



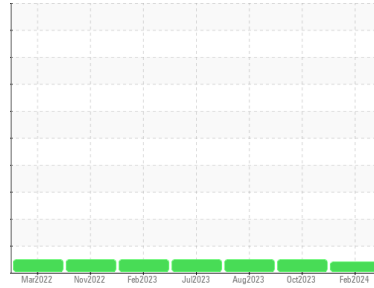
OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Machine Id
811040
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. 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	GFL0107593	GFL0096344	GFL0087564
Sample Date	Client Info	28 Feb 2024	17 Oct 2023	14 Aug 2023
Machine Age	hrs	5294	4718	70426
Oil Age	hrs	0	600	0
Oil Changed	Client Info	Changed	Changed	Changed
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) >200	25	13	26
Chromium	ppm ASTM D5185(m) >20	<1	<1	<1
Nickel	ppm ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm ASTM D5185(m) >2	0	0	<1
Silver	ppm ASTM D5185(m) >2	0	<1	0
Aluminum	ppm ASTM D5185(m) >30	4	3	5
Lead	ppm ASTM D5185(m) >30	0	<1	0
Copper	ppm ASTM D5185(m) >30	2	1	2
Tin	ppm ASTM D5185(m) >15	<1	0	<1
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	35	3
Barium	ppm ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm ASTM D5185(m) 60	65	56	58
Manganese	ppm ASTM D5185(m) 0	0	0	<1
Magnesium	ppm ASTM D5185(m) 1010	1058	681	970
Calcium	ppm ASTM D5185(m) 1070	1177	1406	1103
Phosphorus	ppm ASTM D5185(m) 1150	1074	972	1062
Zinc	ppm ASTM D5185(m) 1270	1271	1148	1191
Sulfur	ppm ASTM D5185(m) 2060	2772	2481	2543
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

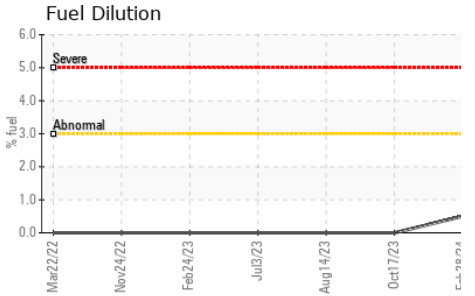
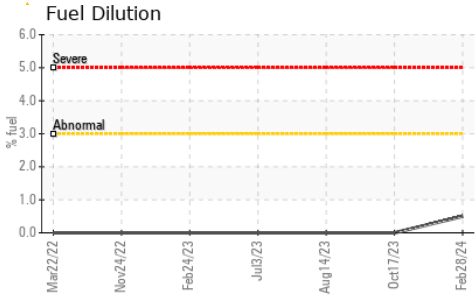
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	4	6	3
Sodium	ppm ASTM D5185(m)	2	2	2
Potassium	ppm ASTM D5185(m) >20	4	4	7
Fuel	% ASTM D7593* >3.0	0.5	<1.0	<1.0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0.6	0.2	0.4
Nitration	Abs/cm ASTM D7624* >20	10.2	6.7	7.8
Sulfation	Abs.1mm ASTM D7415* >30	21.2	21.2	20.8



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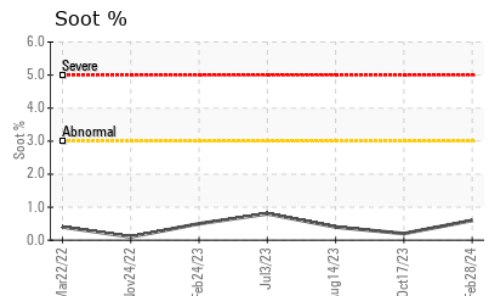
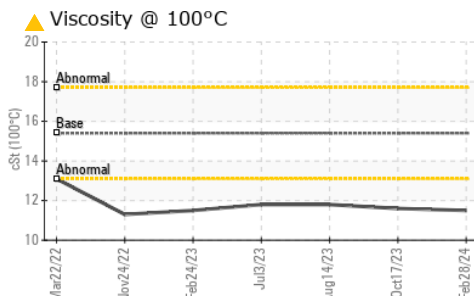
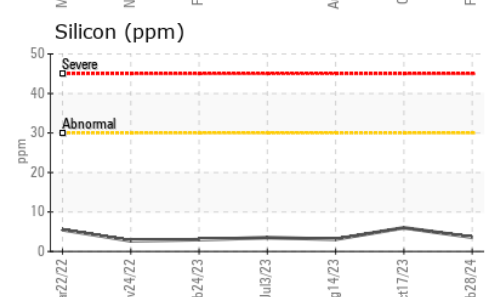
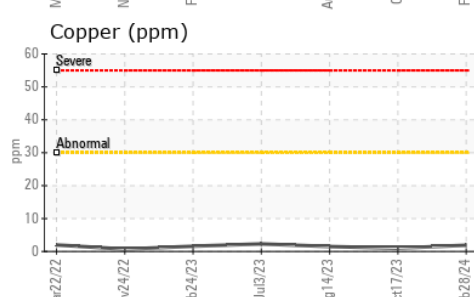
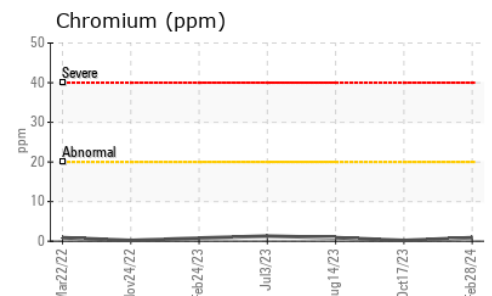
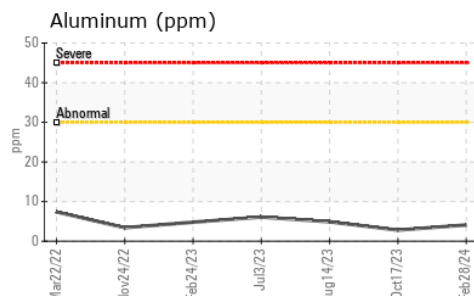
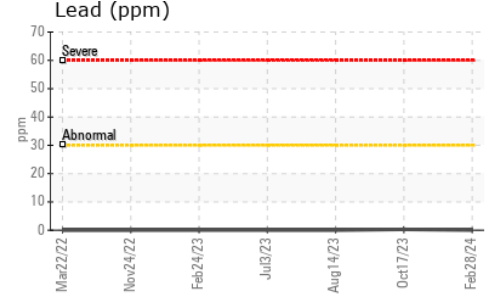
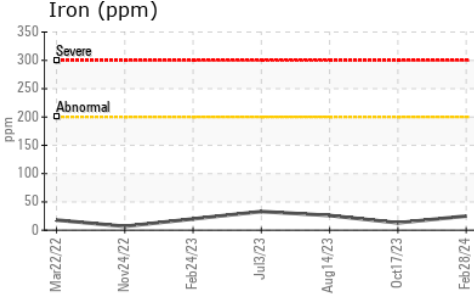


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	17.9	17.2	15.0

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	11.6	11.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 747 - GMA - Solid Waste**
Sample No. : GFL0107593 **Received** : 04 Mar 2024 **4 Chemin du Tremblay,**
Lab Number : 02619774 **Tested** : 05 Mar 2024 **Boucherville, QC**
Unique Number : 5736884 **Diagnosed** : 06 Mar 2024 - Kevin Marson **CA J4B 6Z5**
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel) **Contact: Steve Voyer**
To discuss this sample report, contact Customer Service at 1-800-268-2131. **svoyer@matrec.ca**
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:**