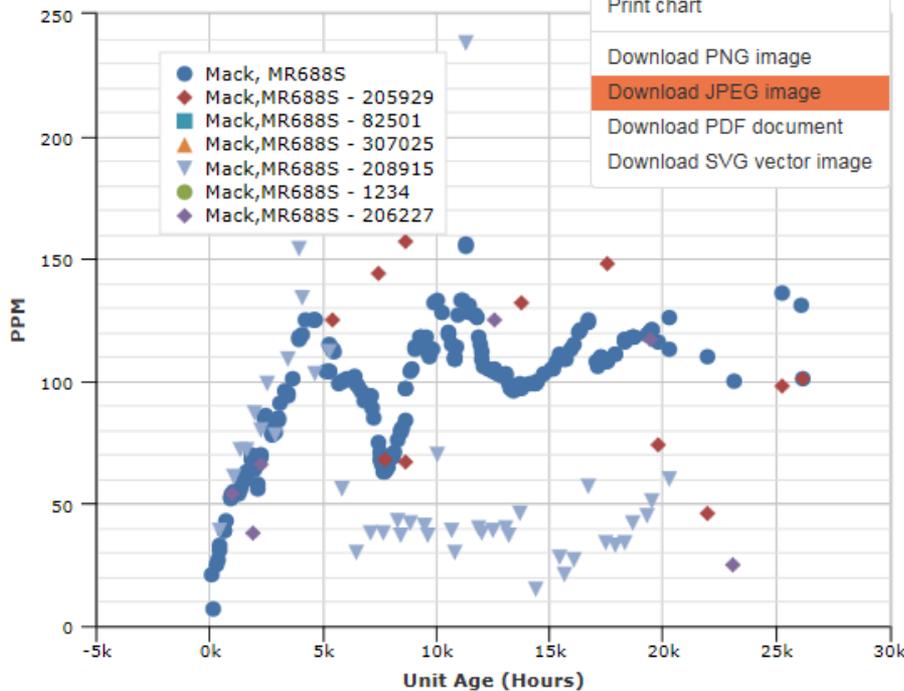
Select Language English ? X last login on 05/14/2015

Date range: All Data ▼ Start Date: MMM dd, yyyy End Date: MMM dd, yyyy



### Compare Make Models

Test: , Test Units: Hours, Compon



### Parameters

Tests: Iron ▼

Units: Hours ▼

Component: TRANS-AUTO ▼

### Make / Models

- 1232
- 1234
- 200221
- 205929
- 206227
- 207351
- 208758
- 208913
- 208915
- 250250
- 307025
- 82501

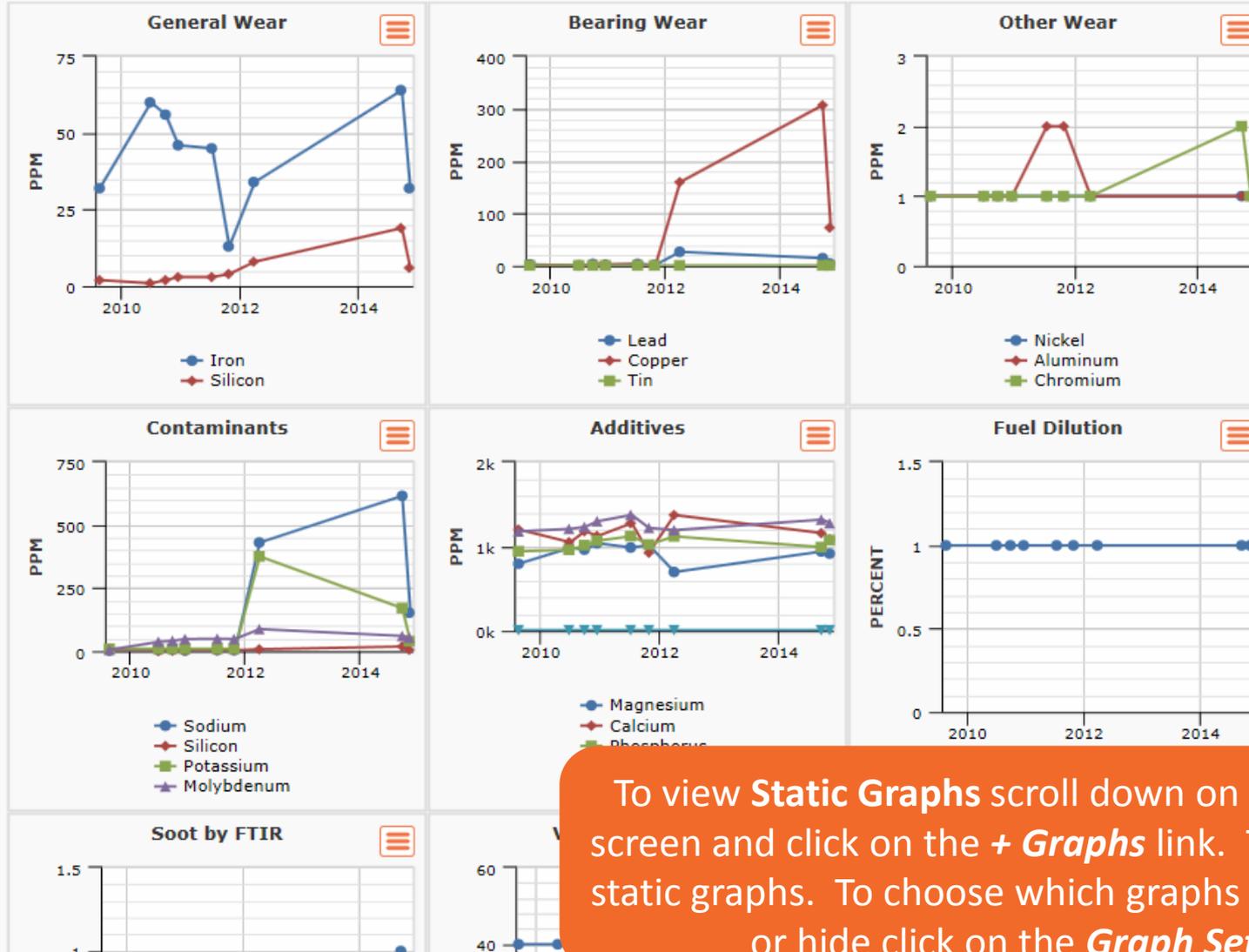
Add Remove

To print your graph or export it to different file types click on the  icon.

# Static Graphs

+ Graphs

⚙️ Graph Settings



To view **Static Graphs** scroll down on the sample details screen and click on the **+ Graphs** link. This will expand the static graphs. To choose which graphs you'd like to display or hide click on the **Graph Settings** link.

# Static Graphs

+ Graphs

Graph Settings

## Graph Settings

×

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

Save

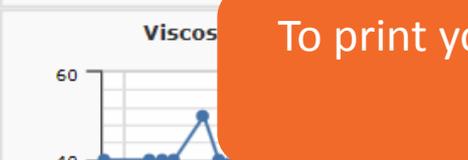
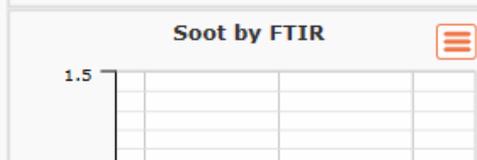
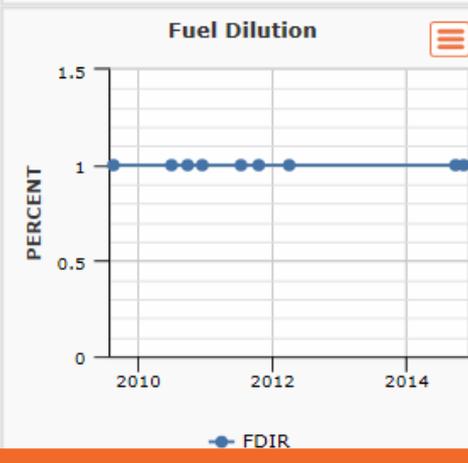
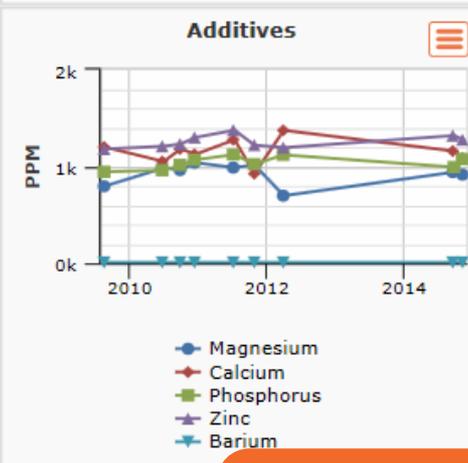
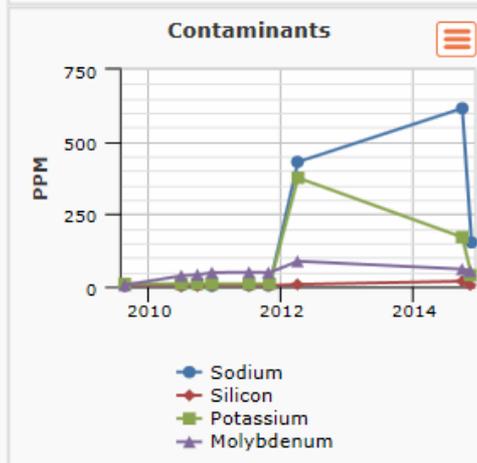
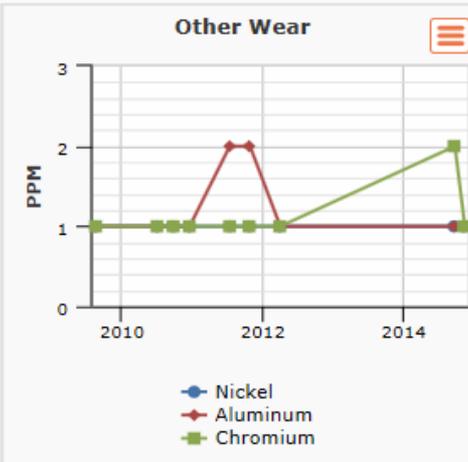
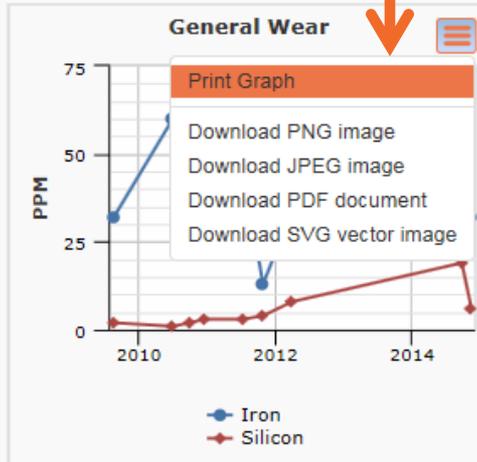
Close

A new window will open up. Select the checkboxes next to the graphs you'd like to view and click **Save**.

# Static Graphs

+ Graphs

Graph Settings



To print your graph or export it to different file types click on the  icon.

# Widget Graphs

Messages

### Welcome to LOAMS

Visit our [LOAMS Resource Center](#).

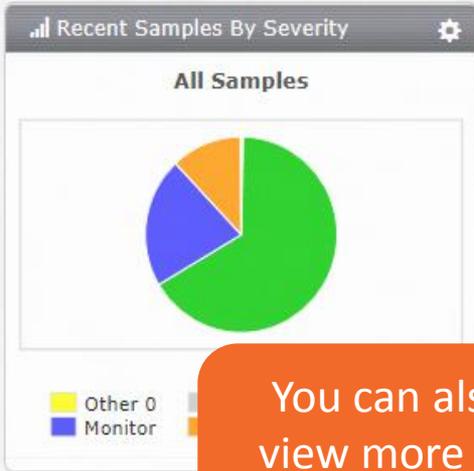
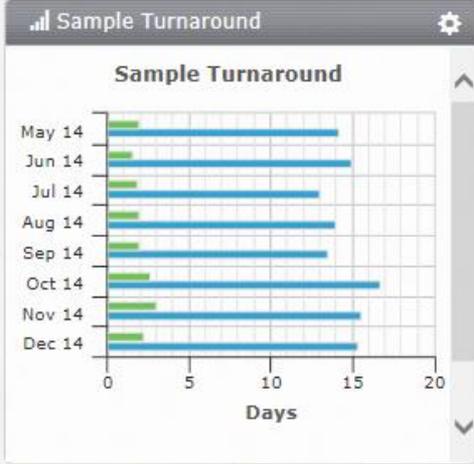
Samples Status

#### All Samples

Legend: In Transit (orange), In Progress (blue), Complete (green)

Track Samples

Track Sample



#### News

- Unit Moved** 12-May-2015  
Barry Cato moved unit 391176 Unknown/Unspecified UNKNOWN from site Oklahoma City, OK [Clifford Power Systems-Oklahoma City] to site Richland County Recycling [Acme Demo Worksite]
- Unit Moved** 12-May-2015  
Barry Cato moved unit G090020212 Onan from site Austin, TX [Clifford Power Systems-Austin] to site Richland County Recycling [Acme Demo Worksite]
- Units Merged** 30-Apr-2015  
Frank Gilboy merged unit 829049 - on site Chillicothe Recycling [Acme - 180680] into unit Demo Unit 2 YORK 2652A on site Chillicothe Recycling [Acme - 180680]

#### Alerts

- SAMPLE ACTIONS**  
Unviewed Critical (0)  
Unviewed Abnormal (0)
- EQUIPMENT ACTIONS**  
Units overdue for sampling (0)  
Units due for sampling (0)

#### Critical Condition

Unit	Component	Condition
206226	ENGINE	C
206226	ENGINE	CA

You can also view additional graphs on your widgets. To view more information on these please view the **Widgets** quick start guide.



**LOAMS® SUPPORT DESK:**

Phone: **1-800-655-4473**

Email: **[LOAMS@AnalystsInc.com](mailto:LOAMS@AnalystsInc.com)**

**[www.AnalystsIncOnline.com](http://www.AnalystsIncOnline.com)**

**[www.AnalystsInc.com/LOAMS-Resource-Center](http://www.AnalystsInc.com/LOAMS-Resource-Center)**