



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**L4800**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0847970</b>	WC0759973	---
Sample Date		Client Info		<b>19 Oct 2023</b>	06 Jan 2023	---
Machine Age	hrs	Client Info		<b>3539</b>	2383	---
Oil Age	hrs	Client Info		<b>1156</b>	0	---
Filter Age	hrs	Client Info		<b>1156</b>	0	---
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>30</b>	34	---
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185m	>20	<b>88</b>	30	---
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	---
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	---
Tin	ppm	ASTM D5185m	>15	<b>2</b>	<1	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	---

## CONTAMINATION

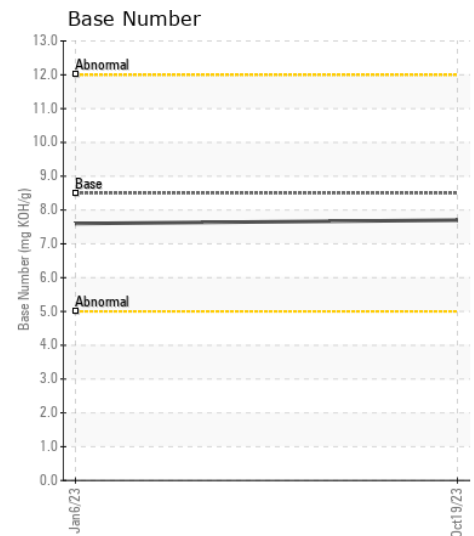
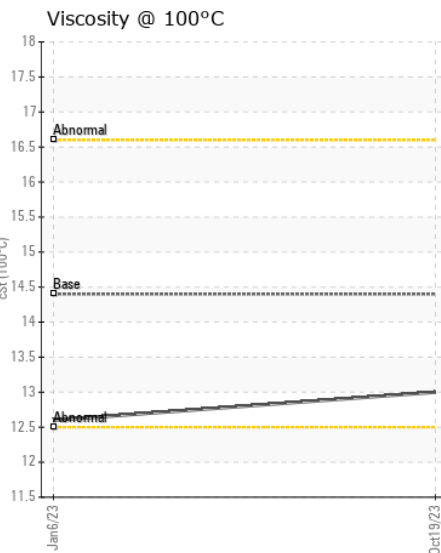
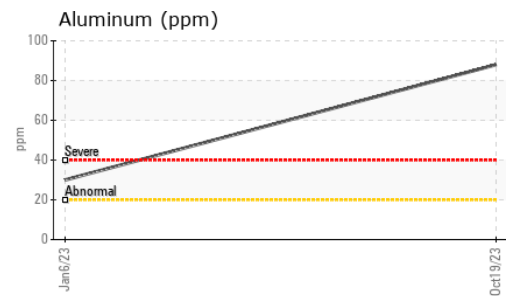
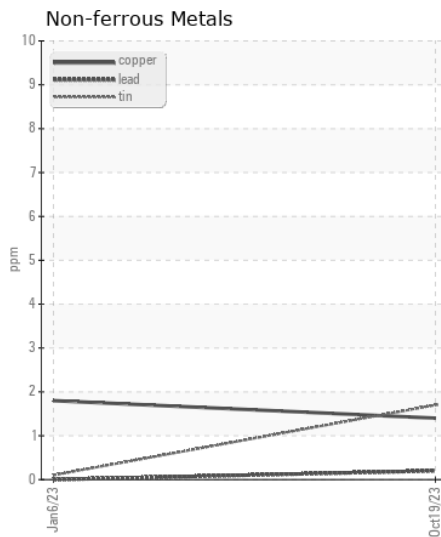
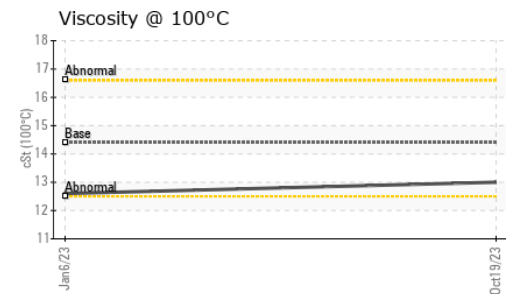
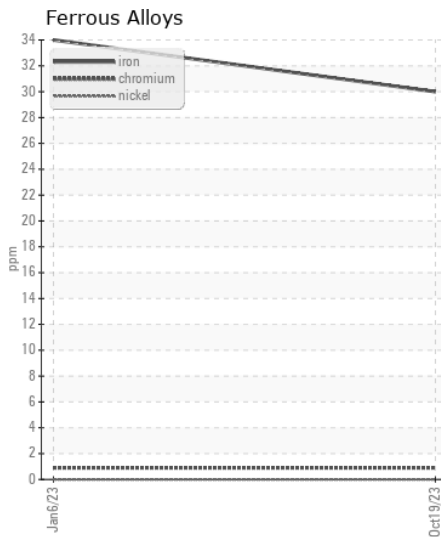
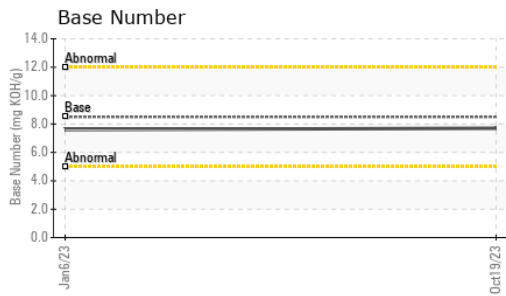
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	6	---
Potassium	ppm	ASTM D5185m	>20	<b>207</b>	66	---
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>0.7</b>	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.0</b>	9.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.9</b>	20.8	---
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	>158	<b>4</b>	2	---
Boron	ppm	ASTM D5185m	250	<b>7</b>	3	---
Barium	ppm	ASTM D5185m	10	<b>0</b>	<1	---
Molybdenum	ppm	ASTM D5185m	100	<b>63</b>	58	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m	450	<b>889</b>	796	---
Calcium	ppm	ASTM D5185m	3000	<b>1118</b>	1143	---
Phosphorus	ppm	ASTM D5185m	1150	<b>940</b>	937	---
Zinc	ppm	ASTM D5185m	1350	<b>1198</b>	1148	---
Sulfur	ppm	ASTM D5185m	4250	<b>2879</b>	3040	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	18.0	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.7</b>	7.6	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.0</b>	12.6	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0847970 **Received** : 16 Jan 2024  
**Lab Number** : 06061848 **Diagnosed** : 17 Jan 2024  
**Unique Number** : 10833230 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

**Apple Valley Waste - Chambersburg Location**  
 5436 Sunset Pike  
 Chambersburg, PA  
 US 17202  
 Contact: Service Manager

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: