OIL ANALYSIS REPORT

Machine Id
911038
Component
Tank Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (200 LTR)

Sample Rating Trend

ISO

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. 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

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		**GFL0059103**	---	---
Sample Date		Client Info		**12 Feb 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**2400**	---	---
Oil Changed		Client Info		**Changed**	---	---
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)	>50	**35**	---	---
Chromium	ppm	ASTM D5185(m)	>10	**4**	---	---
Nickel	ppm	ASTM D5185(m)	>4	**0**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**0**	---	---
Aluminum	ppm	ASTM D5185(m)	>5	**3**	---	---
Lead	ppm	ASTM D5185(m)	>4	**<1**	---	---
Copper	ppm	ASTM D5185(m)	>15	**<1**	---	---
Tin	ppm	ASTM D5185(m)	>4	**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**	---	---

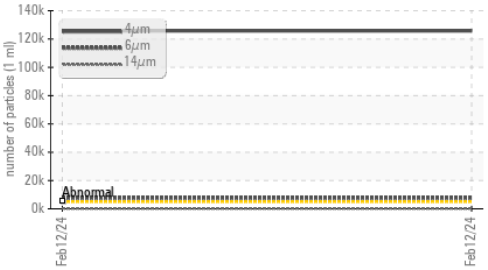
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**0**	---	---
Barium	ppm	ASTM D5185(m)	0	**0**	---	---
Molybdenum	ppm	ASTM D5185(m)	0	**0**	---	---
Manganese	ppm	ASTM D5185(m)	1	**0**	---	---
Magnesium	ppm	ASTM D5185(m)	0	**6**	---	---
Calcium	ppm	ASTM D5185(m)	50	**69**	---	---
Phosphorus	ppm	ASTM D5185(m)	330	**337**	---	---
Zinc	ppm	ASTM D5185(m)	430	**419**	---	---
Sulfur	ppm	ASTM D5185(m)	760	**847**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**9**	---	---
Sodium	ppm	ASTM D5185(m)		**9**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**2**	---	---

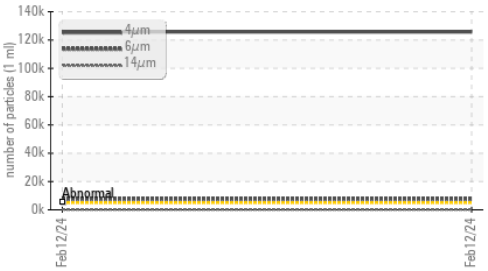
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **125730**	---	---
Particles >6µm		ASTM D7647	>1300	▲ **7698**	---	---
Particles >14µm		ASTM D7647	>160	● **194**	---	---
Particles >21µm		ASTM D7647	>40	**38**	---	---
Particles >38µm		ASTM D7647	>10	**2**	---	---
Particles >71µm		ASTM D7647	>3	**0**	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **24/20/15**	---	---

OIL ANALYSIS REPORT

Particle Trend



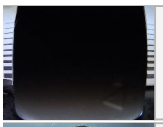
Particle Trend



Viscosity @ 40°C

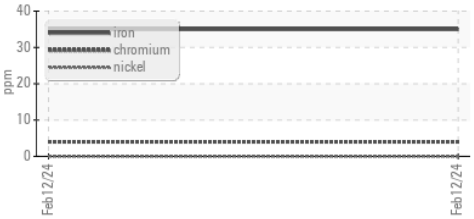
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**NONE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	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	**34.0**	---	---

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

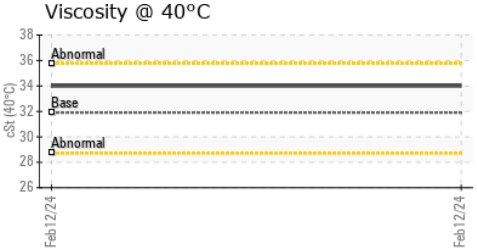
GRAPHS

Ferrous Alloys

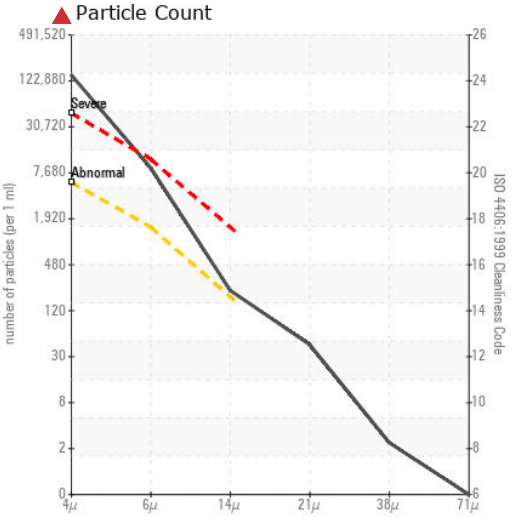


Non-ferrous Metals

Viscosity @ 40°C



Particle Count



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0059103
Lab Number : 02619593
Unique Number : 5736703
Test Package : MOB 1 (Additional Tests: PrtCount)
Received : 04 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 05 Mar 2024 - Kevin Marson

GFL Environmental - 570 - Thunder Bay
3000 Highway 61,
Slate River, ON
CA P7J 0G8
Contact: Cindy Wall
cwall@gflenv.com
T: (807)577-0411
F:

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.