



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KENWORTH T800 8027 (S/N KCB19973)**

Component  
**Diesel Engine**

Fluid  
**SHELL ROTELLA T 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0878734</b>	WC0613636	---
Sample Date		Client Info		<b>12 Jan 2024</b>	26 Jul 2023	---
Machine Age	mls	Client Info		<b>73577</b>	683990	---
Oil Age	mls	Client Info		<b>0</b>	0	---
Filter Age	mls	Client Info		<b>0</b>	0	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	SEVERE	---

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>56</b>	▲ 189	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	12	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	2	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>8</b>	▲ 20	---
Lead	ppm	ASTM D5185m	>40	<b>6</b>	26	---
Copper	ppm	ASTM D5185m	>330	<b>16</b>	66	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	7	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

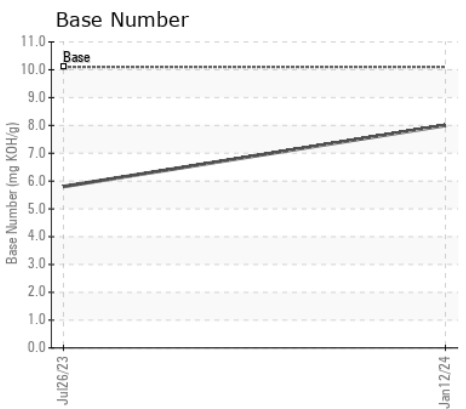
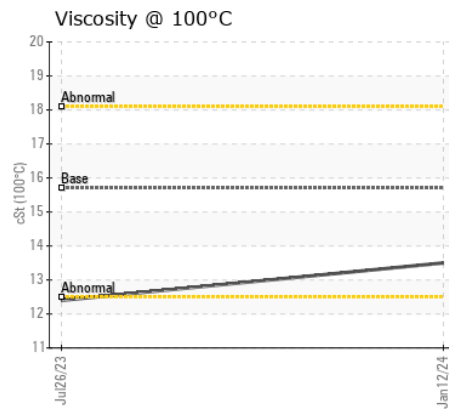
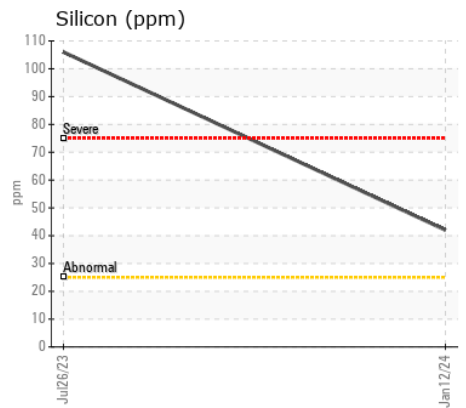
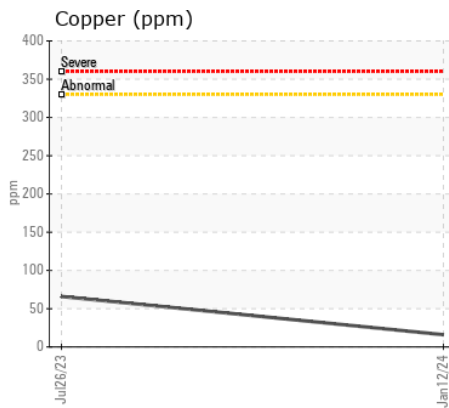
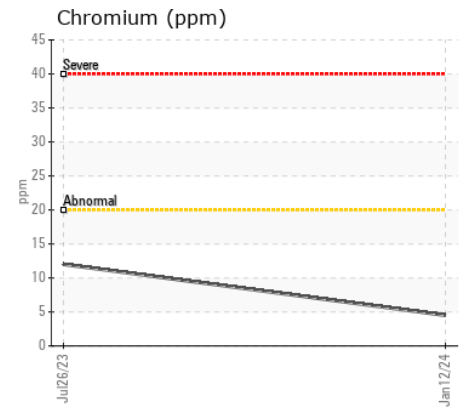
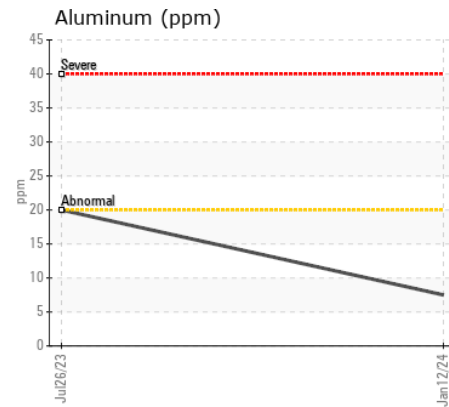
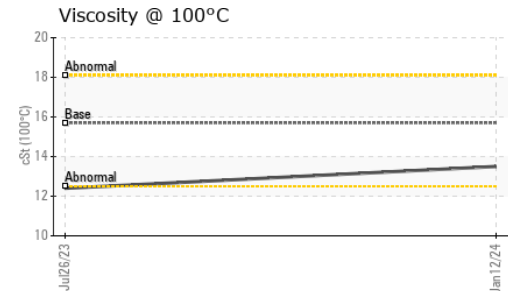
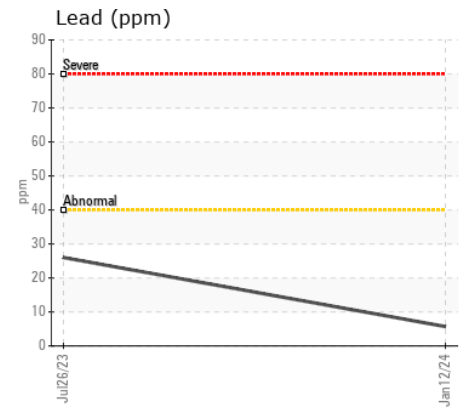
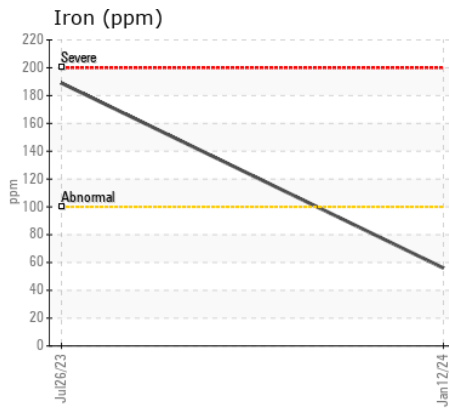
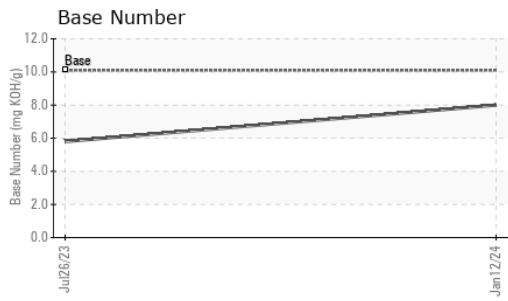
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>42</b>	■ 106	---
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	16	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	▲ 3.8	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	1.2	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	11.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.1</b>	24.3	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	---

## 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.

Sodium	ppm	ASTM D5185m		<b>6</b>	12	---
Boron	ppm	ASTM D5185m	316	<b>33</b>	21	---
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	1.2	<b>56</b>	75	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	---
Magnesium	ppm	ASTM D5185m	24	<b>494</b>	447	---
Calcium	ppm	ASTM D5185m	2292	<b>1577</b>	1576	---
Phosphorus	ppm	ASTM D5185m	1064	<b>1047</b>	876	---
Zinc	ppm	ASTM D5185m	1160	<b>1197</b>	1080	---
Sulfur	ppm	ASTM D5185m	4996	<b>3253</b>	2859	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.6</b>	18.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>8.0</b>	5.8	---
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.5</b>	▲ 12.4	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0878734 **Received** : 17 Jan 2024  
**Lab Number** : 06063366 **Diagnosed** : 18 Jan 2024  
**Unique Number** : 10834748 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: TBN )

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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