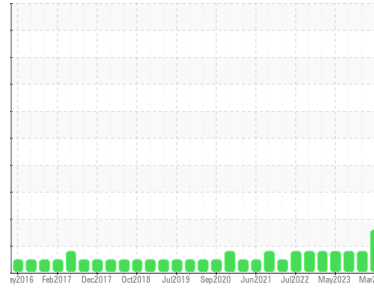




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
RAMVEYOR (S/N 200710090069)

Component
Hydraulic System

Fluid
PETRO CANADA PURITY FG HYDRAULIC AW 68 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

The copper level is abnormal. All other component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		USP0008235	USP0005151	USP0001566
Sample Date	Client Info		11 Mar 2024	13 Dec 2023	19 Sep 2023
Machine Age	mths	Client Info	0	0	0
Oil Age	mths	Client Info	0	0	0
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ATTENTION	MARGINAL	MARGINAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<1	3	2
Chromium	ppm	ASTM D5185m >20	<1	<1	0
Nickel	ppm	ASTM D5185m >20	1	<1	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	0	0
Lead	ppm	ASTM D5185m >20	1	2	2
Copper	ppm	ASTM D5185m >20	▲ 85	▲ 97	▲ 116
Tin	ppm	ASTM D5185m >20	0	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m	0	5	<1
Calcium	ppm	ASTM D5185m	89	48	41
Phosphorus	ppm	ASTM D5185m	343	350	352
Zinc	ppm	ASTM D5185m	449	420	384
Sulfur	ppm	ASTM D5185m	935	893	885

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	0	0	0
Sodium	ppm	ASTM D5185m	3	0	<1
Potassium	ppm	ASTM D5185m >20	3	1	0
Water	%	ASTM D6304 >0.05	0.003	0.003	0.024
ppm Water	ppm	ASTM D6304 >500	31	29	241.0

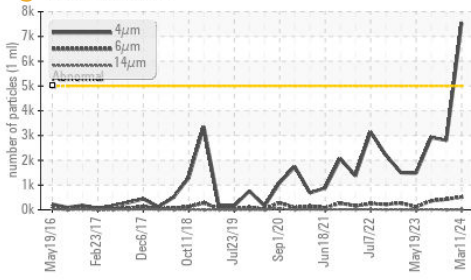
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● 7540	2804	2920
Particles >6µm	ASTM D7647	>1300	515	427	364
Particles >14µm	ASTM D7647	>160	10	5	16
Particles >21µm	ASTM D7647	>40	4	1	6
Particles >38µm	ASTM D7647	>10	0	0	1
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	● 20/16/10	19/16/10	19/16/11

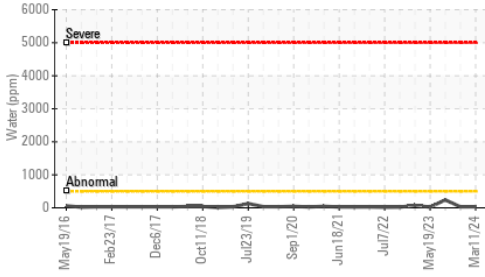
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.26	0.73	0.61	0.51

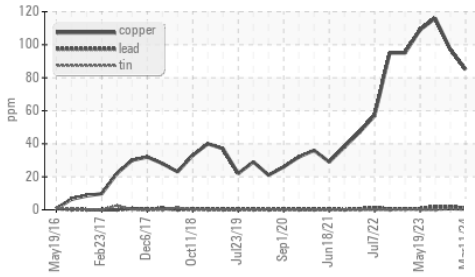
Particle Trend



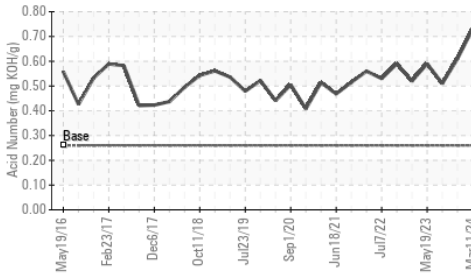
Water (KF)



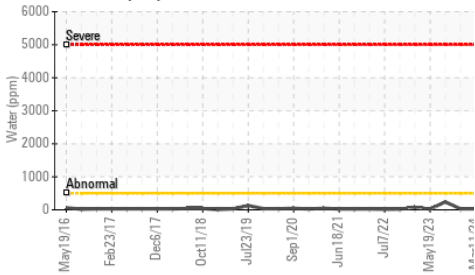
Non-ferrous Metals



Acid Number



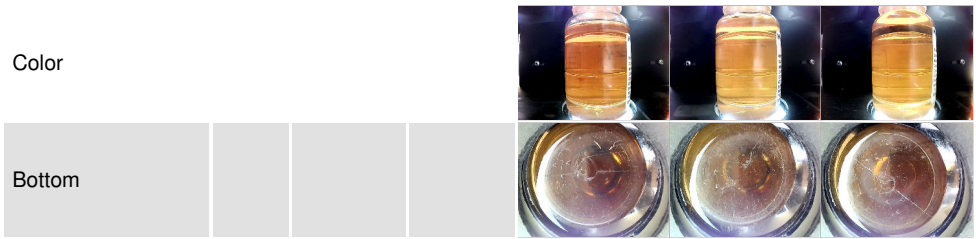
Water (KF)



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	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

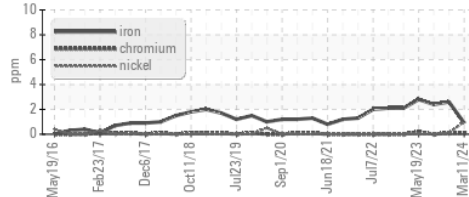
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	63.34	69.1	62.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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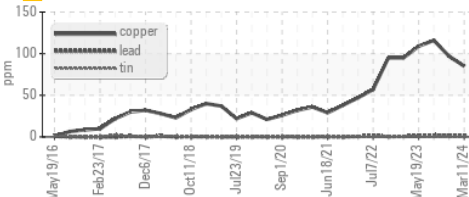


GRAPHS

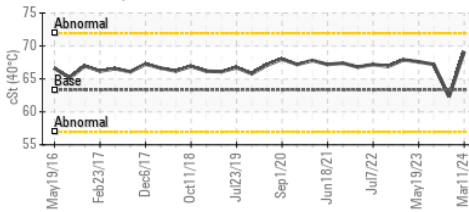
Ferrous Alloys



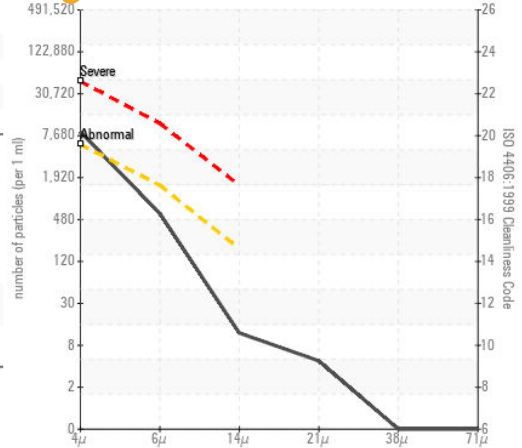
Non-ferrous Metals



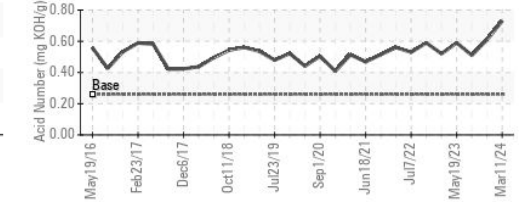
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : USP0008235

Lab Number : 06133393

Unique Number : 10952858

Test Package : IND 2

Received : 29 Mar 2024

Tested : 01 Apr 2024

Diagnosed : 01 Apr 2024 - Doug Bogart

GIBBON PACK

PO Box 730

GIBBON, NE

US 68840

Contact: SERVICE MANAGER

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)

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