



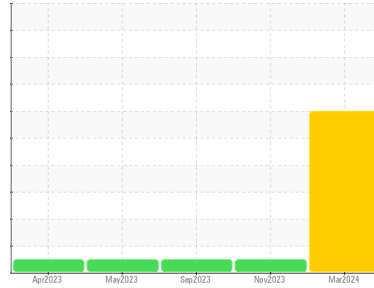
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
713063
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SAE 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		GFL0114923	GFL0097090	GFL0088900
Sample Date	Client Info		08 Mar 2024	08 Nov 2023	20 Sep 2023
Machine Age	hrs	Client Info	2183	24739	1369
Oil Age	hrs	Client Info	0	0	600
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	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	16	6	16
Chromium	ppm	ASTM D5185(m) >20	<1	0	<1
Nickel	ppm	ASTM D5185(m) >5	▲ 9	1	2
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m) >20	2	<1	1
Lead	ppm	ASTM D5185(m) >40	<1	<1	<1
Copper	ppm	ASTM D5185(m) >330	8	6	13
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) 1	5	3	4
Barium	ppm	ASTM D5185(m) 1	0	<1	<1
Molybdenum	ppm	ASTM D5185(m) 1	59	55	61
Manganese	ppm	ASTM D5185(m) 1	<1	0	<1
Magnesium	ppm	ASTM D5185(m) 10	956	894	972
Calcium	ppm	ASTM D5185(m) 2942	1138	1024	1071
Phosphorus	ppm	ASTM D5185(m) 1102	1000	934	993
Zinc	ppm	ASTM D5185(m) 1351	1184	1111	1199
Sulfur	ppm	ASTM D5185(m) 3903	2618	2449	2410
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	3	4	7
Sodium	ppm	ASTM D5185(m)	3	3	4
Potassium	ppm	ASTM D5185(m) >20	3	0	2

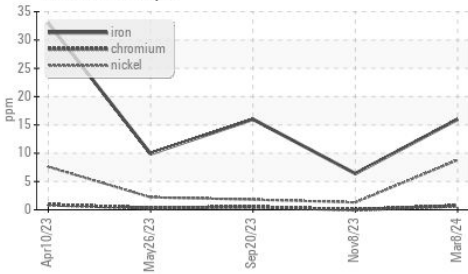
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.3	0.1	0.3
Nitration	Abs/cm	ASTM D7624* >20	9.5	6.5	8.5
Sulfation	Abs./1mm	ASTM D7415* >30	21.4	19.1	20.7

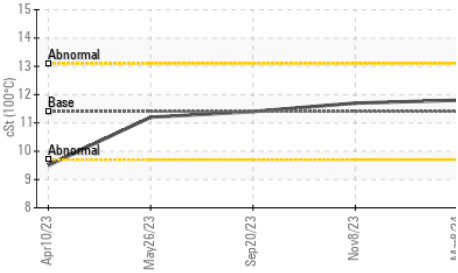


OIL ANALYSIS REPORT

▲ Ferrous Alloys



Viscosity @ 100°C



FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.7	14.4

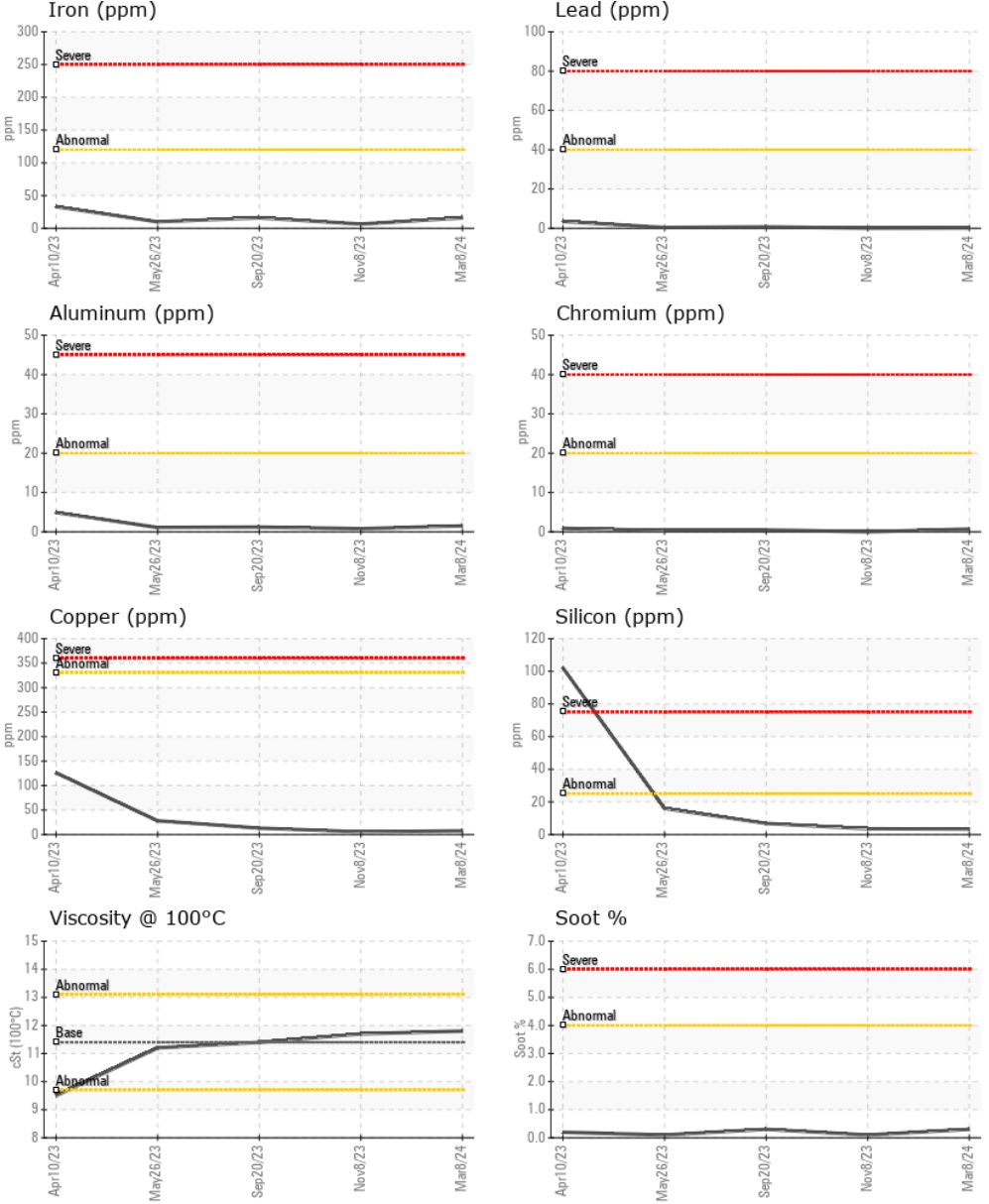
VISUAL

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

FLUID PROPERTIES

	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	11.4	11.8	11.7

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 780 - GMA - ICI - Solid Waste**
Sample No. : GFL0114923 **Received** : 12 Mar 2024 4365 boul. St-Ezear Ouest,
Lab Number : 02621340 **Tested** : 12 Mar 2024 Laval, QC
Unique Number : 5746459 **Diagnosed** : 13 Mar 2024 - Kevin Marson CA H7P 4J3
Test Package : MOB 1

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.