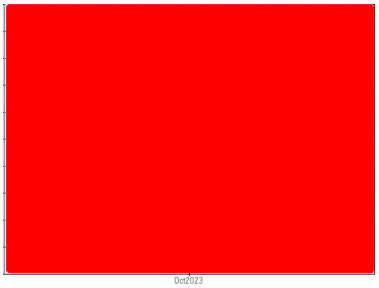
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
911028
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)

DIAGNOSIS

Recommendation

Vérifier les scelles et/ou les filters pour des points d'entrée des contaminants. Nous vous recommandons de vérifier tous les endroits par lesquels de la saleté peut pénétrer dans le système. Le reniflard d`air doit être réparé. S`il n`est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessicant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Nous recommandons le remplacement des filtres de ce composant. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Wear

Usure de segment. Le bas indice ferreux (PQ) indique que l'usure ferreuse est due à de la corrosion.

Contamination

Il y a une grande quantité de limon (particules de 4 à 14 microns) dans l`huile. Les niveaux élémentaires de silicone (Si) et d`aluminium (Al) indiquent l`infiltration d`alumine-silicate (grosses particules de poussière). Une grande quantité de saleté a provoqué une usure abrasive du composant.

Fluid Condition

La viscosité de l'échantillon se situe dans la portée de l'ISO 46; nous vous conseillons de vérifier. l`huile n'est plus en état de service en raison d'une usure anomale et/ou sévère.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**PC0078509**	---	---
Sample Date		Client Info		**30 Oct 2023**	---	---
Machine Age	hrs	Client Info		**6055**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**12**	---	---
Iron	ppm	ASTM D5185(m)	>50	● **153**	---	---
Chromium	ppm	ASTM D5185(m)	>10	▲ **15**	---	---
Nickel	ppm	ASTM D5185(m)	>4	**<1**	---	---
Titanium	ppm	ASTM D5185(m)		**0**	---	---
Silver	ppm	ASTM D5185(m)		**<1**	---	---
Aluminum	ppm	ASTM D5185(m)	>5	**7**	---	---
Lead	ppm	ASTM D5185(m)	>4	**<1**	---	---
Copper	ppm	ASTM D5185(m)	>15	**2**	---	---
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**	---	---

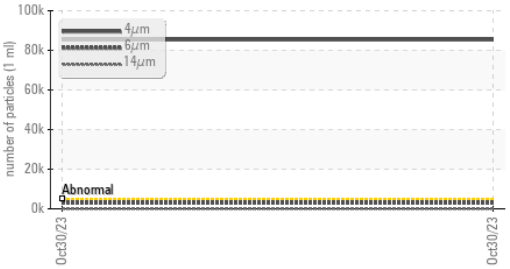
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	**2**	---	---
Barium	ppm	ASTM D5185(m)	0	**<1**	---	---
Molybdenum	ppm	ASTM D5185(m)	0	**<1**	---	---
Manganese	ppm	ASTM D5185(m)	1	**1**	---	---
Magnesium	ppm	ASTM D5185(m)	0	**10**	---	---
Calcium	ppm	ASTM D5185(m)	50	**93**	---	---
Phosphorus	ppm	ASTM D5185(m)	330	**381**	---	---
Zinc	ppm	ASTM D5185(m)	430	**481**	---	---
Sulfur	ppm	ASTM D5185(m)	760	**1024**	---	---
Lithium	ppm	ASTM D5185(m)		**<1**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	▲ **21**	---	---
Sodium	ppm	ASTM D5185(m)		**33**	---	---
Potassium	ppm	ASTM D5185(m)	>20	**5**	---	---

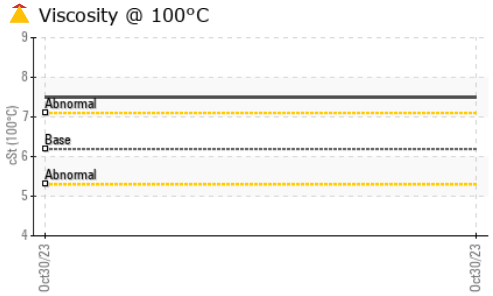
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● **85341**	---	---
Particles >6µm	ASTM D7647	>1300	▲ **2955**	---	---
Particles >14µm	ASTM D7647	>160	**27**	---	---
Particles >21µm	ASTM D7647	>40	**10**	---	---
Particles >38µm	ASTM D7647	>10	**2**	---	---
Particles >71µm	ASTM D7647	>3	**1**	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	● **24/19/12**	---	---

OIL ANALYSIS REPORT

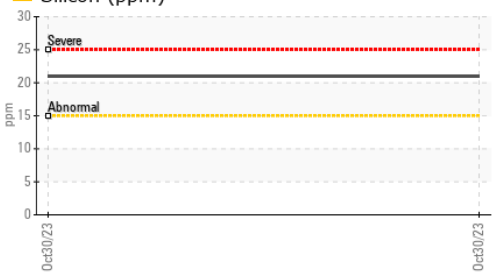
Particle Trend



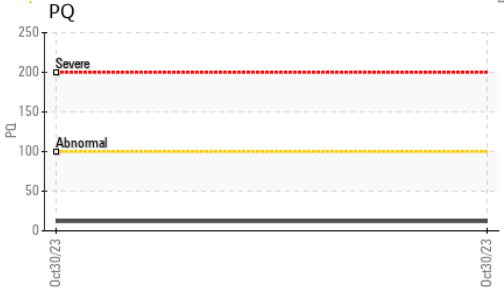
Viscosity @ 100°C



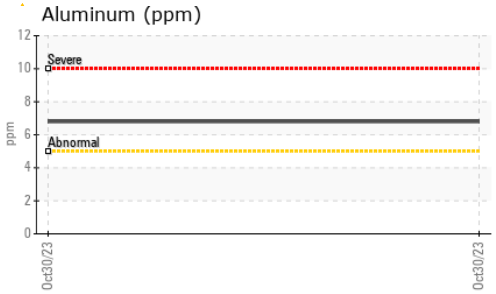
Silicon (ppm)



PQ

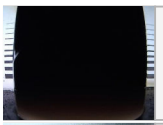


Aluminum (ppm)



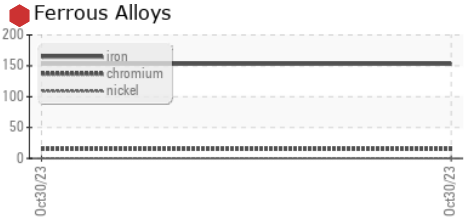
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	---	---
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	---
Precipitate	scalar	Visual*	NONE	**NONE**	---	---
Silt	scalar	Visual*	NONE	**NONE**	---	---
Debris	scalar	Visual*	NONE	**NONE**	---	---
Sand/Dirt	scalar	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	▲ **42.4**	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	6.19	▲ **7.5**	---	---
Viscosity Index (VI)	Scale	ASTM D2270*	147	**144**	---	---

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

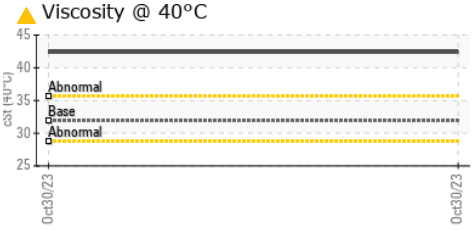
GRAPHS

Ferrous Alloys

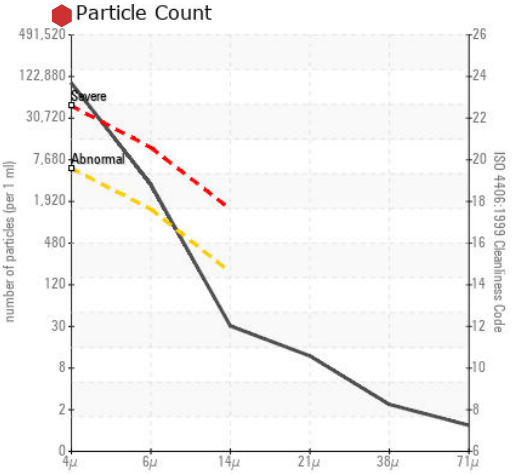


Non-ferrous Metals

Viscosity @ 40°C



Particle Count



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0078509
Lab Number : 02594454
Unique Number : 5671533
Test Package : MOB 1 (Additional Tests: KV100, PQ, PrtCount, VI)

Received : 06 Nov 2023
Diagnosed : 08 Nov 2023
Diagnostician : 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.

GFL Environmental - 742 - Quebec City Solid Waste
5160 Jean-Talon Pierre-Bertrand Bou
Quebec City, QC
CA G2J 1B7
Contact: Jean Audet
Jaudet@matrec.ca
T: (418)624-0080
F: