

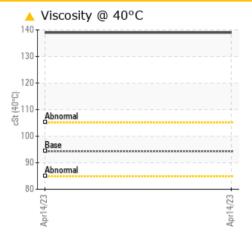
PROBLEM SUMMARY

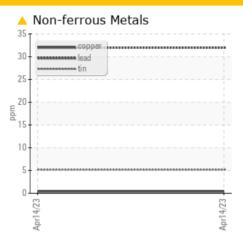
Area **Propulsion Shaft Bearings** Machine Id **Propulsion Shaft Bearings Starboard** Component

Rear Right Bearing

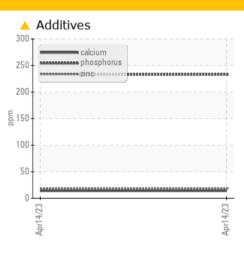
PETRO CANADA TURBOFLO R&O 100 (--- GAL)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	
Lead	ppm	ASTM D5185(m)	>25	<u> </u>	
Boron	ppm	ASTM D5185(m)		A 36	
Phosphorus	ppm	ASTM D5185(m)	4	<u> </u>	
Zinc	ppm	ASTM D5185(m)	0	🔺 18	
Sulfur	ppm	ASTM D5185(m)		<u> </u>	
Visc @ 40°C	cSt	ASTM D7279(m)	94.3	🔺 139	

Customer Id: VMASSEY Sample No.: WC0763463 Lab Number: 02552962 Test Package: MAR 1



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To discuss the diagnosis or test data: Kevin Marson +1 (289)291-4644 x4644 Kevin.Marson@wearcheck.com

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>

RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
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 ANALYS

Propulsion Shaft Bearings **Propulsion Shaft Bearings St** Compo

Rear Right Bearing Fluid

PETRO CANADA TURBOFLO R&O 100 (--- GA

DIAGNOSIS

Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

A 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.

SIS REPO	Samp	le Rating Tre		WEAR		
Starboard	1					
GAL)				Apr2023		
SAMPLE INFORM	<u>IATION</u>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0763463		
Sample Date		Client Info		14 Apr 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info				
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	2		
Chromium	ppm	ASTM D5185(m)	>2	0		
Nickel	ppm	ASTM D5185(m)	>2	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>5	<1		
Lead	ppm	ASTM D5185(m)	>25	<mark>/</mark> 32		
Copper	ppm	ASTM D5185(m)	>5	<1		
Tin	ppm	ASTM D5185(m)	>15	5		
Antimony	ppm	ASTM D5185(m)		6		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		<1		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<u> </u>		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		<1		
Calcium	ppm	ASTM D5185(m)	0	14		
Phosphorus	ppm	ASTM D5185(m)	4	<mark>/</mark> 233		
Zinc	ppm	ASTM D5185(m)	0	<u> </u>		
Sulfur	ppm	ASTM D5185(m)		A 3547		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	i	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	9		
Sodium	ppm	ASTM D5185(m)		3		
Potassium	ppm	ASTM D5185(m)	>20	<1		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate Silt	scalar	Visual* Visual*	NONE	NONE NONE		
	scalar					
Debris Sand/Dirt	scalar scalar	Visual* Visual*	NONE	VLITE NONE		
Appearance	scalar	Visual*	NORML	NORML		
Odor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.1	NEG		
Free Water	scalar	Visual*	2011	NEG		
7:51:39) Rev: 1	ooului	Houti			Submitted Bv	: Vincent Massey

Report Id: VMASSEY [WCAMIS] 02552962 (Generated: 11/09/2023 07:51:39) Rev: 1



OIL ANALYSIS REPORT

