



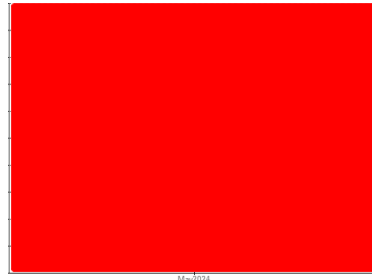
OIL ANALYSIS REPORT

Sample Rating Trend

VISUAL METAL



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



DIAGNOSIS

▲ 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).

▲ Wear

Moderate concentration of visible metal present.

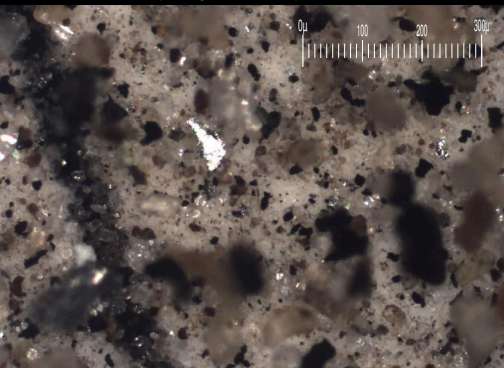
▲ Contamination

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

Fluid Condition

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

Particle Filter (Magn: 100 x)



SAMPLE INFORMATION

	method	limit/base	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	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
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	---	---
Antimony	ppm	ASTM D5185(m) >2	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
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	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

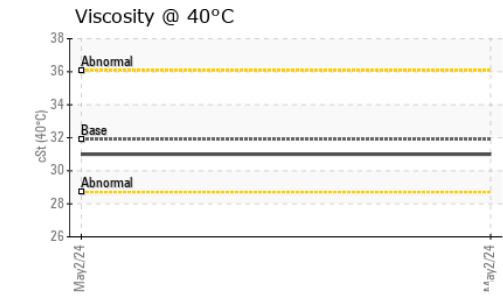
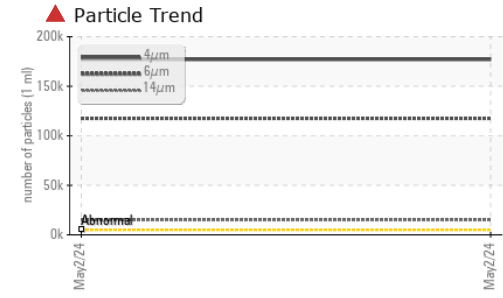
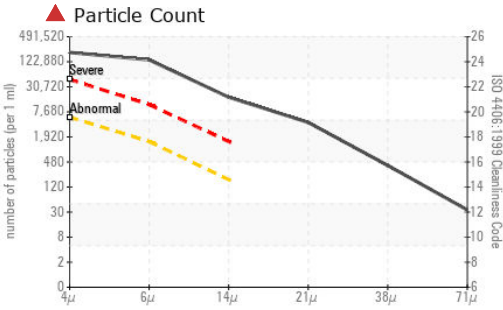
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	6	---	---
Sodium	ppm	ASTM D5185(m)	5	---	---
Potassium	ppm	ASTM D5185(m) >20	4	---	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
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	---	---



OIL ANALYSIS REPORT



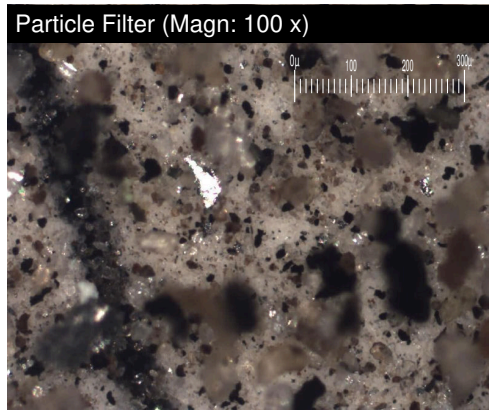
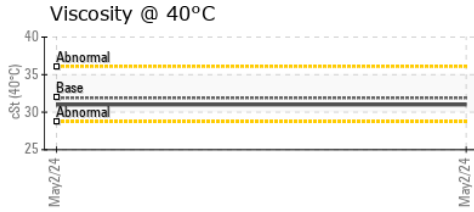
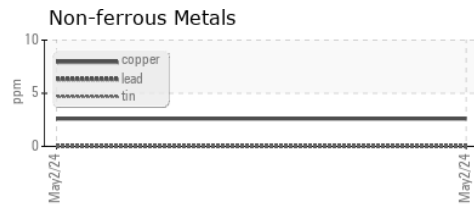
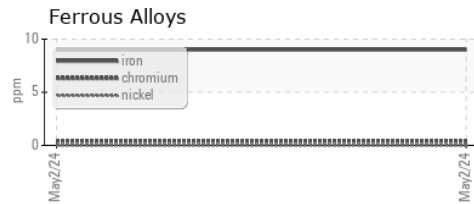
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	▲ MODER	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	31.0	---

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

GRAPHS



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
kmccall@gflenv.com

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.