



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**KENWORTH 109**  
 Component  
**Rear Differential**  
 Fluid  
**GEAR OIL SAE 75W90 (5 GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0844147</b>	WC0615110	WCM2318405
Sample Date		Client Info		<b>16 May 2024</b>	26 Jan 2022	05 Nov 2020
Machine Age	hrs	Client Info		<b>10380</b>	750	4695
Oil Age	hrs	Client Info		<b>750</b>	0	2402
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Not Changed</b>	N/A	Not Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	<b>52</b>	43	59
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	0	<1
Lead	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>100	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

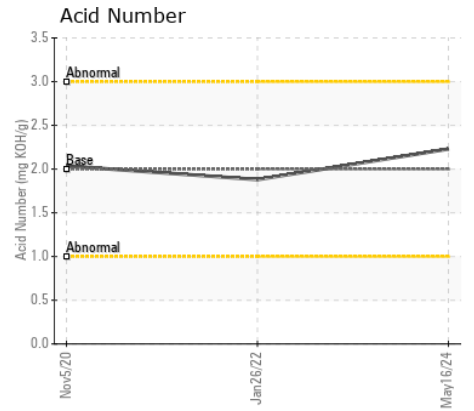
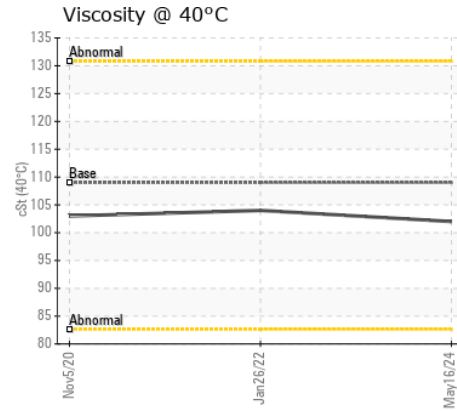
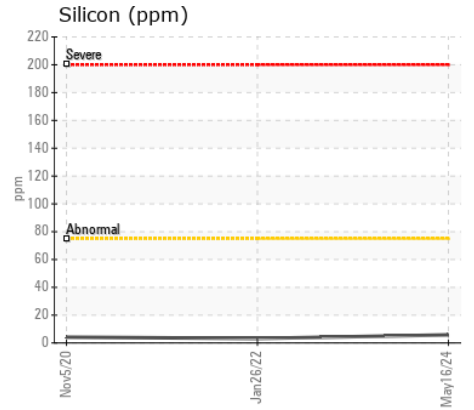
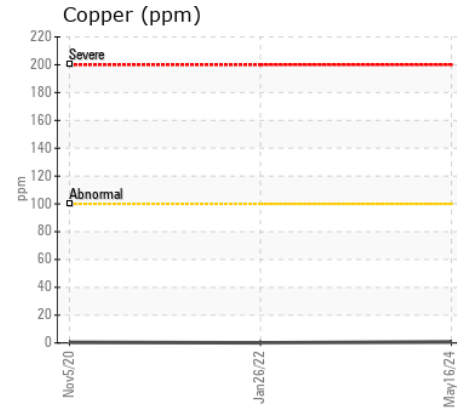
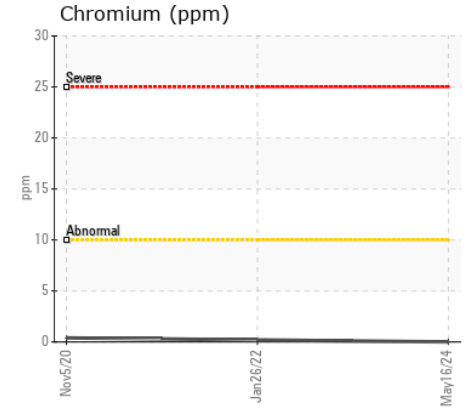
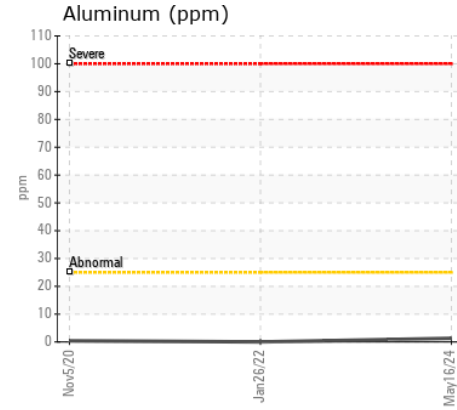
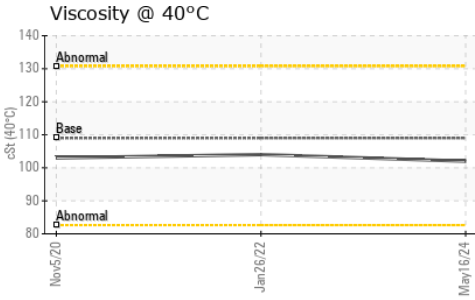
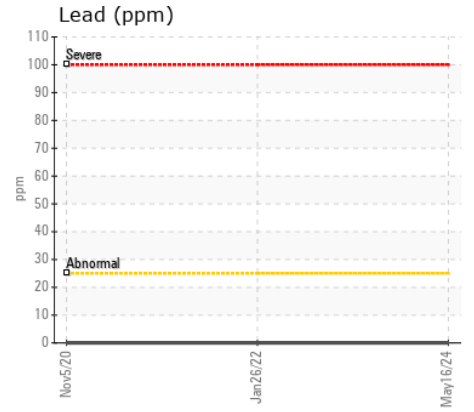
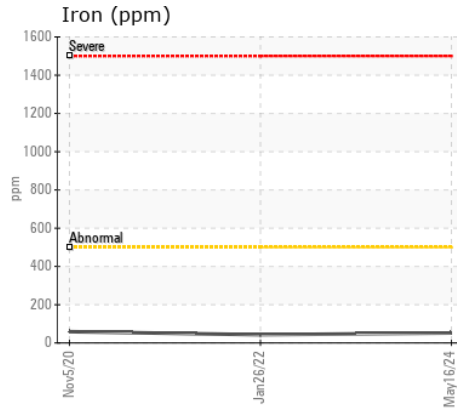
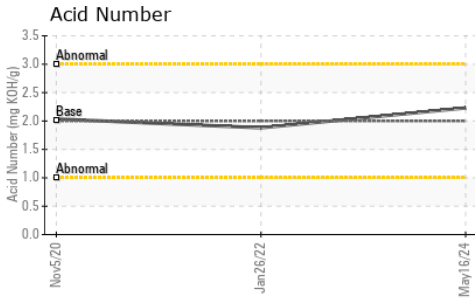
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>75	<b>6</b>	3	4
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	0	0
Water		WC Method	>.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	LIGHT	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	>.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>4</b>	1	2
Boron	ppm	ASTM D5185m	400	<b>184</b>	243	184
Barium	ppm	ASTM D5185m	200	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	12	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>2</b>	1	2
Magnesium	ppm	ASTM D5185m	12	<b>1</b>	0	<1
Calcium	ppm	ASTM D5185m	150	<b>20</b>	16	7
Phosphorus	ppm	ASTM D5185m	1650	<b>1400</b>	1411	1182
Zinc	ppm	ASTM D5185m	125	<b>11</b>	3	4
Sulfur	ppm	ASTM D5185m	22500	<b>28188</b>	20691	20094
Acid Number (AN)	mg KOH/g	ASTM D8045	2.00	<b>2.23</b>	1.88	2.036
Visc @ 40°C	cSt	ASTM D445	109	<b>102</b>	104	103



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0844147  
**Lab Number** : 06211917  
**Unique Number** : 11084781  
**Test Package** : MOB 2

**Received** : 17 Jun 2024  
**Tested** : 18 Jun 2024  
**Diagnosed** : 18 Jun 2024 - Wes Davis

**LYNDEN TRANSPORT - FIFE**  
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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)