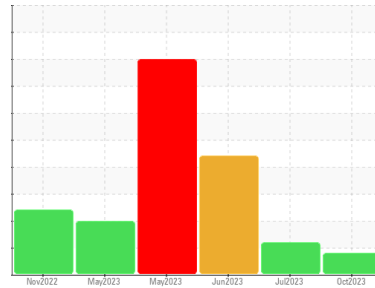




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
411009
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)

DIAGNOSIS

Recommendation

Nous avons pris note que le filtre a été remplacé au moment de l'échantillonnage. Confirm the source of the lubricant being utilized for top-up/fill. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

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

Fluid Condition

Les niveaux d'additifs indiquent l'ajout d'une autre marque ou d'un autre type d'huile. L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0097048	GFL0084479	GFL0084482
Sample Date	Client Info		16 Oct 2023	25 Jul 2023	19 Jun 2023
Machine Age	hrs	Client Info	7762	157258	151902
Oil Age	hrs	Client Info	1200	0	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ATTENTION	ABNORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	4	4	4
Chromium	ppm	ASTM D5185(m) >10	1	1	1
Nickel	ppm	ASTM D5185(m) >4	0	0	0
Titanium	ppm	ASTM D5185(m)	0	0	0
Silver	ppm	ASTM D5185(m)	<1	0	0
Aluminum	ppm	ASTM D5185(m) >5	<1	<1	<1
Lead	ppm	ASTM D5185(m) >4	1	1	<1
Copper	ppm	ASTM D5185(m) >15	6	6	6
Tin	ppm	ASTM D5185(m) >4	0	<1	0
Antimony	ppm	ASTM D5185(m)	0	0	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	0	0
Manganese	ppm	ASTM D5185(m) 1	0	0	0
Magnesium	ppm	ASTM D5185(m) 0	6	2	2
Calcium	ppm	ASTM D5185(m) 50	613	631	628
Phosphorus	ppm	ASTM D5185(m) 330	249	239	231
Zinc	ppm	ASTM D5185(m) 430	98	87	85
Sulfur	ppm	ASTM D5185(m) 760	1082	1106	1079
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

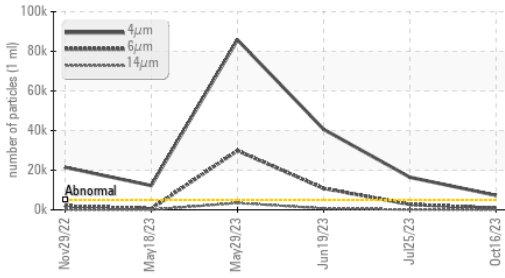
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	<1	<1	<1
Sodium	ppm	ASTM D5185(m)	2	2	3
Potassium	ppm	ASTM D5185(m) >20	0	0	0

FLUID CLEANLINESS

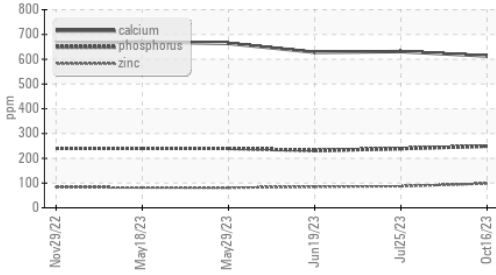
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 7258	▲ 16421	● 40616
Particles >6µm	ASTM D7647	>1300	754	▲ 2701	● 10808
Particles >14µm	ASTM D7647	>160	25	129	▲ 661
Particles >21µm	ASTM D7647	>40	6	32	▲ 127
Particles >38µm	ASTM D7647	>10	0	1	3
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 20/17/12	▲ 21/19/14	● 23/21/17

OIL ANALYSIS REPORT

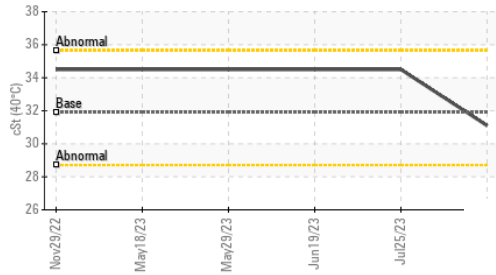
▲ Particle Trend



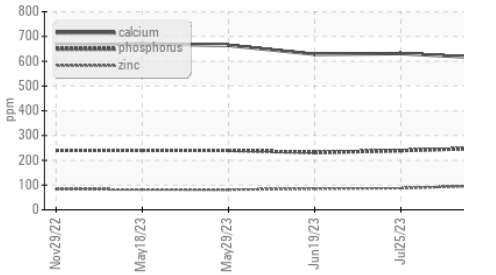
Additives



Viscosity @ 40°C



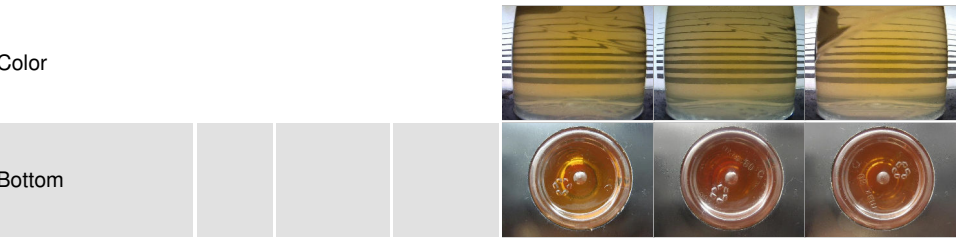
Additives



PARAMETER	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	NONE
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

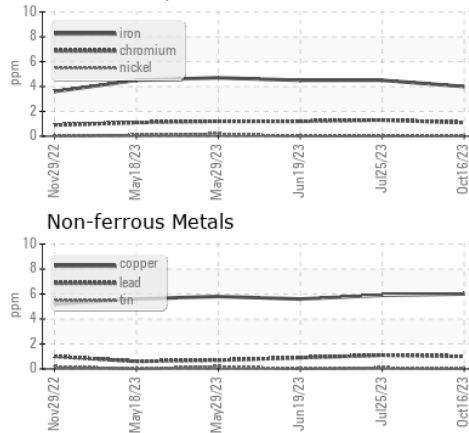
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	31.1	34.5

SAMPLE IMAGES

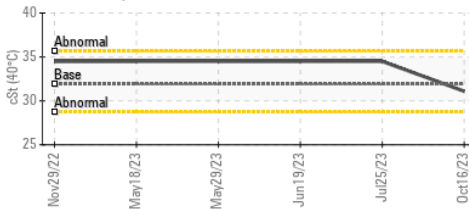


GRAPHS

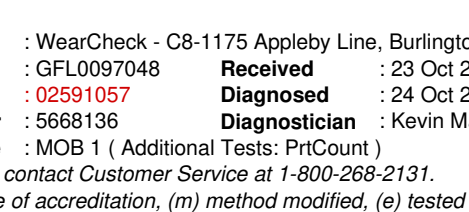
Ferrous Alloys



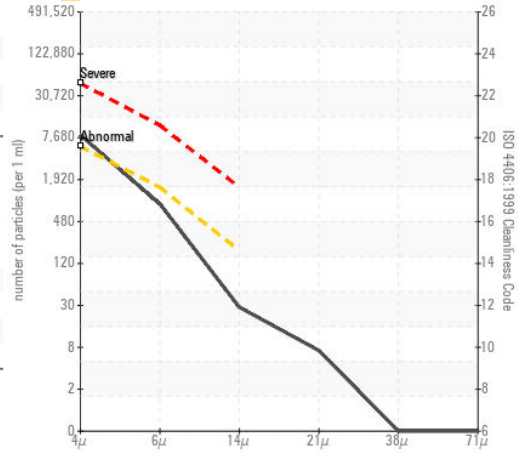
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0097048 **Received** : 23 Oct 2023 4365 boul. St-Elzear Ouest,
Lab Number : 02591057 **Diagnosed** : 24 Oct 2023 Laval, QC
Unique Number : 5668136 **Diagnostician** : Kevin Marson CA H7P 4J3
Test Package : MOB 1 (Additional Tests: PrtCount) Contact: Pieces Laval
 pieces.laval@gflenv.com
 T: (450)687-3838
 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.