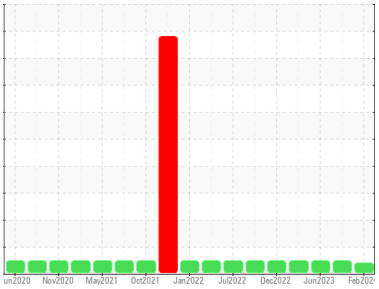
OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
701090
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Aucune mesure corrective n`est recommandée pour l`instant. 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
La teneur en carburant est négligeable. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Il n`y a aucun indice de contamination dans l`huile.

Fluid Condition
La viscosité de l'échantillon se situe dans la portée de l'SAE 30; nous vous conseillons de vérifier. L`état de l`huile est acceptable pour la durée de service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0107606**	GFL0087599	GFL0087666
Sample Date		Client Info		**29 Feb 2024**	14 Sep 2023	20 Jun 2023
Machine Age	kms	Client Info		**216043**	194218	183405
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
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)	>65	**15**	10	11
Chromium	ppm	ASTM D5185(m)	>5	**1**	1	1
Nickel	ppm	ASTM D5185(m)	>3	**<1**	0	0
Titanium	ppm	ASTM D5185(m)	>5	**0**	<1	0
Silver	ppm	ASTM D5185(m)	>2	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>35	**9**	6	3
Lead	ppm	ASTM D5185(m)	>10	**0**	0	0
Copper	ppm	ASTM D5185(m)	>180	**4**	2	2
Tin	ppm	ASTM D5185(m)	>8	**<1**	0	0
Antimony	ppm	ASTM D5185(m)	>35	**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**	2	2
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	60	**61**	58	57
Manganese	ppm	ASTM D5185(m)	0	**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	**987**	958	955
Calcium	ppm	ASTM D5185(m)	1070	**1098**	1054	1033
Phosphorus	ppm	ASTM D5185(m)	1150	**1001**	1029	1027
Zinc	ppm	ASTM D5185(m)	1270	**1222**	1189	1164
Sulfur	ppm	ASTM D5185(m)	2060	**2483**	2411	2403
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**4**	3	3
Sodium	ppm	ASTM D5185(m)		**2**	2	2
Potassium	ppm	ASTM D5185(m)	>20	**12**	9	3
Fuel	%	ASTM D7593*	>3.0	**0.4**	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	**0.5**	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	**8.3**	6.9	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**20.2**	19.3	19.1

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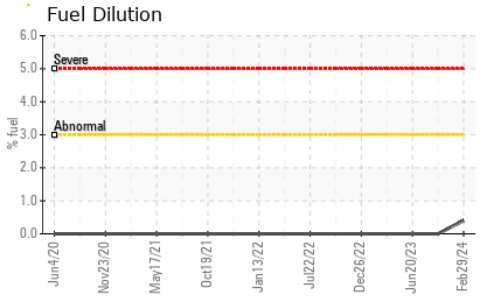
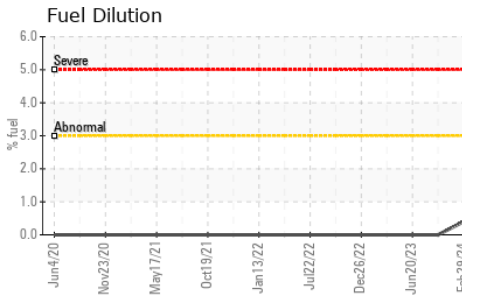


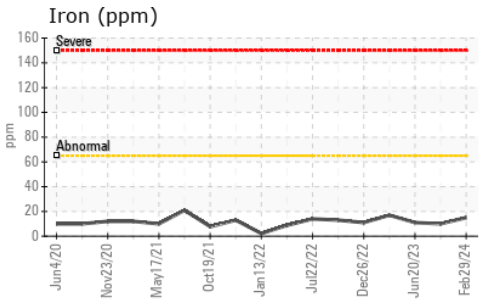


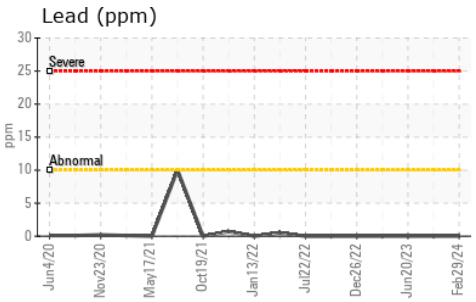
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**17.1**	14.3	14.6

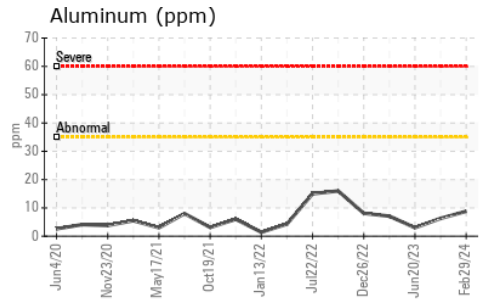
VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

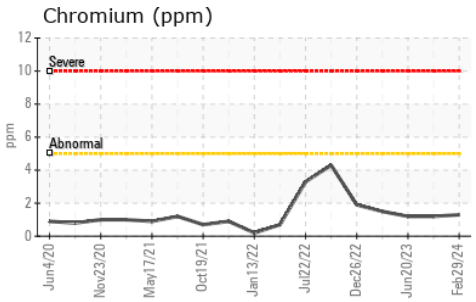
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	▲ **11.5**	11.8	11.5

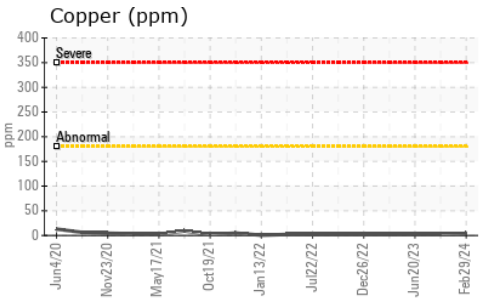
GRAPHS

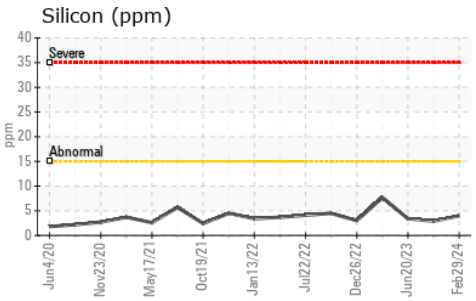


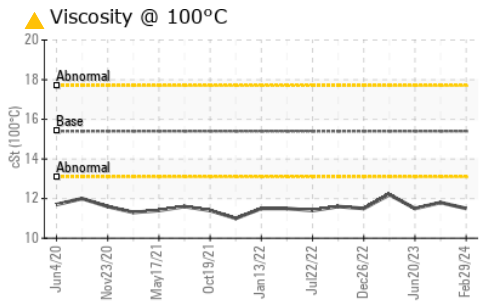


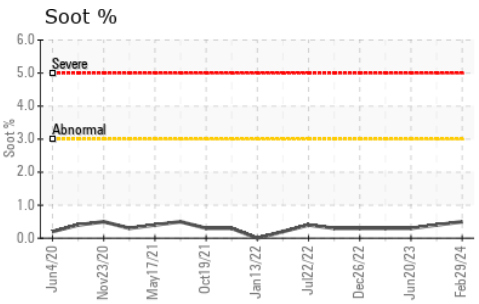












ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107606
Lab Number : 02619776
Unique Number : 5736886
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 04 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 06 Mar 2024 - Kevin Marson

GFL Environmental - 747 - GMA - Solid Waste
4 Chemin du Tremblay,
Boucherville, QC
CA J4B 6Z5
Contact: Steve Voyer
svoyer@matrec.ca
T:
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.