

Machine Id
112007
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0112442	---	---
Sample Date		Client Info		14 Jun 2024	---	---
Machine Age	hrs	Client Info		3697	---	---
Oil Age	hrs	Client Info		1192	---	---
Filter Age	hrs	Client Info		1192	---	---
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)	>100	36	---	---
Chromium	ppm	ASTM D5185(m)	>20	1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	<1	---	---
Aluminum	ppm	ASTM D5185(m)	>20	14	---	---
Lead	ppm	ASTM D5185(m)	>40	0	---	---
Copper	ppm	ASTM D5185(m)	>330	18	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

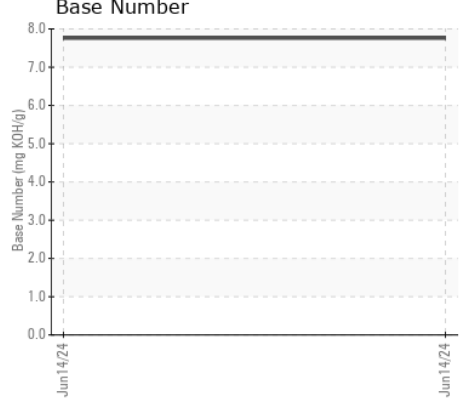
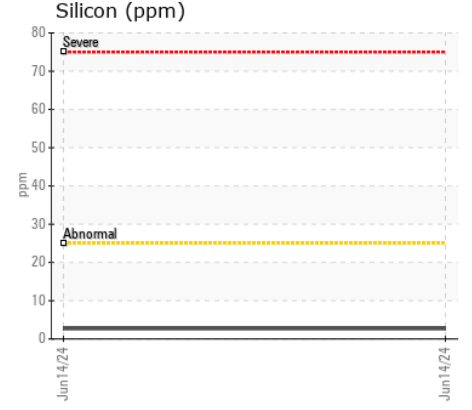
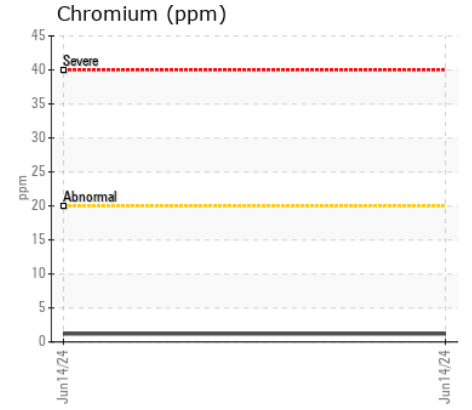
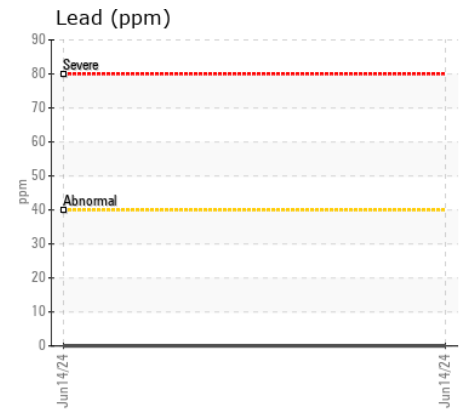
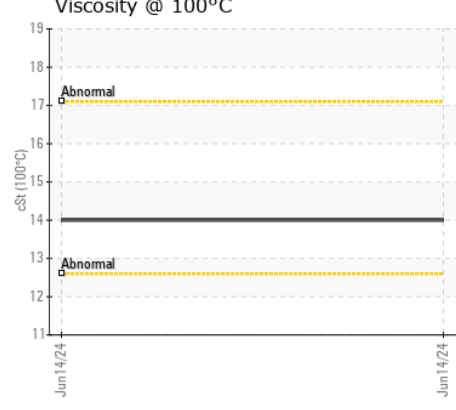
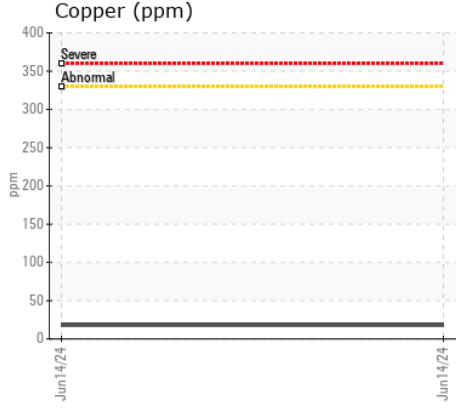
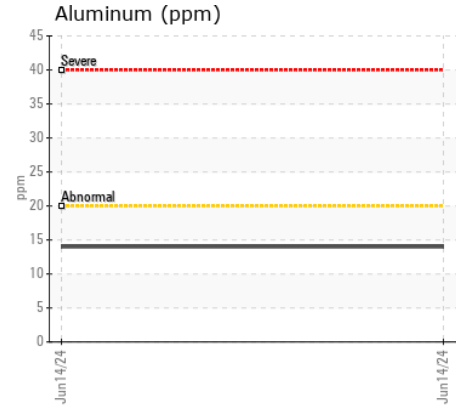
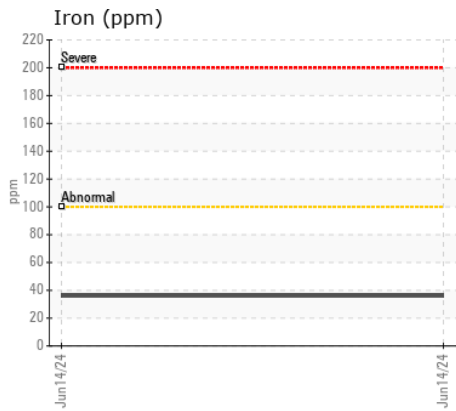
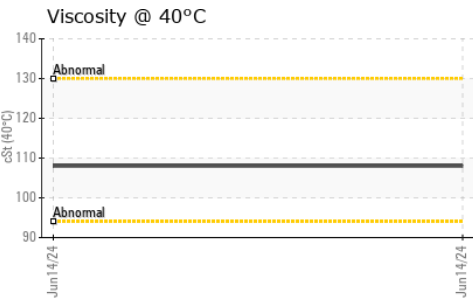
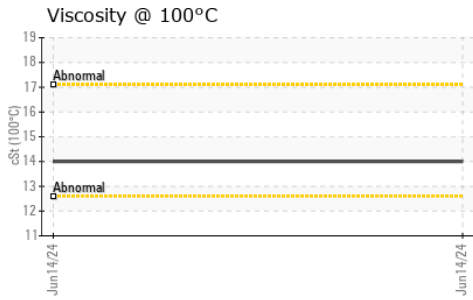
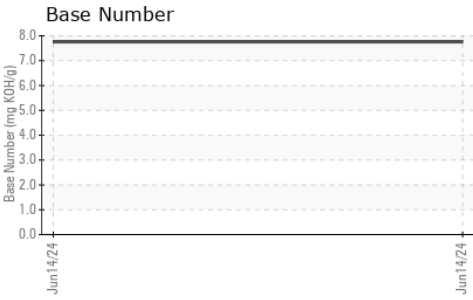
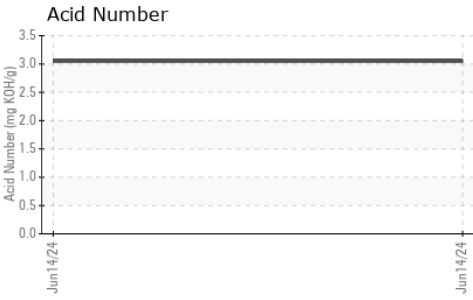
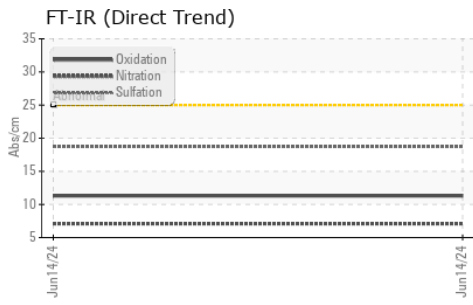
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	28	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	ASTM D7844*	>3	0.1	---	---
Nitration	Abs/cm	ASTM D7624*	>20	7.1	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.7	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.2	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)		1	---	---
Boron	ppm	ASTM D5185(m)		3	---	---
Barium	ppm	ASTM D5185(m)		0	---	---
Molybdenum	ppm	ASTM D5185(m)		9	---	---
Manganese	ppm	ASTM D5185(m)		<1	---	---
Magnesium	ppm	ASTM D5185(m)		124	---	---
Calcium	ppm	ASTM D5185(m)		2137	---	---
Phosphorus	ppm	ASTM D5185(m)		852	---	---
Zinc	ppm	ASTM D5185(m)		1042	---	---
Sulfur	ppm	ASTM D5185(m)		2732	---	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	11.3	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*		3.05	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*		7.76	---	---
Visc @ 40°C	cSt	ASTM D7279(m)		108	---	---
Visc @ 100°C	cSt	ASTM D7279(m)		14.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270*		130	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0112442
Lab Number : 02644003
Unique Number : 5801542
Test Package : MOB 2 (Additional Tests: KV40, TAN Auto, TAN Man, VI, Visual)

GFL Environmental - 550 - Rocky View County
 220 Carmek Blvd
 Rocky View County, AB
 CA T1X 1X1
 Contact: GFL Calgary
 calgarymaintenance@gflenv.com

*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.*

T:
 F: (403)369-6163