

Machine Id
111007
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX AW 32 (--- GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0107909	---	---
Sample Date		Client Info		01 Apr 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	1	---	---
Chromium	ppm	ASTM D5185(m)	>10	0	---	---
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	0	---	---
Lead	ppm	ASTM D5185(m)	>10	7	---	---
Copper	ppm	ASTM D5185(m)	>75	<1	---	---
Tin	ppm	ASTM D5185(m)	>10	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

There is a moderate concentration of dirt present in the oil. The system cleanliness is acceptable for your target ISO 4406 cleanliness code.

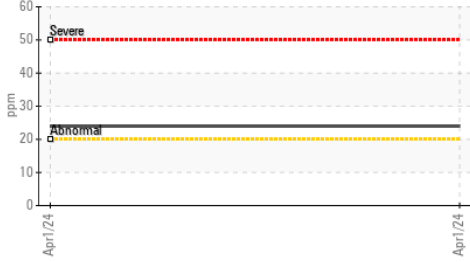
Silicon	ppm	ASTM D5185(m)	>20	▲ 24	---	---
Potassium	ppm	ASTM D5185(m)	>20	0	---	---
Water		WC Method	>0.1	NEG	---	---
Particles >4µm		ASTM D7647	>5000	2920	---	---
Particles >6µm		ASTM D7647	>1300	714	---	---
Particles >14µm		ASTM D7647	>160	57	---	---
Particles >21µm		ASTM D7647	>40	9	---	---
Particles >38µm		ASTM D7647	>10	1	---	---
Particles >71µm		ASTM D7647	>3	1	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/17/13	---	---
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

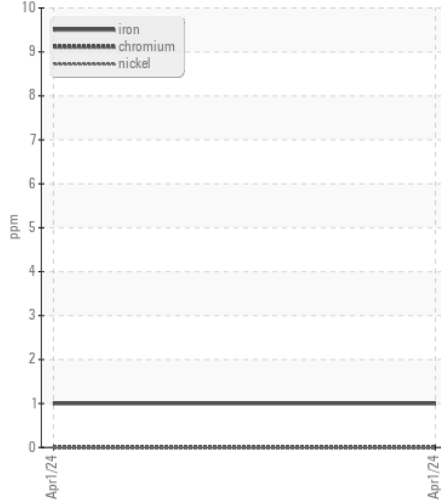
The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185(m)		0	---	---
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)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	0	1	---	---
Calcium	ppm	ASTM D5185(m)	50	52	---	---
Phosphorus	ppm	ASTM D5185(m)	330	317	---	---
Zinc	ppm	ASTM D5185(m)	430	414	---	---
Sulfur	ppm	ASTM D5185(m)	760	698	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	31.5	31.0	---	---

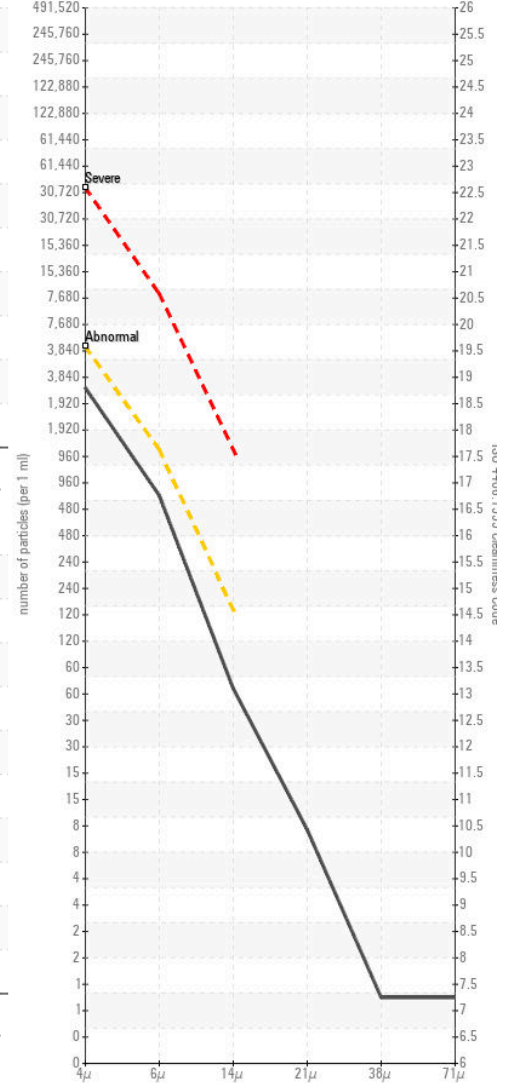
▲ Silicon (ppm)



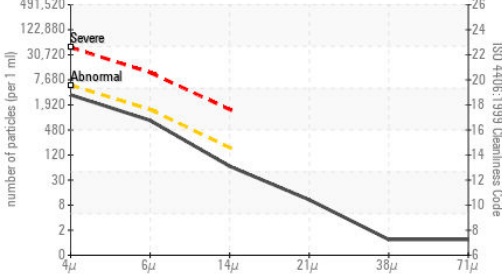
Ferrous Alloys



Particle Count



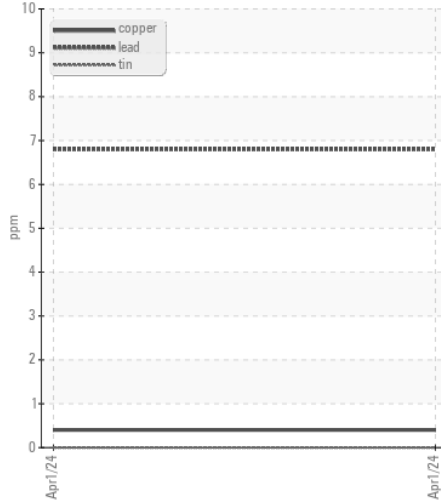
Particle Count



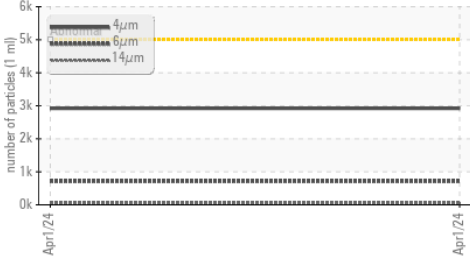
Viscosity @ 40°C



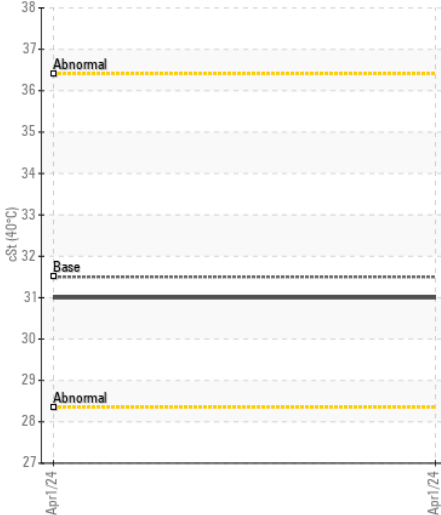
Non-ferrous Metals



Particle Trend



Viscosity @ 40°C



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107909
Lab Number : 02630235
Unique Number : 5763367
Test Package : MOB 1 (Additional Tests: PrtCount)

GFL Environmental - 310 - Winnipeg
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 Winnipeg, MB
 CA R3T 3L6
 Contact: Joshua Lourenco
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 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.