



OIL ANALYSIS REPORT

Sample Rating Trend

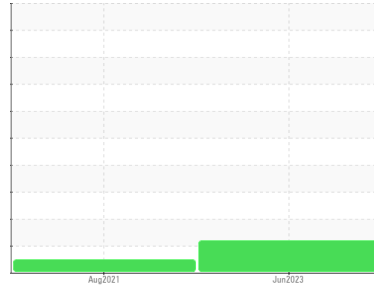
GLYCOL



Machine Id
7840

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- 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. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	GFL0084237	GFL0020833	---
Sample Date	Client Info	22 Jun 2023	09 Aug 2021	---
Machine Age	kms	Client Info	296354	0
Oil Age	kms	Client Info	0	0
Oil Changed	Client Info	Changed	Changed	---
Sample Status		ATTENTION	NORMAL	---

CONTAMINATION

method	limit/base	current	history 1	history 2
Fuel	WC Method >5	<1.0	<1.0	---

WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m) >100	51	18
Chromium	ppm	ASTM D5185(m) >20	2	2
Nickel	ppm	ASTM D5185(m) >4	<1	<1
Titanium	ppm	ASTM D5185(m)	0	0
Silver	ppm	ASTM D5185(m) >3	0	<1
Aluminum	ppm	ASTM D5185(m) >20	9	2
Lead	ppm	ASTM D5185(m) >40	3	<1
Copper	ppm	ASTM D5185(m) >330	1	<1
Tin	ppm	ASTM D5185(m) >15	0	<1
Antimony	ppm	ASTM D5185(m)	0	0
Vanadium	ppm	ASTM D5185(m)	0	0
Beryllium	ppm	ASTM D5185(m)	0	0
Cadmium	ppm	ASTM D5185(m)	0	0

ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m) 250	3	13
Barium	ppm	ASTM D5185(m) 10	0	0
Molybdenum	ppm	ASTM D5185(m) 100	69	60
Manganese	ppm	ASTM D5185(m)	<1	<1
Magnesium	ppm	ASTM D5185(m) 450	1134	994
Calcium	ppm	ASTM D5185(m) 3000	1189	1057
Phosphorus	ppm	ASTM D5185(m) 1150	1173	1117
Zinc	ppm	ASTM D5185(m) 1350	1362	1213
Sulfur	ppm	ASTM D5185(m) 4250	2608	2815
Lithium	ppm	ASTM D5185(m)	<1	<1

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m) >25	4	4
Sodium	ppm	ASTM D5185(m) >216	▲ 181	45
Potassium	ppm	ASTM D5185(m) >20	6	6
Glycol	%	ASTM D7922*	0.0	0.0

INFRA-RED

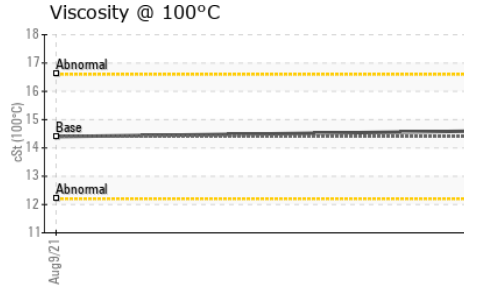
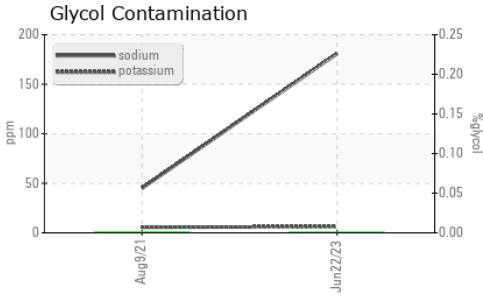
method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844* >3	0.3	0.2
Nitration	Abs/cm	ASTM D7624* >20	10.7	8.0
Sulfation	Abs/.1mm	ASTM D7415* >30	22.9	21.2

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414* >25	19.5	16.7



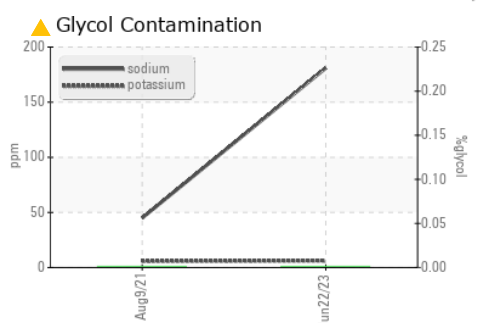
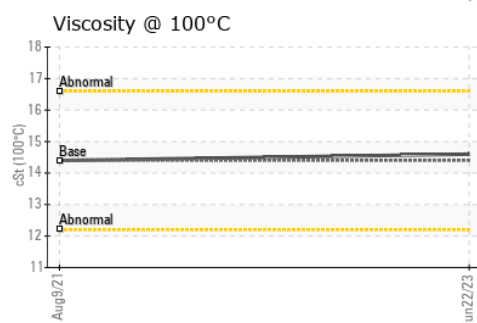
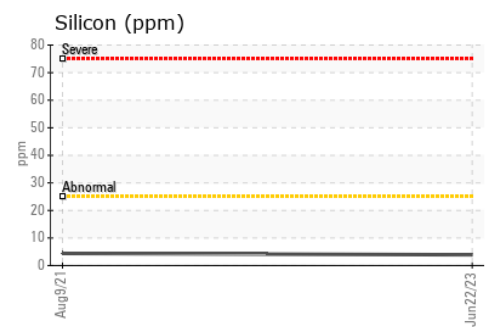
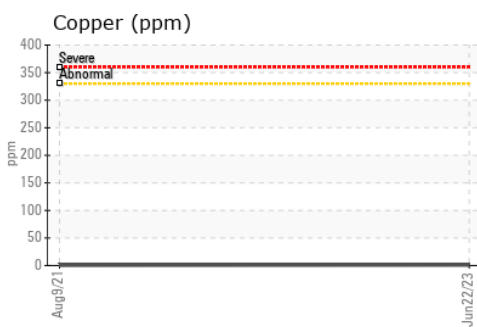
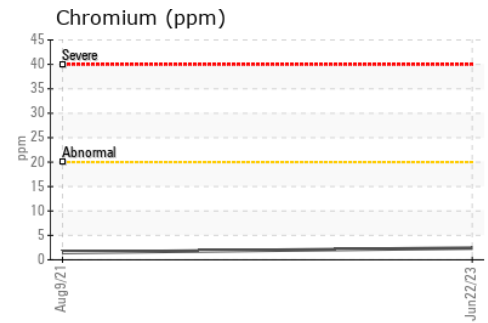
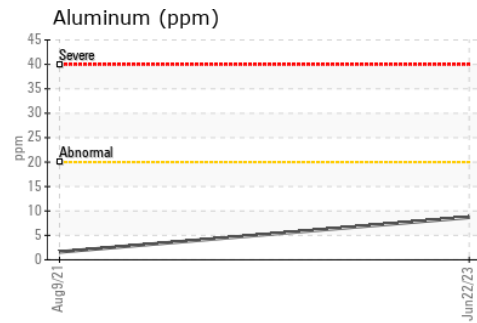
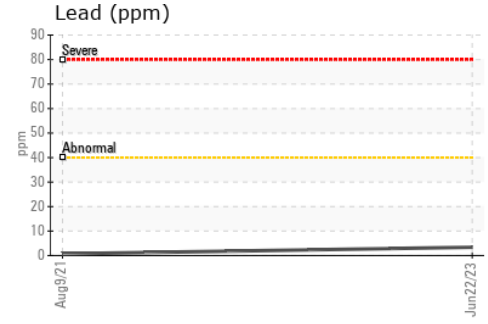
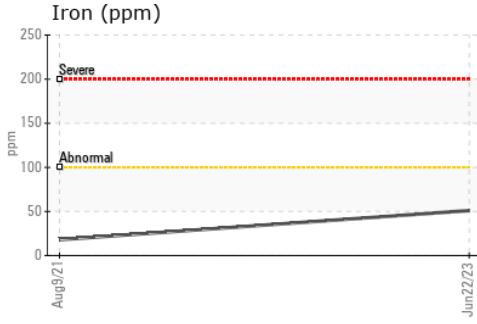
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.4	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 252 - GTA Hauling
Sample No. : GFL0084237 **Received** : 29 Jun 2023 **3668 Weston Road**
Lab Number : 02567216 **Diagnosed** : 29 Jun 2023 **North York, ON**
Unique Number : 5604262 **Diagnostician** : Kevin Marson **CA M9L 1W2**
Test Package : MOB 1 (Additional Tests: Glycol) **Contact: Amanda Cipollone**
acipollone@gflenv.com

To discuss this sample report, contact Customer Service at 1-800-268-2131. T:
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F:
 Validity of results and interpretation are based on the sample and information as supplied.