

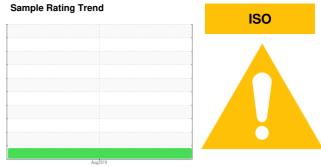
# **OIL ANALYSIS REPORT**

# Trico Oiler Testing 27TP310A

Component

**Outboard Bearing** 

PETRO CANADA TURBOFLO 68 (--- LTR)



### **DIAGNOSIS**

#### Recommendation

Resample in 30-45 days to monitor this situation. We suspect that there is a high level of varnish present in the oil. As a result we recommend that you contact us at 1-800-268-2131 and provide a purchase order for \$95 + HST in order to conduct MPC testing to determine the varnish levels of the oil.

#### Wear

All component wear rates are normal.

#### Contamination

Particles >4µm are abnormally high. Particles >6µm are notably high.

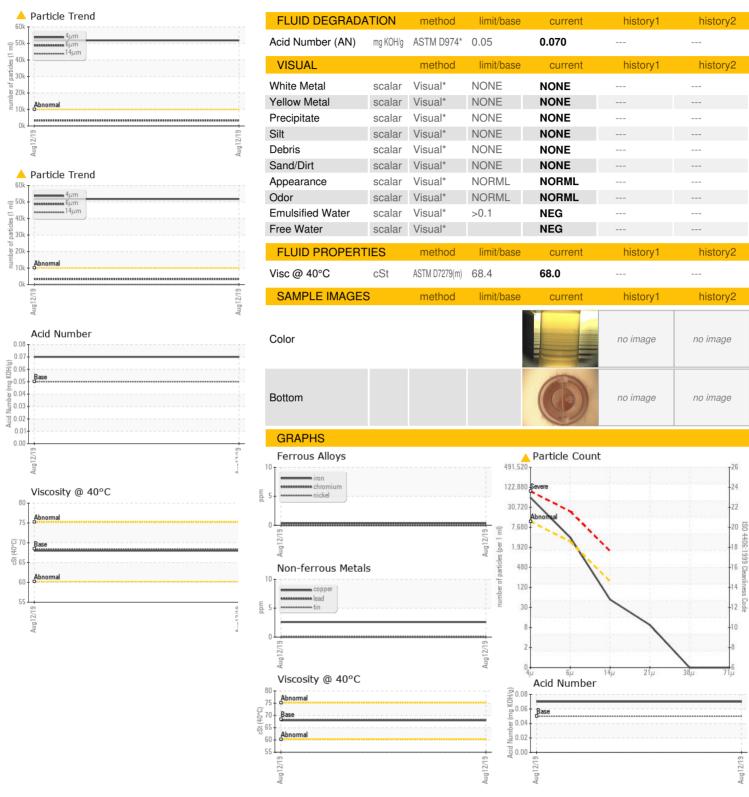
#### **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

				Aug2019		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC22130655		
Sample Date		Client Info		12 Aug 2019		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ABNORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	0		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>20	3		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		<1		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current	history1	history2
	ppm ppm				Í	Í
Boron	• •	ASTM D5185(m)	0	<1		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	0	<1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	<1 0 0		
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	<1 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0	<1 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0	<1 0 0 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 0	<1 0 0 0 0 0 <1 3		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 0 120	<1 0 0 0 0 0 <1 3		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 0 120	<1 0 0 0 0 0 <1 3 3 594		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 120 0.0	<1 0 0 0 0 <1 3 3 594		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 0 120 0.0 50	<1 0 0 0 0 0 <1 3 3 594 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m)	0 0 0 0 0 0 120 0.0 50	<1 0 0 0 0 0 <1 3 3 594 <1 current		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 120 0.0 50 limit/base	<1 0 0 0 0 0 <1 3 3 594 <1 current 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	0 0 0 0 0 120 0.0 50 limit/base >15	<1 0 0 0 0 0 <1 3 3 594 <1 current 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0 0 0 120 0.0 50 limit/base >15	<1 0 0 0 0 0 <1 3 3 594 <1 current 0 0 <1		history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m)	0 0 0 0 0 120 0.0 50 limit/base >15	<1 0 0 0 0 <1 3 3 594 <1 current 0 0 <1	history1 history1	history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m)	0 0 0 0 0 120 0.0 50 limit/base >15 >20 limit/base >10000 >2500	<1 0 0 0 0 0 <1 3 3 594 <1 current 0 0 <1 current  \$ 51804 3321	history1 history1	history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  method ASTM D5185(m) ASTM D7647 ASTM D7647	0 0 0 0 0 120 0.0 50 limit/base >15 >20 limit/base >10000 >2500 >160	<1 0 0 0 0 0 <1 3 3 594 <1 current  0 0 <1 current  4 51804 3321 46		history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium  CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)  MASTM D5185(m)  MASTM D5185(m)  MASTM D5185(m)  MASTM D5185(m)  ASTM D7647  ASTM D7647  ASTM D7647	0 0 0 0 0 120 0.0 50 limit/base >15 >20 limit/base >10000 >2500 >160 >40	<1 0 0 0 0 0 <1 3 3 594 <1 current 0 0 <1 current   \$\text{\$51804}\$ \$\text{\$3321}\$ \$46 8		history2 history2



## **OIL ANALYSIS REPORT**





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No.

Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC22130655 : 02303741 Unique Number: 4915017

Received **Tested** Diagnosed : 21 Aug 2019

: 21 Aug 2019

: 21 Aug 2019 - Bill Quesnel

Test Package : IND 2 (Additional Tests: TAN Man) 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.

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