



# PROBLEM SUMMARY

Sample Rating Trend

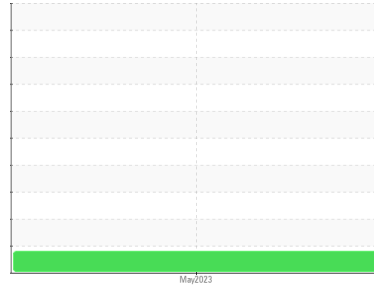
WEAR



Machine Id  
**DT-102**

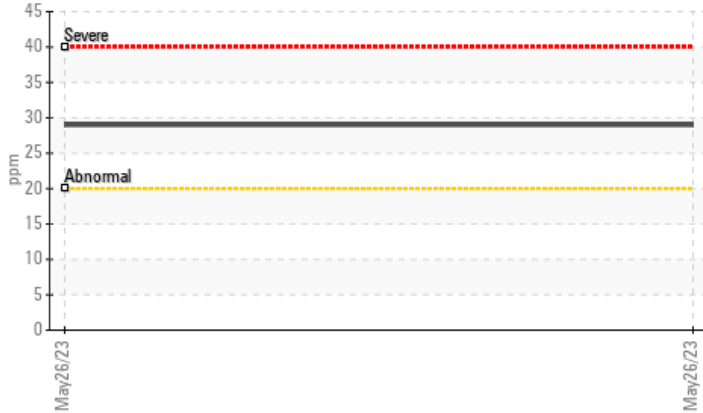
Component  
**Diesel Engine**

Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**



## COMPONENT CONDITION SUMMARY

▲ Aluminum (ppm)



## RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Aluminum	ppm	ASTM D5185m	>20	▲ 29	---	---

Customer Id: ECPROA  
Sample No.: WC0705198  
Lab Number: 05900982  
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Don Baldrige +1  
[don.b505@comcast.net](mailto:don.b505@comcast.net)

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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Machine Id

**DT-102**

Component

**Diesel Engine**

Fluid

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## DIAGNOSIS

### ▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### ▲ Wear

The aluminum level is abnormal. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### 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.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0705198</b>	---	---
Sample Date	Client Info	<b>26 May 2023</b>	---	---
Machine Age	hrs	Client Info	<b>1048</b>	---
Oil Age	hrs	Client Info	<b>500</b>	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	---	---
Glycol	WC Method	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>92</b>	---	---
Chromium	ppm ASTM D5185m >20	<b>2</b>	---	---
Nickel	ppm ASTM D5185m >4	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm ASTM D5185m >3	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >20	<b>▲ 29</b>	---	---
Lead	ppm ASTM D5185m >40	<b>1</b>	---	---
Copper	ppm ASTM D5185m >330	<b>102</b>	---	---
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 250	<b>33</b>	---	---
Barium	ppm ASTM D5185m 10	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m 100	<b>63</b>	---	---
Manganese	ppm ASTM D5185m	<b>2</b>	---	---
Magnesium	ppm ASTM D5185m 450	<b>435</b>	---	---
Calcium	ppm ASTM D5185m 3000	<b>2057</b>	---	---
Phosphorus	ppm ASTM D5185m 1150	<b>990</b>	---	---
Zinc	ppm ASTM D5185m 1350	<b>1317</b>	---	---
Sulfur	ppm ASTM D5185m 4250	<b>3750</b>	---	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>6</b>	---	---
Sodium	ppm ASTM D5185m >158	<b>4</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>3</b>	---	---

## INFRA-RED

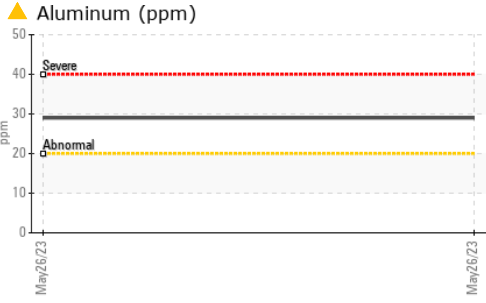
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.6</b>	---	---
Nitration	Abs/cm *ASTM D7624 >20	<b>10.9</b>	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>22.2</b>	---	---

## FLUID DEGRADATION

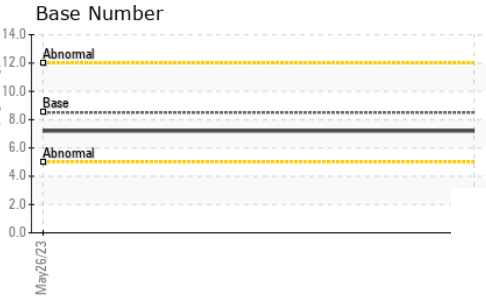
method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>19.4</b>	---	---
Base Number (BN)	mg KOH/g ASTM D2896 8.5	<b>7.2</b>	---	---



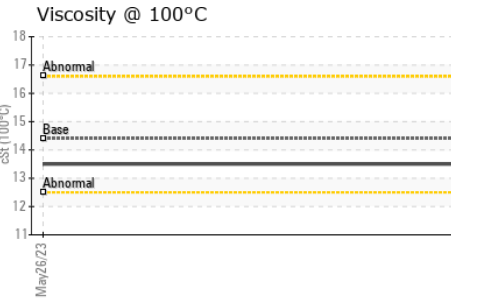
# OIL ANALYSIS REPORT



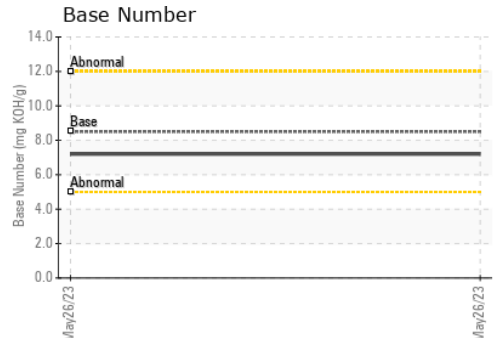
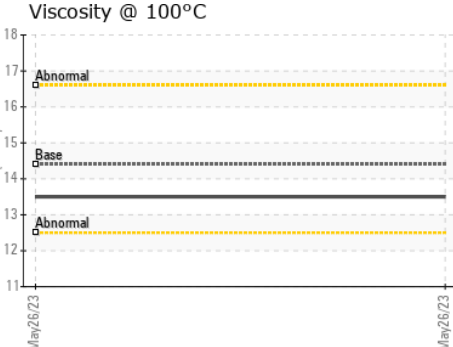
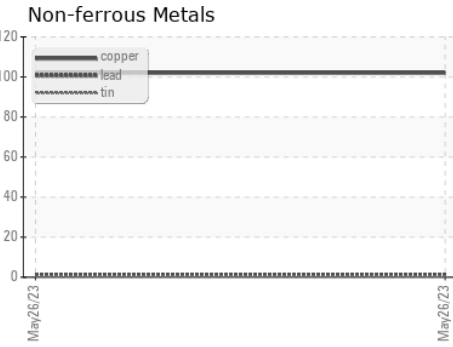
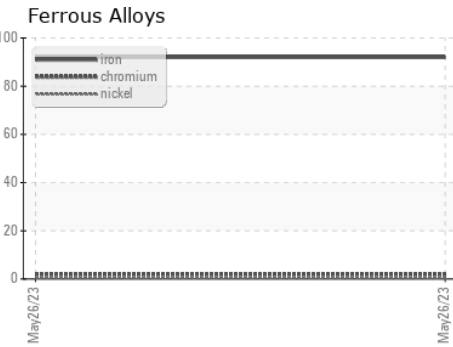
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	14.4	13.5	---



## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0705198 Received : 18 Jul 2023  
 Lab Number : 05900982 Diagnosed : 19 Jul 2023  
 Unique Number : 10562338 Diagnostician : Don Baldrige  
 Test Package : FLEET ( Additional Tests: PrtCount )

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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