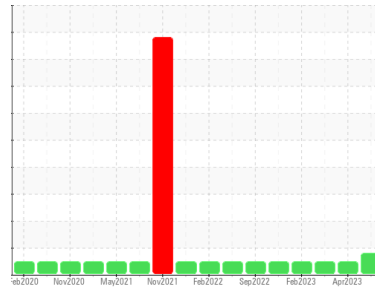




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
8324
 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 piston.

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	GFL0087611	GFL0079508	GFL0072714
Sample Date	Client Info	04 Oct 2023	17 Apr 2023	09 Mar 2023
Machine Age	hrs	333317	328818	17833
Oil Age	hrs	0	0	0
Oil Changed	Client Info	Changed	Changed	N/A
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >3.0	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >75	31	14	8
Chromium	ppm ASTM D5185(m) >5	2	<1	<1
Nickel	ppm ASTM D5185(m) >4	<1	<1	<1
Titanium	ppm ASTM D5185(m) >2	0	<1	<1
Silver	ppm ASTM D5185(m) >2	<1	0	0
Aluminum	ppm ASTM D5185(m) >15	▲ 25	4	2
Lead	ppm ASTM D5185(m) >25	<1	<1	0
Copper	ppm ASTM D5185(m) >100	1	<1	<1
Tin	ppm ASTM D5185(m) >4	0	0	0
Antimony	ppm ASTM D5185(m)	0	<1	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) 2	2	2	2
Barium	ppm ASTM D5185(m) 0	<1	0	0
Molybdenum	ppm ASTM D5185(m) 50	61	59	59
Manganese	ppm ASTM D5185(m) 0	0	<1	<1
Magnesium	ppm ASTM D5185(m) 950	979	973	951
Calcium	ppm ASTM D5185(m) 1050	1081	1095	1082
Phosphorus	ppm ASTM D5185(m) 995	1035	1084	1096
Zinc	ppm ASTM D5185(m) 1180	1222	1191	1184
Sulfur	ppm ASTM D5185(m) 2600	2519	2609	2700
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	6	4	4
Sodium	ppm ASTM D5185(m)	10	5	2
Potassium	ppm ASTM D5185(m) >20	3	1	<1

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >6	1.3	0.2	0
Nitration	Abs/cm ASTM D7624* >20	9.0	7.2	6.0
Sulfation	Abs/.1mm ASTM D7415* >30	21.3	19.1	20.6

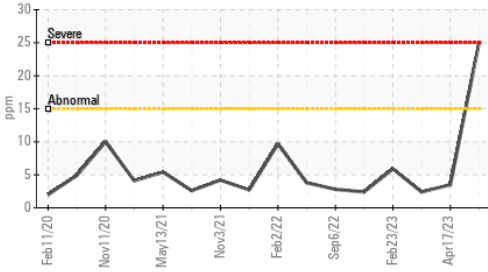
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm ASTM D7414* >25	15.0	15.0	14.4



OIL ANALYSIS REPORT

▲ Aluminum (ppm)



VISUAL method limit/base current history1 history2

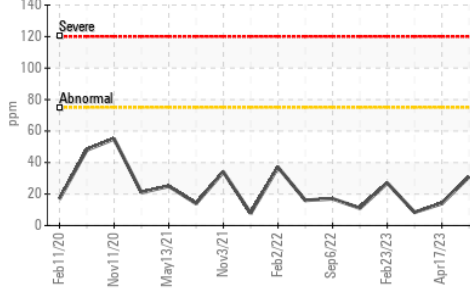
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES method limit/base current history1 history2

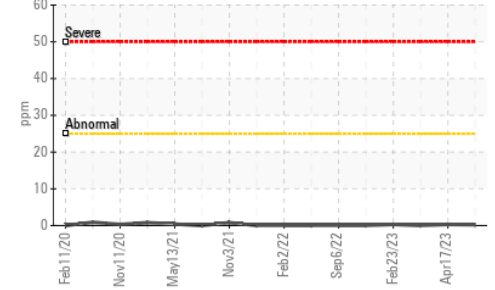
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.8	11.6	11.5
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GRAPHS

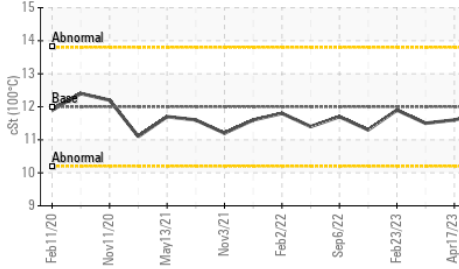
Iron (ppm)



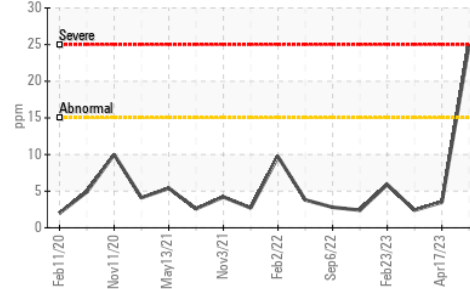
Lead (ppm)



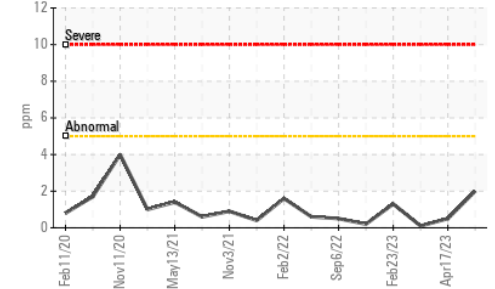
Viscosity @ 100°C



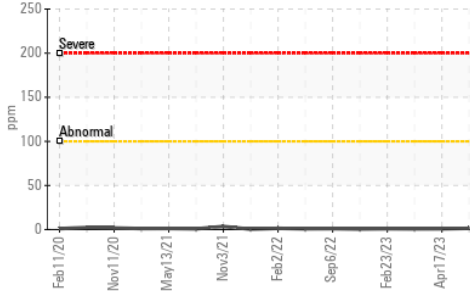
▲ Aluminum (ppm)



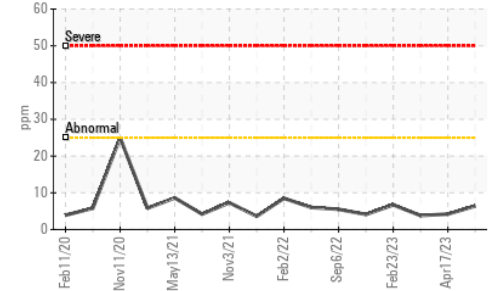
Chromium (ppm)



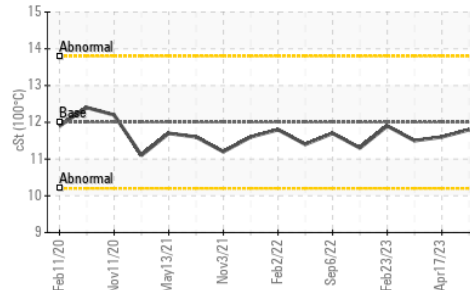
Copper (ppm)



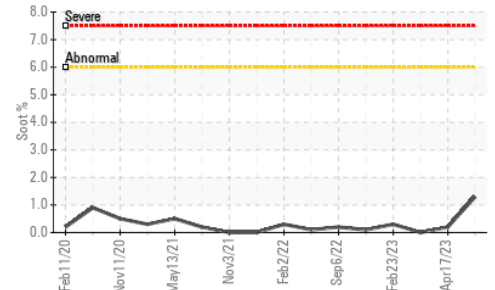
Silicon (ppm)



Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 747 - GMA - Solid Waste
Sample No. : GFL0087611 **Received** : 17 Oct 2023
Lab Number : 02589543 **Diagnosed** : 17 Oct 2023
Unique Number : 5658609 **Diagnostician** : Kevin Marson
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.

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