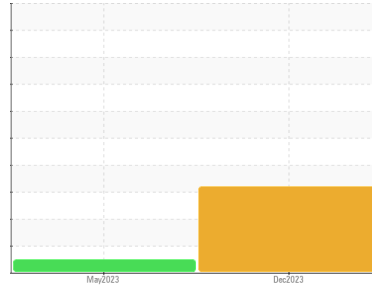




# OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Area  
**CAPLAN**  
 Machine Id  
**#427150**

Component  
**Front Diesel Engine**  
 Fluid  
**CASTROL 15W40 (40 LTR)**

## DIAGNOSIS

### Recommendation

Nous vous recommandons de vérifier le filtre à air, le système d'induction d'air et tout endroit où la saleté peut entrer dans le composant. Nous vous recommandons de vérifier la présence de particules métalliques visibles dans l'huile. Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Nous vous recommandons d'échantillonner de nouveau dès que possible afin de contrôler la situation.

### Wear

Présence d'une faible concentration de métal visible.

### Contamination

La teneur en carburant est négligeable. Il y a une légère concentration de la saleté et débris visible, présente dans l'huile.

### Fluid Condition

La viscosité de l'échantillon se situe dans la portée de l'SAE 30; nous vous conseillons de vérifier. l'huile n'est plus en état de service en raison d'une usure anormale et/ou sévère.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0091128</b>	GFL0079113	---
Sample Date	Client Info	<b>21 Dec 2023</b>	27 May 2023	---
Machine Age	hrs	<b>25794</b>	25235	---
Oil Age	hrs	<b>21</b>	291	---
Oil Changed	Client Info	<b>Changed</b>	Changed	---
Sample Status		<b>ABNORMAL</b>	NORMAL	---

## CONTAMINATION

method	limit/base	current	history1	history2	
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 D5185(m)	>85	<b>3</b>	8	---
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	---
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	0	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	---
Aluminum	ppm	ASTM D5185(m)	>40	<b>2</b>	4	---
Lead	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185(m)	>100	<b>&lt;1</b>	<1	---
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	---
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	---

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)		<b>17</b>	76	---
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185(m)		<b>60</b>	72	---
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	---
Magnesium	ppm	ASTM D5185(m)		<b>827</b>	193	---
Calcium	ppm	ASTM D5185(m)		<b>1177</b>	2134	---
Phosphorus	ppm	ASTM D5185(m)		<b>992</b>	1040	---
Zinc	ppm	ASTM D5185(m)		<b>1139</b>	1076	---
Sulfur	ppm	ASTM D5185(m)		<b>2786</b>	2956	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	---

## CONTAMINANTS

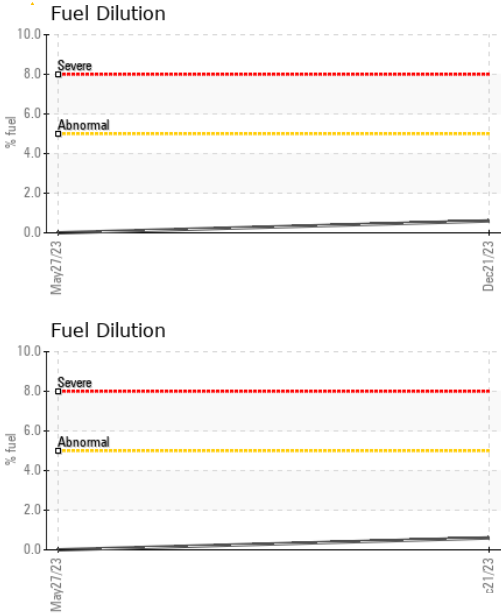
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	<b>4</b>	4	---
Sodium	ppm	ASTM D5185(m)	>406	<b>1</b>	2	---
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	2	---
Fuel	%	ASTM D7593*	>5	<b>0.6</b>	<1.0	---

## INFRA-RED

method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.3	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.0</b>	7.8	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>17.7</b>	19.0	---



# OIL ANALYSIS REPORT

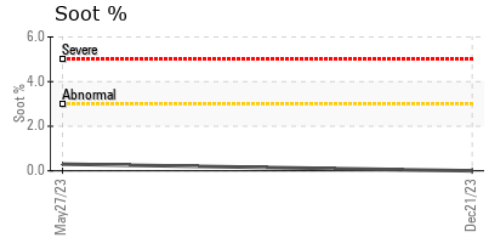
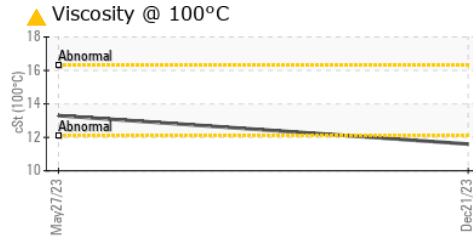
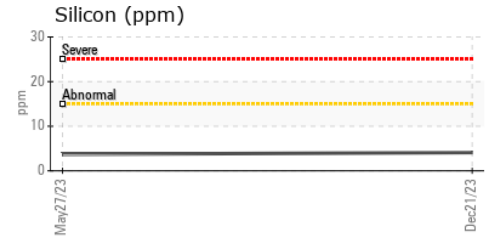
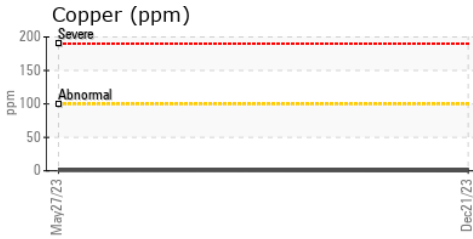
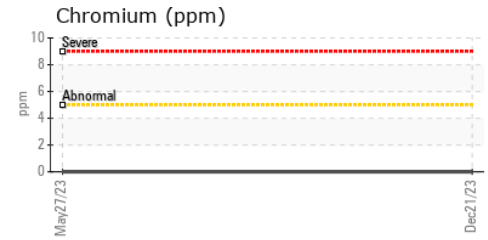
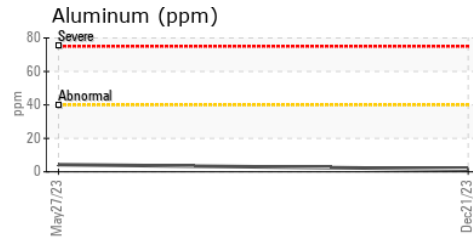
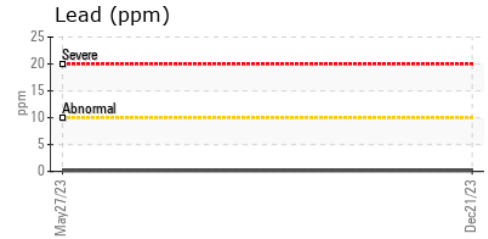
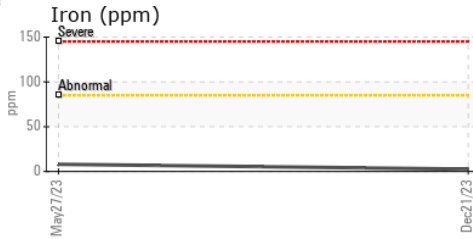


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>12.9</b>	12.9	---

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>▲ LIGHT</b>	NONE	---
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	---
Sand/Dirt	scalar	Visual*	NONE	<b>▲ LIGHT</b>	NONE	---
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	---
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	---
Free Water	scalar	Visual*		<b>NEG</b>	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)		<b>▲ 11.6</b>	13.3	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0091128      **Received** : 27 Dec 2023  
**Lab Number** : **02605199**      **Diagnosed** : 28 Dec 2023  
**Unique Number** : 5698284      **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: BottomAnalysis, FILTERPATCH, FuelDilution, PercentFuel, Visual )

**Matrec - 791 - Rimouski**  
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 Rimouski, QC  
 CA G5M 1W4  
 Contact: Vincent Maltais  
 info@foretsstar.com  
 T: 4(18)388-2626  
 F: (418)388-2038

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.