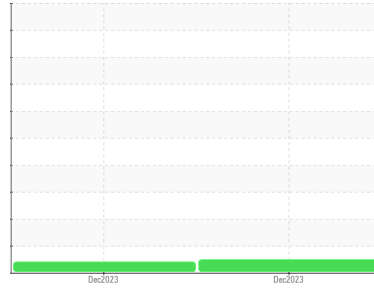




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
529137-SW7946 FREIGHTLINER CASCADIA 125

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0066605	GFL0066602	---
Sample Date	Client Info	30 Dec 2023	16 Dec 2023	---
Machine Age	mls Client Info	0	0	---
Oil Age	mls Client Info	0	0	---
Oil Changed	Client Info	N/A	N/A	---
Sample Status		NORMAL	ABNORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	---
Water	WC Method >0.2	NEG	NEG	---
Glycol	WC Method	NEG	NEG	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >80	7	8	---
Chromium	ppm ASTM D5185m >5	<1	<1	---
Nickel	ppm ASTM D5185m >2	<1	0	---
Titanium	ppm ASTM D5185m	<1	<1	---
Silver	ppm ASTM D5185m >3	0	0	---
Aluminum	ppm ASTM D5185m >30	2	7	---
Lead	ppm ASTM D5185m >30	<1	0	---
Copper	ppm ASTM D5185m >150	21	13	---
Tin	ppm ASTM D5185m >5	<1	1	---
Vanadium	ppm ASTM D5185m	0	<1	---
Cadmium	ppm ASTM D5185m	<1	<1	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	0	0	---
Barium	ppm ASTM D5185m 0	8	0	---
Molybdenum	ppm ASTM D5185m 60	55	52	---
Manganese	ppm ASTM D5185m 0	<1	<1	---
Magnesium	ppm ASTM D5185m 1010	15	19	---
Calcium	ppm ASTM D5185m 1070	2510	2397	---
Phosphorus	ppm ASTM D5185m 1150	992	1110	---
Zinc	ppm ASTM D5185m 1270	1219	1306	---
Sulfur	ppm ASTM D5185m 2060	3326	3397	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >20	7	21	---
Sodium	ppm ASTM D5185m	0	2	---
Potassium	ppm ASTM D5185m >20	4	6	---

INFRA-RED

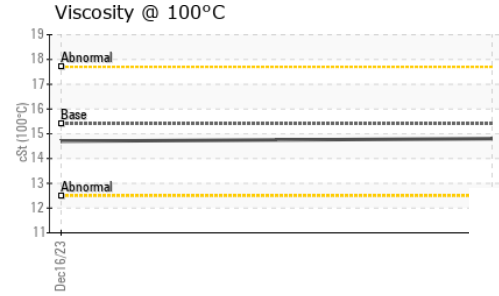
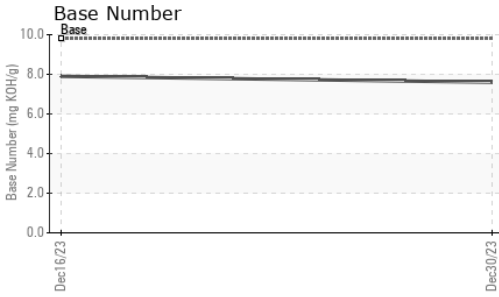
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.1	0.1	---
Nitration	Abs/cm *ASTM D7624 >20	5.5	5.0	---
Sulfation	Abs/.1mm *ASTM D7415 >30	15.5	14.7	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	8.7	8.1	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	7.6	7.9	---



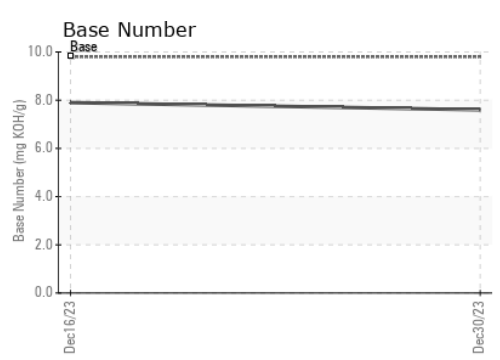
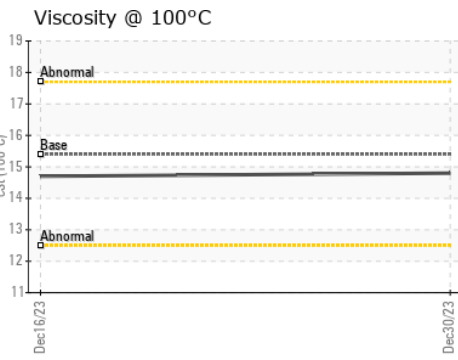
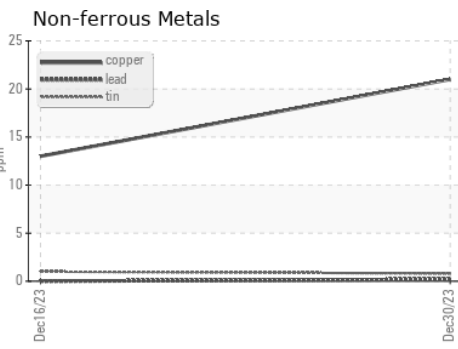
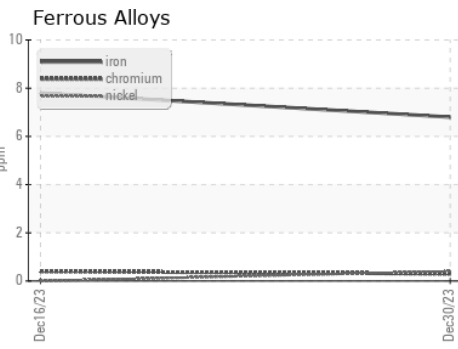
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	14.8	14.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0066605 **Received** : 08 Jan 2024
Lab Number : 06053452 **Diagnosed** : 09 Jan 2024
Unique Number : 10819401 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 980 - Northside Hauling
 1820 Candle Ridge Park Dr
 Houston, TX
 US 77073
 Contact: Edwin Collins
 ecolins@gflenv.com
 T:
 F:

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)