



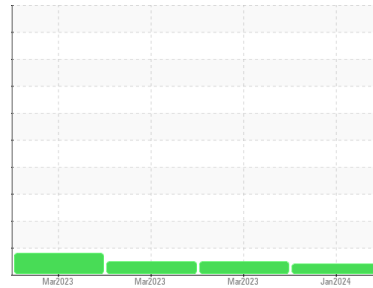
# OIL ANALYSIS REPORT

Sample Rating Trend

VISCOSITY



Machine Id  
**811033**  
Component  
**Diesel Engine**  
Fluid  
**RDL-3647 (--- GAL)**



## DIAGNOSIS

### Recommendation

Aucune mesure corrective n'est recommandée pour l'instant. Confirmez la source du lubrifiant utilisé pour l'appoint/remplissage. Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition. Le fluide était spécifié comme RDL-3647, toutefois, une comparaison avec d'autres fluides indiquent que ce fluide est du SAE 30 Diesel Engine Oil. Veuillez confirmer la viscosité de l'huile et veuillez préciser la marque de votre prochain échantillon.

### Wear

Les taux d'usure de tous les composants sont normaux.

### Contamination

La teneur en carburant est négligeable. 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. Il n'y a aucun indice de contamination dans l'huile.

### Fluid Condition

La viscosité de l'échantillon se situe dans la portée de l'SAE 30; nous vous conseillons de vérifier. Ceci, en plus des niveaux d'additifs, indique que la marque ou le type d'huile ne correspond pas à ce qui a été signalé. L'état de l'huile est acceptable pour la durée de service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0096398</b>	GFL0072737	GFL0079451
Sample Date	Client Info	<b>02 Jan 2024</b>	30 Mar 2023	20 Mar 2023
Machine Age	hrs Client Info	<b>4989</b>	3443	3401
Oil Age	hrs Client Info	<b>0</b>	0	600
Oil Changed	Client Info	<b>Changed</b>	Not Changd	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method	<b>NEG</b>	0.0	0.0

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >80	<b>55</b>	35	31
Chromium	ppm ASTM D5185(m) >5	<b>2</b>	2	1
Nickel	ppm ASTM D5185(m) >2	<b>&lt;1</b>	<1	<1
Titanium	ppm ASTM D5185(m)	<b>0</b>	<1	<1
Silver	ppm ASTM D5185(m) >3	<b>0</b>	0	0
Aluminum	ppm ASTM D5185(m) >30	<b>23</b>	13	11
Lead	ppm ASTM D5185(m) >30	<b>0</b>	0	0
Copper	ppm ASTM D5185(m) >150	<b>3</b>	2	1
Tin	ppm ASTM D5185(m) >5	<b>&lt;1</b>	<1	<1
Antimony	ppm ASTM D5185(m)	<b>0</b>	0	0
Vanadium	ppm ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 50	<b>5</b>	6	6
Barium	ppm ASTM D5185(m) 5	<b>0</b>	0	0
Molybdenum	ppm ASTM D5185(m) 50	<b>60</b>	64	64
Manganese	ppm ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm ASTM D5185(m) 560	<b>934</b>	961	959
Calcium	ppm ASTM D5185(m) 1510	<b>1189</b>	1151	1144
Phosphorus	ppm ASTM D5185(m) 780	<b>1023</b>	1112	1105
Zinc	ppm ASTM D5185(m) 870	<b>1191</b>	1182	1176
Sulfur	ppm ASTM D5185(m) 2040	<b>2681</b>	2727	2723
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

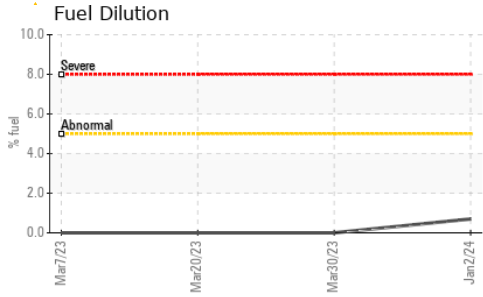
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	<b>6</b>	4	4
Sodium	ppm ASTM D5185(m)	<b>2</b>	2	2
Potassium	ppm ASTM D5185(m) >20	<b>25</b>	11	9
Fuel	% ASTM D7593* >5	<b>0.7</b>	<1.0	<1.0

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0.8</b>	0.2	0.1
Nitration	Abs/cm ASTM D7624* >20	<b>11.5</b>	6.3	5.4
Sulfation	Abs./1mm ASTM D7415* >30	<b>22.3</b>	18.7	18.1



# OIL ANALYSIS REPORT

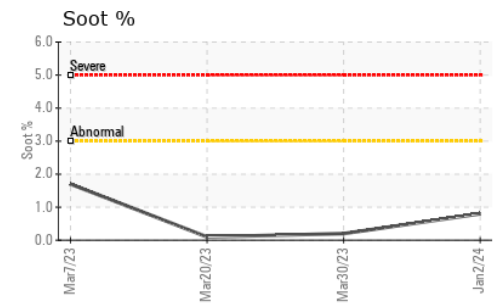
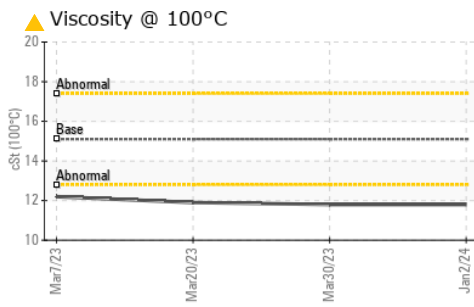
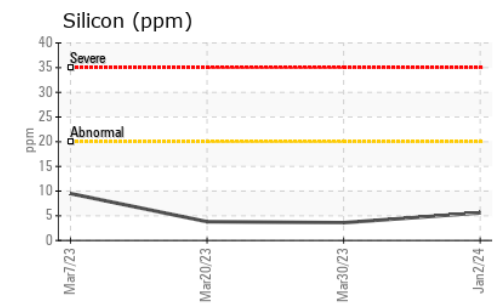
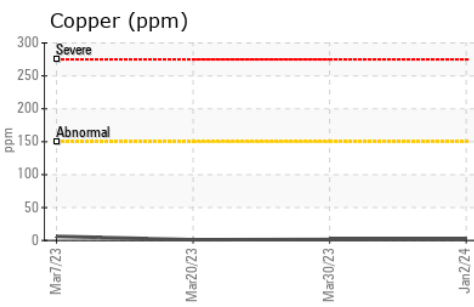
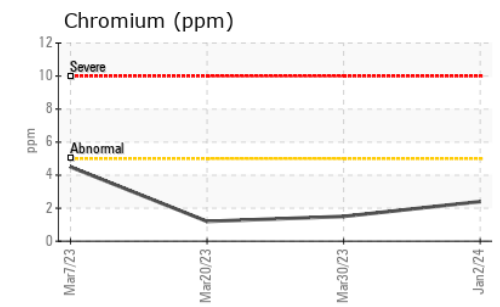
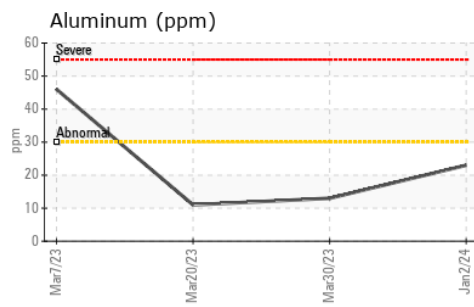
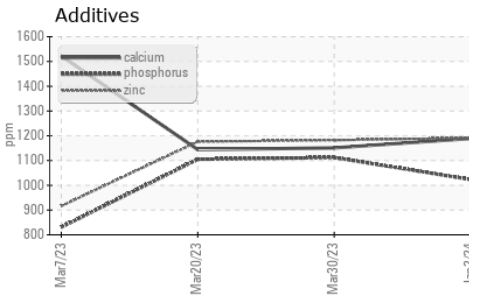
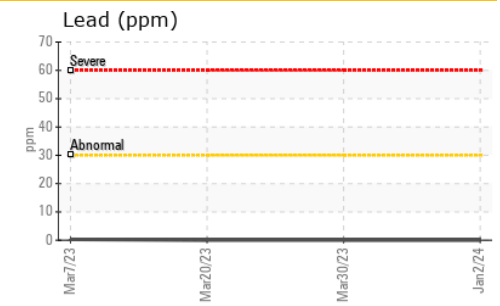
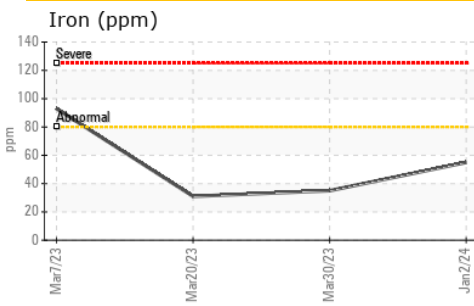
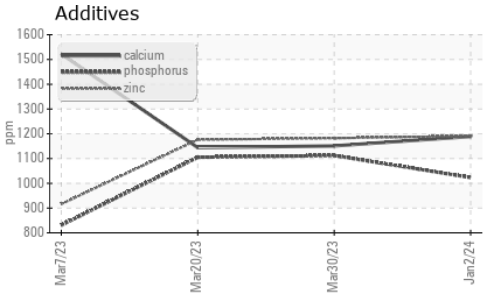


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>17.9</b>	14.1	13.3

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	▲ <b>11.8</b>	11.8	11.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0096398      **Received** : 05 Feb 2024  
**Lab Number** : 02613421      **Tested** : 06 Feb 2024  
**Unique Number** : 5722516      **Diagnosed** : 06 Feb 2024 - Bill Quesnel  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 747 - GMA - Solid Waste**  
 4 Chemin du Tremblay,  
 Boucherville, QC  
 CA J4B 6Z5  
 Contact: Steve Voyer  
 svoyer@matrec.ca

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.