



OIL ANALYSIS REPORT

Sample Rating Trend

DIRT



Machine Id
NO UNIT GFL0110270
Component
Diesel Engine
Fluid
{not provided} (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. The fluid was not specified, however, a fluid match indicates that this fluid is SAE 40 Diesel Engine Oil. Please confirm the oil type and grade, and specify the brand of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris 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		GFL0110270	---	---
Sample Date	Client Info		29 Jan 2024	---	---
Machine Age	kms	Client Info	601090	---	---
Oil Age	kms	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	10	---	---
Chromium	ppm	ASTM D5185(m) >20	0	---	---
Nickel	ppm	ASTM D5185(m) >5	<1	---	---
Titanium	ppm	ASTM D5185(m) >2	0	---	---
Silver	ppm	ASTM D5185(m) >2	0	---	---
Aluminum	ppm	ASTM D5185(m) >20	3	---	---
Lead	ppm	ASTM D5185(m) >40	<1	---	---
Copper	ppm	ASTM D5185(m) >330	2	---	---
Tin	ppm	ASTM D5185(m) >15	<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)	2	---	---
Barium	ppm	ASTM D5185(m)	0	---	---
Molybdenum	ppm	ASTM D5185(m)	58	---	---
Manganese	ppm	ASTM D5185(m)	0	---	---
Magnesium	ppm	ASTM D5185(m)	959	---	---
Calcium	ppm	ASTM D5185(m)	1054	---	---
Phosphorus	ppm	ASTM D5185(m)	1012	---	---
Zinc	ppm	ASTM D5185(m)	1165	---	---
Sulfur	ppm	ASTM D5185(m)	2693	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

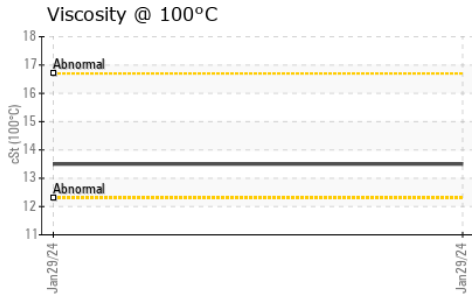
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	7	---	---
Sodium	ppm	ASTM D5185(m)	3	---	---
Potassium	ppm	ASTM D5185(m) >20	1	---	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0	---	---
Nitration	Abs/cm	ASTM D7624* >20	8.7	---	---
Sulfation	Abs/.1mm	ASTM D7415* >30	18.9	---	---



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FLUID DEGRADATION

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

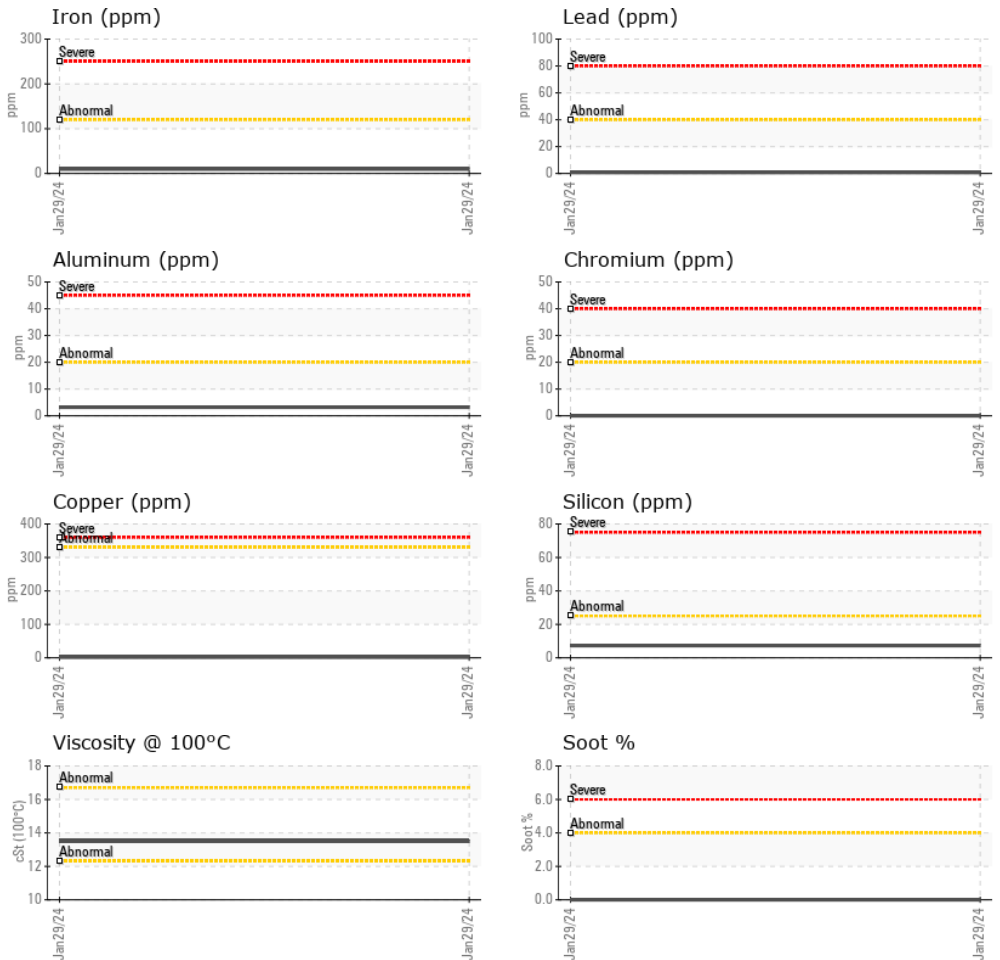
VISUAL

method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE
Precipitate	scalar	Visual*	NONE	VLITE
Silt	scalar	Visual*	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE
Sand/Dirt	scalar	Visual*	NONE	▲ MODER
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)	13.5	---

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 252 - GTA Hauling
Sample No. : GFL0110270 **Received** : 02 Feb 2024 3668 Weston Road
Lab Number : 02612967 **Diagnosed** : 06 Feb 2024 North York, ON
Unique Number : 5722062 **Diagnostician** : Bill Quesnel CA M9L 1W2
Test Package : MOB 1 (Additional Tests: Bottom, BottomAnalysis, FilterPatch, Visual) **Contact:** Tom Hatzioannidis

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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