



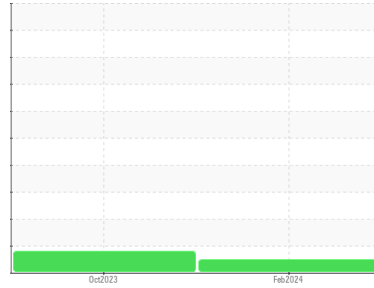
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**(JY7715)**  
Machine Id  
**10657**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA 15W40 (--- GAL)**



## 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	<b>GFL0109503</b>	GFL0094476	---
Sample Date	Client Info	<b>15 Feb 2024</b>	19 Oct 2023	---
Machine Age	hrs Client Info	<b>240256</b>	240256	---
Oil Age	hrs Client Info	<b>600</b>	600	---
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>NORMAL</b>	ABNORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<b>&lt;1.0</b>	<1.0	---
Water	WC Method >0.2	<b>NEG</b>	NEG	---
Glycol	WC Method	<b>NEG</b>	NEG	---

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	<b>10</b>	▲ 219	---
Chromium	ppm ASTM D5185m >20	<b>&lt;1</b>	4	---
Nickel	ppm ASTM D5185m >4	<b>0</b>	2	---
Titanium	ppm ASTM D5185m	<b>0</b>	<1	---
Silver	ppm ASTM D5185m >3	<b>0</b>	0	---
Aluminum	ppm ASTM D5185m >20	<b>2</b>	13	---
Lead	ppm ASTM D5185m >40	<b>1</b>	37	---
Copper	ppm ASTM D5185m >330	<b>3</b>	109	---
Tin	ppm ASTM D5185m >15	<b>&lt;1</b>	3	---
Vanadium	ppm ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm ASTM D5185m	<b>0</b>	<1	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>6</b>	23	---
Barium	ppm ASTM D5185m	<b>0</b>	3	---
Molybdenum	ppm ASTM D5185m	<b>59</b>	69	---
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	4	---
Magnesium	ppm ASTM D5185m	<b>970</b>	409	---
Calcium	ppm ASTM D5185m	<b>1132</b>	1901	---
Phosphorus	ppm ASTM D5185m	<b>1065</b>	1065	---
Zinc	ppm ASTM D5185m	<b>1311</b>	1310	---
Sulfur	ppm ASTM D5185m	<b>3220</b>	3189	---

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	<b>4</b>	22	---
Sodium	ppm ASTM D5185m	<b>2</b>	2	---
Potassium	ppm ASTM D5185m >20	<b>2</b>	8	---

## INFRA-RED

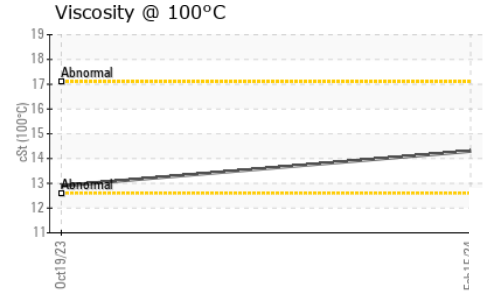
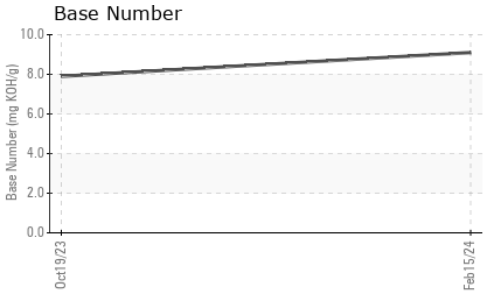
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	<b>0.3</b>	2	---
Nitration	Abs/cm *ASTM D7624 >20	<b>6.8</b>	15.6	---
Sulfation	Abs/.1mm *ASTM D7415 >30	<b>18.5</b>	27.9	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	<b>14.7</b>	27.3	---
Base Number (BN)	mg KOH/g ASTM D2896	<b>9.1</b>	7.9	---



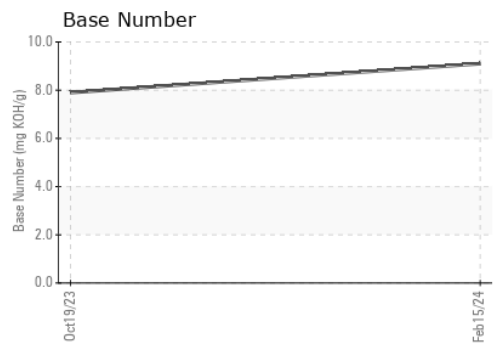
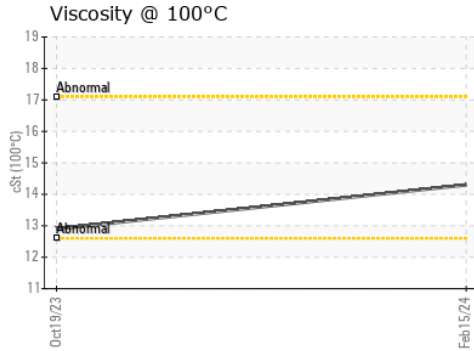
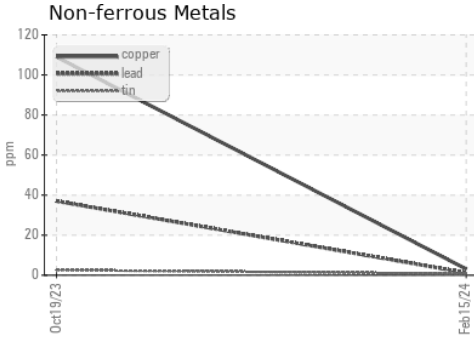
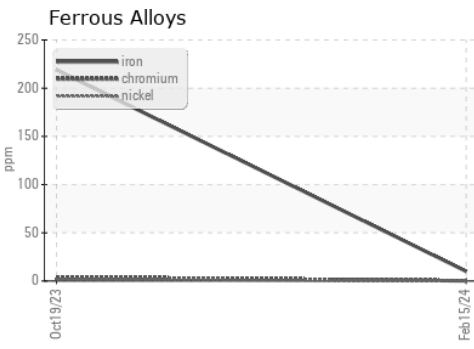
# OIL ANALYSIS REPORT



PARAMETER	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	<b>14.3</b>	12.9	---

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : GFL0109503      **Received** : 21 Feb 2024  
**Lab Number** : 06095340      **Tested** : 22 Feb 2024  
**Unique Number** : 10888193      **Diagnosed** : 22 Feb 2024 - Wes Davis  
**Test Package** : FLEET

**GFL Environmental - 019 - Greenville/TriEast**  
 415 Staton Road  
 Greenville, NC  
 US 27834  
 Contact: Spencer Ligon  
 spencer.ligon@gflenv.com  
 T: (800)207-6618  
 F:

Certificate L2367  
 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)