



# WEAR CHECK

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**2003 KENWORTH 91**

Component  
**Diesel Engine**

Fluid  
**CHEVRON DELO 400 MULTIGRADE 15W40 (10 GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>KL0013204</b>	KL0011536	KL0007241
Sample Date		Client Info		<b>26 Jan 2024</b>	31 Aug 2023	25 Apr 2023
Machine Age	mls	Client Info		<b>592914</b>	587350	590612
Oil Age	mls	Client Info		<b>12303</b>	6739	84723
Filter Age	mls	Client Info		<b>12303</b>	6739	84723
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>33</b>	21	▲ 131
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	2	4
Lead	ppm	ASTM D5185m	>40	<b>3</b>	2	32
Copper	ppm	ASTM D5185m	>330	<b>7</b>	5	14
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

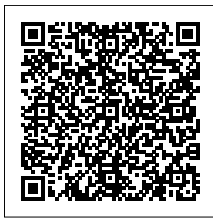
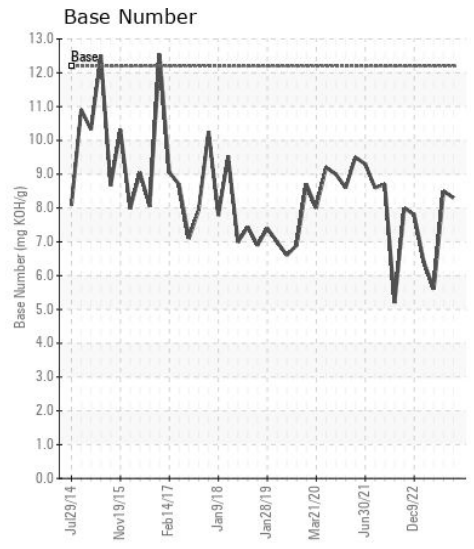
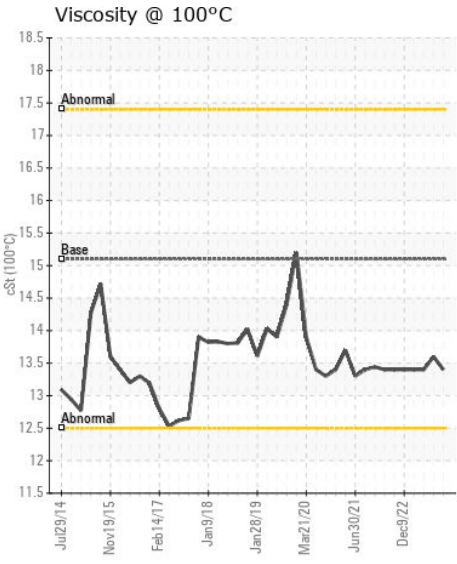
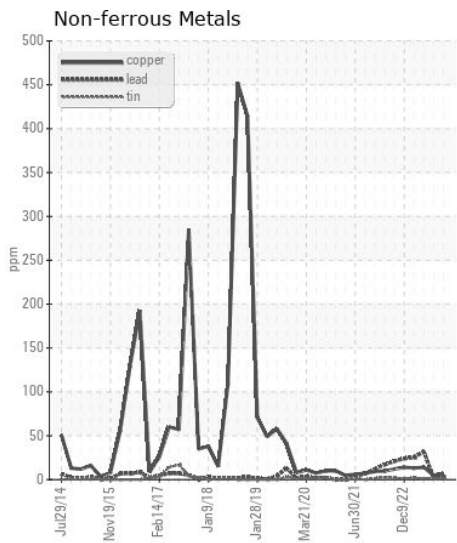
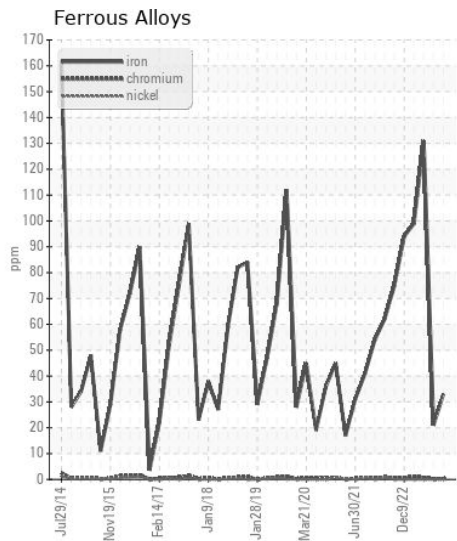
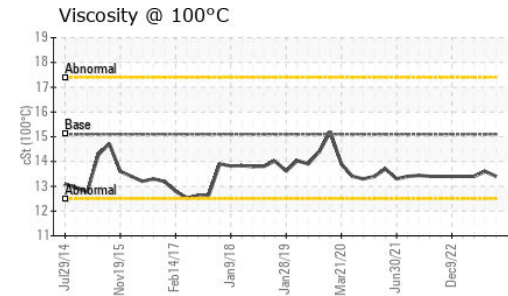
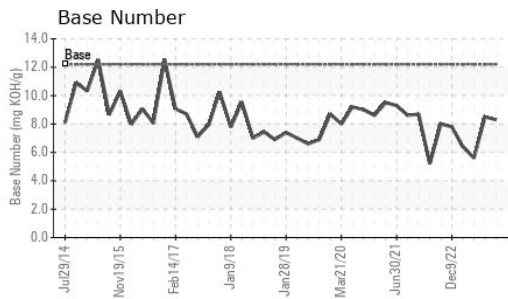
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	6	10
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	<1
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>0.6</b>	0.4	1.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.6</b>	6.4	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.5</b>	22.1	24.4
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>3</b>	2	3
Boron	ppm	ASTM D5185m		<b>217</b>	359	85
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>100</b>	118	122
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>616</b>	709	741
Calcium	ppm	ASTM D5185m		<b>1489</b>	1641	1706
Phosphorus	ppm	ASTM D5185m	1360	<b>676</b>	761	694
Zinc	ppm	ASTM D5185m	1480	<b>881</b>	896	916
Sulfur	ppm	ASTM D5185m		<b>2408</b>	3138	2806
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>16.8</b>	15.5	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	<b>8.3</b>	8.5	5.6
Visc @ 100°C	cSt	ASTM D445	15.1	<b>13.4</b>	13.6	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KL0013204 **Received** : 30 Jan 2024  
**Lab Number** : 06074522 **Diagnosed** : 31 Jan 2024  
**Unique Number** : 10856613 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

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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)