



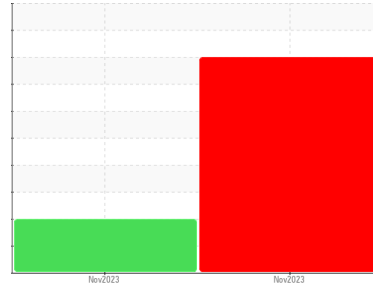
OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
OR425
Component
Hydraulic System
Fluid
CAT TDTO 30W (--- GAL)



DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. 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 dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Wear

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

Contamination

Il y a une quantité élevée de matières particulaires (2 à 100 µm de taille) présente 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'SAE 10W; nous vous conseillons de vérifier. 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		GFL0097087	GFL0097088	---
Sample Date	Client Info		10 Nov 2023	10 Nov 2023	---
Machine Age	hrs	Client Info	18125	18125	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Not Chngd	Not Chngd	---
Sample Status			SEVERE	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		16	---	---
Iron	ppm	ASTM D5185(m) >20	▲ 57	18	---
Chromium	ppm	ASTM D5185(m) >10	0	▲ 11	---
Nickel	ppm	ASTM D5185(m) >10	0	0	---
Titanium	ppm	ASTM D5185(m)	0	0	---
Silver	ppm	ASTM D5185(m)	<1	<1	---
Aluminum	ppm	ASTM D5185(m) >10	▲ 11	2	---
Lead	ppm	ASTM D5185(m) >10	0	<1	---
Copper	ppm	ASTM D5185(m) >75	<1	1	---
Tin	ppm	ASTM D5185(m) >10	0	0	---
Antimony	ppm	ASTM D5185(m)	0	0	---
Vanadium	ppm	ASTM D5185(m)	0	0	---
Beryllium	ppm	ASTM D5185(m)	0	0	---
Cadmium	ppm	ASTM D5185(m)	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	5	5	---
Barium	ppm	ASTM D5185(m)	<1	<1	---
Molybdenum	ppm	ASTM D5185(m)	0	<1	---
Manganese	ppm	ASTM D5185(m)	<1	0	---
Magnesium	ppm	ASTM D5185(m)	19	14	---
Calcium	ppm	ASTM D5185(m) 2980	3068	1153	---
Phosphorus	ppm	ASTM D5185(m) 1100	1052	726	---
Zinc	ppm	ASTM D5185(m) 1270	1229	824	---
Sulfur	ppm	ASTM D5185(m)	4836	1978	---
Lithium	ppm	ASTM D5185(m)	<1	<1	---

CONTAMINANTS

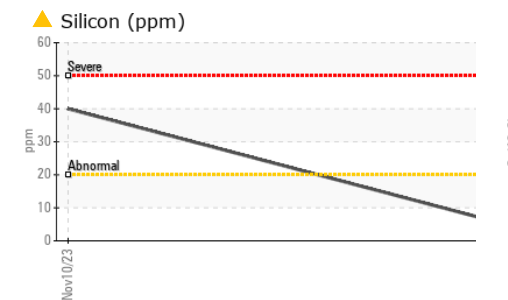
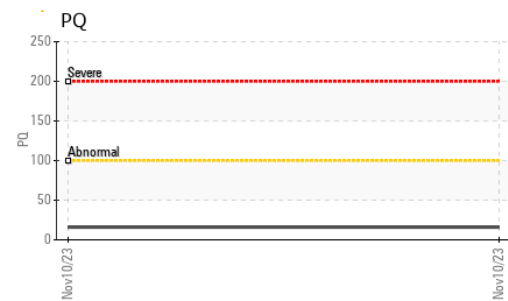
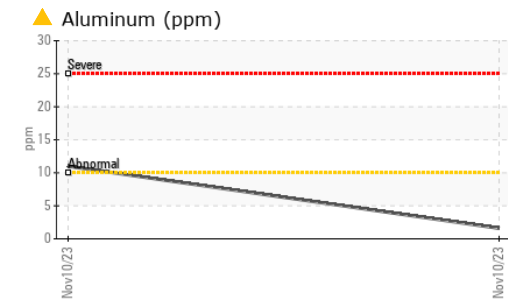
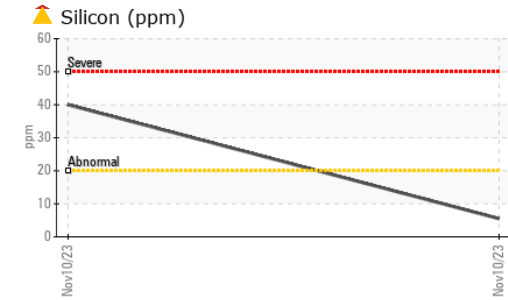
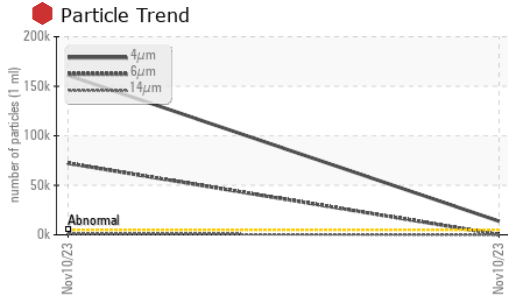
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >20	▲ 40	6	---
Sodium	ppm	ASTM D5185(m)	3	2	---
Potassium	ppm	ASTM D5185(m) >20	5	<1	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 161018	▲ 13717	---
Particles >6µm	ASTM D7647	>1300	▲ 72194	206	---
Particles >14µm	ASTM D7647	>160	▲ 981	7	---
Particles >21µm	ASTM D7647	>40	▲ 185	2	---
Particles >38µm	ASTM D7647	>10	9	1	---
Particles >71µm	ASTM D7647	>3	0	1	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 25/23/17	▲ 21/15/10	---



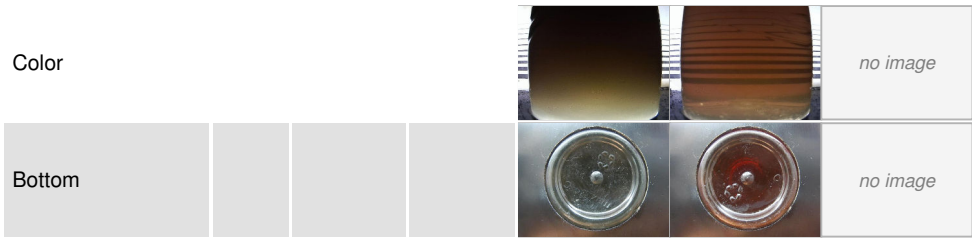
OIL ANALYSIS REPORT



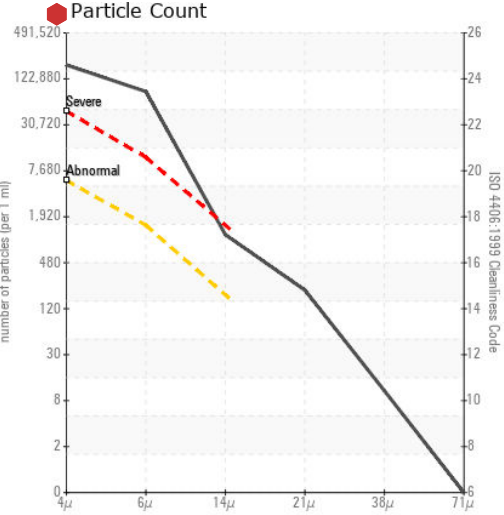
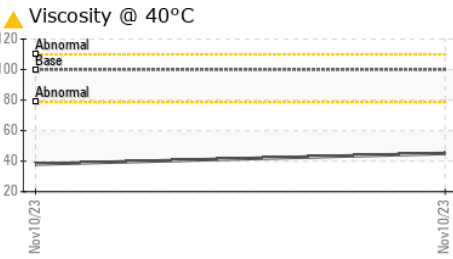
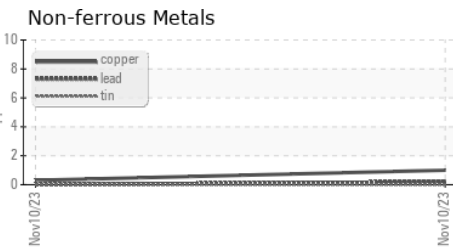
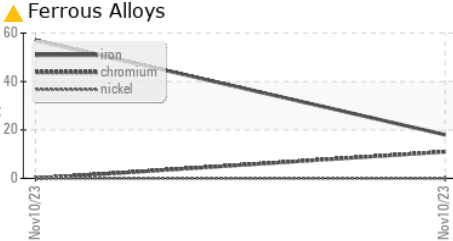
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	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)	100 ▲ 45.1	▲ 38.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0097087 **Received** : 14 Nov 2023 4365 boul. St-Elzear Ouest,
Lab Number : 02596246 **Diagnosed** : 15 Nov 2023 Laval, QC
Unique Number : 5681326 **Diagnostician** : Kevin Marson CA H7P 4J3
Test Package : MOB 1 (Additional Tests: PQ, PrtCount) Contact: Louis Michaud
 To discuss this sample report, contact Customer Service at 1-800-268-2131. louis.michaud@gflenv.com
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T:
 Validity of results and interpretation are based on the sample and information as supplied. F: