



OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Machine Id
301212
Component
Gasoline Engine
Fluid
LUCAS 5W20 (--- 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. 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 high concentration of glycol present in the oil.

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0100637	---	---
Sample Date	Client Info		28 Nov 2023	---	---
Machine Age	kms	Client Info	190298	---	---
Oil Age	kms	Client Info	0	---	---
Oil Changed	Client Info		N/A	---	---
Sample Status			SEVERE	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >150	25	---	---
Chromium	ppm	ASTM D5185(m) >20	<1	---	---
Nickel	ppm	ASTM D5185(m) >5	<1	---	---
Titanium	ppm	ASTM D5185(m)	0	---	---
Silver	ppm	ASTM D5185(m) >2	0	---	---
Aluminum	ppm	ASTM D5185(m) >40	6	---	---
Lead	ppm	ASTM D5185(m) >50	0	---	---
Copper	ppm	ASTM D5185(m) >155	7	---	---
Tin	ppm	ASTM D5185(m) >10	<1	---	---
Antimony	ppm	ASTM D5185(m)	0	---	---
Vanadium	ppm	ASTM D5185(m)	0	---	---
Beryllium	ppm	ASTM D5185(m)	0	---	---
Cadmium	ppm	ASTM D5185(m)	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	25	---	---
Barium	ppm	ASTM D5185(m)	<1	---	---
Molybdenum	ppm	ASTM D5185(m)	229	---	---
Manganese	ppm	ASTM D5185(m)	<1	---	---
Magnesium	ppm	ASTM D5185(m)	382	---	---
Calcium	ppm	ASTM D5185(m)	943	---	---
Phosphorus	ppm	ASTM D5185(m)	544	---	---
Zinc	ppm	ASTM D5185(m)	639	---	---
Sulfur	ppm	ASTM D5185(m)	1498	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

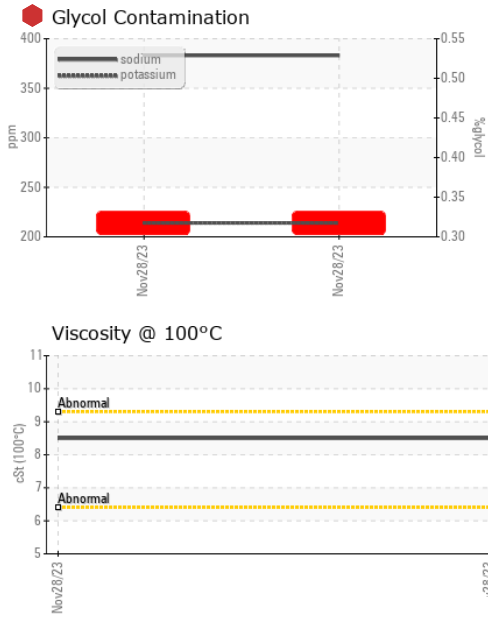
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >30	25	---	---
Sodium	ppm	ASTM D5185(m) >400	383	---	---
Potassium	ppm	ASTM D5185(m) >20	214	---	---
Glycol	%	ASTM D7922*	0.331	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	---	---
Nitration	Abs/cm	ASTM D7624* >20	12.1	---	---
Sulfation	Abs./1mm	ASTM D7415* >30	23.6	---	---



OIL ANALYSIS REPORT

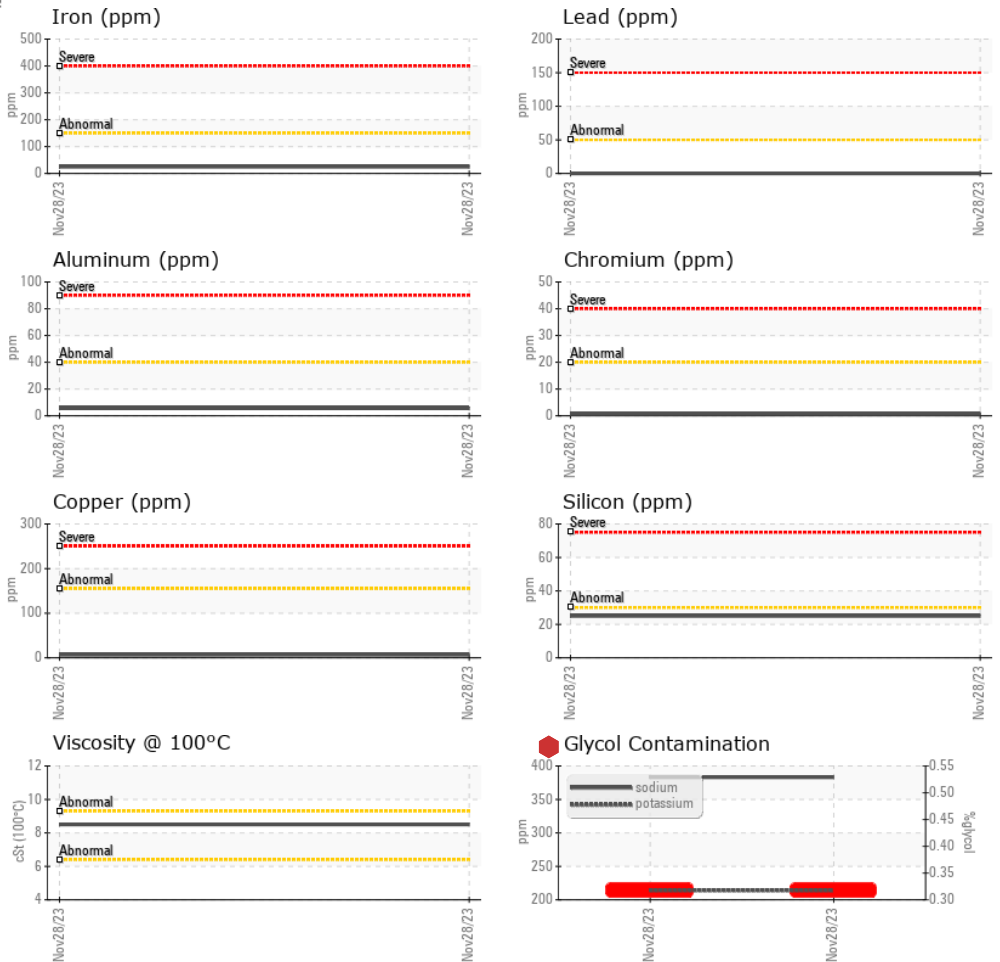


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	15.0	---	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Precipitate	scalar	Visual*	NONE	NONE	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		8.5	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling
Sample No. : GFL0100637 **Received** : 05 Dec 2023 38950 Queens Way, Squamish, BC
Lab Number : 02600943 **Diagnosed** : 06 Dec 2023 CA V8B 0K8
Unique Number : 5694028 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (Additional Tests: Glycol, Visual)

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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