



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KENWORTH T880 5739 (S/N Y322771)**  
 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>WC0917305</b>	WC0878952	WC0878898
Sample Date		Client Info		<b>19 Jun 2024</b>	02 May 2024	06 Feb 2024
Machine Age	mls	Client Info		<b>0</b>	31752	17996
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>15</b>	37	51
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>&lt;1</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>20	<b>6</b>	16	45
Lead	ppm	ASTM D5185m	>40	<b>0</b>	2	0
Copper	ppm	ASTM D5185m	>330	<b>2</b>	4	9
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	3	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

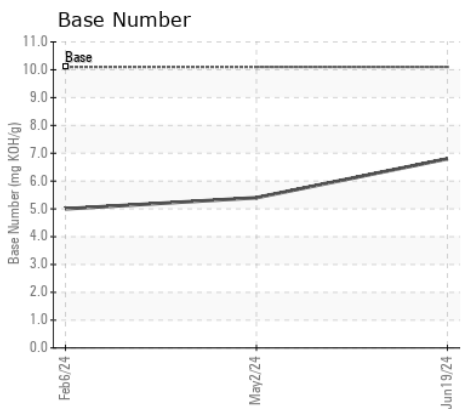
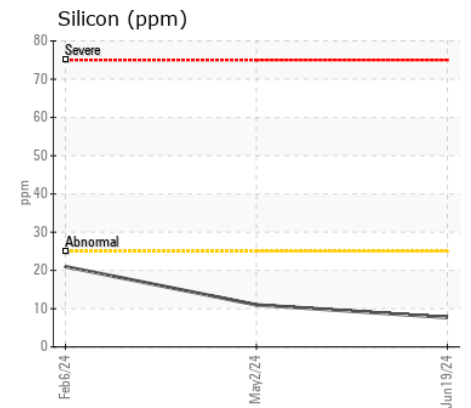
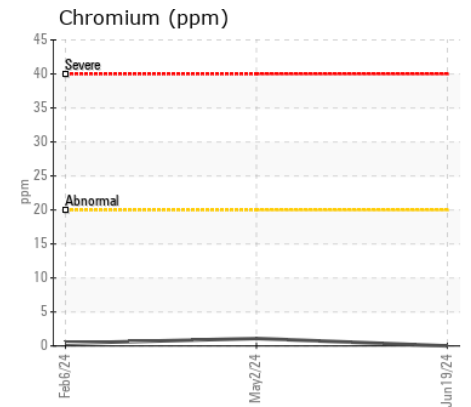
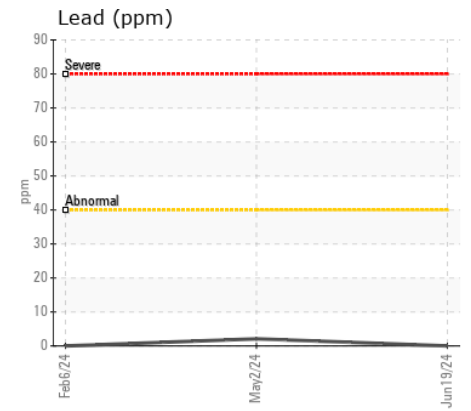
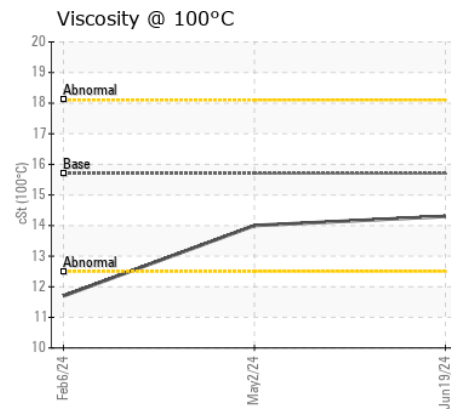
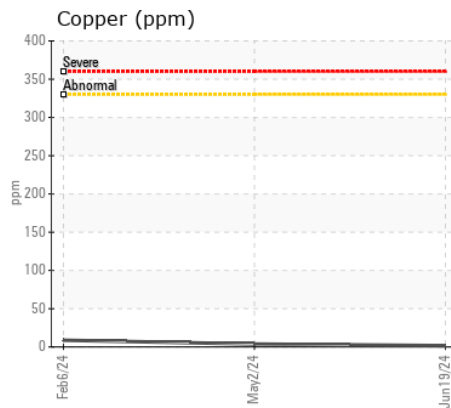
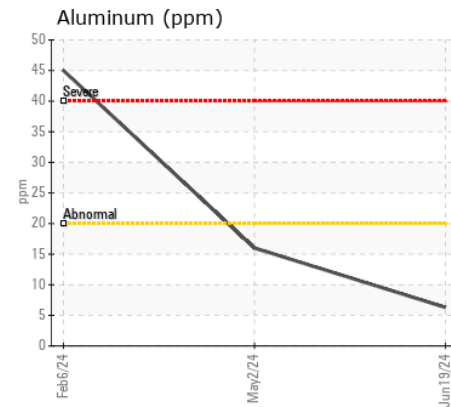
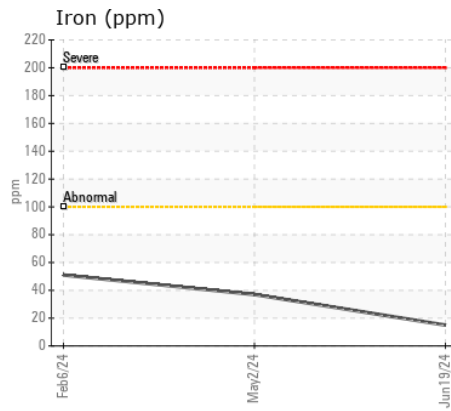
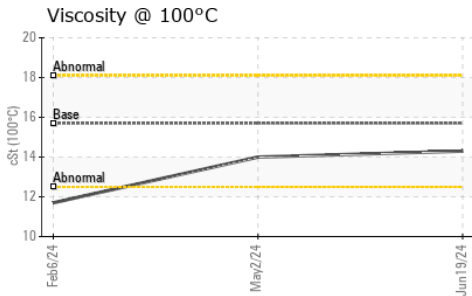
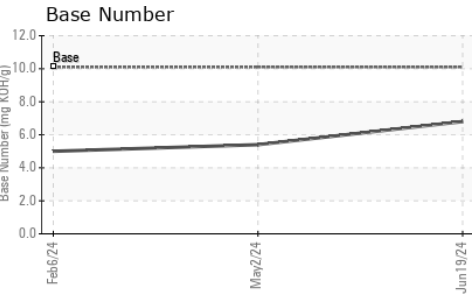
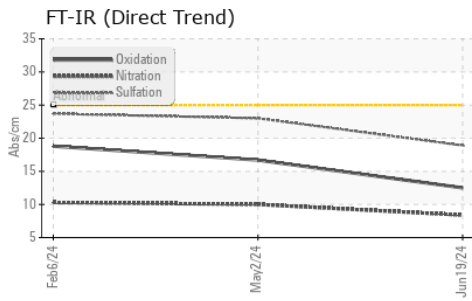
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>8</b>	11	21
Potassium	ppm	ASTM D5185m	>20	<b>17</b>	44	126
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	0.5
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.4</b>	10.0	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.9</b>	23.0	23.7
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	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>1</b>	3	4
Boron	ppm	ASTM D5185m	316	<b>12</b>	6	27
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	1.2	<b>17</b>	17	7
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Magnesium	ppm	ASTM D5185m	24	<b>197</b>	324	752
Calcium	ppm	ASTM D5185m	2292	<b>2225</b>	2170	1233
Phosphorus	ppm	ASTM D5185m	1064	<b>964</b>	1008	738
Zinc	ppm	ASTM D5185m	1160	<b>1178</b>	1189	864
Sulfur	ppm	ASTM D5185m	4996	<b>4192</b>	4287	2862
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.5</b>	16.7	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	<b>6.8</b>	5.4	5.0
Visc @ 100°C	cSt	ASTM D445	15.7	<b>14.3</b>	14.0	11.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0917305 **Received** : 25 Jun 2024  
**Lab Number** : 06220519 **Tested** : 26 Jun 2024  
**Unique Number** : 11098716 **Diagnosed** : 27 Jun 2024 - Don Baldrige  
**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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