



WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
GFL218
Machine Id
833048
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you check for visible metal particles in the oil. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. 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. An inspection for the source(s) of wear may be warranted at this time. Resample in 30-45 days to monitor this situation. Re-sampling is suggested to confirm test results prior to significant maintenance activities being performed. Please indicate that this is a resample on your Sample Information Form (SIF).

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0120086	---	---
Sample Date		Client Info		02 May 2024	---	---
Machine Age	hrs	Client Info		1917	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

WEAR

Moderate concentration of visible metal present.

Iron	ppm	ASTM D5185(m)	>40	9	---	---
Chromium	ppm	ASTM D5185(m)	>5	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	0	---	---
Titanium	ppm	ASTM D5185(m)	>2	0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>8	2	---	---
Lead	ppm	ASTM D5185(m)	>5	0	---	---
Copper	ppm	ASTM D5185(m)	>20	3	---	---
Tin	ppm	ASTM D5185(m)	>2	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	▲ MODER	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

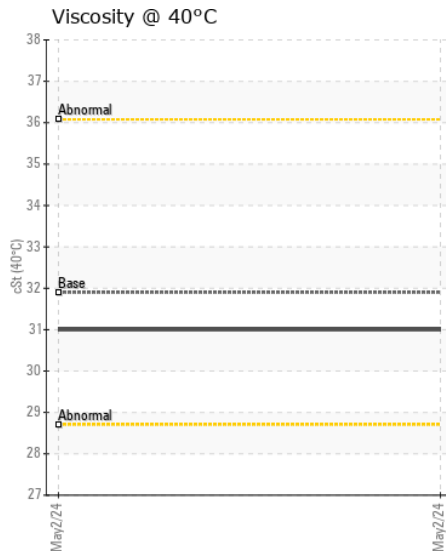
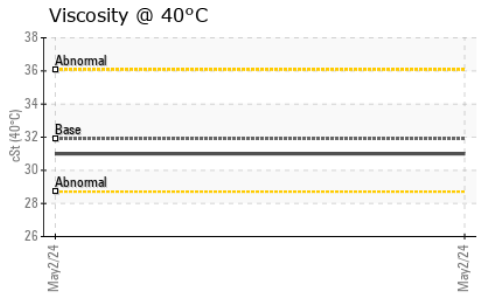
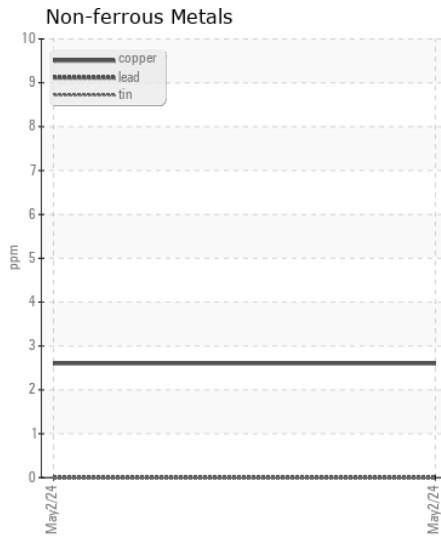
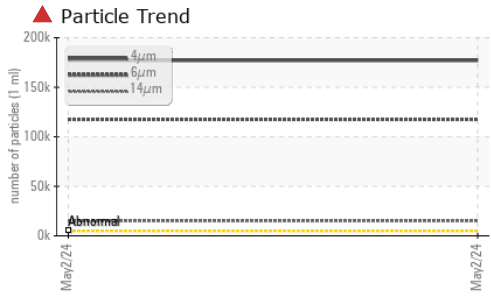
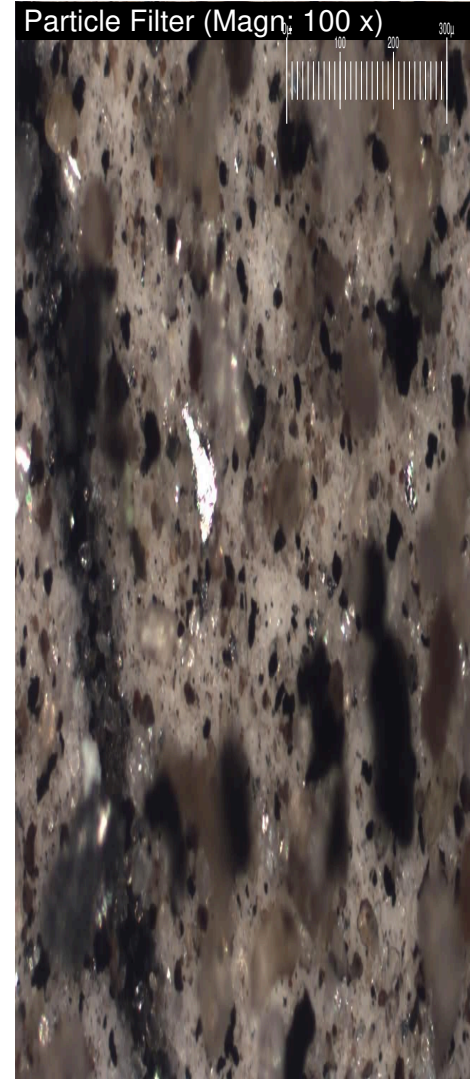
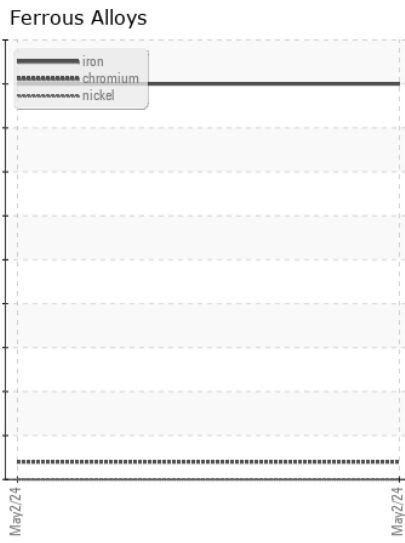
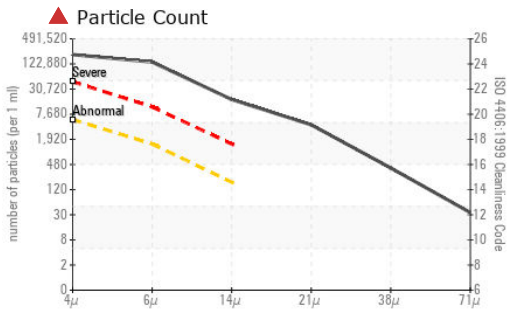
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

Silicon	ppm	ASTM D5185(m)	>20	6	---	---
Potassium	ppm	ASTM D5185(m)	>20	4	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	▲ 177063	---	---
Particles >6µm		ASTM D7647	>1300	▲ 117568	---	---
Particles >14µm		ASTM D7647	>160	▲ 15003	---	---
Particles >21µm		ASTM D7647	>40	▲ 3737	---	---
Particles >38µm		ASTM D7647	>10	▲ 349	---	---
Particles >71µm		ASTM D7647	>3	▲ 30	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 25/24/21	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	VLITE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---

FLUID CONDITION

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		5	---	---
Boron	ppm	ASTM D5185(m)	0	0	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---	---
Manganese	ppm	ASTM D5185(m)	1	0	---	---
Magnesium	ppm	ASTM D5185(m)	0	1	---	---
Calcium	ppm	ASTM D5185(m)	50	19	---	---
Phosphorus	ppm	ASTM D5185(m)	330	317	---	---
Zinc	ppm	ASTM D5185(m)	430	379	---	---
Sulfur	ppm	ASTM D5185(m)	760	729	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	31.0	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 225 - COT(D2)**
Sample No. : GFL0120086 **Received** : 06 May 2024 20 Brydon Drive
Lab Number : 02633527 **Tested** : 07 May 2024 Etobicoke, ON
Unique Number : 5774680 **Diagnosed** : 07 May 2024 - Kevin Marson CA M9W 5R6
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, PrtCount, PrtFilter) **Contact:** Kim McCall

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.

T:
F: