



# PROBLEM SUMMARY

Sample Rating Trend

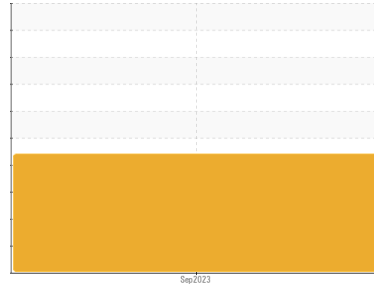
FUEL



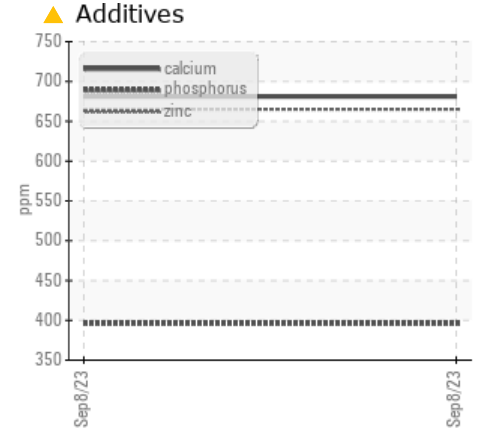
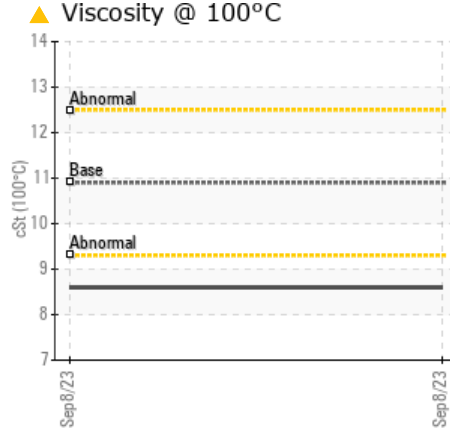
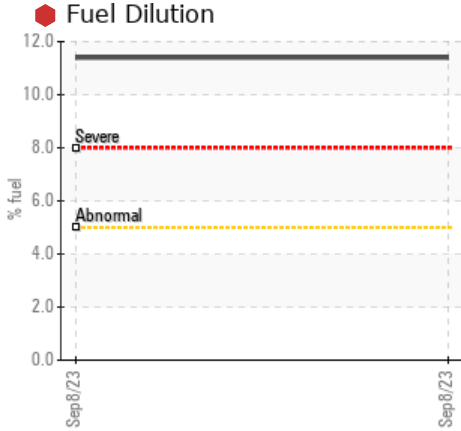
Machine Id  
**T-731**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 5W30 (--- GAL)**



## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	---	---
Boron	ppm	ASTM D5185m	250	▲ 24	---	---
Calcium	ppm	ASTM D5185m	3000	▲ 681	---	---
Phosphorus	ppm	ASTM D5185m	1150	▲ 396	---	---
Zinc	ppm	ASTM D5185m	1350	▲ 665	---	---
Sulfur	ppm	ASTM D5185m	4250	▲ 1890	---	---
Fuel	%	ASTM D3524	>5	● 11.4	---	---
Visc @ 100°C	cSt	ASTM D445	10.9	▲ 8.6	---	---

Customer Id: EAICLA  
 Sample No.: WC0865155  
 Lab Number: 05979317  
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

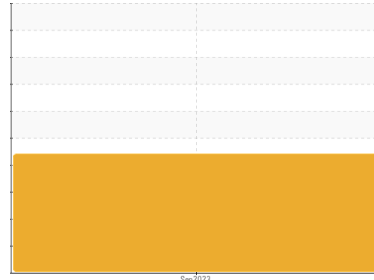
Action	Status	Date	Done By	Description
Resample	---	---	?	We recommend an early resample to monitor this condition.
Information Required	---	---	?	Please specify the brand, type, and viscosity of the oil on your next sample. Please specify the component make and model with your next sample.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**T-731**

Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 5W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

### Wear

All component wear rates are normal.

### Contamination

There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0865155</b>	---	---
Sample Date	Client Info		<b>08 Sep 2023</b>	---	---
Machine Age	mls	Client Info	<b>154128</b>	---	---
Oil Age	mls	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>SEVERE</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>12</b>	---	---
Chromium	ppm	ASTM D5185m >20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >20	<b>3</b>	---	---
Lead	ppm	ASTM D5185m >40	<b>0</b>	---	---
Copper	ppm	ASTM D5185m >330	<b>10</b>	---	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	<b>▲ 24</b>	---	---
Barium	ppm	ASTM D5185m 10	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m 100	<b>78</b>	---	---
Manganese	ppm	ASTM D5185m	<b>2</b>	---	---
Magnesium	ppm	ASTM D5185m 450	<b>567</b>	---	---
Calcium	ppm	ASTM D5185m 3000	<b>▲ 681</b>	---	---
Phosphorus	ppm	ASTM D5185m 1150	<b>▲ 396</b>	---	---
Zinc	ppm	ASTM D5185m 1350	<b>▲ 665</b>	---	---
Sulfur	ppm	ASTM D5185m 4250	<b>▲ 1890</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>13</b>	---	---
Sodium	ppm	ASTM D5185m	<b>2</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>1</b>	---	---
Fuel	%	ASTM D3524 >5	<b>◆ 11.4</b>	---	---

## INFRA-RED

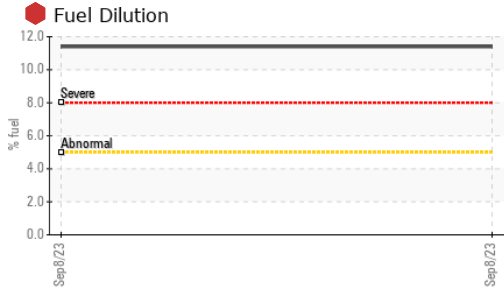
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	---	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>14.7</b>	---	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>24.8</b>	---	---

## FLUID DEGRADATION

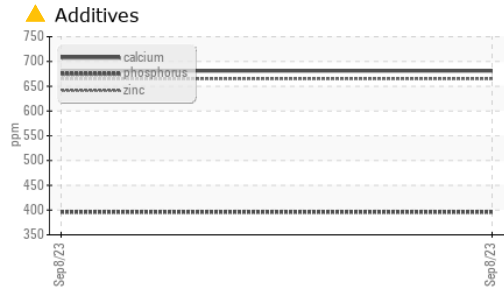
	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>23.8</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	<b>3.9</b>	---	---



# OIL ANALYSIS REPORT

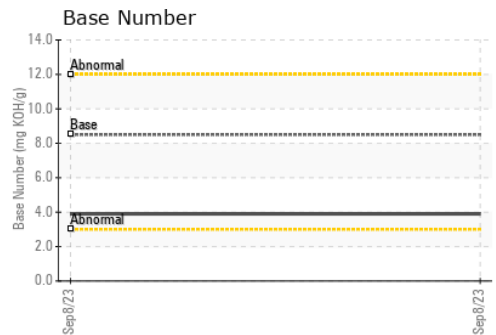
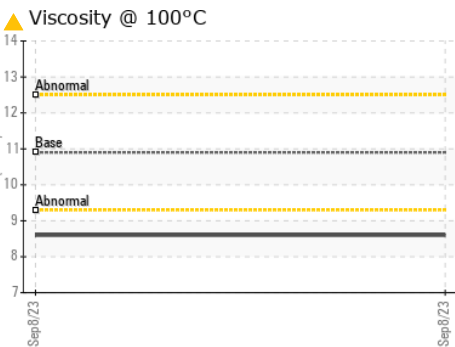
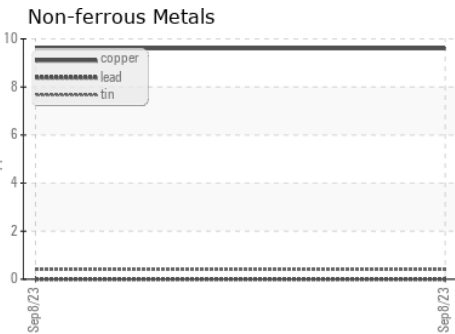
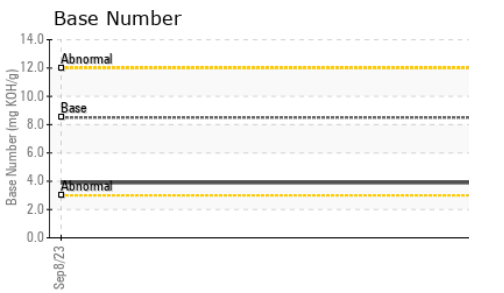
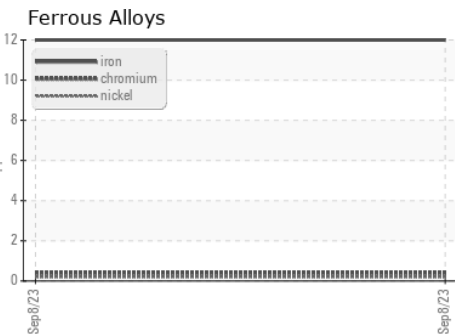
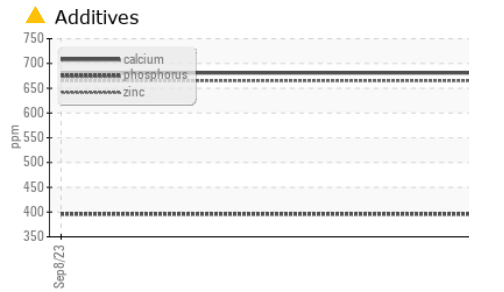


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---



FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	10.9	▲ 8.6	---	---

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0865155 **Received** : 16 Oct 2023  
**Lab Number** : 05979317 **Diagnosed** : 17 Oct 2023  
**Unique Number** : 10696612 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

EAI EQUIPMENT A DIV OF PLEASANT CONSTRUCTION INC  
 24024 FREDERICK ROAD  
 CLARKSBURG, MD  
 US 20871  
 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)

T:  
F: