



OIL ANALYSIS REPORT

Sample Rating Trend

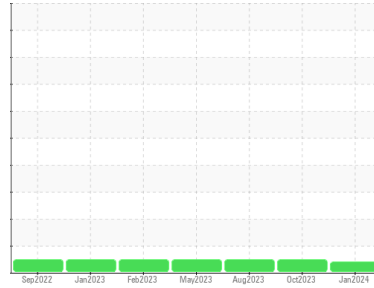
VISCOSITY



Machine Id
811039

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (32 LTR)



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 de métaux sont typiques pour la période de rodage d'un nouveau composant.

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	GFL0107570	GFL0096349	GFL0087630
Sample Date	Client Info	23 Jan 2024	26 Oct 2023	15 Aug 2023
Machine Age	kms Client Info	105728	99275	87708
Oil Age	kms Client Info	0	0	0
Oil Changed	Client Info	Changed	N/A	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	0.0	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >200	20	28	26
Chromium	ppm ASTM D5185(m) >20	2	<1	1
Nickel	ppm ASTM D5185(m) >2	<1	<1	<1
Titanium	ppm ASTM D5185(m) >2	0	0	0
Silver	ppm ASTM D5185(m) >2	0	<1	0
Aluminum	ppm ASTM D5185(m) >30	6	8	5
Lead	ppm ASTM D5185(m) >30	0	8	0
Copper	ppm ASTM D5185(m) >30	1	15	2
Tin	ppm ASTM D5185(m) >15	0	1	<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	40	2
Barium	ppm ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm ASTM D5185(m) 60	60	66	59
Manganese	ppm ASTM D5185(m) 0	0	0	<1
Magnesium	ppm ASTM D5185(m) 1010	987	916	985
Calcium	ppm ASTM D5185(m) 1070	1080	1244	1116
Phosphorus	ppm ASTM D5185(m) 1150	1025	1042	1052
Zinc	ppm ASTM D5185(m) 1270	1180	1252	1213
Sulfur	ppm ASTM D5185(m) 2060	2722	2699	2470
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

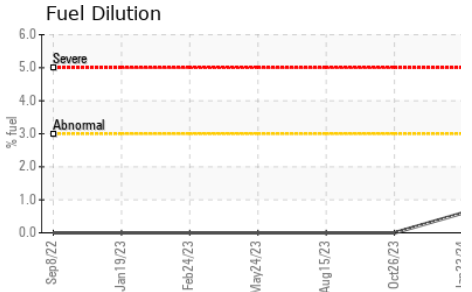
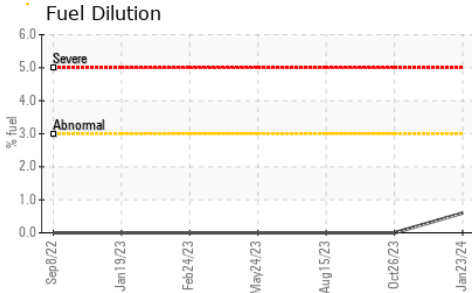
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	9	8	4
Sodium	ppm ASTM D5185(m)	1	6	2
Potassium	ppm ASTM D5185(m) >20	8	6	5
Fuel	% ASTM D7593* >3.0	0.6	<1.0	<1.0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0.3	0.4	0.7
Nitration	Abs/cm ASTM D7624* >20	7.4	8.7	9.2
Sulfation	Abs./1mm ASTM D7415* >30	19.4	24.5	22.4



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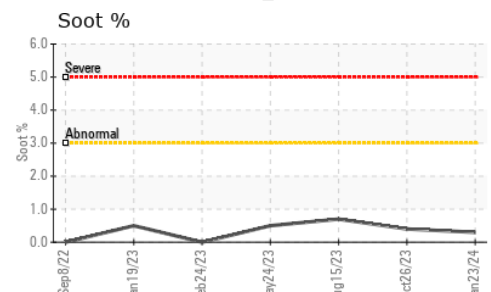
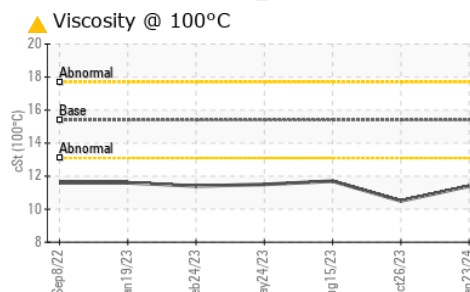
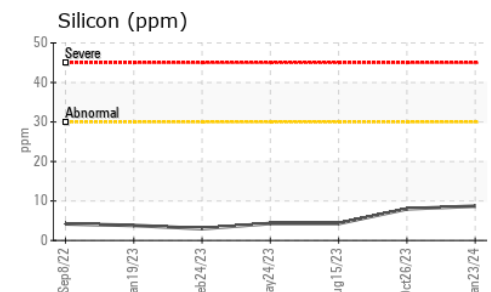
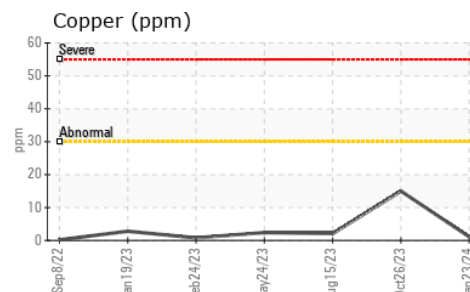
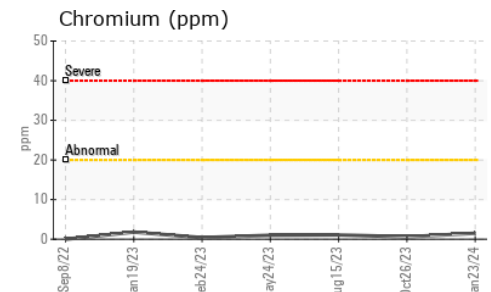
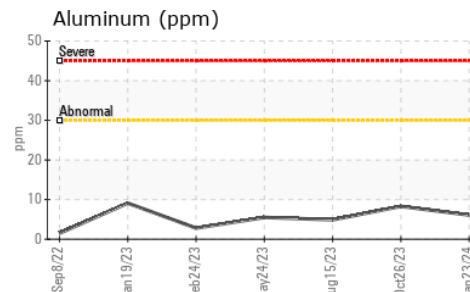
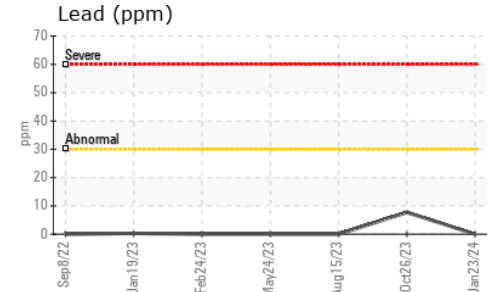
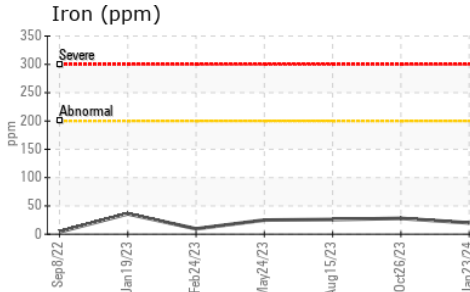


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.1	22.3	16.6

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	▲ 11.4	10.5	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0107570 **Received** : 05 Feb 2024
Lab Number : **02613416** **Tested** : 06 Feb 2024
Unique Number : 5722511 **Diagnosed** : 06 Feb 2024 - Bill Quesnel
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

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

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.

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F: