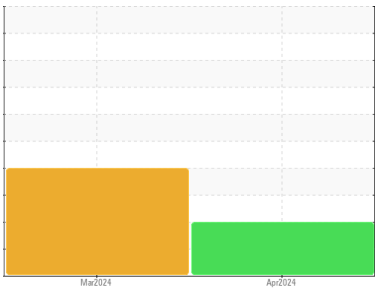
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
Or1984
Component
Hydraulic System
Fluid
PETRO CANADA DURATRAN (115 LTR)

DIAGNOSIS

▲ Recommendation
Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation.

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. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0113406**	GFL0113298	---
Sample Date		Client Info		**01 Apr 2024**	20 Mar 2024	---
Machine Age	hrs	Client Info		**11666**	0	---
Oil Age	hrs	Client Info		**11666**	0	---
Oil Changed		Client Info		**Changed**	N/A	---
Sample Status				**SEVERE**	SEVERE	---

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>65	**35**	34	---
Chromium	ppm	ASTM D5185(m)	>6	**0**	0	---
Nickel	ppm	ASTM D5185(m)	>10	**0**	<1	---
Titanium	ppm	ASTM D5185(m)		**0**	0	---
Silver	ppm	ASTM D5185(m)		**0**	0	---
Aluminum	ppm	ASTM D5185(m)	>5	**<1**	0	---
Lead	ppm	ASTM D5185(m)	>45	**0**	0	---
Copper	ppm	ASTM D5185(m)	>120	**2**	3	---
Tin	ppm	ASTM D5185(m)	>4	**0**	0	---
Antimony	ppm	ASTM D5185(m)		**0**	0	---
Vanadium	ppm	ASTM D5185(m)		**0**	0	---
Beryllium	ppm	ASTM D5185(m)		**0**	0	---
Cadmium	ppm	ASTM D5185(m)		**0**	0	---

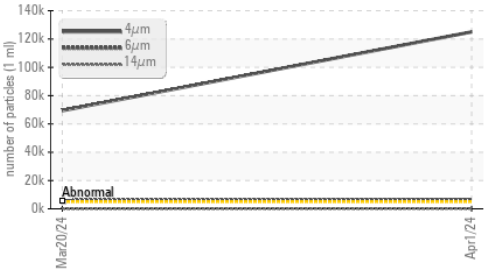
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	110	**98**	105	---
Barium	ppm	ASTM D5185(m)	0.0	**0**	0	---
Molybdenum	ppm	ASTM D5185(m)	0.0	**0**	0	---
Manganese	ppm	ASTM D5185(m)	1	**0**	0	---
Magnesium	ppm	ASTM D5185(m)	13	**15**	12	---
Calcium	ppm	ASTM D5185(m)	3610	**3354**	3364	---
Phosphorus	ppm	ASTM D5185(m)	1192	**732**	705	---
Zinc	ppm	ASTM D5185(m)	1455	**180**	61	---
Sulfur	ppm	ASTM D5185(m)	2641	**2639**	2692	---
Lithium	ppm	ASTM D5185(m)		**<1**	<1	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**7**	7	---
Sodium	ppm	ASTM D5185(m)		**2**	2	---
Potassium	ppm	ASTM D5185(m)	>20	**2**	<1	---

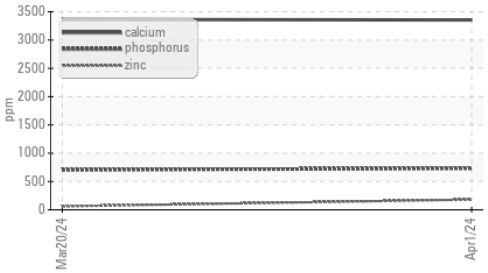
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **125014**	▲ 69385	---
Particles >6µm		ASTM D7647	>1300	▲ **6514**	▲ 5743	---
Particles >14µm		ASTM D7647	>160	**79**	13	---
Particles >21µm		ASTM D7647	>40	**23**	2	---
Particles >38µm		ASTM D7647	>10	**3**	1	---
Particles >71µm		ASTM D7647	>3	**1**	1	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/20/13**	▲ 23/20/11	---

OIL ANALYSIS REPORT

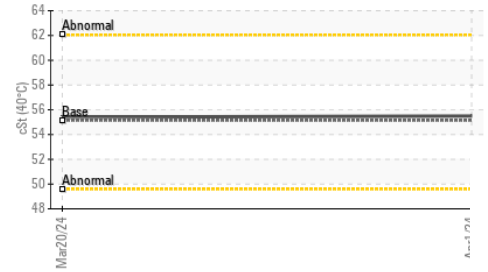
Particle Trend



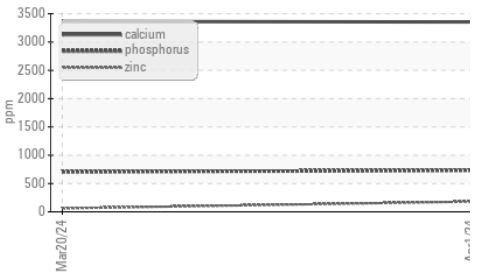
Additives



Viscosity @ 40°C

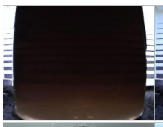
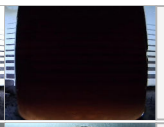


Additives



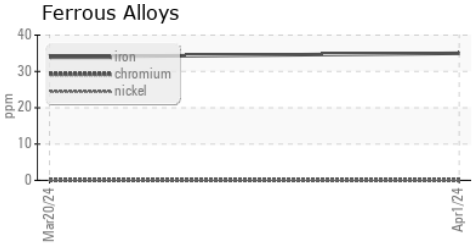
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	---
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	---
Silt	scalar	Visual*	NONE	**NONE**	NONE	---
Debris	scalar	Visual*	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	Visual*	NONE	**NONE**	NONE	---
Appearance	scalar	Visual*	NORML	**NORML**	NORML	---
Odor	scalar	Visual*	NORML	**NORML**	NORML	---
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	---
Free Water	scalar	Visual*		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	55.14	**55.5**	▲ 55.4	---

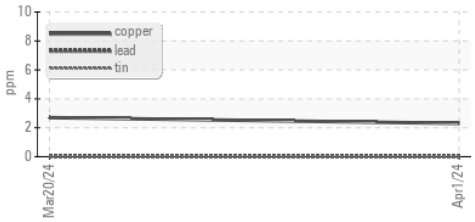
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

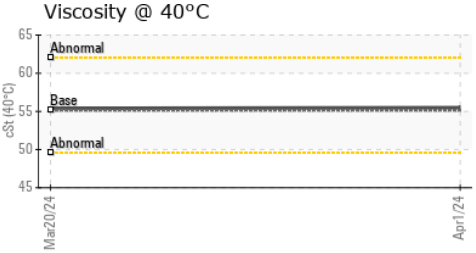
Ferrous Alloys



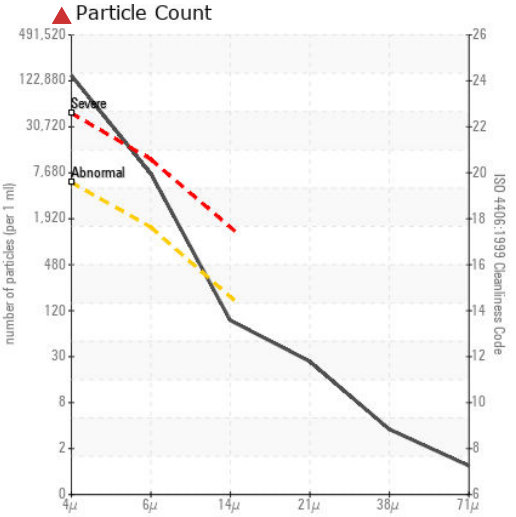
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0113406
Lab Number : 02626465
Unique Number : 5759597
Test Package : MOB 1 (Additional Tests: PrtCount)

Received : 03 Apr 2024
Tested : 04 Apr 2024
Diagnosed : 05 Apr 2024 - Kevin Marson

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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