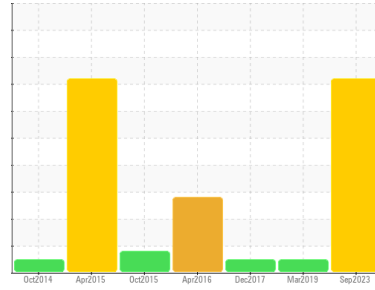




# PROBLEM SUMMARY

Sample Rating Trend



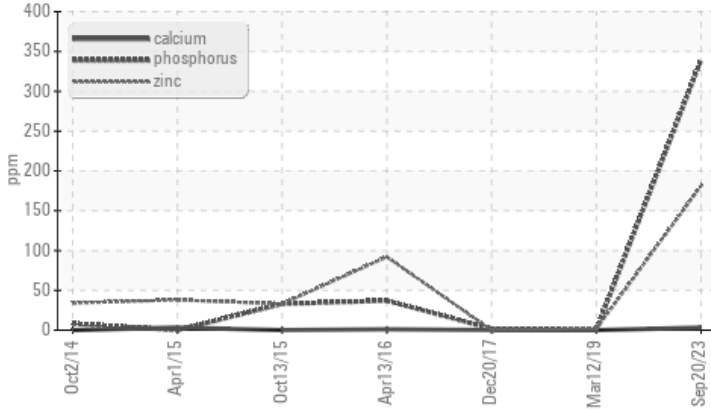
WATER



Area  
**[1635]**  
 Machine Id  
**KAESER 4918928 - MCCARTHY TIRE SERVICES (S/N 1005)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (8 GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Additives



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

| Sample Status    |        |             |       | SEVERE         | NORMAL | NORMAL |
|------------------|--------|-------------|-------|----------------|--------|--------|
| Phosphorus       | ppm    | ASTM D5185m |       | ▲ <b>339</b>   | 0      | 2      |
| Zinc             | ppm    | ASTM D5185m |       | ▲ <b>181</b>   | 1      | 0      |
| Sulfur           | ppm    | ASTM D5185m |       | ▲ <b>1331</b>  | 16506  | 17692  |
| Silt             | scalar | *Visual     | NONE  | ▲ <b>MODER</b> | NONE   | NONE   |
| Debris           | scalar | *Visual     | NONE  | ▲ <b>MODER</b> | LIGHT  | LIGHT  |
| Emulsified Water | scalar | *Visual     | >0.05 | ▲ <b>0.2%</b>  | NEG    | NEG    |
| Free Water       | scalar | *Visual     |       | ● <b>1.0</b>   | NEG    | NEG    |

Customer Id: PALFOU  
 Sample No.: WC0845237  
 Lab Number: 05964724  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

RECOMMENDED ACTIONS

| Action        | Status | Date | Done By | Description   |
|---------------|--------|------|---------|---|
| Change Filter | ---    | ---  | ?       | We recommend you service the filters on this component. |

HISTORICAL DIAGNOSIS

12 Mar 2019 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



20 Dec 2017 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the component. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



13 Apr 2016 Diag: Jonathan Hester

WATER



We advise that you follow the water drain-off procedure for this component. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate concentration of water present in the oil. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid.

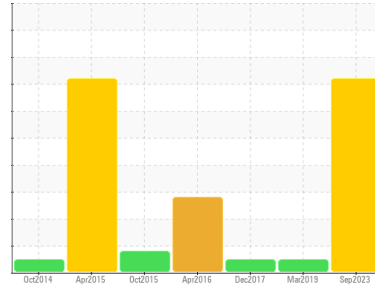
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Area  
**[1635]**  
 Machine Id  
**KAESER 4918928 - MCCARTHY TIRE SERVICES (S/N 1005)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (8 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a moderate amount of visible silt present in the sample.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>WC0845237</b>   | WCI2313441  | WCI2330815  |
| Sample Date   | Client Info |             | <b>20 Sep 2023</b> | 12 Mar 2019 | 20 Dec 2017 |
| Machine Age   | hrs         | Client Info | <b>55573</b>       | 22934       | 16803       |
| Oil Age       | hrs         | Client Info | <b>1402</b>        | 6131        | 11941       |
| Oil Changed   | Client Info |             | <b>Not Chngd</b>   | Changed     | Changed     |
| Sample Status |             |             | <b>SEVERE</b>      | NORMAL      | NORMAL      |

## WEAR METALS

|          | method | limit/base      | current    | history1 | history2 |
|----------|--------|-----------------|------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >50 | <b>6</b>   | <1       | <1       |
| Chromium | ppm    | ASTM D5185m >10 | <b>0</b>   | 0        | 0        |
| Nickel   | ppm    | ASTM D5185m >3  | <b>2</b>   | 0        | 0        |
| Titanium | ppm    | ASTM D5185m >3  | <b>0</b>   | 0        | 0        |
| Silver   | ppm    | ASTM D5185m >2  | <b>0</b>   | 0        | 0        |
| Aluminum | ppm    | ASTM D5185m >10 | <b>2</b>   | <1       | 0        |
| Lead     | ppm    | ASTM D5185m >10 | <b>0</b>   | <1       | 0        |
| Copper   | ppm    | ASTM D5185m >50 | <b>17</b>  | 13       | 11       |
| Tin      | ppm    | ASTM D5185m >10 | <b>0</b>   | <1       | <1       |
| Antimony | ppm    | ASTM D5185m     | <b>---</b> | 0        | 0        |
| Vanadium | ppm    | ASTM D5185m     | <b>0</b>   | 0        | 0        |
| Cadmium  | ppm    | ASTM D5185m     | <b>0</b>   | 0        | 0        |

## ADDITIVES

|            | method | limit/base     | current       | history1 | history2 |
|------------|--------|----------------|---------------|----------|----------|
| Boron      | ppm    | ASTM D5185m    | <b>0</b>      | 0        | 0        |
| Barium     | ppm    | ASTM D5185m 90 | <b>5</b>      | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m    | <b>0</b>      | 0        | 0        |
| Manganese  | ppm    | ASTM D5185m    | <b>0</b>      | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185m 90 | <b>5</b>      | 0        | 0        |
| Calcium    | ppm    | ASTM D5185m 2  | <b>3</b>      | 0        | 0        |
| Phosphorus | ppm    | ASTM D5185m    | <b>▲ 339</b>  | 0        | 2        |
| Zinc       | ppm    | ASTM D5185m    | <b>▲ 181</b>  | 1        | 0        |
| Sulfur     | ppm    | ASTM D5185m    | <b>▲ 1331</b> | 16506    | 17692    |

## CONTAMINANTS

|           | method | limit/base       | current      | history1 | history2 |
|-----------|--------|------------------|--------------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25  | <b>&lt;1</b> | <1       | <1       |
| Sodium    | ppm    | ASTM D5185m      | <b>4</b>     | 0        | 0        |
| Potassium | ppm    | ASTM D5185m >20  | <b>&lt;1</b> | <1       | <1       |
| Water     | %      | ASTM D6304 >0.05 | <b>---</b>   | ---      | ---      |
| ppm Water | ppm    | ASTM D6304 >500  | <b>---</b>   | ---      | ---      |

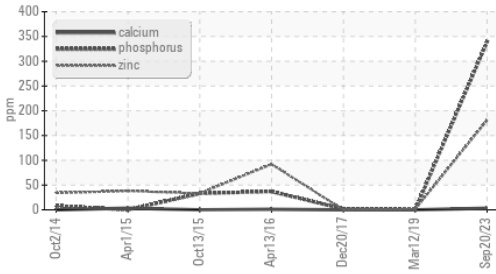
## FLUID DEGRADATION

|                  | method   | limit/base     | current     | history1 | history2 |
|------------------|----------|----------------|-------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 0.4 | <b>0.42</b> | 0.369    | 0.340    |



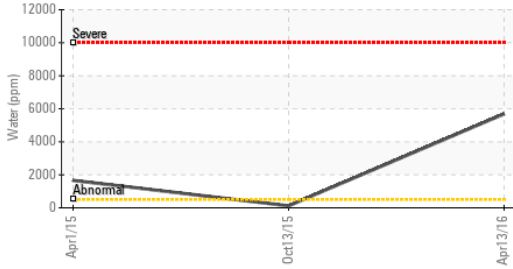
# OIL ANALYSIS REPORT

## Additives



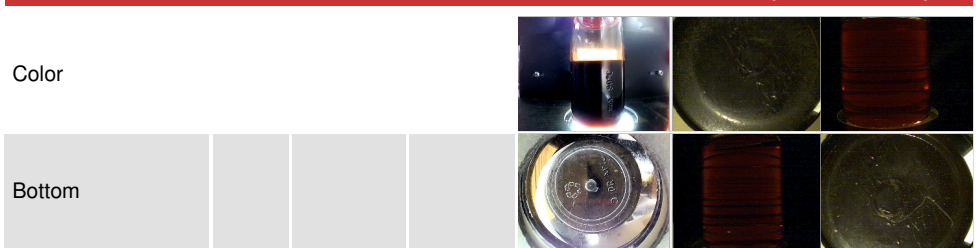
| PARAMETER        | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | ▲ MODER | NONE     | NONE     |
| Debris           | scalar | *Visual    | ▲ MODER | LIGHT    | LIGHT    |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | ▲ 0.2%  | NEG      | NEG      |
| Free Water       | scalar | *Visual    | ◆ 1.0   | NEG      | NEG      |

## Water (KF)

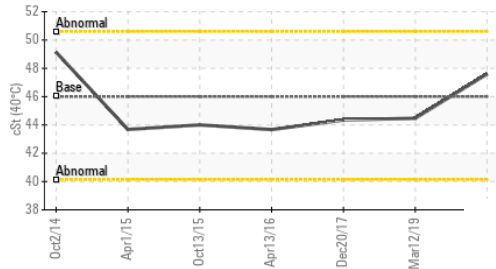


| PARAMETER   | method | limit/base | current | history1 | history2 |
|-------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt    | ASTM D445  | 46      | 47.6     | 44.47    |

## SAMPLE IMAGES

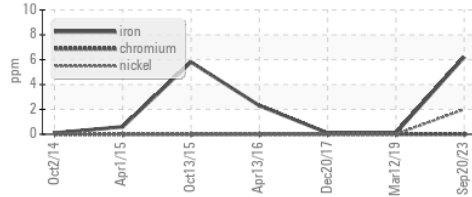


## Viscosity @ 40°C

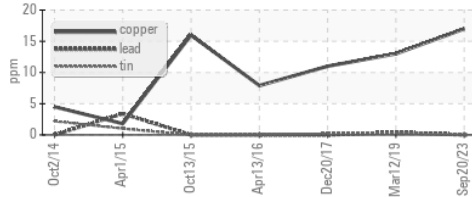


## GRAPHS

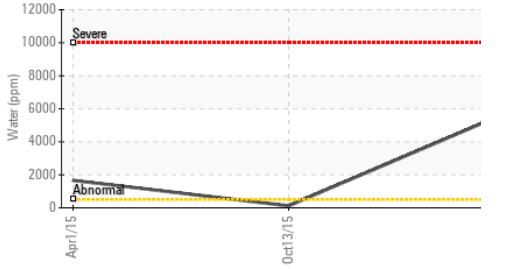
### Ferrous Alloys



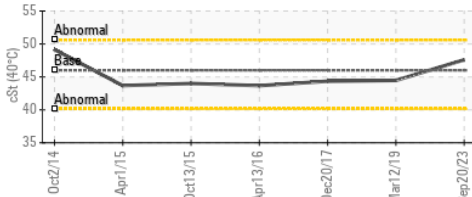
### Non-ferrous Metals



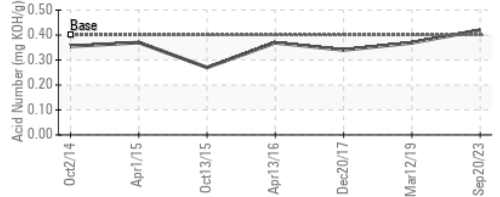
## Water (KF)



### Viscosity @ 40°C



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0845237 **Received** : 29 Sep 2023  
**Lab Number** : 05964724 **Diagnosed** : 02 Oct 2023  
**Unique Number** : 10671275 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF )

**ELEVATED INDUSTRIAL SOLUTIONS - EIS**  
 302 HUGHES ST  
 FOUNTAIN INN, SC  
 US 29644  
 Contact: DARRIN WARD  
 dward@elevatedindustrial.com  
 T:  
 F: (864)862-7653

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)