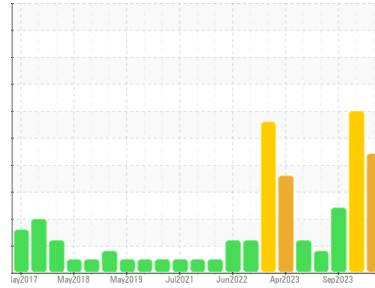




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
4793

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. Light fuel dilution occurring. There is a light concentration of glycol present in the oil. No other contaminants were detected in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0102655	GFL0101719	GFL0093911
Sample Date	Client Info	22 Jan 2024	25 Nov 2023	14 Sep 2023
Machine Age	hrs	19782	1941	18867
Oil Age	hrs	371	0	0
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ATTENTION	SEVERE	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >110	30	30	21
Chromium	ppm ASTM D5185(m) >4	1	1	<1
Nickel	ppm ASTM D5185(m) >2	<1	<1	0
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m) >2	0	<1	<1
Aluminum	ppm ASTM D5185(m) >25	2	2	2
Lead	ppm ASTM D5185(m) >45	0	<1	<1
Copper	ppm ASTM D5185(m) >85	<1	1	1
Tin	ppm ASTM D5185(m) >4	0	0	0
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) 2	2	3	1
Barium	ppm ASTM D5185(m) 0	0	<1	0
Molybdenum	ppm ASTM D5185(m) 50	64	58	52
Manganese	ppm ASTM D5185(m) 0	0	0	<1
Magnesium	ppm ASTM D5185(m) 950	909	761	804
Calcium	ppm ASTM D5185(m) 1050	1026	843	869
Phosphorus	ppm ASTM D5185(m) 995	962	754	843
Zinc	ppm ASTM D5185(m) 1180	1130	941	983
Sulfur	ppm ASTM D5185(m) 2600	2586	2034	2093
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

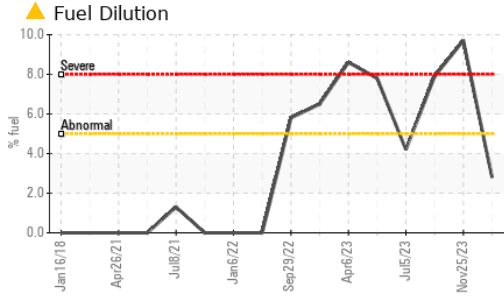
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	6	5	5
Sodium	ppm ASTM D5185(m)	▲ 234	▲ 252	90
Potassium	ppm ASTM D5185(m) >20	3	2	0
Fuel	% ASTM D7593*	▲ 2.8	◆ 9.7	▲ 7.9
Glycol	% ASTM D7922*	▲ 0.016	▲ 0.022	0.0

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	0.7	0.8	0.5
Nitration	Abs/cm ASTM D7624* >20	11.3	13.8	11.6
Sulfation	Abs/.1mm ASTM D7415* >30	21.0	25.5	26.4



OIL ANALYSIS REPORT

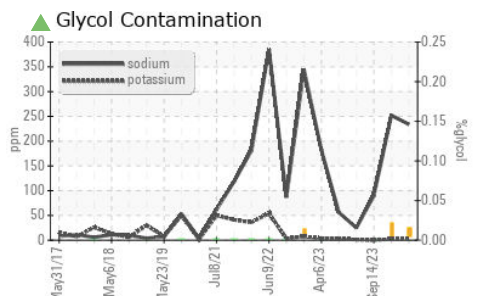
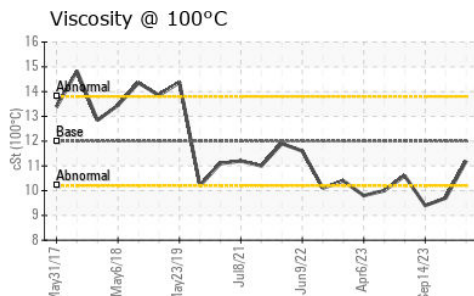
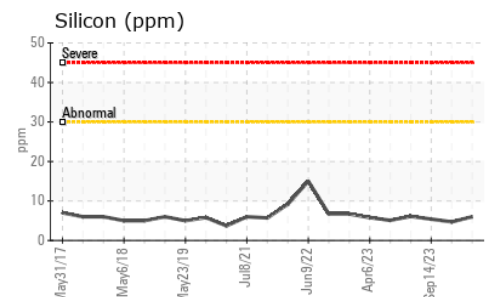
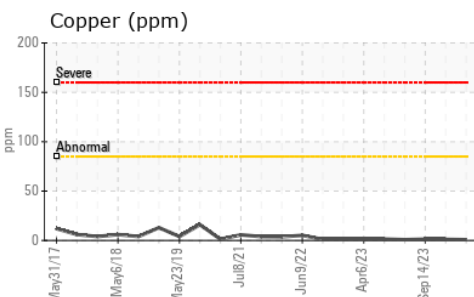
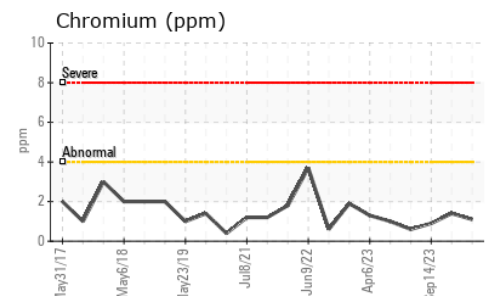
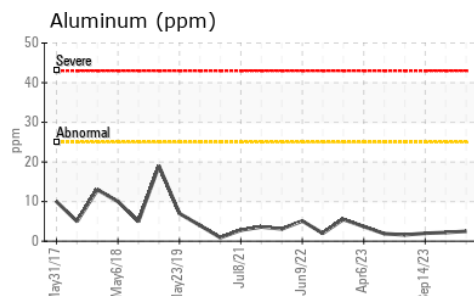
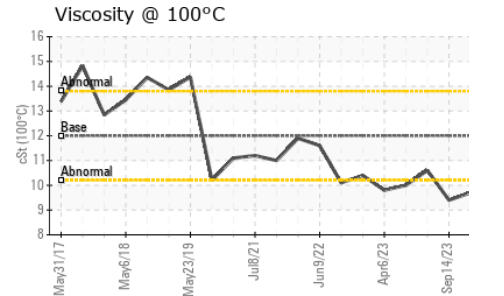
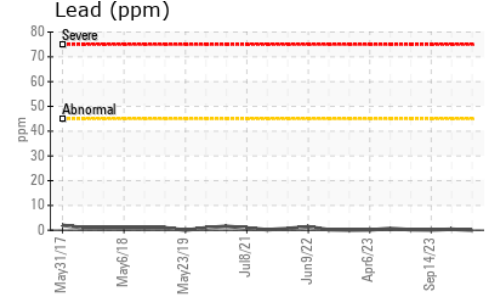
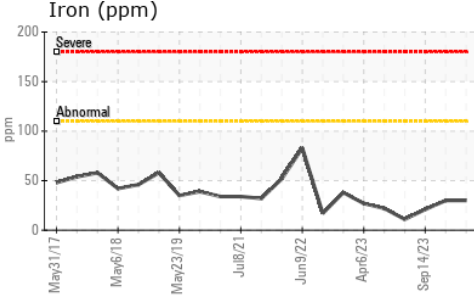
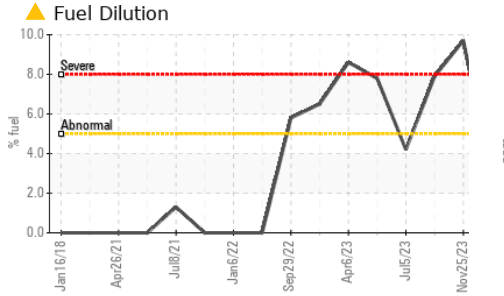


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	18.3	27.4	▲ 30.6

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	11.2	▲ 9.7	▲ 9.4

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW
Sample No. : GFL0102655 **Received** : 26 Jan 2024
Lab Number : 02611363 **Diagnosed** : 30 Jan 2024
Unique Number : 5720458 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: Glycol, PercentFuel)

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.

Contact: Tim Greig
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