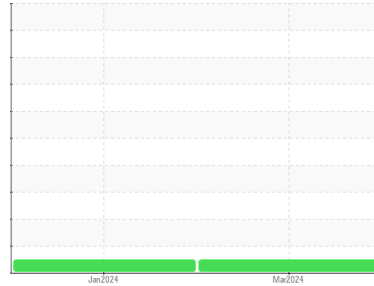




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
(TMV8901)
 Machine Id
834091

Component
Natural Gas Engine
 Fluid
PETRO CANADA 15W40 (28 QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0106785	GFL0092146	---
Sample Date	Client Info	05 Mar 2024	04 Jan 2024	---
Machine Age	hrs	Client Info	1191	719
Oil Age	hrs	Client Info	719	600
Oil Changed	Client Info	Changed	Changed	---
Sample Status		NORMAL	NORMAL	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	12	46
Chromium	ppm	ASTM D5185m	>4	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1
Titanium	ppm	ASTM D5185m		0	0
Silver	ppm	ASTM D5185m	>3	0	0
Aluminum	ppm	ASTM D5185m	>9	8	9
Lead	ppm	ASTM D5185m	>30	0	0
Copper	ppm	ASTM D5185m	>35	2	16
Tin	ppm	ASTM D5185m	>4	<1	<1
Vanadium	ppm	ASTM D5185m		0	0
Cadmium	ppm	ASTM D5185m		0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		5	12
Barium	ppm	ASTM D5185m		0	0
Molybdenum	ppm	ASTM D5185m		51	56
Manganese	ppm	ASTM D5185m		2	10
Magnesium	ppm	ASTM D5185m		539	722
Calcium	ppm	ASTM D5185m		1493	1210
Phosphorus	ppm	ASTM D5185m		683	720
Zinc	ppm	ASTM D5185m		910	888
Sulfur	ppm	ASTM D5185m		2236	2504

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	5	30
Sodium	ppm	ASTM D5185m		2	5
Potassium	ppm	ASTM D5185m	>20	56	51

INFRA-RED

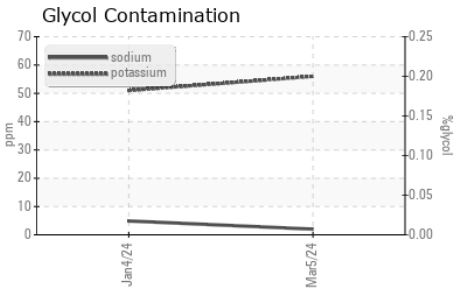
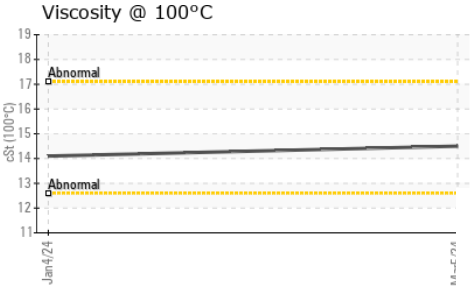
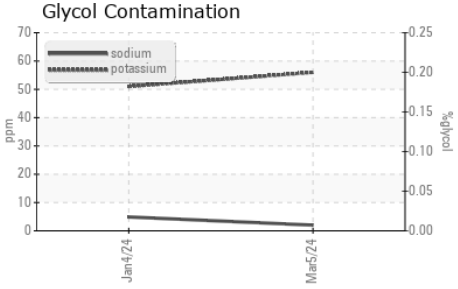
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0	0
Nitration	Abs/cm	*ASTM D7624	>20	10.5	11.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.8	23.3

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	20.9
Base Number (BN)	mg KOH/g	ASTM D2896		4.8	3.7



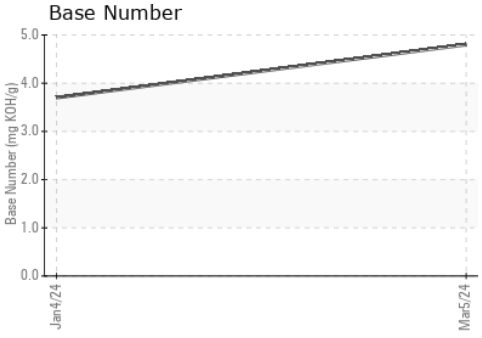
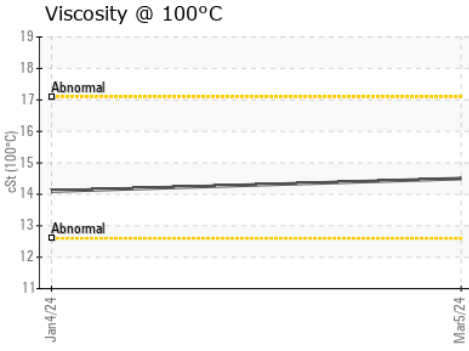
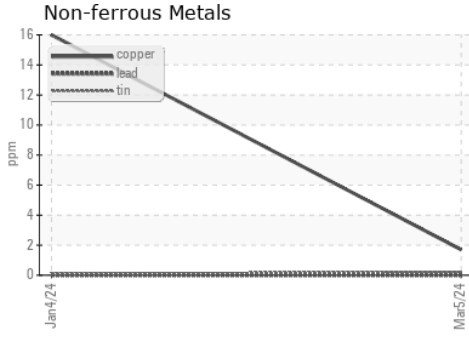
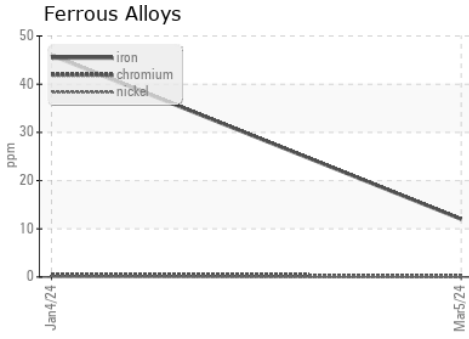
OIL ANALYSIS REPORT



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	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.5	14.1	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0106785 **Received** : 07 Mar 2024
Lab Number : **06112044** **Tested** : 12 Mar 2024
Unique Number : 10915541 **Diagnosed** : 12 Mar 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Jose Gonzalez
 jgonzalez2@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)