



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(TJY0185)

Machine Id

934067

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Engine oil sample)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0103945	GFL0103930	GFL0100526
Sample Date		Client Info		15 Feb 2024	11 Jan 2024	04 Nov 2023
Machine Age	hrs	Client Info		1494	1184	605
Oil Age	hrs	Client Info		1494	579	605
Filter Age	hrs	Client Info		0	579	605
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Not Chngd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	15	20	41
Chromium	ppm	ASTM D5185m	>4	1	1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	50	39	31
Lead	ppm	ASTM D5185m	>30	0	<1	<1
Copper	ppm	ASTM D5185m	>35	<1	3	13
Tin	ppm	ASTM D5185m	>4	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

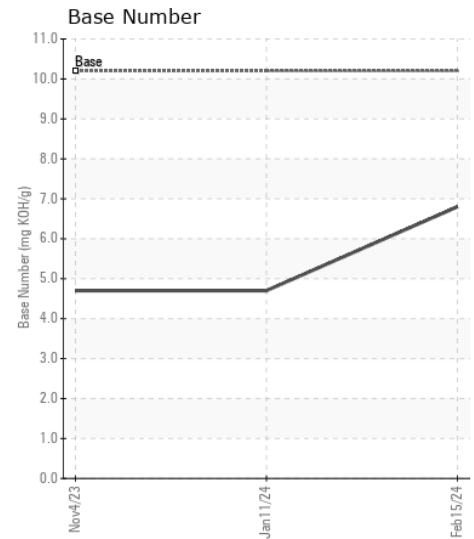
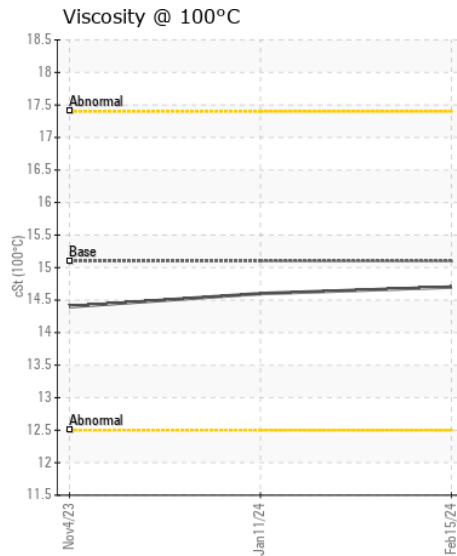
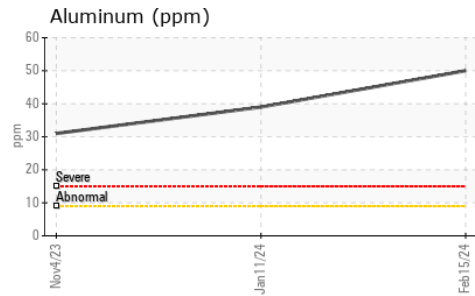
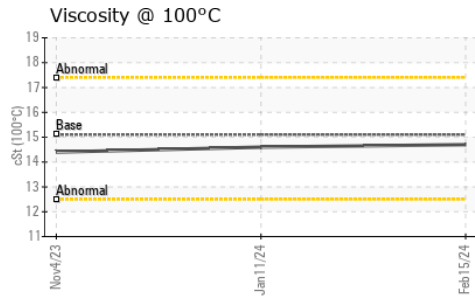
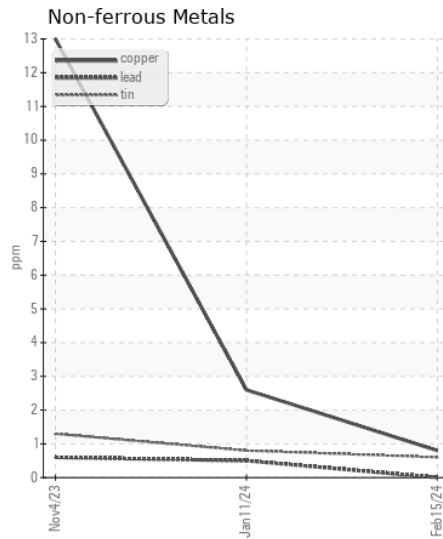
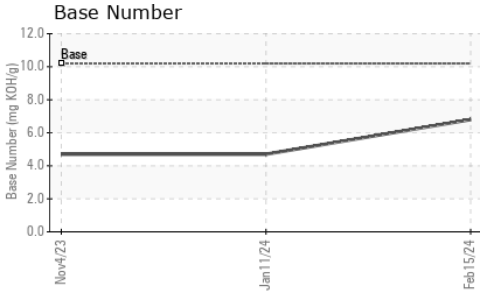
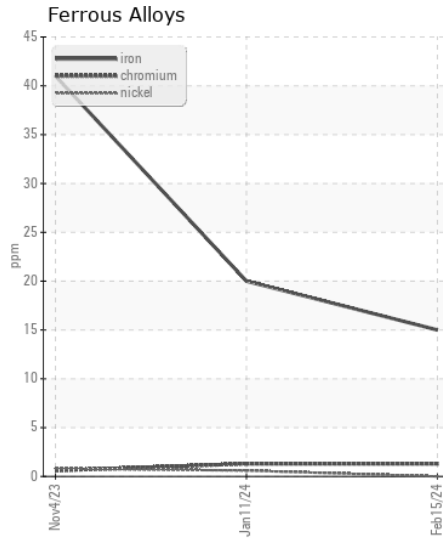
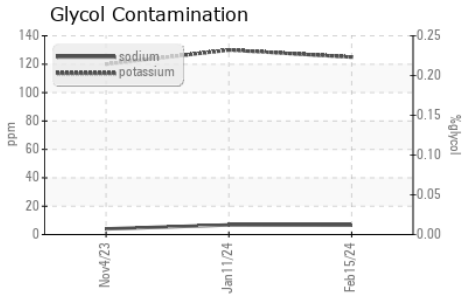
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>+100	6	9	34
Potassium	ppm	ASTM D5185m	>20	125	130	120
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	7.1	10.7	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.9	21.0	22.6
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	>0.1	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		7	7	4
Boron	ppm	ASTM D5185m	50	14	9	8
Barium	ppm	ASTM D5185m	5	0	<1	0
Molybdenum	ppm	ASTM D5185m	50	52	55	50
Manganese	ppm	ASTM D5185m	0	<1	2	7
Magnesium	ppm	ASTM D5185m	560	567	618	786
Calcium	ppm	ASTM D5185m	1510	1581	1557	1267
Phosphorus	ppm	ASTM D5185m	780	790	791	657
Zinc	ppm	ASTM D5185m	870	951	1018	932
Sulfur	ppm	ASTM D5185m	2040	2475	2518	2247
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	18.1	20.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.8	4.7	4.7
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.6	14.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103945
Lab Number : 06097521
Unique Number : 10890374
Test Package : FLEET

Received : 22 Feb 2024
Tested : 23 Feb 2024
Diagnosed : 24 Feb 2024 - Don Baldrige

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050
 Contact: TECHNICIAN ACCOUNT
 wcgfldemo@gmail.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: