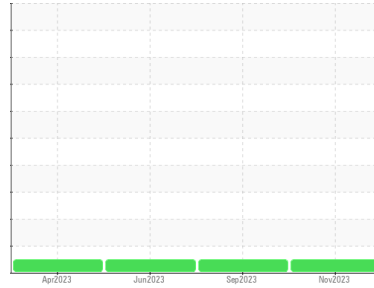




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
913139
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

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 n'y a aucun indice de contamination dans l'huile.

Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0097071	GFL0088897	GFL0047519
Sample Date	Client Info		22 Nov 2023	18 Sep 2023	12 Jun 2023
Machine Age	hrs	Client Info	1973	36621	22673
Oil Age	hrs	Client Info	600	0	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	13	17	16
Chromium	ppm	ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >5	5	2	3
Titanium	ppm	ASTM D5185(m) >2	0	0	<1
Silver	ppm	ASTM D5185(m) >2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m) >20	1	1	2
Lead	ppm	ASTM D5185(m) >40	1	4	<1
Copper	ppm	ASTM D5185(m) >330	39	134	27
Tin	ppm	ASTM D5185(m) >15	<1	1	2
Antimony	ppm	ASTM D5185(m)	0	0	<1
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) 1	3	3	15
Barium	ppm	ASTM D5185(m) 1	0	<1	0
Molybdenum	ppm	ASTM D5185(m) 1	56	60	63
Manganese	ppm	ASTM D5185(m) 1	0	0	1
Magnesium	ppm	ASTM D5185(m) 10	912	949	932
Calcium	ppm	ASTM D5185(m) 2942	1051	1111	1162
Phosphorus	ppm	ASTM D5185(m) 1102	942	977	1053
Zinc	ppm	ASTM D5185(m) 1351	1128	1175	1197
Sulfur	ppm	ASTM D5185(m) 3903	2342	2388	2518
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

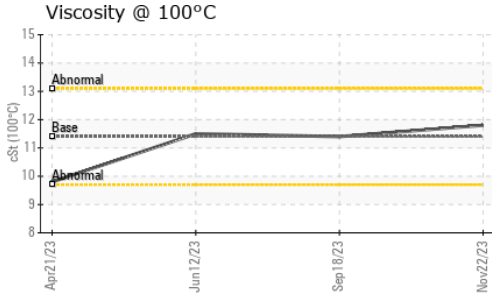
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	4	9
Sodium	ppm	ASTM D5185(m)	6	9	2
Potassium	ppm	ASTM D5185(m) >20	0	2	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.3	0.4	0.2
Nitration	Abs/cm	ASTM D7624* >20	7.5	7.8	7.1
Sulfation	Abs./1mm	ASTM D7415* >30	19.8	19.8	19.8



OIL ANALYSIS REPORT

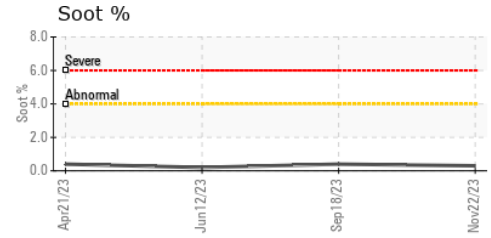
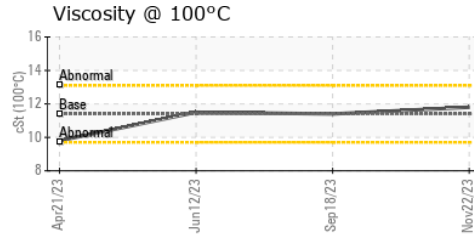
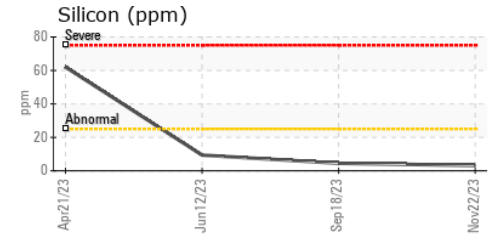
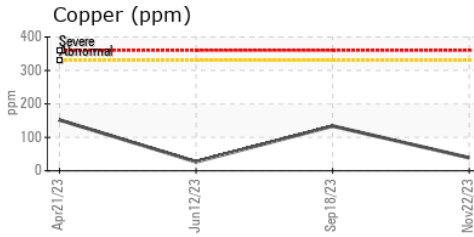
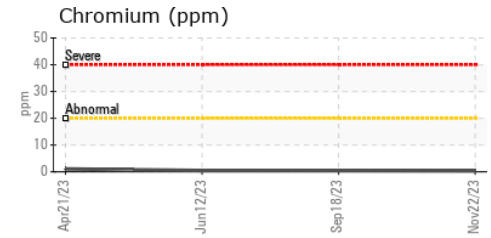
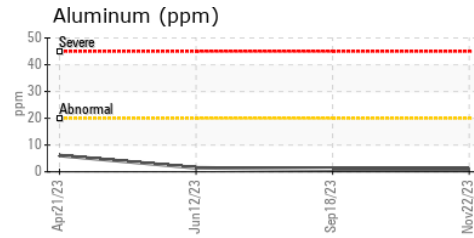
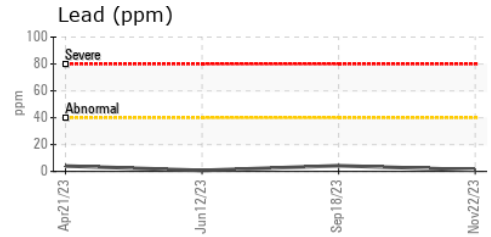
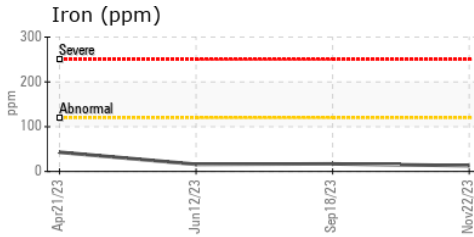


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	14.6	15.0	15.5

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---	---
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	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.8	11.4	11.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 780 - GMA - ICI - Solid Waste
Sample No. : GFL0097071 **Received** : 24 Nov 2023 4365 boul. St-Elzear Ouest,
Lab Number : 02598674 **Diagnosed** : 24 Nov 2023 Laval, QC
Unique Number : 5683754 **Diagnostician** : Wes Davis CA H7P 4J3
Test Package : MOB 1 (Additional Tests: Visual) Contact: Pieces Laval
 pieces.laval@gflenv.com

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.