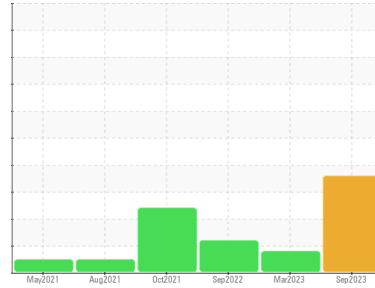




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
255004

Component
Gasoline Engine

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

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Test for glycol is positive. There is a light concentration of glycol present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. 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	GFL0084118	GFL0073160	GFL0039285	
Sample Date	Client Info	26 Sep 2023	15 Mar 2023	23 Sep 2022	
Machine Age	kms	Client Info	250360	7024	1410
Oil Age	kms	Client Info	0	0	600
Oil Changed	Client Info	N/A	N/A	Changed	
Sample Status		ATTENTION	MARGINAL	ABNORMAL	

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >4.0	<1.0	▲ 2.2	▲ 3.6

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >150	44	39	50
Chromium	ppm	ASTM D5185(m) >20	2	1	2
Nickel	ppm	ASTM D5185(m) >5	1	1	1
Titanium	ppm	ASTM D5185(m)	7	0	<1
Silver	ppm	ASTM D5185(m) >2	<1	0	0
Aluminum	ppm	ASTM D5185(m) >40	6	4	5
Lead	ppm	ASTM D5185(m) >50	<1	<1	0
Copper	ppm	ASTM D5185(m) >155	8	4	12
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	<1	<1	<1
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	19	11	10
Barium	ppm	ASTM D5185(m) 0	0	0	0
Molybdenum	ppm	ASTM D5185(m) 50	103	66	66
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 950	634	401	431
Calcium	ppm	ASTM D5185(m) 1050	1292	1146	1453
Phosphorus	ppm	ASTM D5185(m) 995	657	628	625
Zinc	ppm	ASTM D5185(m) 1180	809	652	651
Sulfur	ppm	ASTM D5185(m) 2600	1972	1766	1737
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >30	8	5	7
Sodium	ppm	ASTM D5185(m) >400	▲ 24	21	40
Potassium	ppm	ASTM D5185(m) >20	1	2	4
Glycol	%	ASTM D7922*	▲ 0.012	0.0	NEG

INFRA-RED

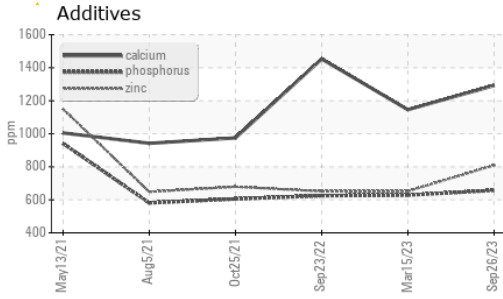
method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	0	0	0	
Nitration	Abs/cm	ASTM D7624*	>20	16.1	12.6	15.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	30.3	28.5	29.8

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	30.4	20.7	26.6



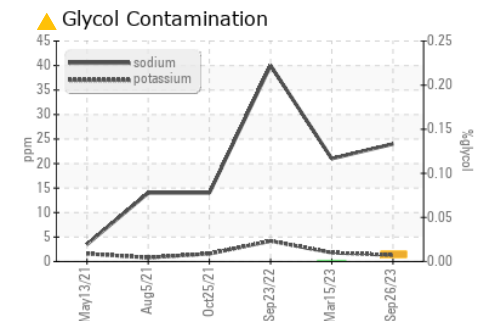
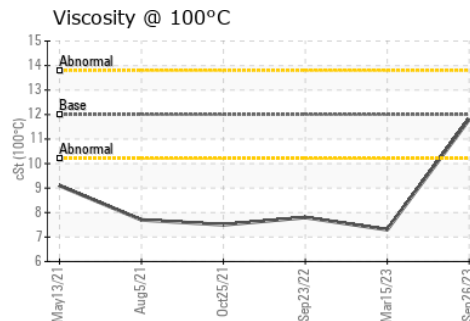
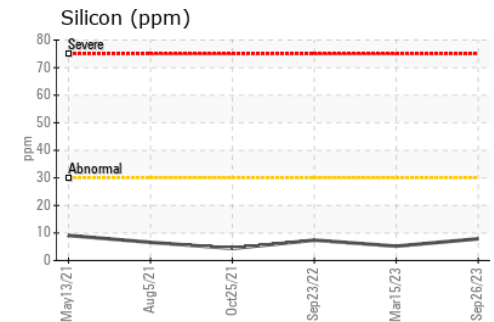
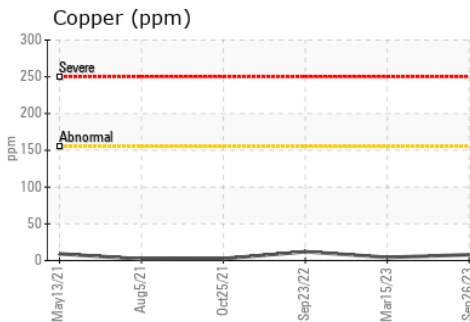
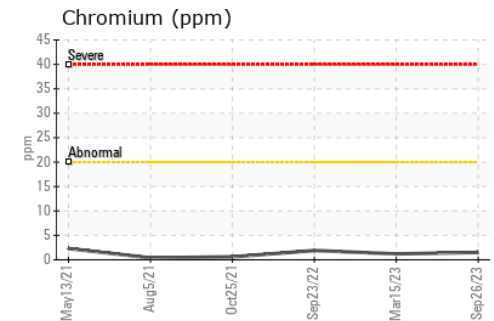
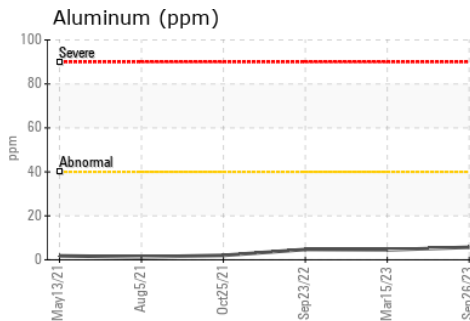
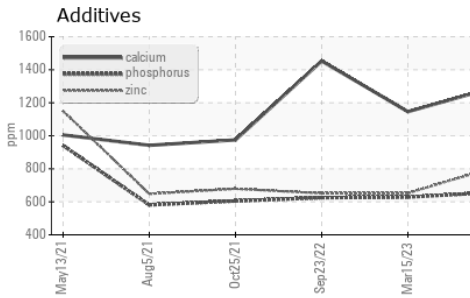
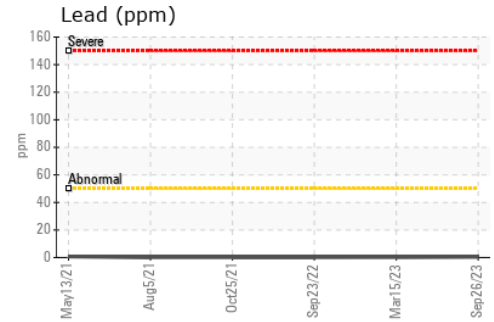
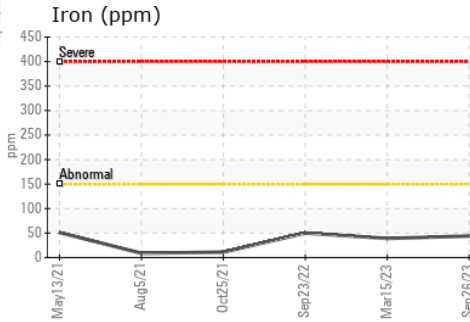
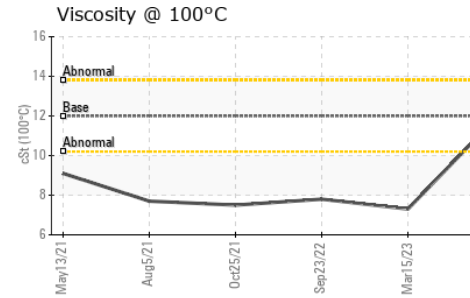
OIL ANALYSIS REPORT



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)	12.00	11.8	7.3 ▲ 7.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 574 - Vancouver Fleet
Sample No. : GFL0084118 **Received** : 24 Oct 2023
Lab Number : 02591276 **Diagnosed** : 26 Oct 2023
Unique Number : 5668355 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol)

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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