



# OIL ANALYSIS REPORT

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

Machine Id  
**KENWORTH 4169**  
Component  
**Diesel Engine**  
Fluid  
**CITGO CITGUARD 600 15W40 (44 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0901418</b>	WC0901406	---
Sample Date		Client Info		<b>07 May 2024</b>	26 Feb 2024	---
Machine Age	mls	Client Info		<b>308114</b>	292504	---
Oil Age	mls	Client Info		<b>15610</b>	14881	---
Filter Age	mls	Client Info		<b>15610</b>	14881	---
Oil Changed		Client Info		<b>Changed</b>	Changed	---
Filter Changed		Client Info		<b>Changed</b>	Changed	---
Sample Status				<b>NORMAL</b>	NORMAL	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>13</b>	18	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	---
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	---
Titanium	ppm	ASTM D5185m		<b>1</b>	2	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>3</b>	4	---
Lead	ppm	ASTM D5185m	>40	<b>6</b>	4	---
Copper	ppm	ASTM D5185m	>330	<b>0</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	1	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

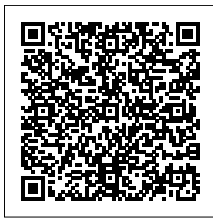
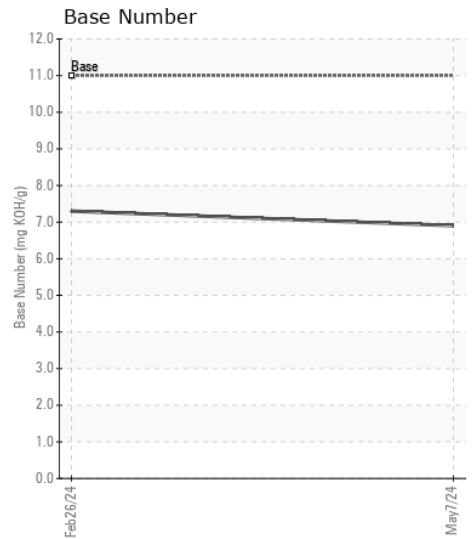
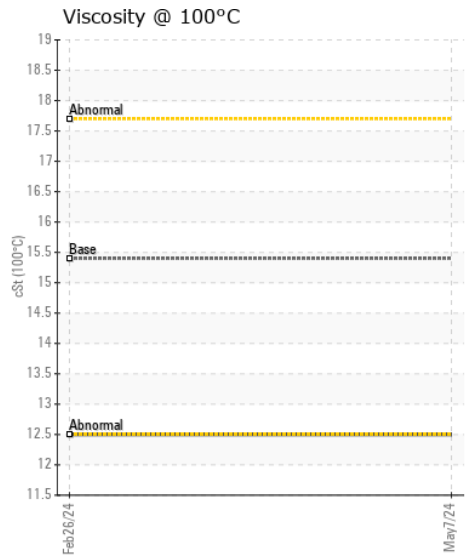
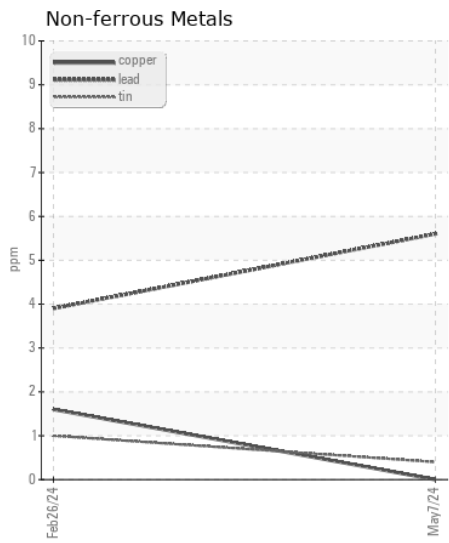
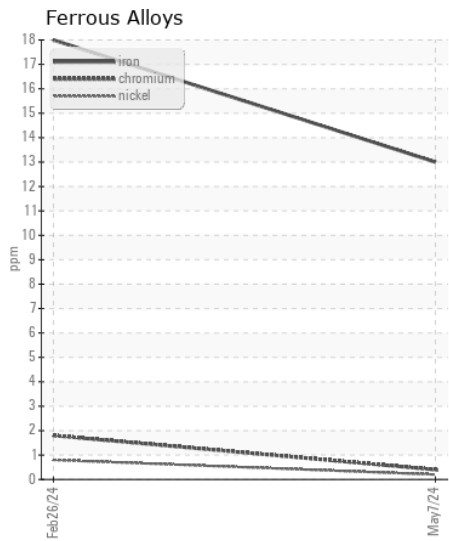
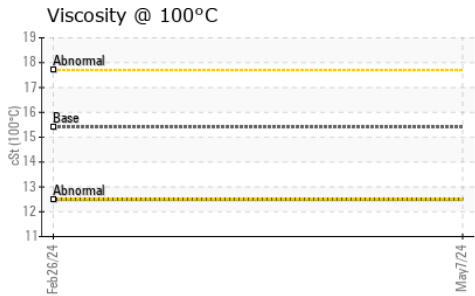
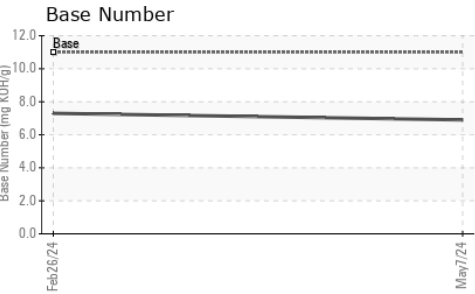
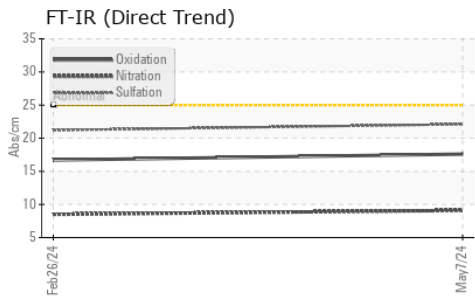
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	10	---
Potassium	ppm	ASTM D5185m	>20	<b>3</b>	3	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Water		WC Method	>0.2	<b>NEG</b>	NEG	---
Glycol		WC Method		<b>NEG</b>	NEG	---
Soot %	%	*ASTM D7844	>3	<b>0.4</b>	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.1</b>	8.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	21.2	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	---
Boron	ppm	ASTM D5185m	13	<b>9</b>	12	---
Barium	ppm	ASTM D5185m	0	<b>0</b>	2	---
Molybdenum	ppm	ASTM D5185m	57	<b>82</b>	110	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	825	<b>503</b>	633	---
Calcium	ppm	ASTM D5185m	1100	<b>1956</b>	2297	---
Phosphorus	ppm	ASTM D5185m	933	<b>1147</b>	1343	---
Zinc	ppm	ASTM D5185m	1089	<b>1361</b>	1742	---
Sulfur	ppm	ASTM D5185m	2769	<b>3812</b>	5036	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.6</b>	16.7	---
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	<b>6.9</b>	7.3	---
Visc @ 100°C	cSt	ASTM D445	15.4	<b>12.5</b>	12.5	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0901418 **Received** : 10 May 2024  
**Lab Number** : 06175155 **Tested** : 11 May 2024  
**Unique Number** : 11021208 **Diagnosed** : 11 May 2024 - Wes Davis  
**Test Package** : FLEET

**OMNISOURCE SE**  
 1426 WEST MAIN SHOP  
 KERNERSVILLE, NC  
 US 27284  
 Contact: JEFF HENDRIX

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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F: