



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
433013
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112407	---	---
Sample Date		Client Info		13 Feb 2024	---	---
Machine Age	hrs	Client Info		19240	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				NORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	41	---	---
Chromium	ppm	ASTM D5185(m)	>4	<1	---	---
Nickel	ppm	ASTM D5185(m)	>2	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>9	5	---	---
Lead	ppm	ASTM D5185(m)	>30	3	---	---
Copper	ppm	ASTM D5185(m)	>35	10	---	---
Tin	ppm	ASTM D5185(m)	>4	1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---

CONTAMINATION

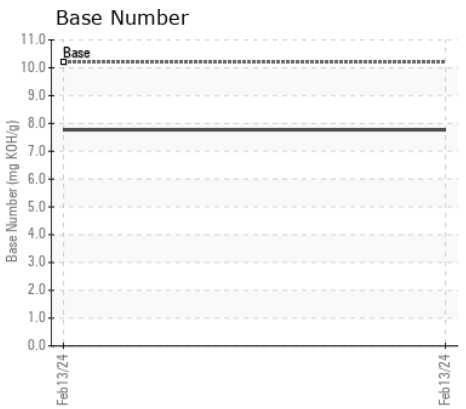
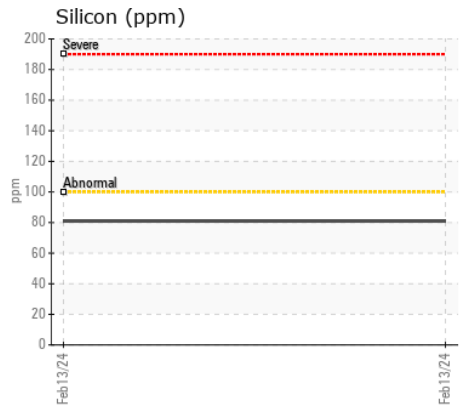
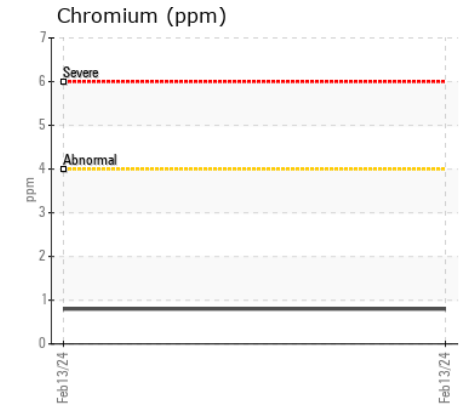
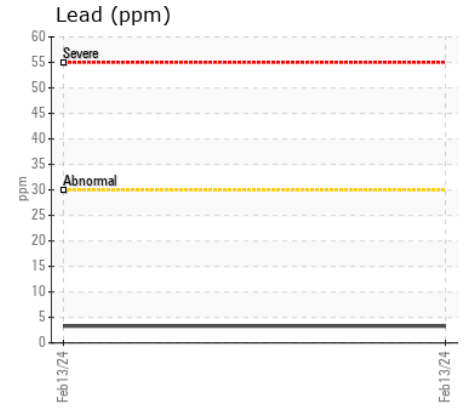
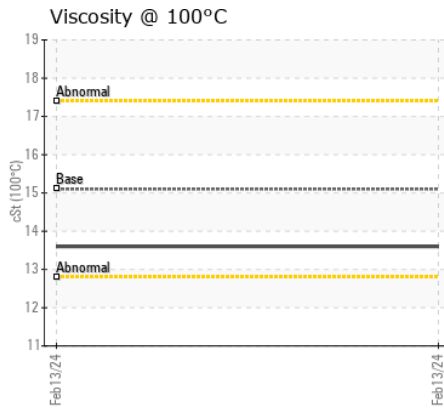
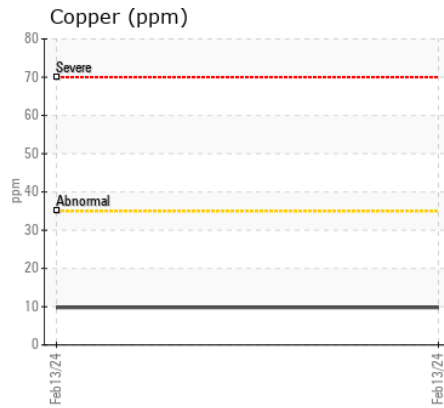
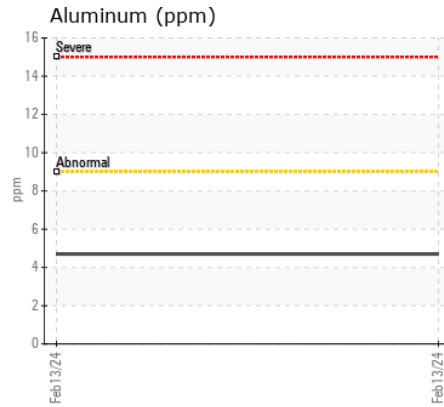
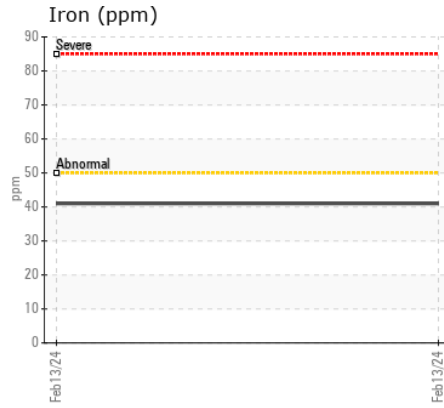
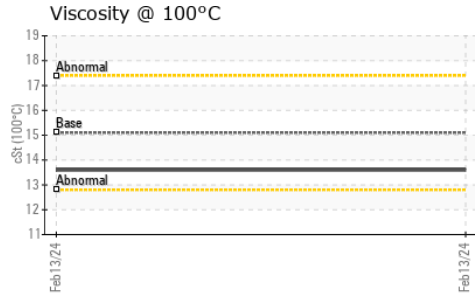
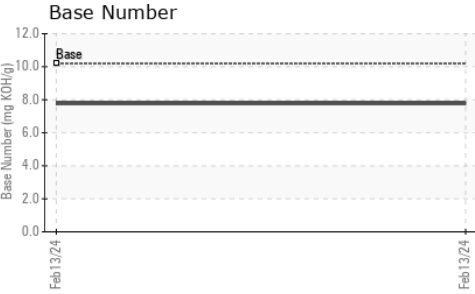
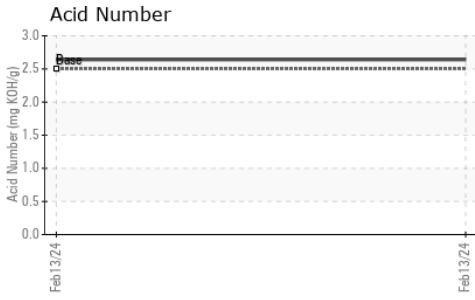
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>+100	81	---	---
Potassium	ppm	ASTM D5185(m)	>20	6	---	---
Water		WC Method	>0.1	NEG	---	---
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	8.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.0	---	---
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		6	---	---
Boron	ppm	ASTM D5185(m)	50	39	---	---
Barium	ppm	ASTM D5185(m)	5	4	---	---
Molybdenum	ppm	ASTM D5185(m)	50	99	---	---
Manganese	ppm	ASTM D5185(m)	0	4	---	---
Magnesium	ppm	ASTM D5185(m)	560	639	---	---
Calcium	ppm	ASTM D5185(m)	1510	1289	---	---
Phosphorus	ppm	ASTM D5185(m)	780	695	---	---
Zinc	ppm	ASTM D5185(m)	870	801	---	---
Sulfur	ppm	ASTM D5185(m)	2040	2393	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.4	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	2.5	2.64	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	10.2	7.77	---	---
i-pH	Scale 0-14	ASTM D7946*	<4.5	5.29	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	13.6	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112407
Lab Number : 02616966
Unique Number : 5734076
Test Package : MOB 2 (Additional Tests: i-pH, TAN Auto, TAN Man)

GFL Environmental - 550 - Rocky View County
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 Rocky View County, AB
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.