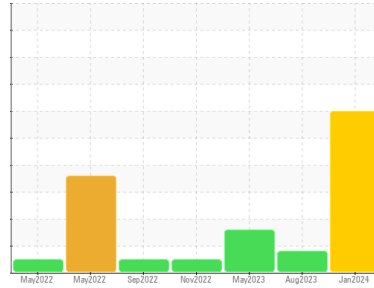




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
9216
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

Wear

Usure de la soupape d'échappement.

Contamination

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

Fluid Condition

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		GFL0093650	GFL0063123	GFL0063116
Sample Date	Client Info		09 Jan 2024	22 Aug 2023	03 May 2023
Machine Age	hrs	Client Info	19275	0	17754
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	ABNORMAL	ABNORMAL

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	44	67	8
Chromium	ppm	ASTM D5185(m) >20	1	<1	0
Nickel	ppm	ASTM D5185(m) >5	13	8	2
Titanium	ppm	ASTM D5185(m) >2	0	<1	<1
Silver	ppm	ASTM D5185(m) >2	0	0	0
Aluminum	ppm	ASTM D5185(m) >20	7	7	5
Lead	ppm	ASTM D5185(m) >40	2	3	3
Copper	ppm	ASTM D5185(m) >330	4	7	1
Tin	ppm	ASTM D5185(m) >15	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	0	<1	<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) 2	2	26	133
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 50	57	72	104
Manganese	ppm	ASTM D5185(m) 0	<1	1	<1
Magnesium	ppm	ASTM D5185(m) 950	908	879	649
Calcium	ppm	ASTM D5185(m) 1050	1093	1230	1528
Phosphorus	ppm	ASTM D5185(m) 995	962	939	722
Zinc	ppm	ASTM D5185(m) 1180	1152	1096	796
Sulfur	ppm	ASTM D5185(m) 2600	2329	2244	2006
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	10	13	25
Sodium	ppm	ASTM D5185(m)	4	9	4
Potassium	ppm	ASTM D5185(m) >20	2	2	1

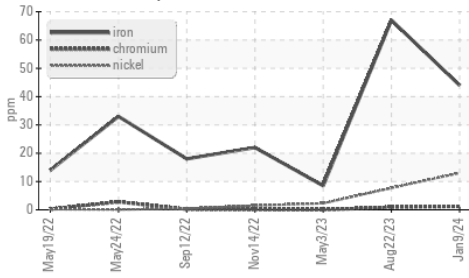
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.4	0.4	0.1
Nitration	Abs/cm	ASTM D7624* >20	10.2	11.4	10.2
Sulfation	Abs./1mm	ASTM D7415* >30	22.9	26.4	25.5

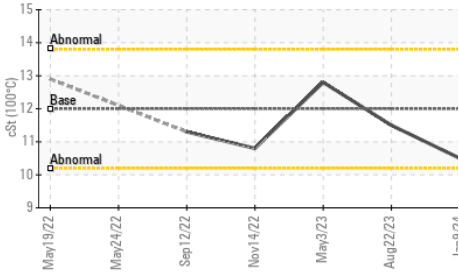


OIL ANALYSIS REPORT

Ferrous Alloys



Viscosity @ 100°C



FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm ASTM D7414*	>25	19.5	20.9	23.6

VISUAL

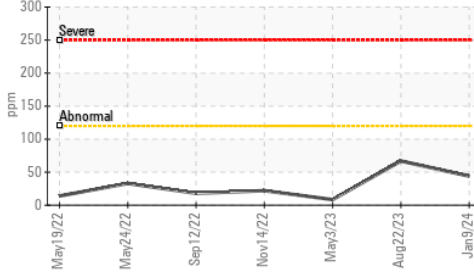
method	limit/base	current	history1	history2	
Emulsified Water	scalar Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar Visual*		NEG	NEG	NEG

