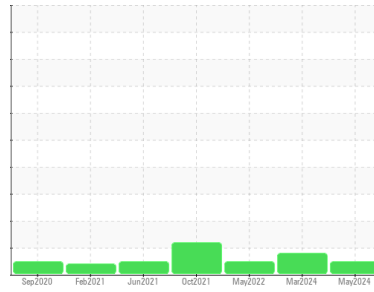




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER DSD 200 7067840 (S/N 1103)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the component. The amount and size of particulates present in the system is acceptable.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1    | history2    |
|--------------------|-------------|-------------|------------|--------------------|-------------|-------------|
| Sample Number      | Client Info |             |            | <b>KCP27142</b>    | KC124657    | KC106147    |
| Sample Date        | Client Info |             |            | <b>28 May 2024</b> | 07 Mar 2024 | 24 May 2022 |
| Machine Age        | hrs         | Client Info |            | <b>30898</b>       | 28900       | 16047       |
| Oil Age            | hrs         | Client Info |            | <b>4968</b>        | 0           | 7609        |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | N/A         | Changed     |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ATTENTION   | NORMAL      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>0</b>     | 0        | 0        |
| Chromium    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Nickel      | ppm | ASTM D5185m | >3         | <b>0</b>     | 0        | 0        |
| Titanium    | ppm | ASTM D5185m | >3         | <b>&lt;1</b> | 0        | 0        |
| Silver      | ppm | ASTM D5185m | >2         | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | <1       |
| Lead        | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >50        | <b>12</b>    | 5        | 7        |
| Tin         | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Antimony    | ppm | ASTM D5185m |            | <b>---</b>   | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

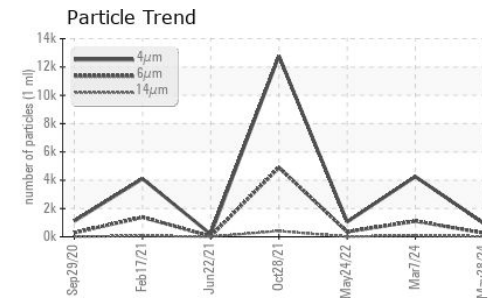
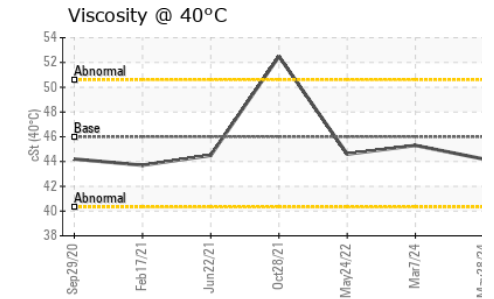
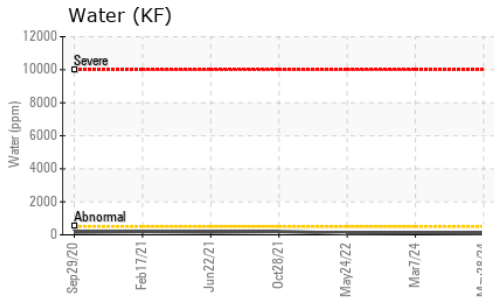
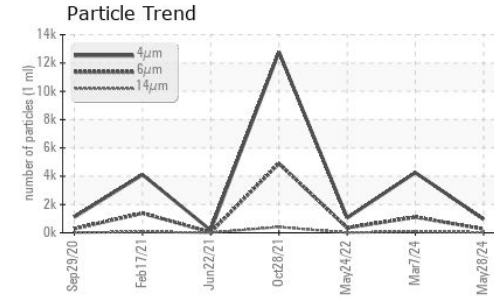
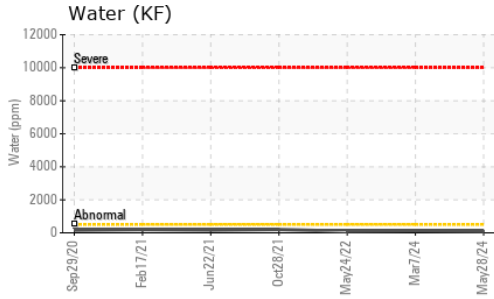
| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 90         | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | 0        | 0        |
| Magnesium  | ppm | ASTM D5185m | 90         | <b>0</b>     | 8        | 3        |
| Calcium    | ppm | ASTM D5185m | 2          | <b>0</b>     | 0        | 0        |
| Phosphorus | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Zinc       | ppm | ASTM D5185m |            | <b>5</b>     | 17       | 4        |
| Sulfur     | ppm | ASTM D5185m |            | <b>18370</b> | 14638    | 15731    |

| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | 0        | <1       |
| Sodium       | ppm | ASTM D5185m |            | <b>3</b>     | 5        | 2        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>&lt;1</b> | 0        | 0        |
| Water        | %   | ASTM D6304  | >0.05      | <b>0.008</b> | 0.013    | 0.008    |
| ppm Water    | ppm | ASTM D6304  | >500       | <b>84</b>    | 134      | 87.6     |

| FLUID CLEANLINESS |  | method       | limit/base | current         | history1 | history2 |
|-------------------|--|--------------|------------|-----------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>964</b>      | 4254     | 1054     |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>261</b>      | 1111     | 353      |
| Particles >14µm   |  | ASTM D7647   | >80        | <b>28</b>       | 92       | 12       |
| Particles >21µm   |  | ASTM D7647   | >20        | <b>6</b>        | 22       | 2        |
| Particles >38µm   |  | ASTM D7647   | >4         | <b>1</b>        | 1        | 0        |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>0</b>        | 0        | 0        |
| Oil Cleanliness   |  | ISO 4406 (c) | >--/17/13  | <b>17/15/12</b> | 19/17/14 | 17/16/11 |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.4        | <b>0.35</b> | 0.40     | 0.38     |

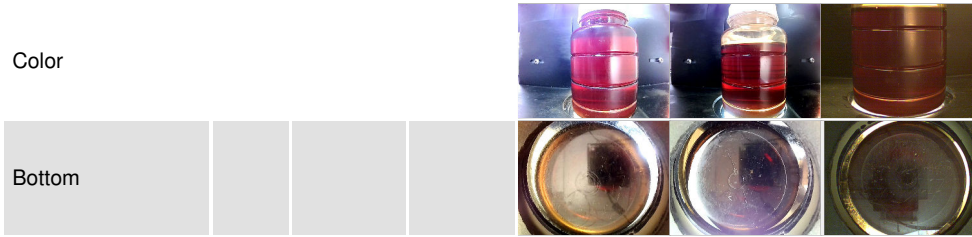
# OIL ANALYSIS REPORT



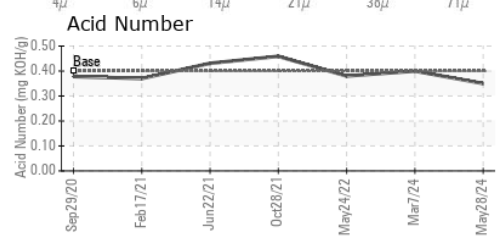
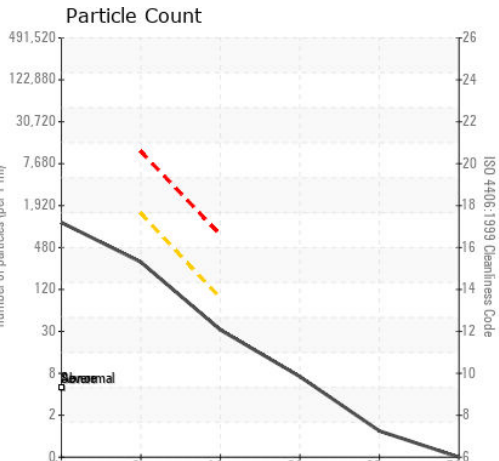
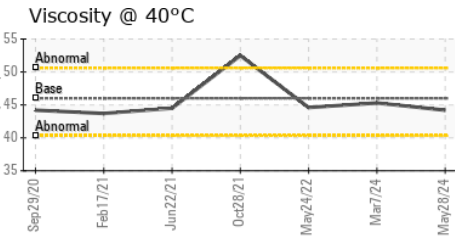
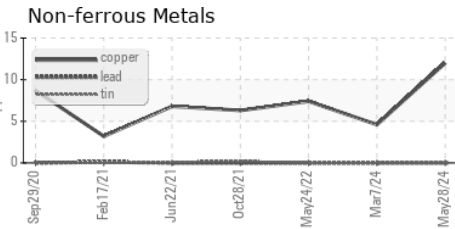
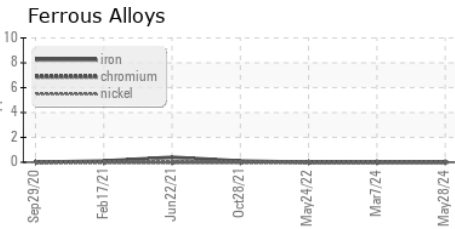
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| Precipitate      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Silt             | scalar | *Visual    | NONE    | NONE     | NONE     |
| Debris           | scalar | *Visual    | NONE    | NONE     | NONE     |
| Sand/Dirt        | scalar | *Visual    | NONE    | NONE     | NONE     |
| Appearance       | scalar | *Visual    | NORML   | NORML    | NORML    |
| Odor             | scalar | *Visual    | NORML   | NORML    | NORML    |
| Emulsified Water | scalar | *Visual    | >0.05   | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

| FLUID PROPERTIES | method | limit/base   | current | history1 | history2 |
|------------------|--------|--------------|---------|----------|----------|
| Visc @ 40°C      | cSt    | ASTM D445 46 | 44.2    | 45.3     | 44.6     |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP27142 **Received** : 05 Jun 2024  
**Lab Number** : 06200753 **Tested** : 06 Jun 2024  
**Unique Number** : 11062876 **Diagnosed** : 07 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**DRIVE AUTOMOTIVE - MAGNA DRIVE**  
 120 MOON ACRES RD.  
 PIEDMONT, SC  
 US 29673  
 Contact: SERVICE MANAGER

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)

T:  
F: