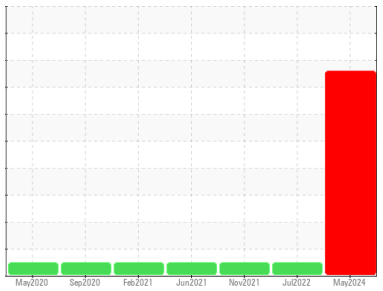
OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
8329
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

▲ Recommendation
Nous vous recommandons de vidanger l`huile de ce composant si vous ne l`avez pas déjà fait. Nous vous recommandons d`échantillonner de nouveau dès que possible afin de contrôler la situation.

▲ Wear
Usure de cylindre, de vilebrequin ou d`arbre à cames. Usure de segment. 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 anomale et/ou sévère.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0120712**	GFL0053325	GFL0026716
Sample Date		Client Info		**09 May 2024**	07 Jul 2022	04 Nov 2021
Machine Age	hrs	Client Info		**14811**	290934	12573
Oil Age	hrs	Client Info		**600**	0	400
Oil Changed		Client Info		**N/A**	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

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		**0**	---	---
Iron	ppm	ASTM D5185(m)	>75	▲ **115**	67	45
Chromium	ppm	ASTM D5185(m)	>5	▲ **5**	2	2
Nickel	ppm	ASTM D5185(m)	>4	**2**	1	<1
Titanium	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Silver	ppm	ASTM D5185(m)	>2	**0**	0	<1
Aluminum	ppm	ASTM D5185(m)	>15	▲ **52**	11	8
Lead	ppm	ASTM D5185(m)	>25	**6**	12	9
Copper	ppm	ASTM D5185(m)	>100	**94**	183	256
Tin	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
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	**4**	2	15
Barium	ppm	ASTM D5185(m)	0	**0**	0	0
Molybdenum	ppm	ASTM D5185(m)	50	**62**	65	60
Manganese	ppm	ASTM D5185(m)	0	**1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	**991**	1017	946
Calcium	ppm	ASTM D5185(m)	1050	**1184**	1218	1283
Phosphorus	ppm	ASTM D5185(m)	995	**953**	984	1123
Zinc	ppm	ASTM D5185(m)	1180	**1210**	1322	1322
Sulfur	ppm	ASTM D5185(m)	2600	**1859**	1950	2481
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**22**	16	17
Sodium	ppm	ASTM D5185(m)		**14**	27	52
Potassium	ppm	ASTM D5185(m)	>20	**7**	6	6
Glycol	%	ASTM D7922*		**0.0**	0.0	0.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>6	**0.8**	1.3	0.8
Nitration	Abs/cm	ASTM D7624*	>20	**12.8**	14.3	11.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	**24.0**	26.3	25.1

OIL ANALYSIS REPORT

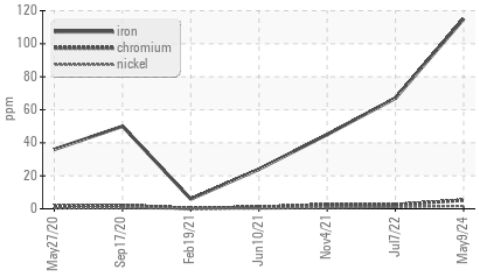
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**21.8**	24.2	19.2

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

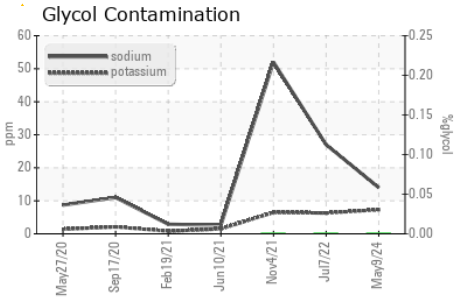
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	**12.0**	12.0	12.4

GRAPHS

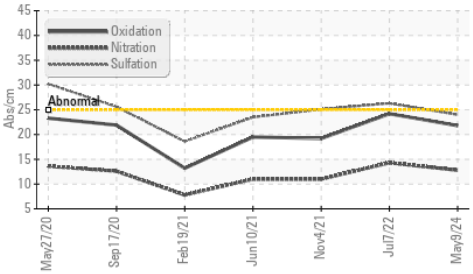
Ferrous Alloys



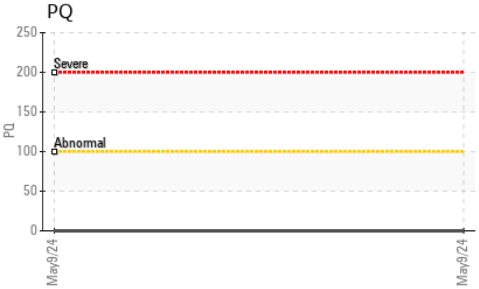
Glycol Contamination



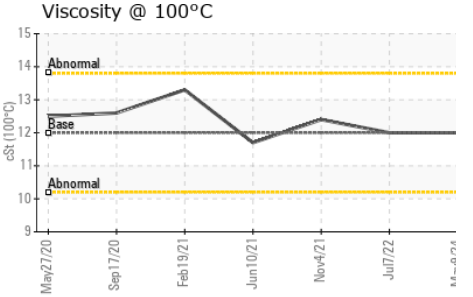
FT-IR (Direct Trend)



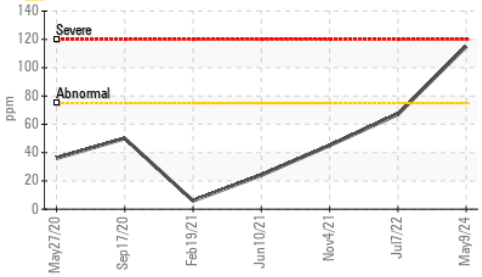
PQ



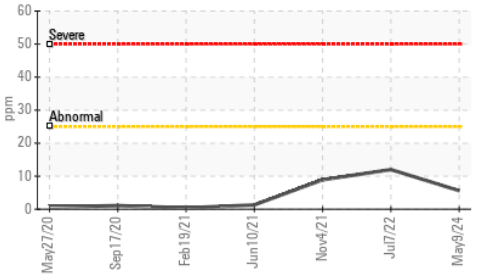
Viscosity @ 100°C



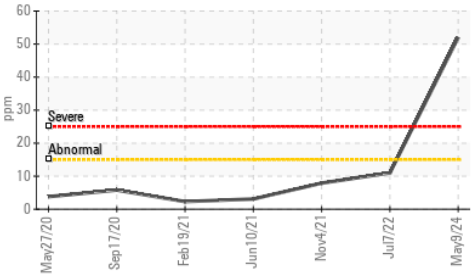
Iron (ppm)



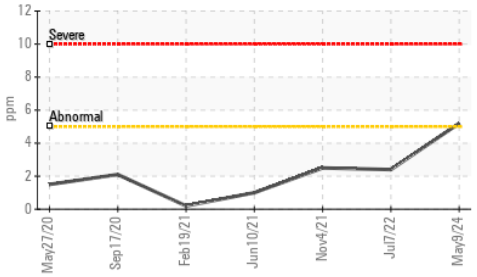
Lead (ppm)



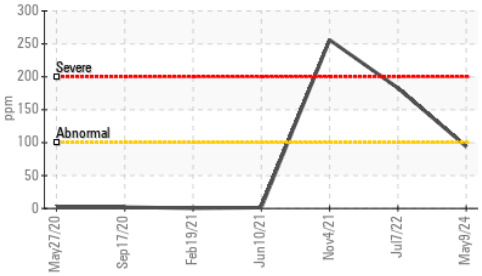
Aluminum (ppm)



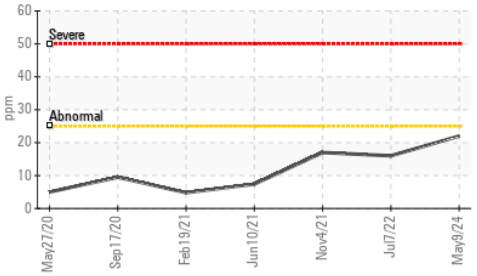
Chromium (ppm)



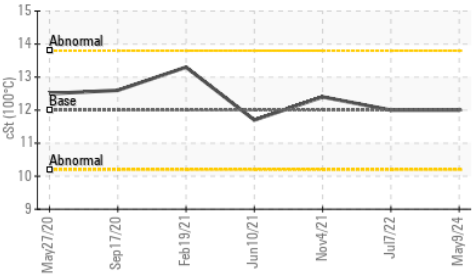
Copper (ppm)



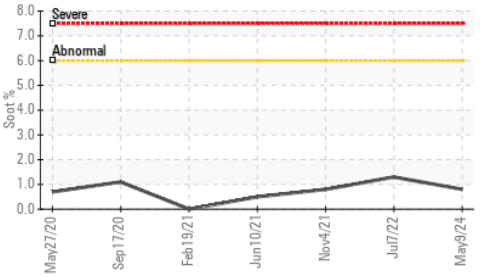
Silicon (ppm)



Viscosity @ 100°C



Soot %



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0120712
Lab Number : 02635538
Unique Number : 5776691
Test Package : MOB 1 (Additional Tests: Glycol, PQ)

Received : 15 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Kevin Marson

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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Report Id: GFL747 [WCAMIS] 02635538 (Generated: 05/17/2024 14:01:36) Rev: 1

Submitted By: Steve Voyer