



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**2171**  
Component  
**Diesel Engine**  
Fluid  
**VALVOLINE 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>IL0034240</b>	---	---
Sample Date		Client Info		<b>28 Dec 2023</b>	---	---
Machine Age	mls	Client Info		<b>66126</b>	---	---
Oil Age	mls	Client Info		<b>0</b>	---	---
Filter Age	mls	Client Info		<b>0</b>	---	---
Oil Changed		Client Info		<b>Not Chngd</b>	---	---
Filter Changed		Client Info		<b>Not Chngd</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	<b>59</b>	---	---
Chromium	ppm	ASTM D5185m	>20	<b>4</b>	---	---
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	<b>37</b>	---	---
Lead	ppm	ASTM D5185m	>40	<b>8</b>	---	---
Copper	ppm	ASTM D5185m	>330	<b>7</b>	---	---
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---

### CONTAMINATION

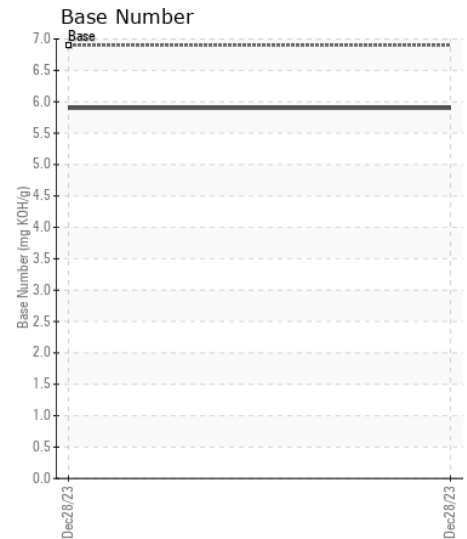
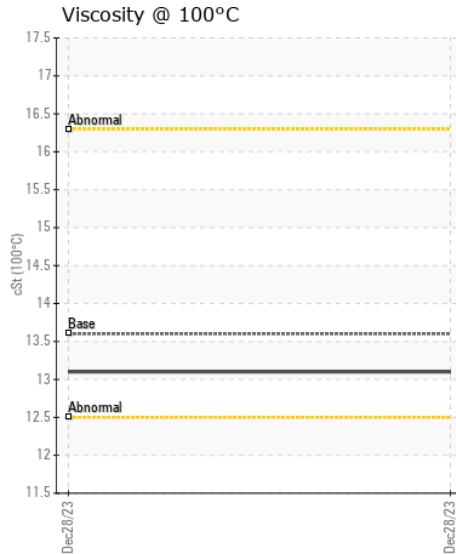
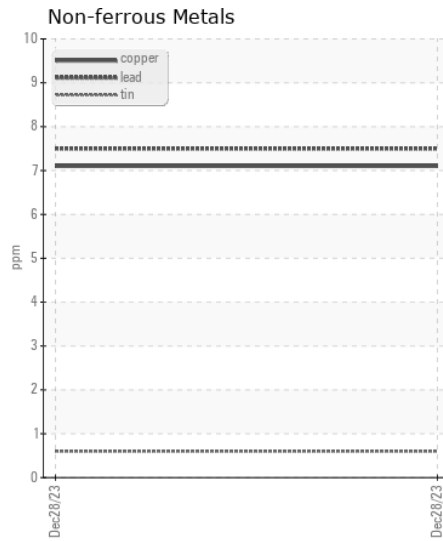
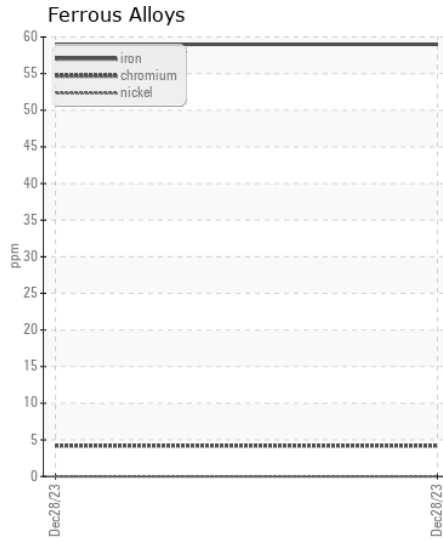
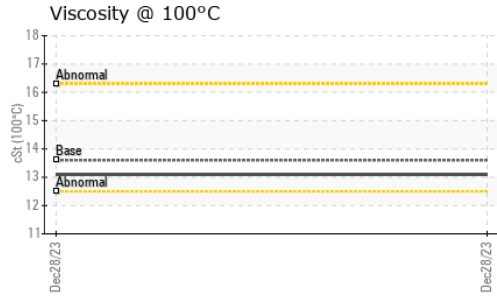
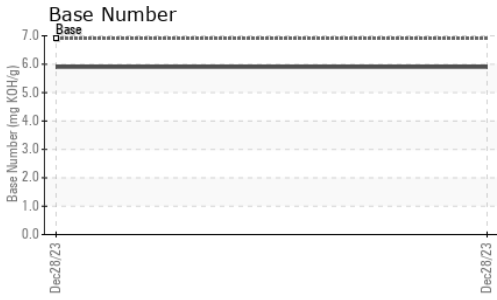
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>114</b>	---	---
Fuel		WC Method	>5	<b>&lt;1.0</b>	---	---
Water		WC Method	>0.2	<b>NEG</b>	---	---
Glycol		WC Method		<b>NEG</b>	---	---
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	---	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>23.2</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Appearance	scalar	*Visual	NORML	<b>NORML</b>	---	---
Odor	scalar	*Visual	NORML	<b>NORML</b>	---	---
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	---	---

### 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>2</b>	---	---
Boron	ppm	ASTM D5185m	39	<b>40</b>	---	---
Barium	ppm	ASTM D5185m	1	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	49	<b>65</b>	---	---
Manganese	ppm	ASTM D5185m	1	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	616	<b>748</b>	---	---
Calcium	ppm	ASTM D5185m	1554	<b>1242</b>	---	---
Phosphorus	ppm	ASTM D5185m	899	<b>792</b>	---	---
Zinc	ppm	ASTM D5185m	1069	<b>1030</b>	---	---
Sulfur	ppm	ASTM D5185m	2624	<b>2506</b>	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.3</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	<b>5.9</b>	---	---
Visc @ 100°C	cSt	ASTM D445	13.6	<b>13.1</b>	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : IL0034240 **Received** : 10 Jan 2024  
**Lab Number** : 06057291 **Diagnosed** : 11 Jan 2024  
**Unique Number** : 10823240 **Diagnostician** : Wes Davis  
**Test Package** : FLEET

**TAMPA IDEALEASE**  
 5951 ORIENT ROAD  
 TAMPA, FL  
 US 33610-9565  
 Contact: Russ Cook  
 russcook@idealease.com  
 T: (813)626-9285  
 F: (844)270-1356

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)