



# PROBLEM SUMMARY

Sample Rating Trend

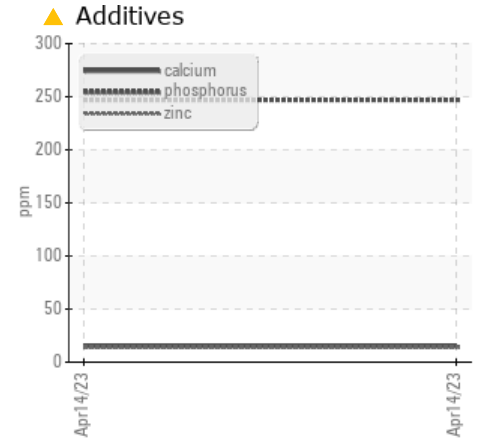
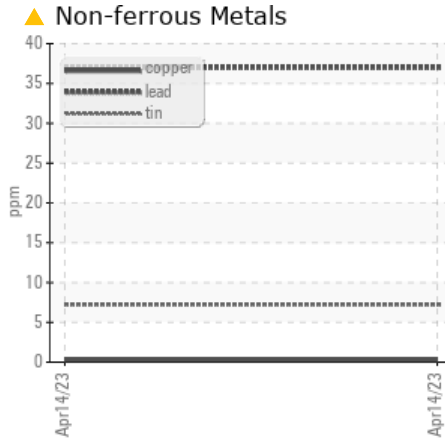
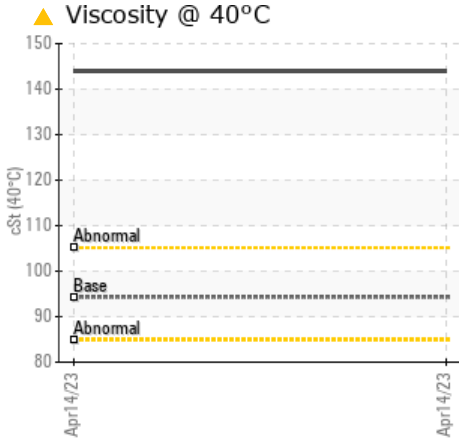


**WEAR**



Area  
**Propulsion Shaft Bearings**  
 Machine Id  
**Propulsion Shaft Bearings Port**  
 Component  
**Rear Left Bearing**  
 Fluid  
**PETRO CANADA TURBOFLO R&O 100 (--- GAL)**

## COMPONENT CONDITION SUMMARY



## RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA TURBOFLO R&O 100, however, a fluid match indicates that this fluid is ISO 150 Synthetic (PAO) Gear Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## PROBLEMATIC TEST RESULTS

Sample Status				<b>ABNORMAL</b>	---	---
Lead	ppm	ASTM D5185(m)	>25	<b>▲ 37</b>	---	---
Boron	ppm	ASTM D5185(m)		<b>▲ 39</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	4	<b>▲ 247</b>	---	---
Sulfur	ppm	ASTM D5185(m)		<b>▲ 3537</b>	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	94.3	<b>▲ 144</b>	---	---

Customer Id: VMASSEY  
 Sample No.: WC0810870  
 Lab Number: 02552963  
 Test Package: MAR 1



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Kevin Marson +1 (289)291-4644 x4644  
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To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Alert	MISSED	Aug 16 2023	?	The fluid was specified as PETRO CANADA TURBOFLO R&O 100, however, a fluid match indicates that this fluid is ISO 150 Synthetic (PAO) Gear Oil. Please confirm the oil type and grade on your next sample.
Information Required	MISSED	Aug 16 2023	?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.
Check Fluid Source	MISSED	Aug 16 2023	?	Confirm the source of the lubricant being utilized for top-up/fill.

## HISTORICAL DIAGNOSIS



# OIL ANALYSIS REPORT

Sample Rating Trend

**WEAR**



Area  
Machine Id  
Component  
Fluid

**Propulsion Shaft Bearings**  
**Propulsion Shaft Bearings Port**  
**Rear Left Bearing**  
**PETRO CANADA TURBOFLO R&O 100 (--- GAL)**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA TURBOFLO R&O 100, however, a fluid match indicates that this fluid is ISO 150 Synthetic (PAO) Gear Oil. Please confirm the oil type and grade on your next sample. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

Lead ppm levels are noted. All other component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>WC0810870</b>	---	---
Sample Date	Client Info	<b>14 Apr 2023</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>ABNORMAL</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>20	<b>2</b>	---	---
Chromium ppm ASTM D5185(m)	>2	<b>0</b>	---	---
Nickel ppm ASTM D5185(m)	>2	<b>0</b>	---	---
Titanium ppm ASTM D5185(m)		<b>0</b>	---	---
Silver ppm ASTM D5185(m)		<b>0</b>	---	---
Aluminum ppm ASTM D5185(m)	>5	<b>&lt;1</b>	---	---
Lead ppm ASTM D5185(m)	>25	<b>▲ 37</b>	---	---
Copper ppm ASTM D5185(m)	>5	<b>&lt;1</b>	---	---
Tin ppm ASTM D5185(m)	>15	<b>7</b>	---	---
Antimony ppm ASTM D5185(m)		<b>6</b>	---	---
Vanadium ppm ASTM D5185(m)		<b>0</b>	---	---
Beryllium ppm ASTM D5185(m)		<b>0</b>	---	---
Cadmium ppm ASTM D5185(m)		<b>1</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185(m)		<b>▲ 39</b>	---	---
Barium ppm ASTM D5185(m)		<b>0</b>	---	---
Molybdenum ppm ASTM D5185(m)		<b>0</b>	---	---
Manganese ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Magnesium ppm ASTM D5185(m)		<b>&lt;1</b>	---	---
Calcium ppm ASTM D5185(m)	0	<b>15</b>	---	---
Phosphorus ppm ASTM D5185(m)	4	<b>▲ 247</b>	---	---
Zinc ppm ASTM D5185(m)	0	<b>14</b>	---	---
Sulfur ppm ASTM D5185(m)		<b>▲ 3537</b>	---	---
Lithium ppm ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

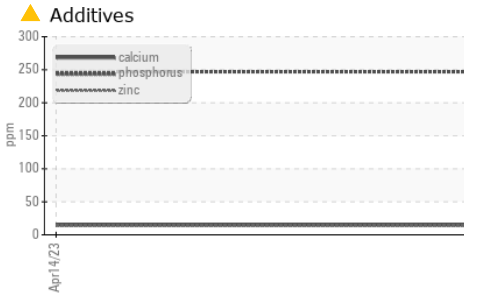
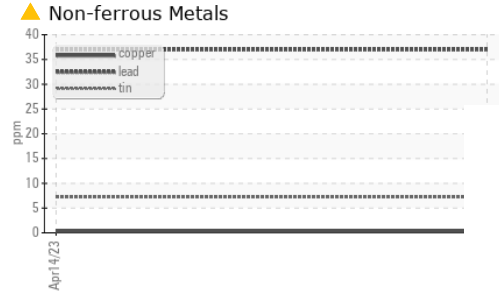
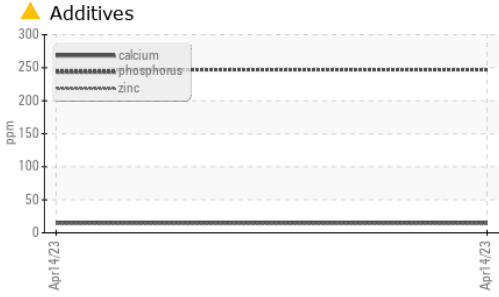
method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>15	<b>7</b>	---	---
Sodium ppm ASTM D5185(m)		<b>1</b>	---	---
Potassium ppm ASTM D5185(m)	>20	<b>&lt;1</b>	---	---

## VISUAL

method	limit/base	current	history1	history2
White Metal scalar Visual*	NONE	<b>NONE</b>	---	---
Yellow Metal scalar Visual*	NONE	<b>NONE</b>	---	---
Precipitate scalar Visual*	NONE	<b>NONE</b>	---	---
Silt scalar Visual*	NONE	<b>NONE</b>	---	---
Debris scalar Visual*	NONE	<b>VLITE</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*	>0.1	<b>NEG</b>	---	---
Free Water scalar Visual*		<b>NEG</b>	---	---



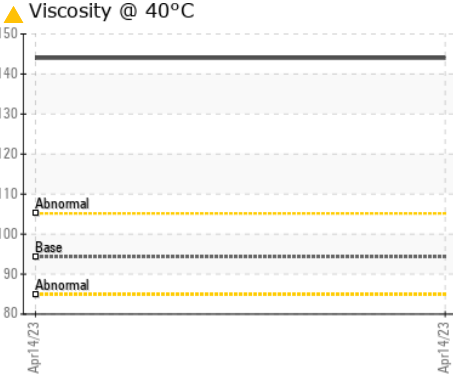
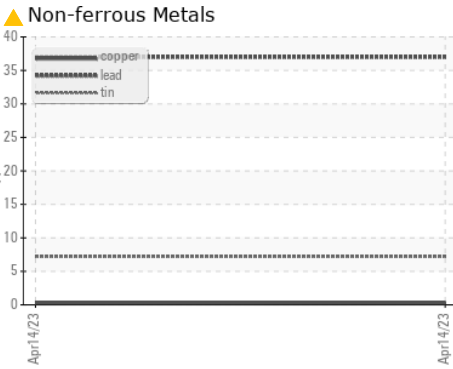
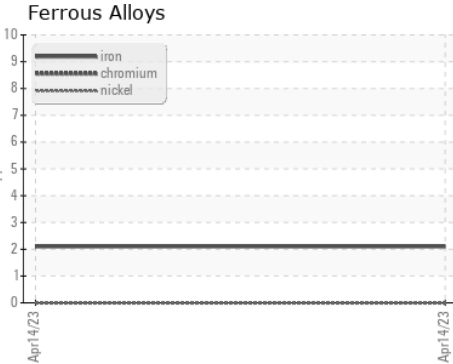
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	94.3 <span style="color: red;">▲ 144</span>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0810870 **Received** : 21 Apr 2023  
**Lab Number** : 02552963 **Diagnosed** : 21 Apr 2023  
**Unique Number** : 5565978 **Diagnostician** : Kevin Marson  
**Test Package** : MAR 1

**Canadian Coast Guard**  
 CCGS Vincent Massey, 101 Boul. Champlain  
 Quebec, QC  
 CA G1K 7Y7  
 Contact: Vincent Massey  
 vincentmasseyse@ccgs-ngcc.gc.ca

To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.