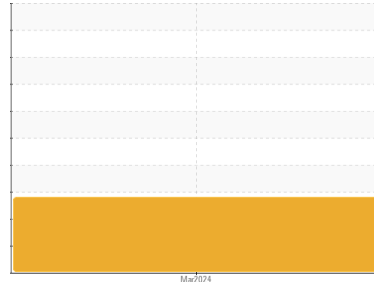




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
813112 AUTOCAR ACX64

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Fuel content negligible.

Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0103187	---	---
Sample Date	Client Info	11 Mar 2024	---	---
Machine Age	hrs	548	---	---
Oil Age	hrs	548	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>100	25	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	9	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	10	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	0	29	---	---
Barium	ppm	ASTM D5185m	0	3	---	---
Molybdenum	ppm	ASTM D5185m	60	53	---	---
Manganese	ppm	ASTM D5185m	0	3	---	---
Magnesium	ppm	ASTM D5185m	1010	792	---	---
Calcium	ppm	ASTM D5185m	1070	1199	---	---
Phosphorus	ppm	ASTM D5185m	1150	760	---	---
Zinc	ppm	ASTM D5185m	1270	869	---	---
Sulfur	ppm	ASTM D5185m	2060	2652	---	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>25	13	---	---
Sodium	ppm	ASTM D5185m		▲ 122	---	---
Potassium	ppm	ASTM D5185m	>20	▲ 141	---	---
Fuel	%	ASTM D3524	>5	1.1	---	---
Glycol	%	*ASTM D2982		NEG	---	---

INFRA-RED

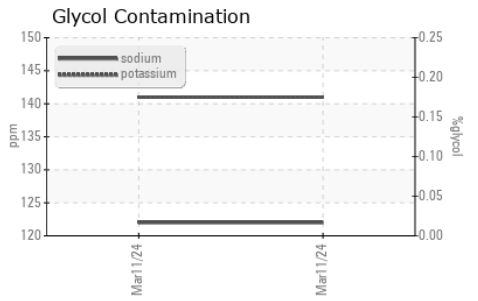
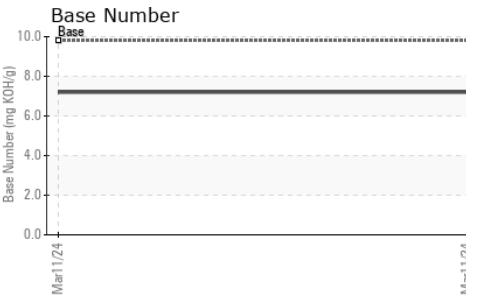
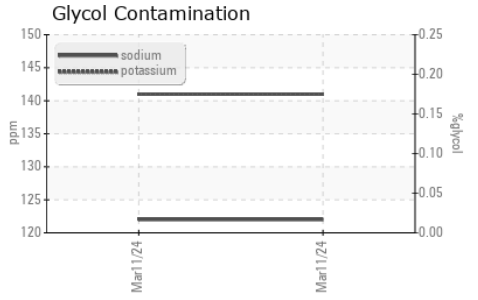
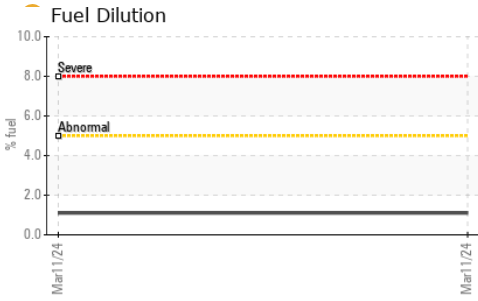
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844	>3	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	10.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.2	---	---



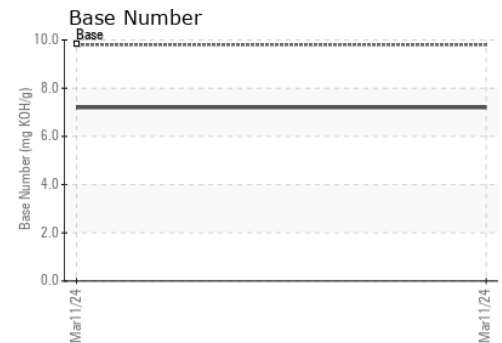
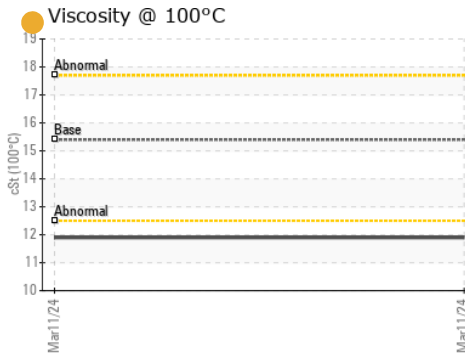
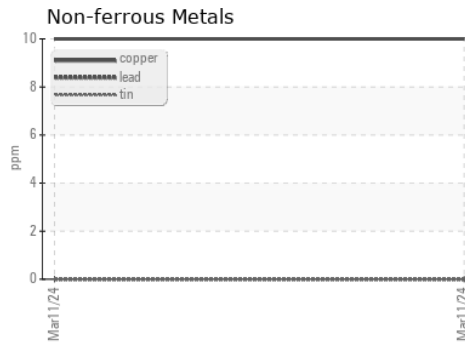
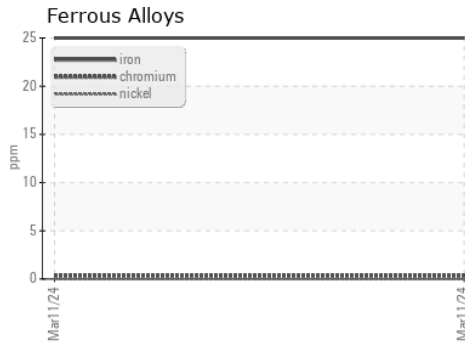
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
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	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	11.9	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0103187 Received : 12 Mar 2024
 Lab Number : 06115667 Tested : 15 Mar 2024
 Unique Number : 10924500 Diagnosed : 15 Mar 2024 - Jonathan Hester
 Test Package : FLEET (Additional Tests: FuelDilution, Glycol, PercentFuel)

GFL Environmental - 001 - Raleigh(CNG)
 3741 Conquest Drive
 Garner, NC
 US 27529
 Contact: Ronald Gregory
 rgregory@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: (919)662-1730