



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
523092 FREIGHTLINER CASCADIA 125
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115316	GFL0066587	---
Sample Date		Client Info		19 Apr 2024	19 Jan 2024	---
Machine Age	hrs	Client Info		0	3	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	4	12	---
Chromium	ppm	ASTM D5185m	>5	0	<1	---
Nickel	ppm	ASTM D5185m	>2	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>30	2	2	---
Lead	ppm	ASTM D5185m	>30	<1	0	---
Copper	ppm	ASTM D5185m	>150	2	1	---
Tin	ppm	ASTM D5185m	>5	0	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

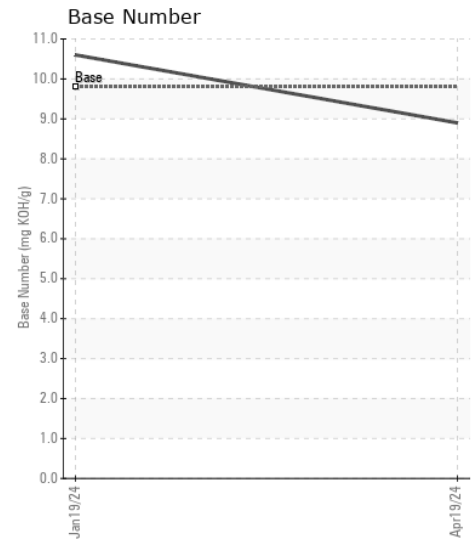
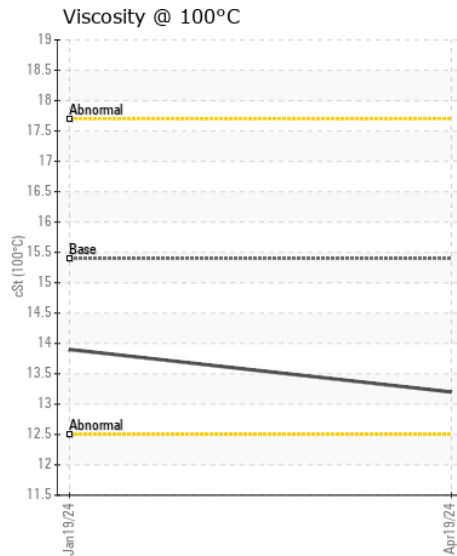
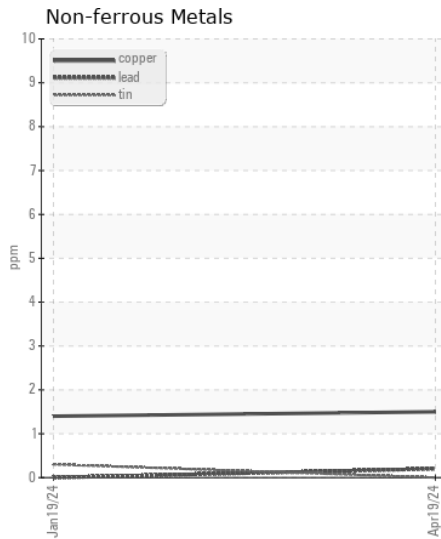
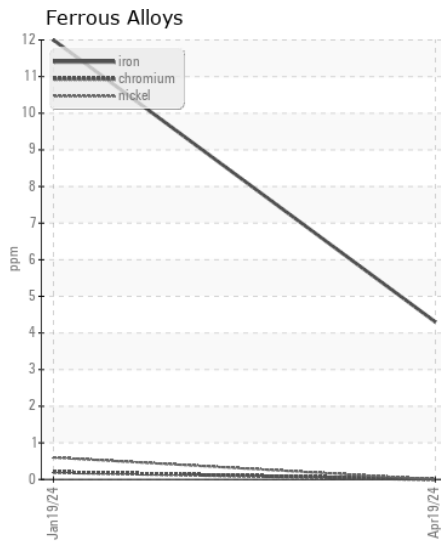
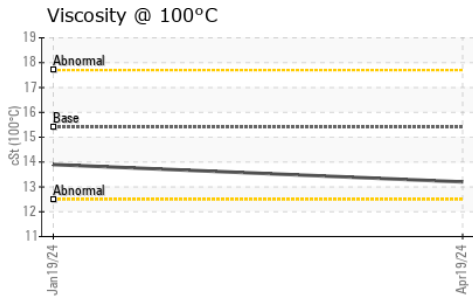
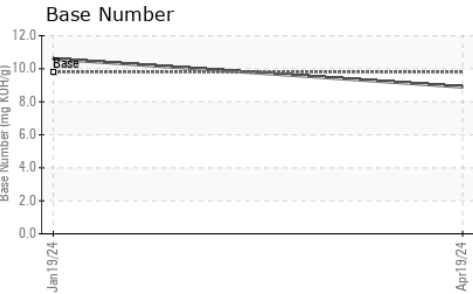
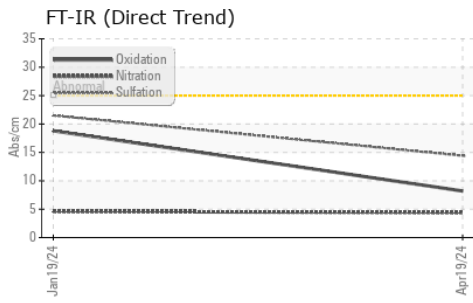
Moderate concentration of visible dirt/debris present in the oil.

Silicon	ppm	ASTM D5185m	>20	11	10	---
Potassium	ppm	ASTM D5185m	>20	<1	2	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0	0	---
Nitration	Abs/cm	*ASTM D7624	>20	4.4	4.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.4	21.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	MODER	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	THICK	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	3	---
Boron	ppm	ASTM D5185m	0	10	68	---
Barium	ppm	ASTM D5185m	0	0	<1	---
Molybdenum	ppm	ASTM D5185m	60	52	36	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	86	469	---
Calcium	ppm	ASTM D5185m	1070	2185	1453	---
Phosphorus	ppm	ASTM D5185m	1150	1001	679	---
Zinc	ppm	ASTM D5185m	1270	1127	808	---
Sulfur	ppm	ASTM D5185m	2060	3368	2159	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.2	18.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.9	10.6	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.2	13.9	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0115316
Lab Number : 06175282
Unique Number : 11021335
Test Package : FLEET

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 16 May 2024 - Jonathan Hester

GFL Environmental - 980 - Northside Hauling
 1820 Candle Ridge Park Dr
 Houston, TX
 US 77073

Contact: Edwin Collins
 ecolins@gflenv.com

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)

T:
F: