



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
913098

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0077033	---	---
Sample Date	Client Info		16 Jul 2023	---	---
Machine Age	hrs	Client Info	1953	---	---
Oil Age	hrs	Client Info	751	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	13	---	---
Chromium	ppm	ASTM D5185(m) >20	<1	---	---
Nickel	ppm	ASTM D5185(m) >5	2	---	---
Titanium	ppm	ASTM D5185(m) >2	0	---	---
Silver	ppm	ASTM D5185(m) >2	<1	---	---
Aluminum	ppm	ASTM D5185(m) >20	1	---	---
Lead	ppm	ASTM D5185(m) >40	<1	---	---
Copper	ppm	ASTM D5185(m) >330	11	---	---
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) 250	4	---	---
Barium	ppm	ASTM D5185(m) 10	0	---	---
Molybdenum	ppm	ASTM D5185(m) 100	60	---	---
Manganese	ppm	ASTM D5185(m)	<1	---	---
Magnesium	ppm	ASTM D5185(m) 450	989	---	---
Calcium	ppm	ASTM D5185(m) 3000	1041	---	---
Phosphorus	ppm	ASTM D5185(m) 1150	1037	---	---
Zinc	ppm	ASTM D5185(m) 1350	1182	---	---
Sulfur	ppm	ASTM D5185(m) 4250	2337	---	---
Lithium	ppm	ASTM D5185(m)	<1	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	6	---	---
Sodium	ppm	ASTM D5185(m) >158	2	---	---
Potassium	ppm	ASTM D5185(m) >20	<1	---	---

INFRA-RED

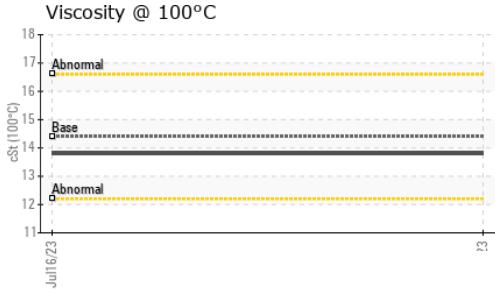
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.2	---	---
Nitration	Abs/cm	ASTM D7624* >20	8.5	---	---
Sulfation	Abs/.1mm	ASTM D7415* >30	20.9	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	16.2	---	---



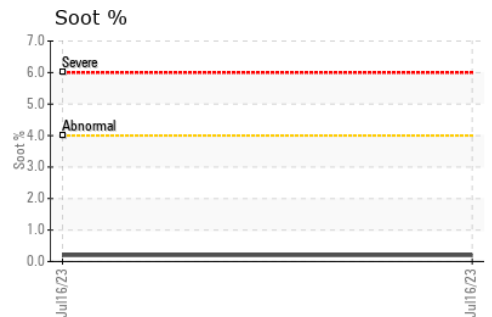
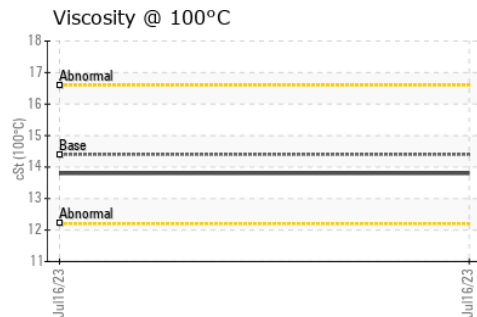
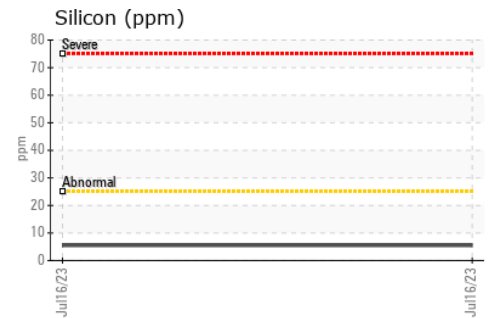
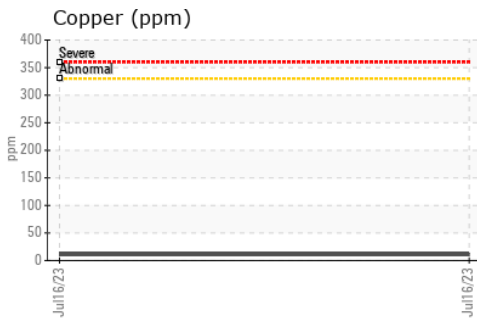
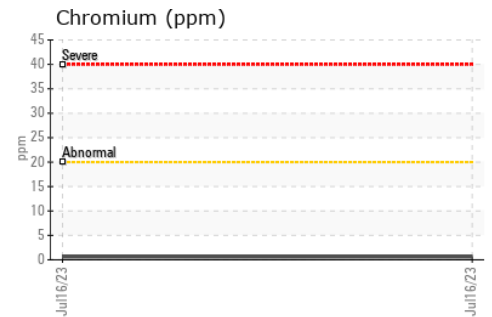
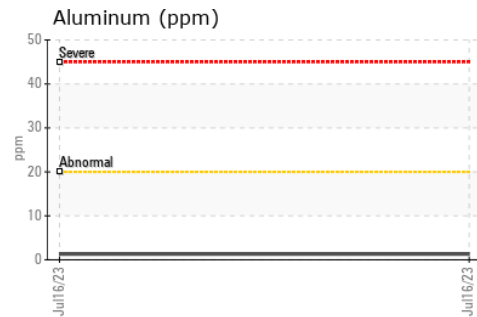
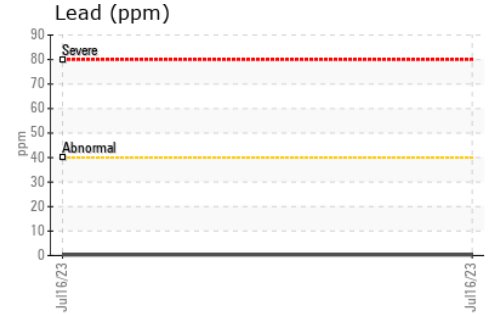
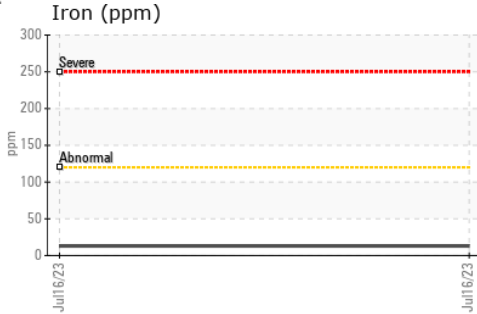
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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)	14.4	13.8	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling
Sample No. : GFL0077033 **Received** : 28 Jul 2023 38950 Queens Way,
Lab Number : 02572859 **Diagnosed** : 28 Jul 2023 Squamish, BC
Unique Number : 5617910 **Diagnostician** : Wes Davis CA V8B 0K8
Test Package : MOB 1 Contact: Jonas Araujo jaraujo@gflenv.com

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.