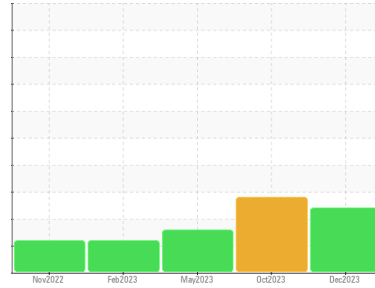


OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
CLINKER 1

Component
Gearbox

Fluid
PETRO CANADA TURBOFLO R&O 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Insufficient sample was received to conduct all the routine laboratory tests. No evidence of fuel present in the oil.

Fluid Condition

The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0083641	PCA0083674	PCA0083622
Sample Date	Client Info		18 Dec 2023	03 Oct 2023	16 May 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	ATTENTION	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	14	11	10
Chromium	ppm	ASTM D5185m >15	0	<1	0
Nickel	ppm	ASTM D5185m >15	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	2	<1
Lead	ppm	ASTM D5185m >100	<1	<1	<1
Copper	ppm	ASTM D5185m >200	1	<1	2
Tin	ppm	ASTM D5185m >25	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	32	13	4
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	<1	<1	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	51	13	4
Calcium	ppm	ASTM D5185m 0	355	115	59
Phosphorus	ppm	ASTM D5185m 4	221	87	58
Zinc	ppm	ASTM D5185m 0	191	73	30
Sulfur	ppm	ASTM D5185m	3491	1087	761

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	2	<1	0
Sodium	ppm	ASTM D5185m	3	2	1
Potassium	ppm	ASTM D5185m >20	0	<1	0

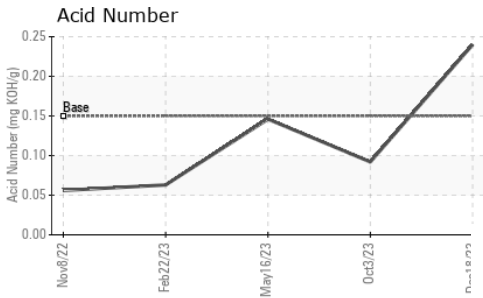
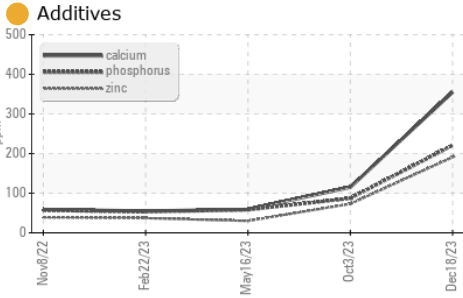
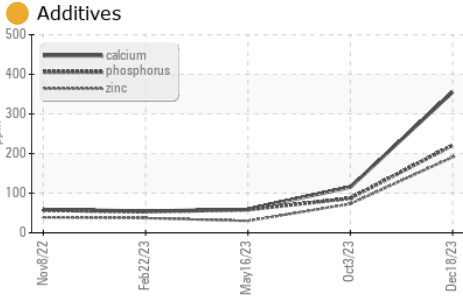
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	---	36808	---
Particles >6µm	ASTM D7647	>5000	---	6295	---
Particles >14µm	ASTM D7647	>640	---	467	---
Particles >21µm	ASTM D7647	>160	---	142	---
Particles >38µm	ASTM D7647	>40	---	10	---
Particles >71µm	ASTM D7647	>10	---	1	---
Oil Cleanliness	ISO 4406 (c)	>21/19/16	---	22/20/16	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.15	0.24	0.092	0.146

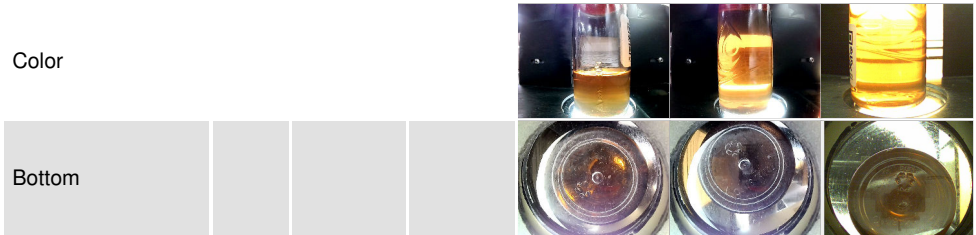
OIL ANALYSIS REPORT



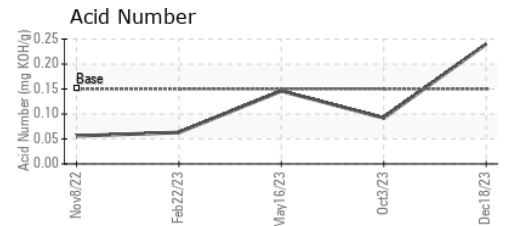
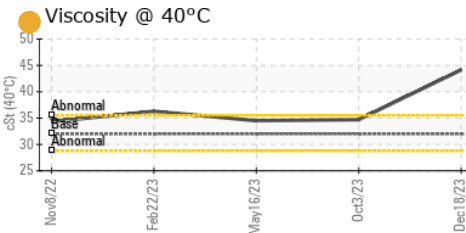
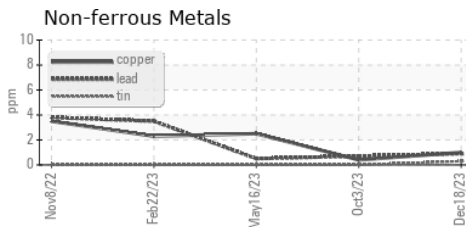
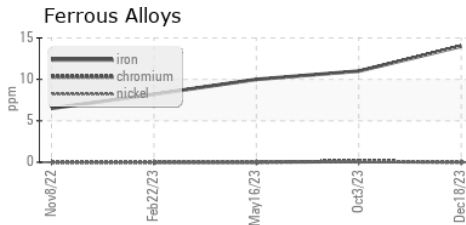
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

PARAMETER	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	32.0 ● 44.14	34.7	34.5

PARAMETER	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0083641 **Received** : 11 Mar 2024
Lab Number : 06114479 **Tested** : 14 Mar 2024
Unique Number : 10923312 **Diagnosed** : 14 Mar 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: PRTCOUNT)

WHEELABRATOR
 100 SALEM TURNPIKE
 SAUGUS, MA
 US 01906
 Contact:

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: (518)312-1460

F: