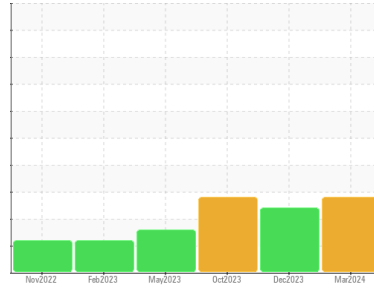


Machine Id
CLINKER 1

Component
Gearbox

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



DIAGNOSIS

- Recommendation**
We recommend you service the filters on this component. Resample at the next service interval to monitor.
- Wear**
All component wear rates are normal.
- Contamination**
There is a high amount of silt (particulates < 14 microns in size) present in the oil.
- Fluid Condition**
Additive levels indicate 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	PCA0083662	PCA0083641	PCA0083674
Sample Date	Client Info	17 Mar 2024	18 Dec 2023	03 Oct 2023
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ATTENTION	ATTENTION

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	6	14	11
Chromium	ppm ASTM D5185m >15	<1	0	<1
Nickel	ppm ASTM D5185m >15	<1	0	0
Titanium	ppm ASTM D5185m	0	0	0
Silver	ppm ASTM D5185m	0	0	0
Aluminum	ppm ASTM D5185m >25	0	0	2
Lead	ppm ASTM D5185m >100	<1	<1	<1
Copper	ppm ASTM D5185m >200	2	1	<1
Tin	ppm ASTM D5185m >25	0	<1	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	14	32	13
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	0	<1	<1
Manganese	ppm ASTM D5185m	<1	<1	0
Magnesium	ppm ASTM D5185m	14	51	13
Calcium	ppm ASTM D5185m 0	126	355	115
Phosphorus	ppm ASTM D5185m 4	118	221	87
Zinc	ppm ASTM D5185m 0	73	191	73
Sulfur	ppm ASTM D5185m	1101	3491	1087

CONTAMINANTS

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

FLUID CLEANLINESS

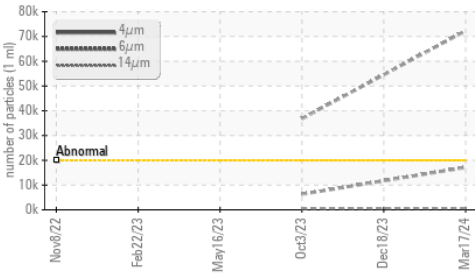
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >20000	72278	---	36808
Particles >6µm	ASTM D7647 >5000	17155	---	6295
Particles >14µm	ASTM D7647 >640	622	---	467
Particles >21µm	ASTM D7647 >160	109	---	142
Particles >38µm	ASTM D7647 >40	3	---	10
Particles >71µm	ASTM D7647 >10	0	---	1
Oil Cleanliness	ISO 4406 (c) >21/19/16	23/21/16	---	22/20/16

FLUID DEGRADATION

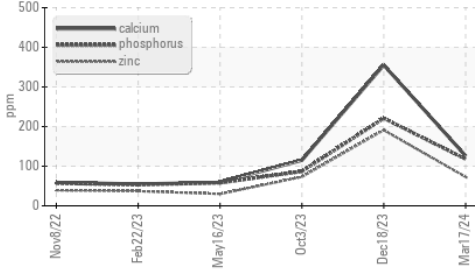
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045 0.15	0.119	0.24	0.092

OIL ANALYSIS REPORT

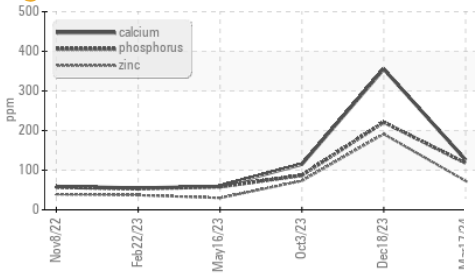
▲ Particle Trend



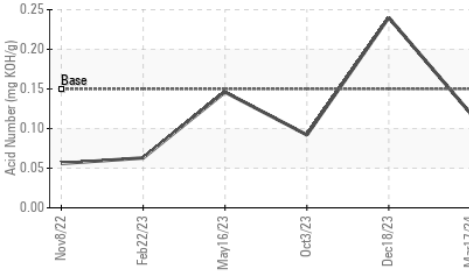
● Additives



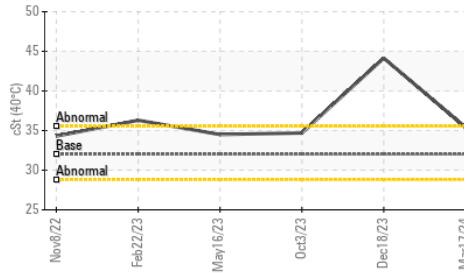
● Additives



Acid Number



Viscosity @ 40°C

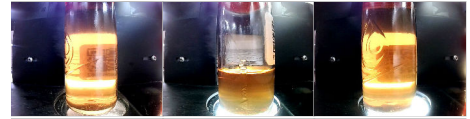


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	32.0	35.4	44.14	34.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

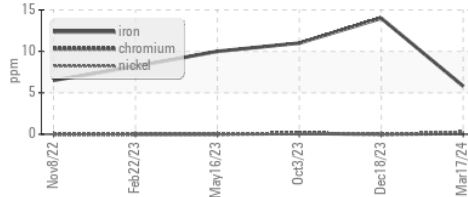


Bottom

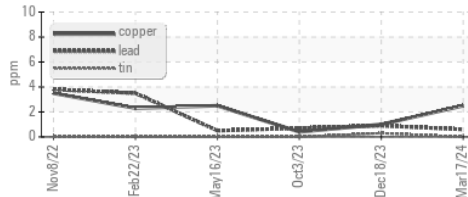


GRAPHS

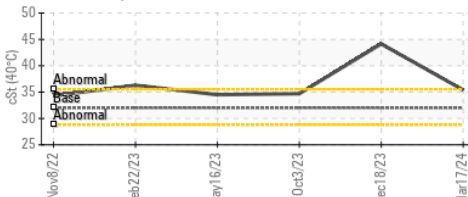
Ferrous Alloys



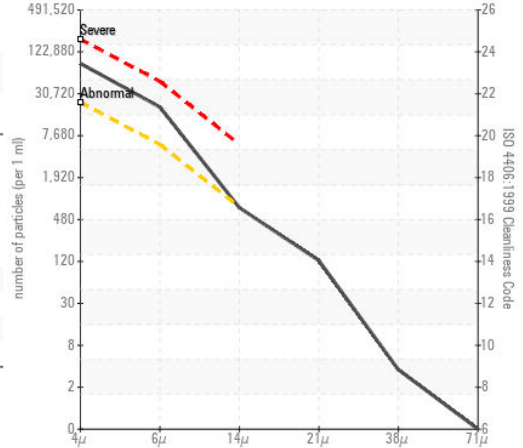
Non-ferrous Metals



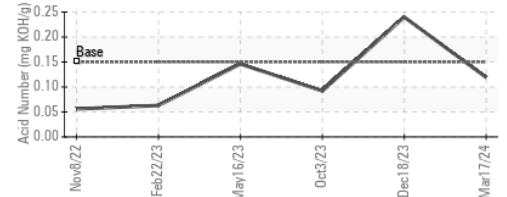
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0083662 **Received** : 18 Mar 2024
Lab Number : **06120831** **Tested** : 19 Mar 2024
Unique Number : 10929664 **Diagnosed** : 20 Mar 2024 - Don Baldrige
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: