



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
525143- SW7521 FREIGHTLINER CASCADIA 125
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0115329	GFL0105534	---
Sample Date		Client Info		28 May 2024	13 Dec 2023	---
Machine Age	mls	Client Info		0	114240	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		N/A	Changed	---
Filter Changed		Client Info		N/A	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	22	7	---
Chromium	ppm	ASTM D5185m	>5	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	0	0	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>30	▲ 47	2	---
Lead	ppm	ASTM D5185m	>30	0	1	---
Copper	ppm	ASTM D5185m	>150	5	2	---
Tin	ppm	ASTM D5185m	>5	0	0	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

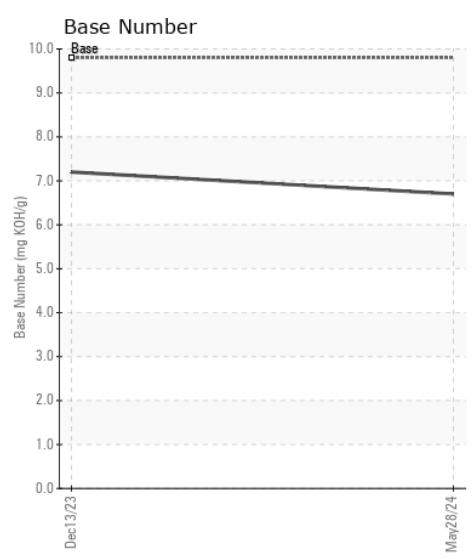
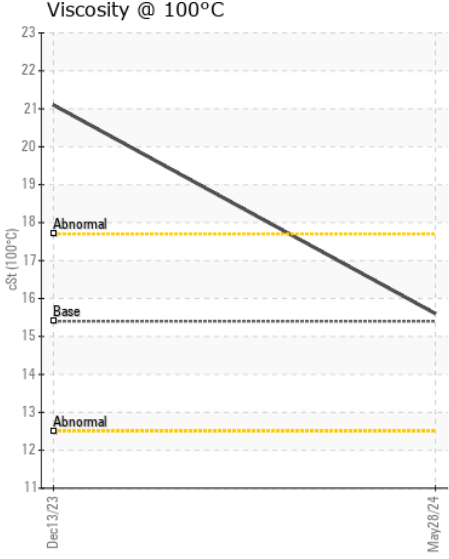
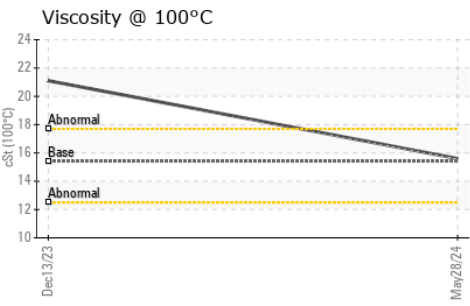
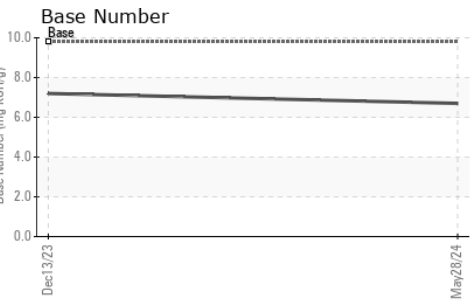
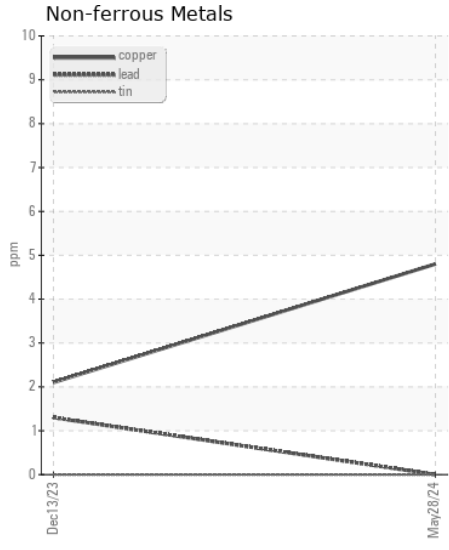
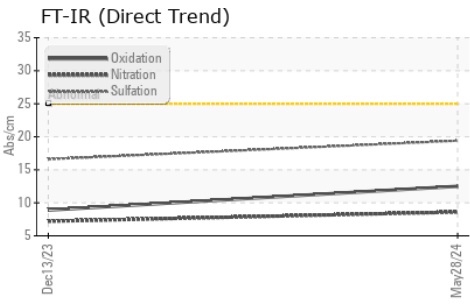
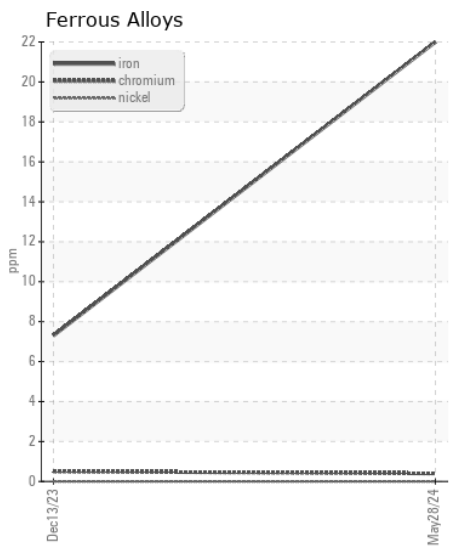
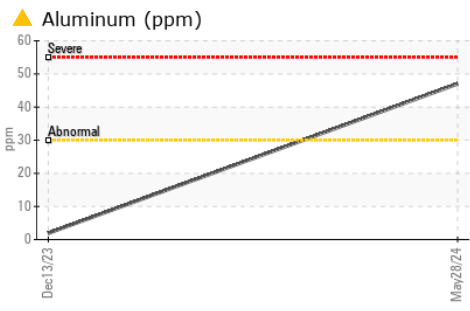
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	8	9	---
Potassium	ppm	ASTM D5185m	>20	1	<1	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.5	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.6	7.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	16.6	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
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	---

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	0	---
Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	61	20	---
Manganese	ppm	ASTM D5185m	0	<1	0	---
Magnesium	ppm	ASTM D5185m	1010	8	92	---
Calcium	ppm	ASTM D5185m	1070	2605	2422	---
Phosphorus	ppm	ASTM D5185m	1150	1177	882	---
Zinc	ppm	ASTM D5185m	1270	1407	1119	---
Sulfur	ppm	ASTM D5185m	2060	3712	2976	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.5	8.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.7	7.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	15.6	▲ 21.1	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0115329
Lab Number : 06197299
Unique Number : 11059422
Test Package : FLEET
Received : 03 Jun 2024
Tested : 03 Jun 2024
Diagnosed : 04 Jun 2024 - Sean Felton

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)