



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(DM8031)
Machine Id
FREIGHTLINER 11093-223100
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0128325	GFL0111386	GFL0049623
Sample Date		Client Info		11 Jul 2024	03 Feb 2024	18 Jul 2022
Machine Age	hrs	Client Info		21414	0	129254
Oil Age	hrs	Client Info		0	0	129254
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>130	37	26	▲ 129
Chromium	ppm	ASTM D5185m	>10	1	1	4
Nickel	ppm	ASTM D5185m	>4	<1	<1	2
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	6	4	11
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>125	2	1	4
Tin	ppm	ASTM D5185m	>4	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

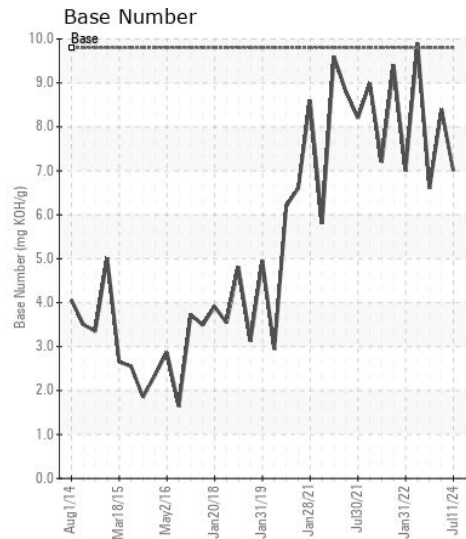
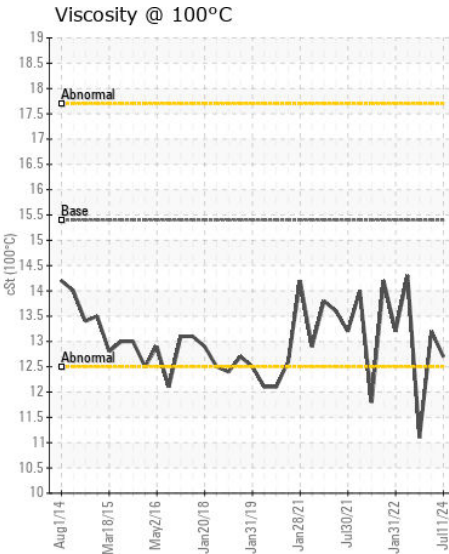
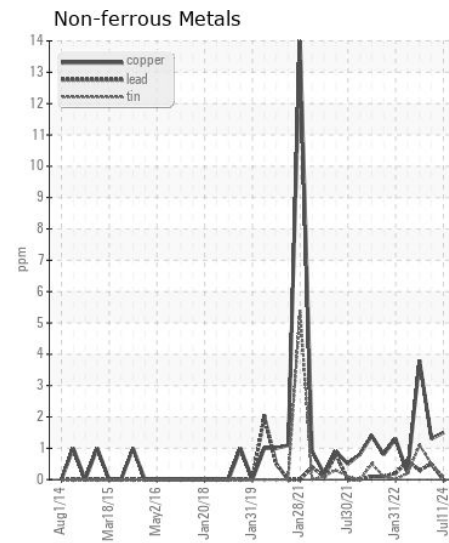
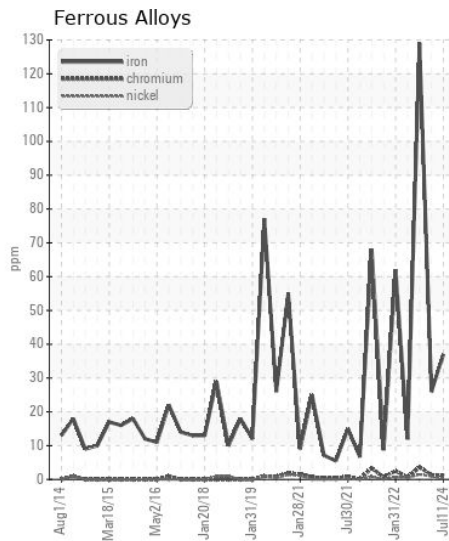
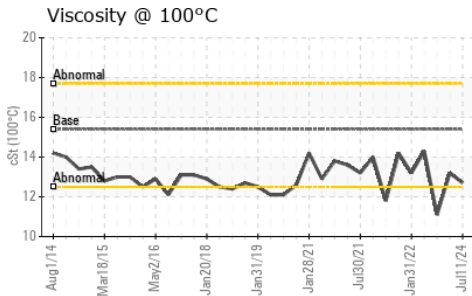
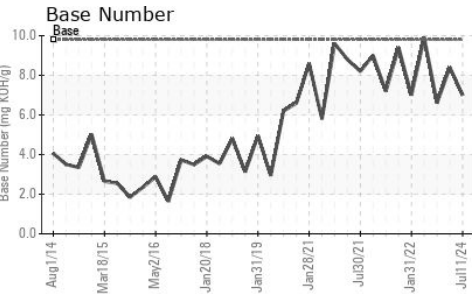
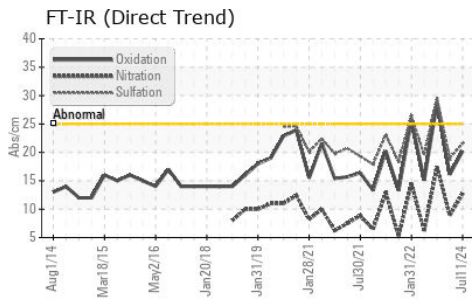
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	5	13
Potassium	ppm	ASTM D5185m	>20	4	4	13
Fuel		WC Method	>3.0	<1.0	0.7	▲ 13.1
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.4	0.1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	12.7	8.9	17.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	19.0	29.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		12	8	▲ 310
Boron	ppm	ASTM D5185m	0	5	6	9
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	63	69	70
Manganese	ppm	ASTM D5185m	0	0	<1	1
Magnesium	ppm	ASTM D5185m	1010	1016	1057	937
Calcium	ppm	ASTM D5185m	1070	1174	1097	1116
Phosphorus	ppm	ASTM D5185m	1150	1109	1021	938
Zinc	ppm	ASTM D5185m	1270	1365	1350	1234
Sulfur	ppm	ASTM D5185m	2060	3582	3037	3241
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.2	16.1	28.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.0	8.4	6.6
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	13.2	▲ 11.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0128325
Lab Number : 06239800
Unique Number : 11128634
Test Package : FLEET
Received : 17 Jul 2024
Tested : 18 Jul 2024
Diagnosed : 18 Jul 2024 - Wes Davis

GFL Environmental - 004 - Newport - Central Coast
 427 Roberts Road
 Newport, NC
 US 28570
 Contact: Marquis Williams
 marquis.williams@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) F: (252)223-6010