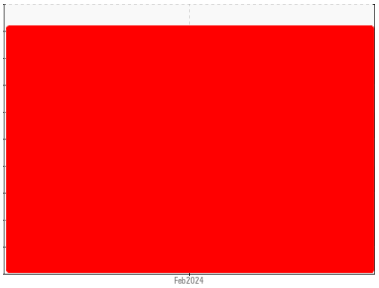
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Machine Id
101013
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 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. Resample in 30-45 days to monitor this situation. We suspect that the abnormal contaminant(s) is the result of incorrect sampling technique. DISCLAIMER: Interpretation of results is based on the sample as received from the customer. The condition of the sample and the method of sampling cannot be verified.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil. Light concentration of visible dirt/debris present in the oil.

Fluid Condition

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0108236**	---	---
Sample Date		Client Info		**07 Feb 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**Not Changd**	---	---
Sample Status				**SEVERE**	---	---

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

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**1**	---	---
Iron	ppm	ASTM D5185(m)	>20	▲ **20**	---	---
Chromium	ppm	ASTM D5185(m)	>10	**<1**	---	---
Nickel	ppm	ASTM D5185(m)	>10	**0**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>10	**4**	---	---
Lead	ppm	ASTM D5185(m)	>10	**<1**	---	---
Copper	ppm	ASTM D5185(m)	>75	**2**	---	---
Tin	ppm	ASTM D5185(m)	>10	**0**	---	---
Antimony	ppm	ASTM D5185(m)		**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	**<1**	---	---
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	**4**	---	---
Calcium	ppm	ASTM D5185(m)	50	**95**	---	---
Phosphorus	ppm	ASTM D5185(m)	330	**352**	---	---
Zinc	ppm	ASTM D5185(m)	430	**442**	---	---
Sulfur	ppm	ASTM D5185(m)	760	**987**	---	---
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)		**1**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**3**	---	---

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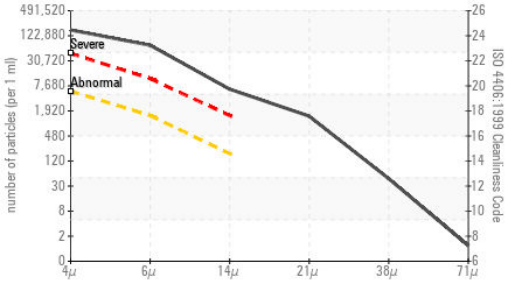
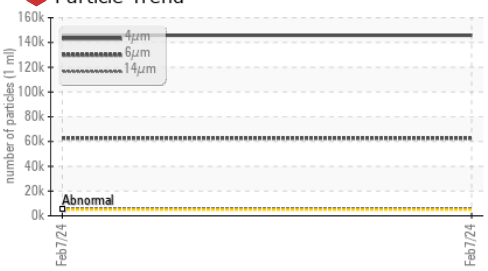
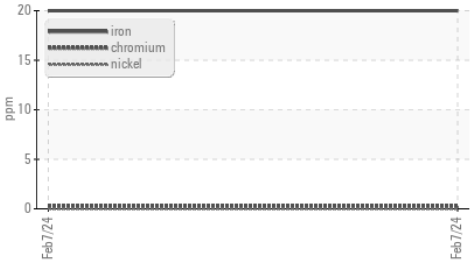
Particle Count



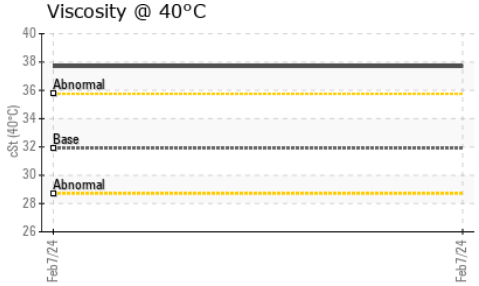
Particle Trend



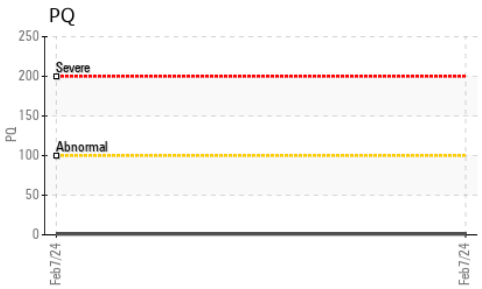
Ferrous Alloys



Viscosity @ 40°C



PQ



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	**145770**	---	---
Particles >6µm	ASTM D7647	>1300	**62730**	---	---
Particles >14µm	ASTM D7647	>160	**5571**	---	---
Particles >21µm	ASTM D7647	>40	**1258**	---	---
Particles >38µm	ASTM D7647	>10	**40**	---	---
Particles >71µm	ASTM D7647	>3	**1**	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	**24/23/20**	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**VLITE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**LIGHT**	---	---
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	**37.7**	---	---

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

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0108236
Lab Number : 02616274
Unique Number : 5733384
Test Package : MOB 1 (Additional Tests: PQ, PrtCount)

Received : 16 Feb 2024
Tested : 20 Feb 2024
Diagnosed : 20 Feb 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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