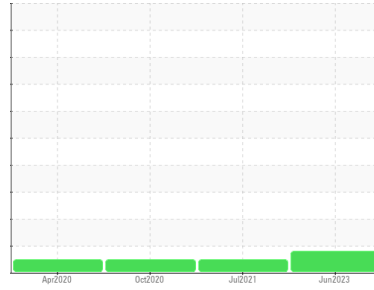




# PROBLEM SUMMARY

Sample Rating Trend



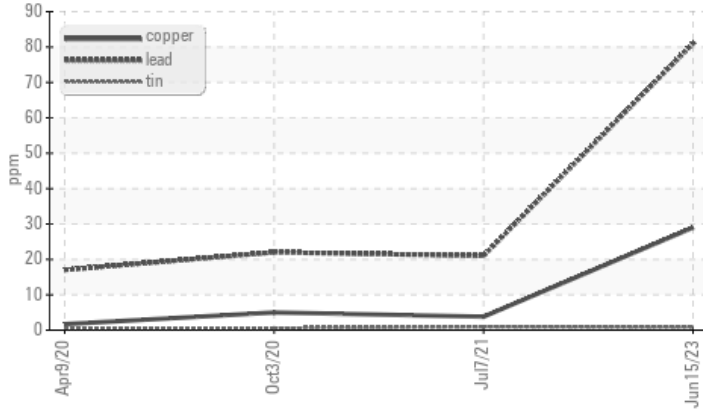
**WEAR**



Machine Id  
**KENWORTH T-880 T-769 (S/N 1XKZD40X6HJ165237)**  
 Component  
**Diesel Engine**  
 Fluid  
**DURALENE Dura-Max 15W40 (--- GAL)**

## COMPONENT CONDITION SUMMARY

### ▲ Non-ferrous Metals



## RECOMMENDATION

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

## PROBLEMATIC TEST RESULTS

| Sample Status |     |             |     | <b>ABNORMAL</b> | NORMAL | NORMAL |
|---------------|-----|-------------|-----|-----------------|--------|--------|
| Lead          | ppm | ASTM D5185m | >40 | <b>▲ 81</b>     | 21     | 22     |

**Customer Id:** EAICLA  
**Sample No.:** WC0804121  
**Lab Number:** 05905142  
**Test Package:** CONST



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   |
|----------|--------|------|---------|---|
| Resample | ---    | ---  | ?       | We recommend an early resample to monitor this condition. |

## HISTORICAL DIAGNOSIS

### 07 Jul 2021 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 oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 03 Oct 2020 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 oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 09 Apr 2020 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

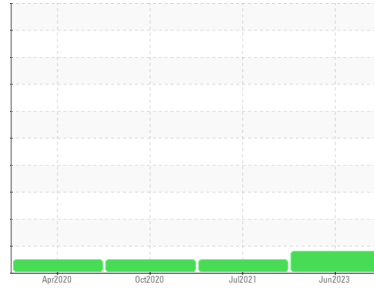
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id  
**KENWORTH T-880 T-769 (S/N 1XKZD40X6HJ165237)**  
 Component  
**Diesel Engine**  
 Fluid  
**DURALENE Dura-Max 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

### Wear

The lead level is abnormal. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1    | history2    |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info |             | <b>WC0804121</b>   | WC0546667   | WC0456782   |
| Sample Date   | Client Info |             | <b>15 Jun 2023</b> | 07 Jul 2021 | 03 Oct 2020 |
| Machine Age   | mls         | Client Info | <b>343073</b>      | 254227      | 205637      |
| Oil Age       | mls         | Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info |             | <b>Changed</b>     | Changed     | Changed     |
| Sample Status |             |             | <b>ABNORMAL</b>    | NORMAL      | NORMAL      |

## CONTAMINATION

|        | method    | limit/base | current        | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel   | WC Method | >5         | <b>&lt;1.0</b> | <1.0     | <1.0     |
| Glycol | WC Method |            | <b>NEG</b>     | NEG      | NEG      |

## WEAR METALS

|          | method | limit/base       | current      | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron     | ppm    | ASTM D5185m >100 | <b>54</b>    | 28       | 30       |
| Chromium | ppm    | ASTM D5185m >20  | <b>1</b>     | <1       | <1       |
| Nickel   | ppm    | ASTM D5185m >4   | <b>&lt;1</b> | 0        | <1       |
| Titanium | ppm    | ASTM D5185m      | <b>&lt;1</b> | <1       | <1       |
| Silver   | ppm    | ASTM D5185m >3   | <b>0</b>     | <1       | <1       |
| Aluminum | ppm    | ASTM D5185m >20  | <b>4</b>     | 2        | 0        |
| Lead     | ppm    | ASTM D5185m >40  | <b>▲ 81</b>  | 21       | 22       |
| Copper   | ppm    | ASTM D5185m >330 | <b>29</b>    | 4        | 5        |
| Tin      | ppm    | ASTM D5185m >15  | <b>&lt;1</b> | <1       | <1       |
| Antimony | ppm    | ASTM D5185m      | <b>---</b>   | 0        | 0        |
| 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>&lt;1</b> | 9        | 3        |
| Barium     | ppm    | ASTM D5185m | <b>0</b>     | 0        | 0        |
| Molybdenum | ppm    | ASTM D5185m | <b>4</b>     | 3        | 4        |
| Manganese  | ppm    | ASTM D5185m | <b>&lt;1</b> | <1       | <1       |
| Magnesium  | ppm    | ASTM D5185m | <b>65</b>    | 60       | 74       |
| Calcium    | ppm    | ASTM D5185m | <b>2903</b>  | 3130     | 2431     |
| Phosphorus | ppm    | ASTM D5185m | <b>1096</b>  | 1153     | 958      |
| Zinc       | ppm    | ASTM D5185m | <b>1322</b>  | 1355     | 1177     |
| Sulfur     | ppm    | ASTM D5185m | <b>4548</b>  | 3848     | 2991     |

## CONTAMINANTS

|           | method | limit/base      | current   | history1 | history2 |
|-----------|--------|-----------------|-----------|----------|----------|
| Silicon   | ppm    | ASTM D5185m >25 | <b>10</b> | 5        | 6        |
| Sodium    | ppm    | ASTM D5185m     | <b>3</b>  | 2        | 3        |
| Potassium | ppm    | ASTM D5185m >20 | <b>2</b>  | 4        | 5        |

## INFRA-RED

|           | method   | limit/base      | current     | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot %    | %        | *ASTM D7844 >3  | <b>1</b>    | 0.7      | 0.7      |
| Nitration | Abs/cm   | *ASTM D7624 >20 | <b>12.3</b> | 11       | 11.4     |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | <b>31.2</b> | 27.4     | 30.2     |

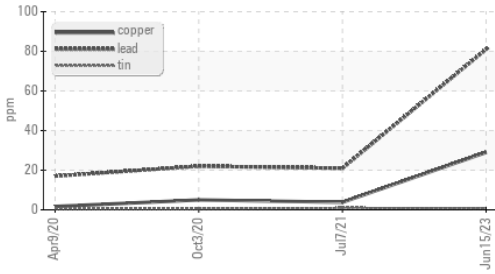
## FLUID DEGRADATION

|                  | method   | limit/base      | current     | history1 | history2 |
|------------------|----------|-----------------|-------------|----------|----------|
| Oxidation        | Abs/.1mm | *ASTM D7414 >25 | <b>24.8</b> | 17.4     | 20.2     |
| Base Number (BN) | mg KOH/g | ASTM D2896      | <b>5.1</b>  | 5.7      | 5.3      |



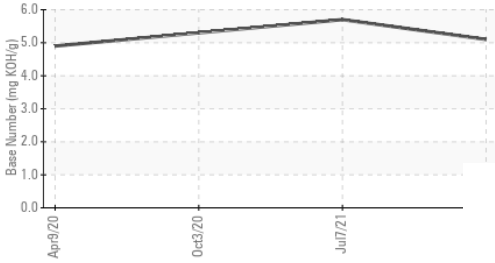
# OIL ANALYSIS REPORT

### ▲ Non-ferrous Metals



| 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    | >0.2    | NEG      | NEG      |
| Free Water       | scalar | *Visual    |         | NEG      | NEG      |

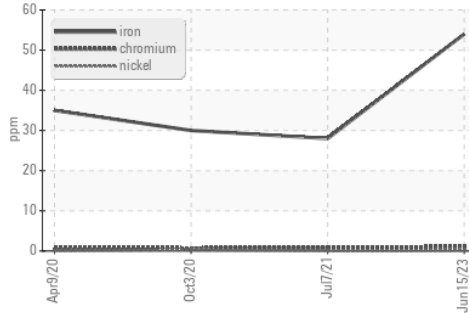
### Base Number



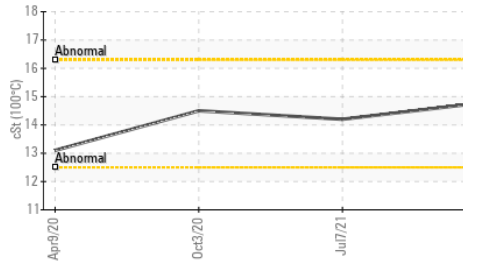
| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 100°C     | cSt    | ASTM D445  | 14.8    | 14.2     | 14.5     |

### GRAPHS

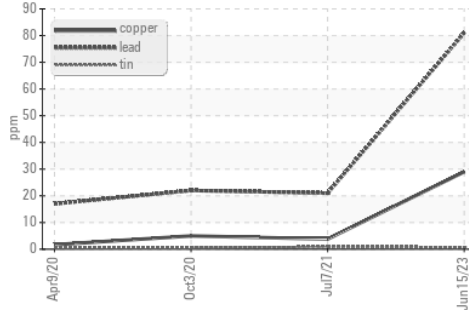
#### Ferrous Alloys



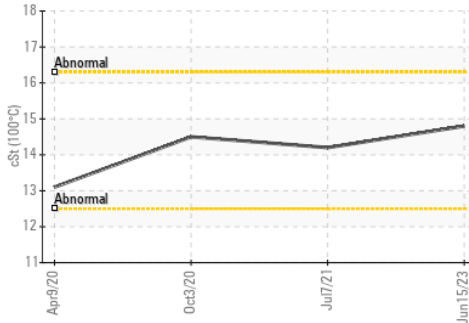
### Viscosity @ 100°C



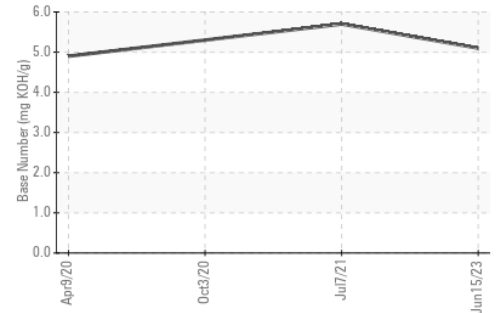
### ▲ Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0804121 **Received** : 24 Jul 2023  
**Lab Number** : 05905142 **Diagnosed** : 26 Jul 2023  
**Unique Number** : 10566498 **Diagnostician** : Don Baldrige  
**Test Package** : CONST ( Additional Tests: TBN )

EAI EQUIPMENT A DIV OF PLEASANT CONSTRUCTION INC  
 24024 FREDERICK ROAD  
 CLARKSBURG, MD  
 US 20871  
 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: