



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**KENWORTH 764**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (20 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0844204</b>	WC0778916	WC0707366
Sample Date		Client Info		<b>08 Jan 2024</b>	05 Jun 2023	16 Dec 2022
Machine Age	mls	Client Info		<b>11826</b>	10991	179550
Oil Age	mls	Client Info		<b>450</b>	450	450
Filter Age	mls	Client Info		<b>450</b>	450	450
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

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>39</b>	35	50
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	<1	1
Nickel	ppm	ASTM D5185m	>4	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	2	10
Lead	ppm	ASTM D5185m	>40	<b>2</b>	0	2
Copper	ppm	ASTM D5185m	>330	<b>2</b>	1	2
Tin	ppm	ASTM D5185m	>15	<b>1</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

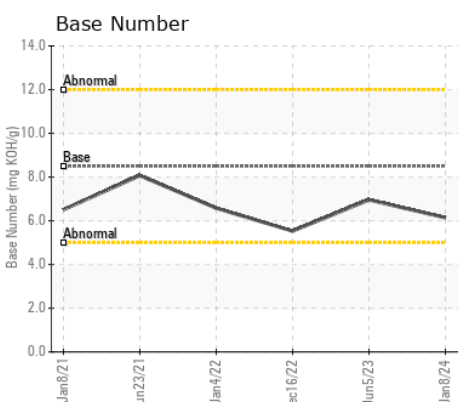
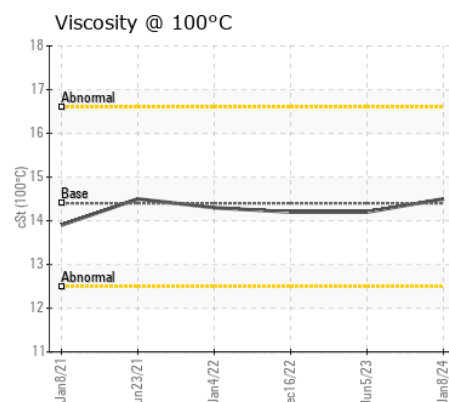
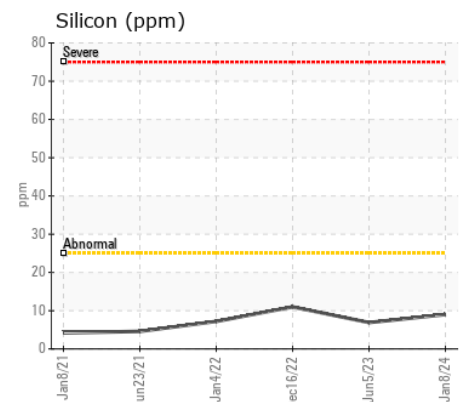
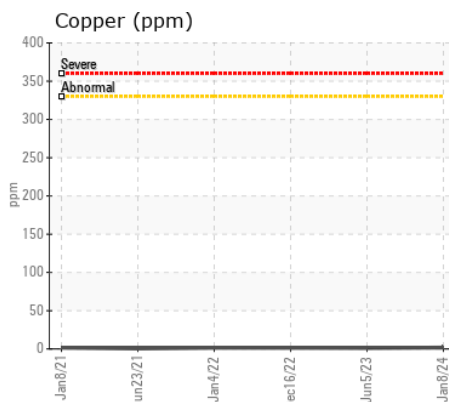
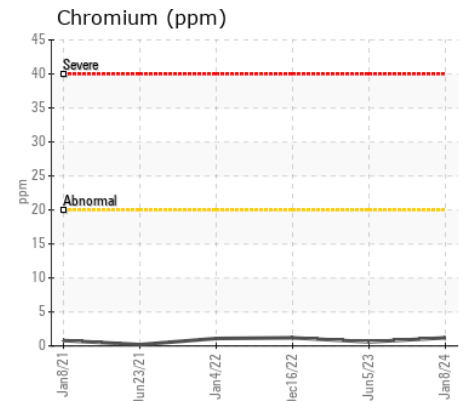
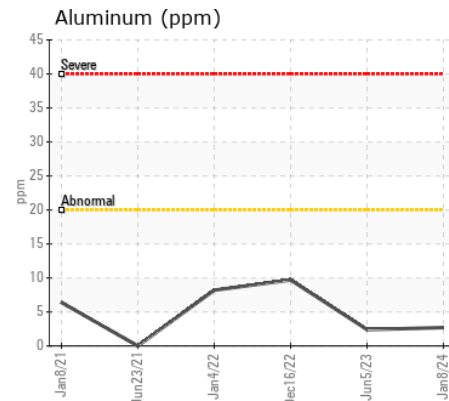
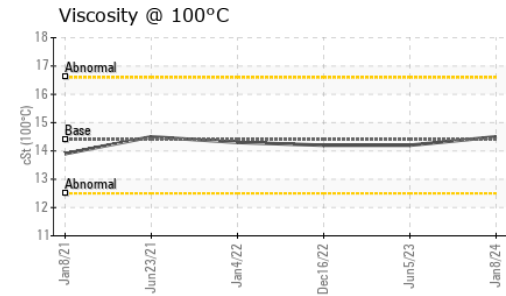
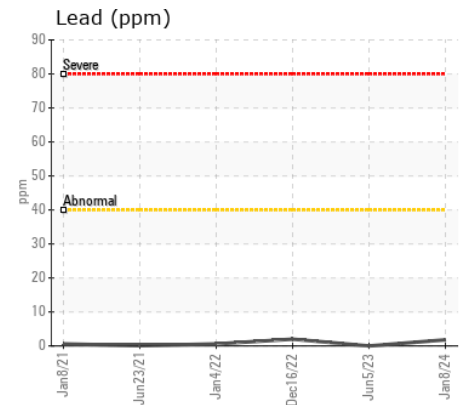
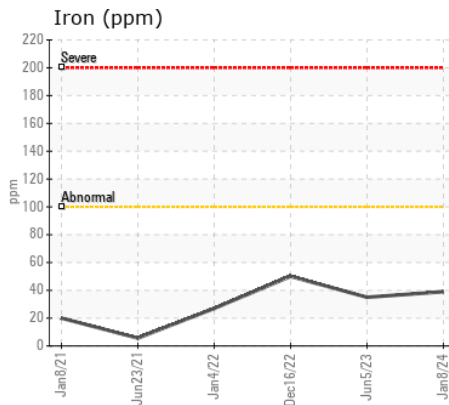
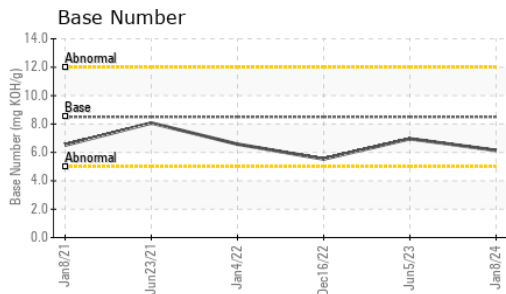
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	7	11
Potassium	ppm	ASTM D5185m	>20	<b>6</b>	5	12
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>1</b>	0.8	0.9
Nitration	Abs/cm	*ASTM D7624	>20	<b>13.6</b>	11.9	13.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>26.7</b>	24.8	27.1
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	>158	<b>&lt;1</b>	2	3
Boron	ppm	ASTM D5185m	250	<b>27</b>	38	32
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>6</b>	4	8
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>771</b>	774	698
Calcium	ppm	ASTM D5185m	3000	<b>1358</b>	1448	1356
Phosphorus	ppm	ASTM D5185m	1150	<b>691</b>	716	723
Zinc	ppm	ASTM D5185m	1350	<b>865</b>	875	848
Sulfur	ppm	ASTM D5185m	4250	<b>3101</b>	3802	3415
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>22.7</b>	20.4	21.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.14</b>	6.96	5.53
Visc @ 100°C	cSt	ASTM D445	14.4	<b>14.5</b>	14.2	14.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0844204 **Received** : 08 Jan 2024  
**Lab Number** : 06055052 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821001 **Diagnostician** : Wes Davis  
**Test Package** : MOB 2

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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)