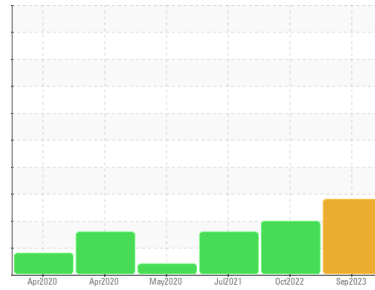




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
701079
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)

DIAGNOSIS

Recommendation

Nous recommandons le remplacement des filtres de ce composant. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Usure de segment. Le diagnostic reflète les données mises à jour sur ce composant.

Contamination

Il y a une quantité modérée de particules (de 4 à 14 microns) dans l'huile.

Fluid Condition

l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0084387	GFL0047494	GFL0013768
Sample Date	Client Info	26 Sep 2023	19 Oct 2022	05 Jul 2021
Machine Age	hrs	138900	122836	88944
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	SEVERE	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >40	13	13	9
Chromium	ppm	ASTM D5185(m) >5	▲ 8	8	5
Nickel	ppm	ASTM D5185(m) >2	<1	0	<1
Titanium	ppm	ASTM D5185(m) >2	0	<1	0
Silver	ppm	ASTM D5185(m)	<1	0	<1
Aluminum	ppm	ASTM D5185(m) >8	2	2	1
Lead	ppm	ASTM D5185(m) >5	<1	0	0
Copper	ppm	ASTM D5185(m) >20	2	2	1
Tin	ppm	ASTM D5185(m) >2	0	0	0
Antimony	ppm	ASTM D5185(m) >2	0	<1	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m) 0	1	<1	1
Barium	ppm	ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm	ASTM D5185(m) 0	0	<1	<1
Manganese	ppm	ASTM D5185(m) 1	0	<1	<1
Magnesium	ppm	ASTM D5185(m) 0	3	3	3
Calcium	ppm	ASTM D5185(m) 50	54	55	55
Phosphorus	ppm	ASTM D5185(m) 330	332	350	343
Zinc	ppm	ASTM D5185(m) 430	408	397	415
Sulfur	ppm	ASTM D5185(m) 760	895	779	768
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >20	6	6	3
Sodium	ppm	ASTM D5185(m)	6	6	4
Potassium	ppm	ASTM D5185(m) >20	1	2	2

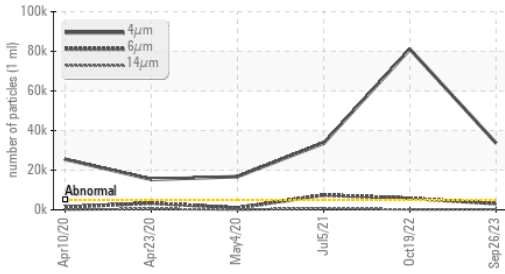
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 33709	81066	▲ 33630
Particles >6µm	ASTM D7647 >1300	▲ 3039	▲ 5773	▲ 7461
Particles >14µm	ASTM D7647 >160	▲ 212	149	▲ 618
Particles >21µm	ASTM D7647 >40	▲ 58	38	▲ 145
Particles >38µm	ASTM D7647 >10	4	4	5
Particles >71µm	ASTM D7647 >3	1	1	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 22/19/15	24/20/14	▲ 22/20/16

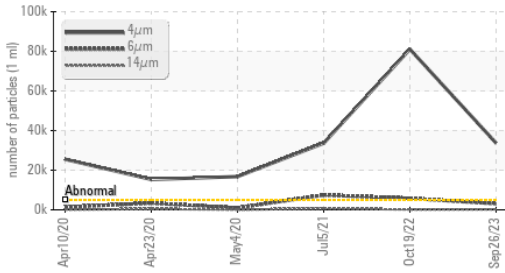


OIL ANALYSIS REPORT

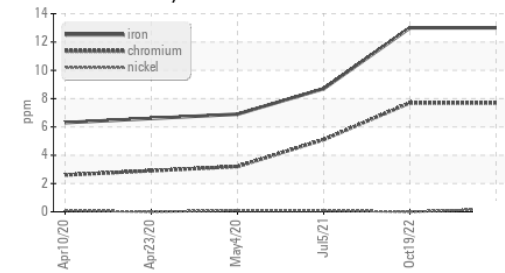
▲ Particle Trend



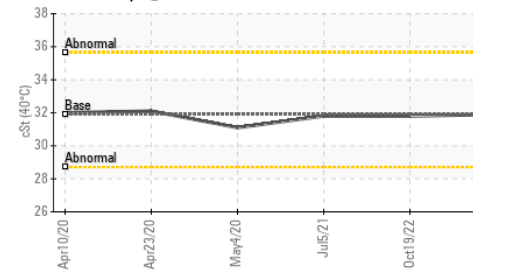
▲ Particle Trend



▲ Ferrous Alloys



Viscosity @ 40°C



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

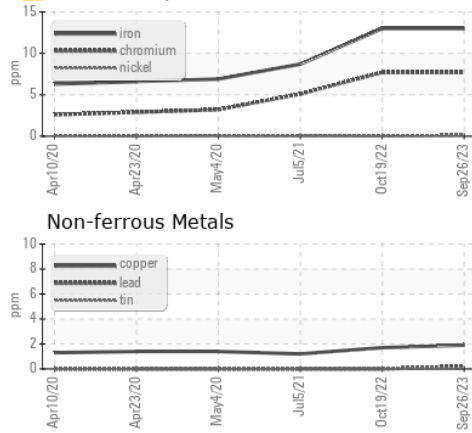
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	31.8	31.8

SAMPLE IMAGES

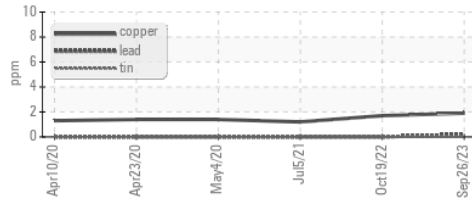


GRAPHS

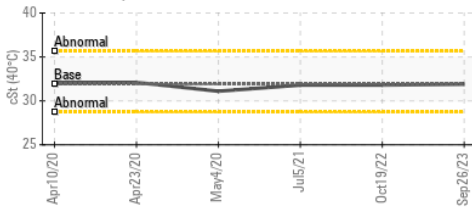
▲ Ferrous Alloys



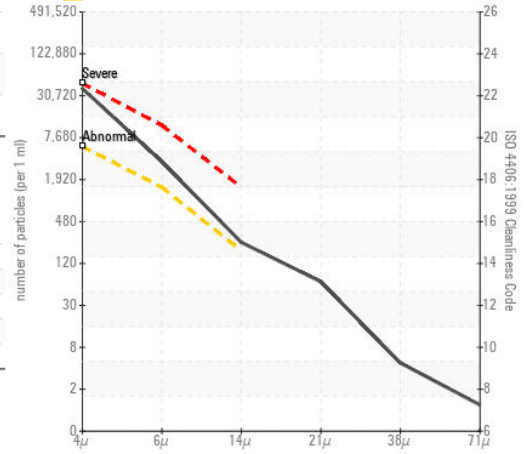
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0084387 **Received** : 12 Oct 2023
Lab Number : 02588635 **Diagnosed** : 13 Oct 2023
Unique Number : 5657701 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: PrtCount)

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.

4365 boul. St-Elzear Ouest,
 Laval, QC
 CA H7P 4J3
 Contact: Pieces Laval
 pieces.laval@gflenv.com
 T: (450)687-3838
 F: