



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(TMV3662)

Machine Id

934066

Component

Natural Gas Engine

Fluid

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

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Sample)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0125245	GFL0114401	GFL0103947
Sample Date		Client Info		21 Jun 2024	18 Mar 2024	28 Dec 2023
Machine Age	hrs	Client Info		2034	15655	7686
Oil Age	hrs	Client Info		0	0	7686
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	23	22	31
Chromium	ppm	ASTM D5185m	>4	3	2	<1
Nickel	ppm	ASTM D5185m	>2	1	1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>9	38	31	20
Lead	ppm	ASTM D5185m	>30	1	2	<1
Copper	ppm	ASTM D5185m	>35	4	6	17
Tin	ppm	ASTM D5185m	>4	<1	2	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

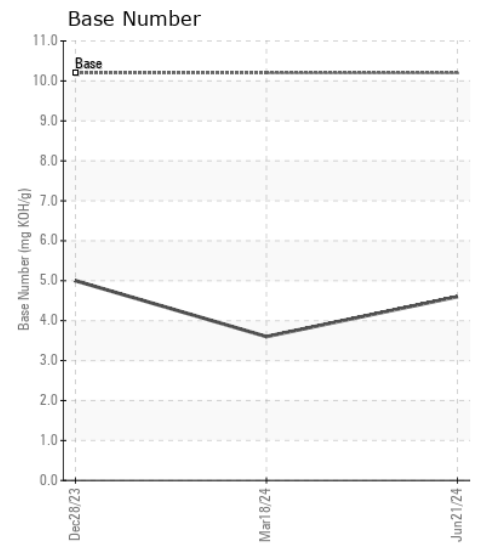
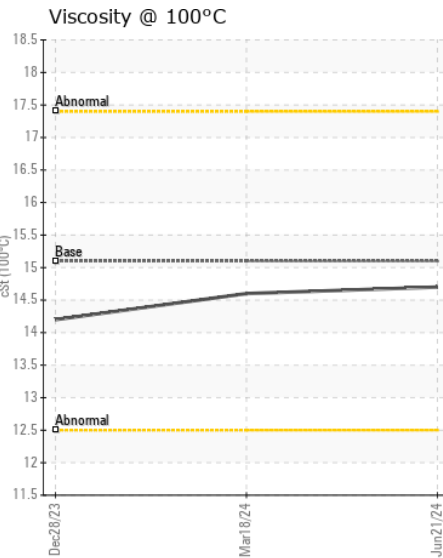
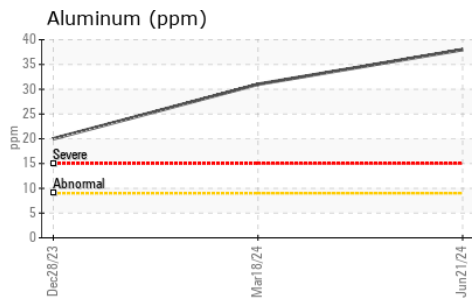
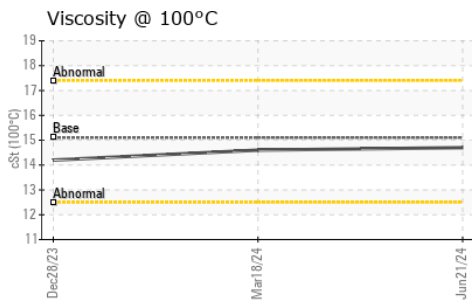
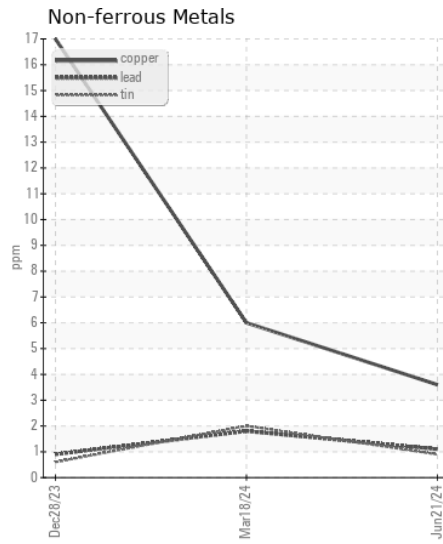
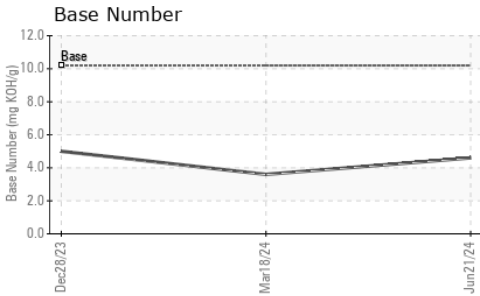
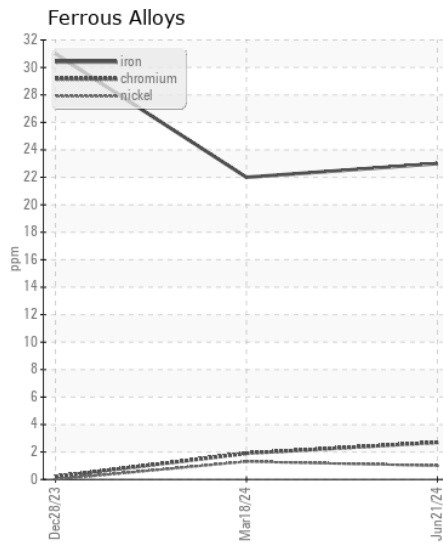
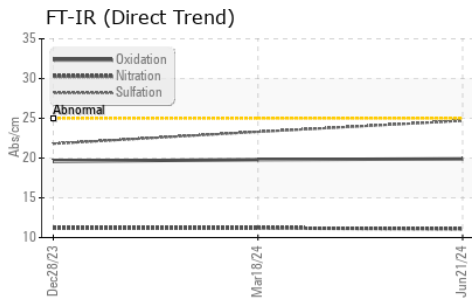
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	8	8	24
Potassium	ppm	ASTM D5185m	>20	129	112	66
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.1	11.2	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.7	23.3	21.8
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		8	6	4
Boron	ppm	ASTM D5185m	50	8	11	14
Barium	ppm	ASTM D5185m	5	<1	2	2
Molybdenum	ppm	ASTM D5185m	50	63	66	61
Manganese	ppm	ASTM D5185m	0	1	3	15
Magnesium	ppm	ASTM D5185m	560	669	632	762
Calcium	ppm	ASTM D5185m	1510	1869	1858	1387
Phosphorus	ppm	ASTM D5185m	780	915	791	698
Zinc	ppm	ASTM D5185m	870	1127	1071	924
Sulfur	ppm	ASTM D5185m	2040	2752	2816	2354
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.9	19.8	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.6	3.6	5.0
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.6	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0125245
Lab Number : 06224230
Unique Number : 11102427
Test Package : FLEET

Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Angela Borella

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: