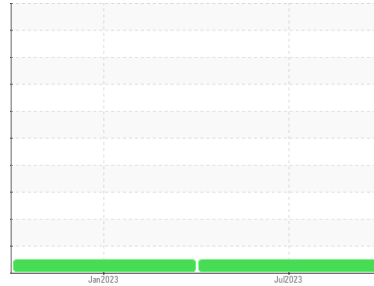




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**KENWORTH T880 T-896 (S/N 1NKZXPEX1PJ225385)**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0804125</b>	WC0546621	---
Sample Date	Client Info			<b>10 Jul 2023</b>	30 Jan 2023	---
Machine Age	mls	Client Info		<b>51360</b>	0	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Oil Changed	Client Info			<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>49</b>	76	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>28</b>	29	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	1	---
Copper	ppm	ASTM D5185m	>330	<b>5</b>	12	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	<b>2</b>	17	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	100	<b>4</b>	4	---
Manganese	ppm	ASTM D5185m		<b>1</b>	2	---
Magnesium	ppm	ASTM D5185m	450	<b>108</b>	446	---
Calcium	ppm	ASTM D5185m	3000	<b>2538</b>	1715	---
Phosphorus	ppm	ASTM D5185m	1150	<b>985</b>	766	---
Zinc	ppm	ASTM D5185m	1350	<b>1177</b>	929	---
Sulfur	ppm	ASTM D5185m	4250	<b>4550</b>	2977	---

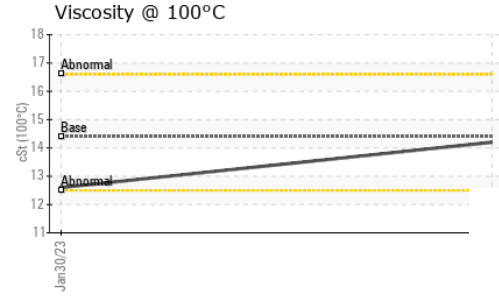
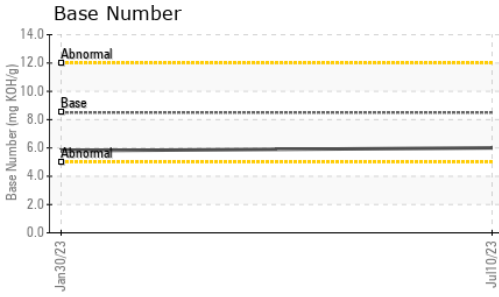
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>9</b>	11	---
Sodium	ppm	ASTM D5185m	>158	<b>3</b>	3	---
Potassium	ppm	ASTM D5185m	>20	<b>67</b>	83	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.7</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.7</b>	11.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>24.9</b>	25.1	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.2</b>	19.4	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.0</b>	5.8	---



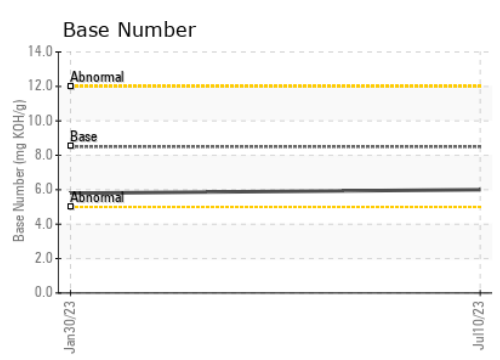
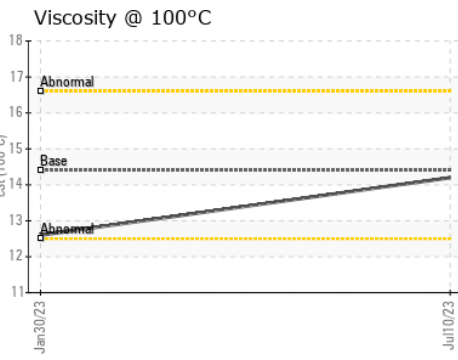
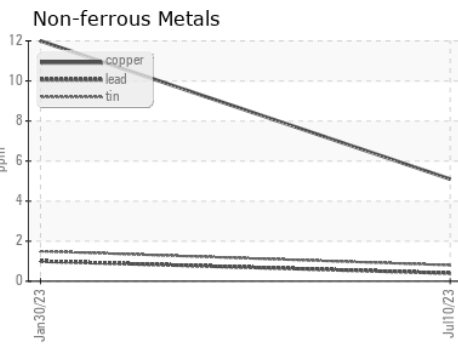
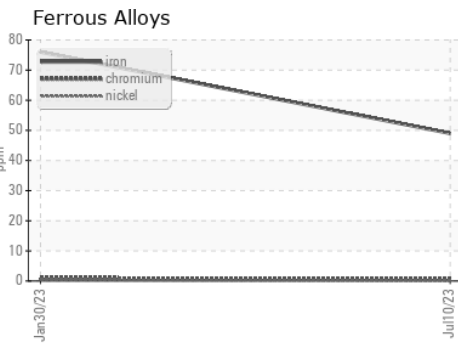
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.2</b>	12.6	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0804125      **Received** : 24 Jul 2023  
**Lab Number** : 05905140      **Diagnosed** : 24 Jul 2023  
**Unique Number** : 10566496      **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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

Certificate L2367  
 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)

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