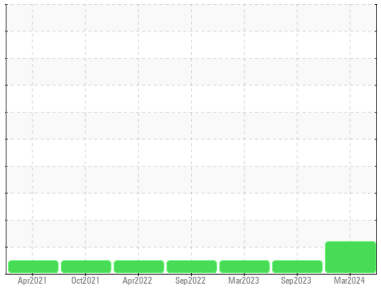
OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS

Machine Id
731025
Component
Natural Gas Engine
Fluid
CASTROL 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Check for low coolant level. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative.

Fluid Condition
The condition of the oil is acceptable for the time in service (see recommendation).

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0100731**	GFL0079584	GFL0041649
Sample Date		Client Info		**22 Mar 2024**	15 Sep 2023	19 Mar 2023
Machine Age	kms	Client Info		**205754**	174188	5492
Oil Age	kms	Client Info		**0**	0	600
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>50	**18**	13	12
Chromium	ppm	ASTM D5185(m)	>4	**2**	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	**<1**	<1	<1
Titanium	ppm	ASTM D5185(m)		**0**	0	<1
Silver	ppm	ASTM D5185(m)	>3	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>9	**2**	2	2
Lead	ppm	ASTM D5185(m)	>30	**7**	4	4
Copper	ppm	ASTM D5185(m)	>35	**2**	2	2
Tin	ppm	ASTM D5185(m)	>4	**<1**	<1	<1
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
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)		**5**	4	4
Barium	ppm	ASTM D5185(m)		**0**	0	0
Molybdenum	ppm	ASTM D5185(m)		**61**	55	54
Manganese	ppm	ASTM D5185(m)		**0**	<1	<1
Magnesium	ppm	ASTM D5185(m)		**560**	591	573
Calcium	ppm	ASTM D5185(m)		**1749**	1609	1726
Phosphorus	ppm	ASTM D5185(m)		**741**	792	777
Zinc	ppm	ASTM D5185(m)		**962**	944	974
Sulfur	ppm	ASTM D5185(m)		**2004**	1990	2091
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	**3**	4	4
Sodium	ppm	ASTM D5185(m)	>406	**35**	4	4
Potassium	ppm	ASTM D5185(m)	>20	▲ **154**	<1	1
Glycol	%	ASTM D7922*		**0.0**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**12.8**	11.4	8.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	**26.3**	25.1	23.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**20.9**	20.5	14.5

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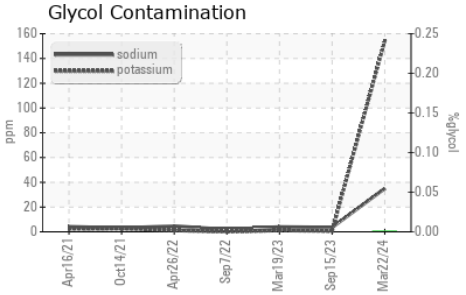
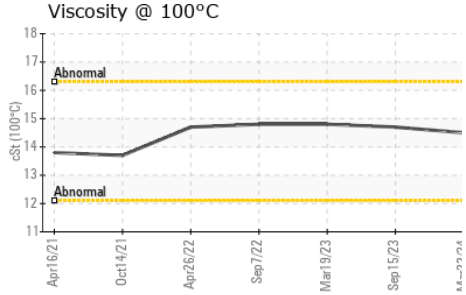
Glycol Contamination



Viscosity @ 100°C

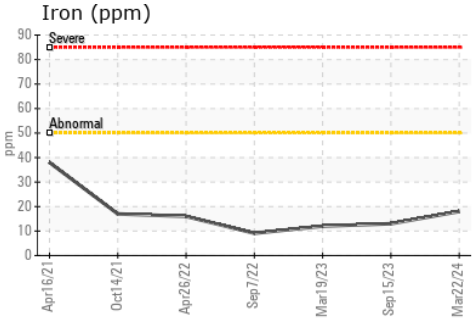


VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

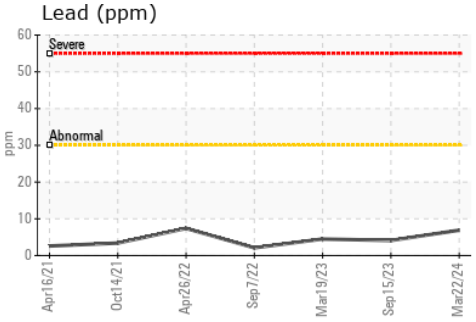
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		**14.5**	14.7	14.8

GRAPHS

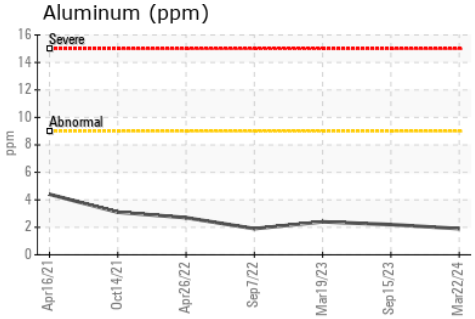
Iron (ppm)



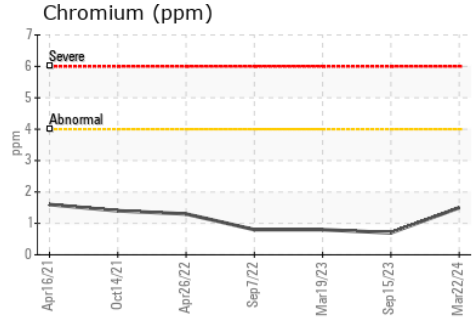
Lead (ppm)



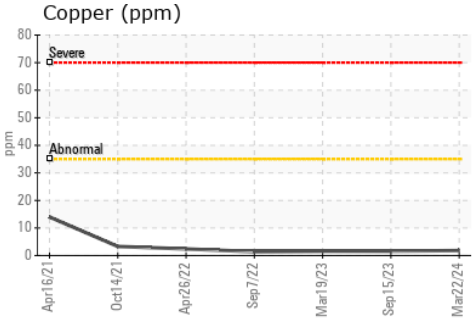
Aluminum (ppm)



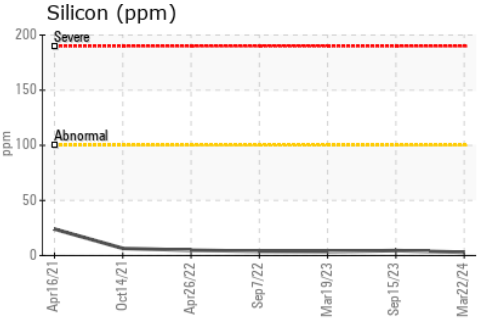
Chromium (ppm)



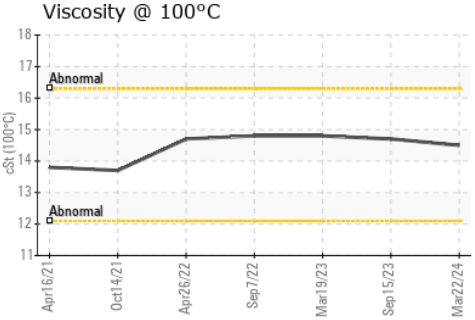
Copper (ppm)



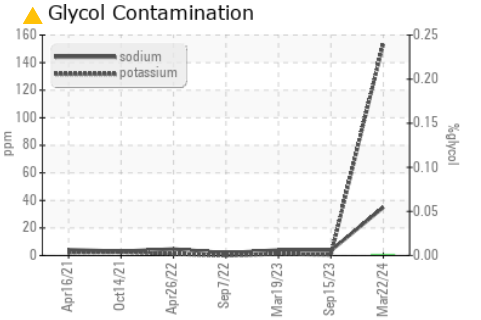
Silicon (ppm)



Viscosity @ 100°C



Glycol Contamination



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0100731
Lab Number : 02624835
Unique Number : 5749954
Test Package : MOB 1 (Additional Tests: Glycol)

Received : 27 Mar 2024
Tested : 27 Mar 2024
Diagnosed : 27 Mar 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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