FLUID PROPERTIES

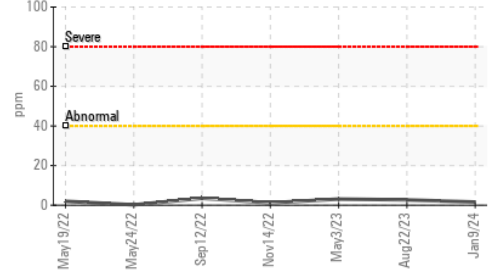
method	limit/base	current	history1	history2	
Visc @ 100°C	cSt ASTM D7279(m)	12.00	10.5	11.5	12.8

GRAPHS

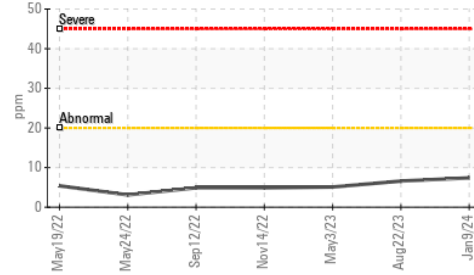
Iron (ppm)



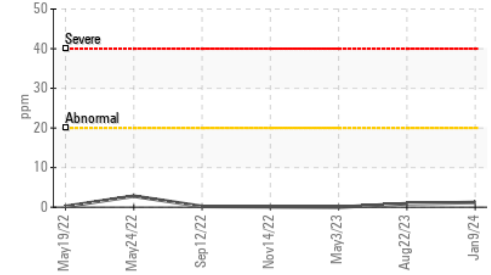
Lead (ppm)



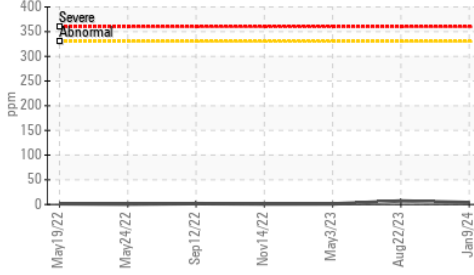
Aluminum (ppm)



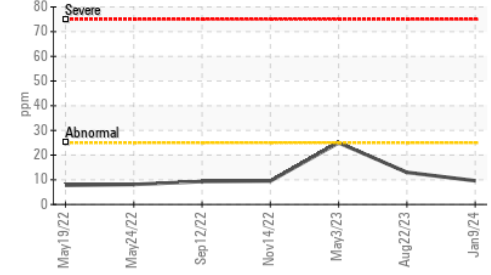
Chromium (ppm)



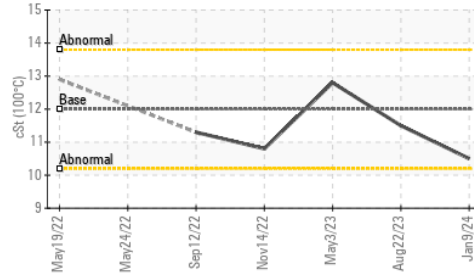
Copper (ppm)



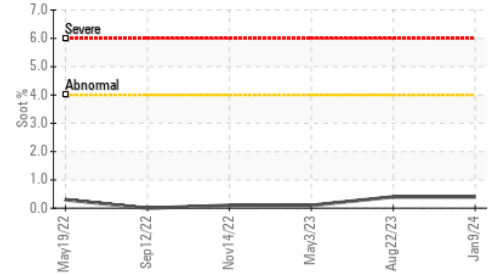
Silicon (ppm)



Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 769 - Drummondville CD**
Sample No. : GFL0093650 **Received** : 05 Feb 2024 1005 rue Rhea
Lab Number : 02613372 **Tested** : 05 Feb 2024 Drummondville, QC
Unique Number : 5722467 **Diagnosed** : 05 Feb 2024 - Bill Quesnel CA J2B 8A9
Test Package : MOB 1 **Contact**: Service Manager

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.

T:
F: