



# OIL ANALYSIS REPORT

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

Machine Id  
**KENWORTH 3049**  
 Component  
**Diesel Engine**  
 Fluid  
**CHEVRON DELO 400 XLE 10W30 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0906918</b>	WC0906891	WC0906922
Sample Date		Client Info		<b>16 Apr 2024</b>	21 Mar 2024	08 Mar 2024
Machine Age	mls	Client Info		<b>514160</b>	503002	495783
Oil Age	mls	Client Info		<b>12340</b>	461621	34162
Filter Age	mls	Client Info		<b>12340</b>	41381	34162
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	29	20
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	2	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	14	10
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>5</b>	3	11
Tin	ppm	ASTM D5185m	>15	<b>0</b>	1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

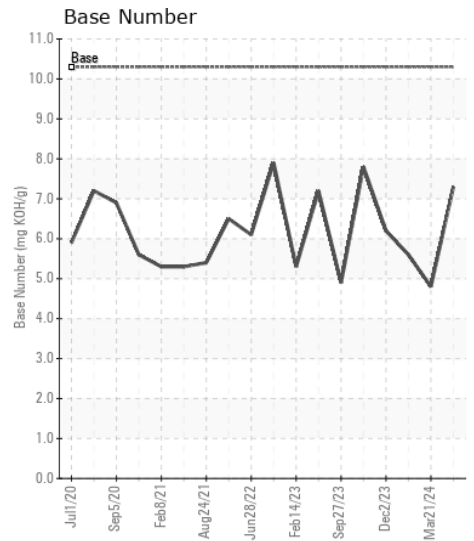
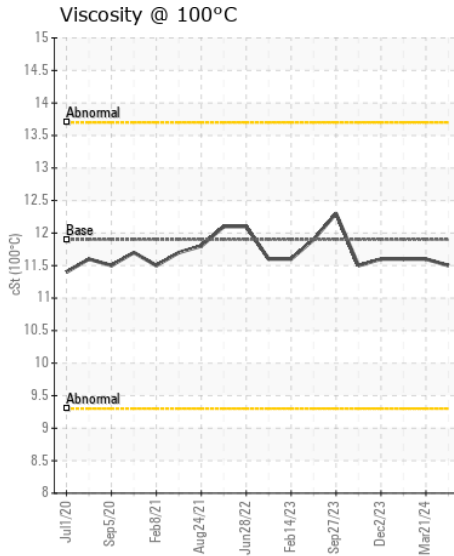
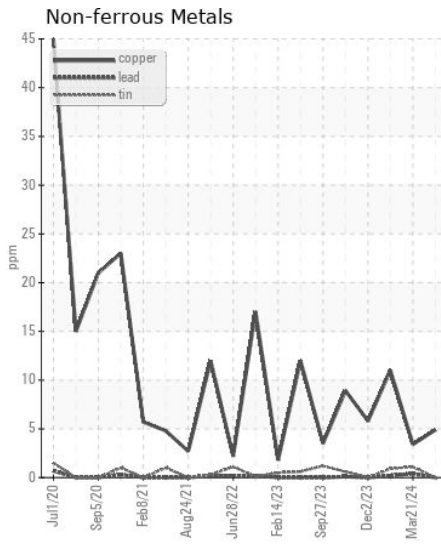
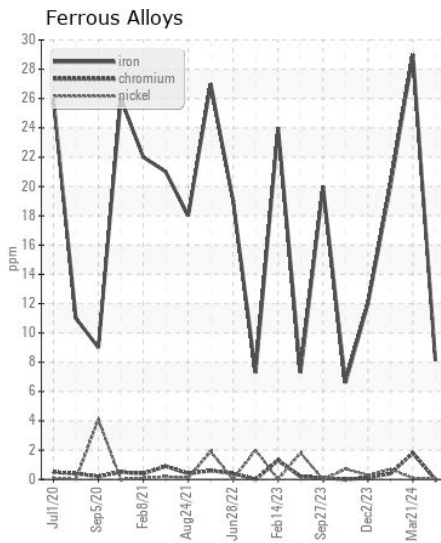
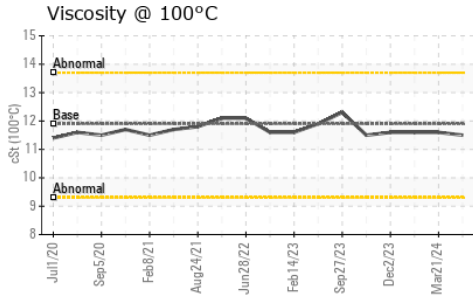
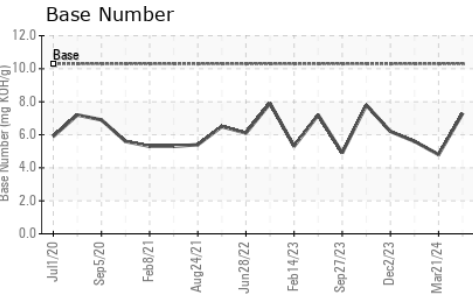
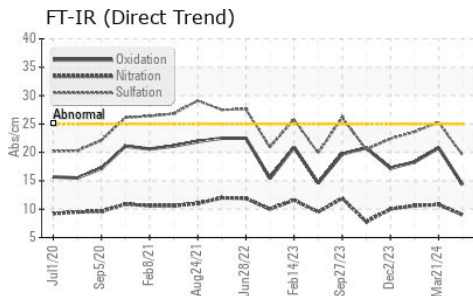
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	16	15
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	11	9
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
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>	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.0</b>	10.8	10.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	25.3	23.6
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>5</b>	23	17
Boron	ppm	ASTM D5185m		<b>47</b>	17	22
Barium	ppm	ASTM D5185m		<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m		<b>2</b>	6	5
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>792</b>	765	753
Calcium	ppm	ASTM D5185m	2900	<b>1479</b>	1441	1452
Phosphorus	ppm	ASTM D5185m	1100	<b>798</b>	758	699
Zinc	ppm	ASTM D5185m	1200	<b>885</b>	875	861
Sulfur	ppm	ASTM D5185m	4000	<b>3787</b>	3020	3128
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.3</b>	20.8	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	<b>7.3</b>	4.8	5.6
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.5</b>	11.6	11.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0906918  
**Lab Number** : 06159701  
**Unique Number** : 10995124  
**Test Package** : FLEET

**Received** : 24 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 25 Apr 2024 - Wes Davis

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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)