



# OIL ANALYSIS REPORT

Sample Rating Trend

GLYCOL



Area  
**(L913871)**  
Machine Id  
**WESTERN STAR 829119**

Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 10W30 (--- GAL)**



## DIAGNOSIS

**Recommendation**  
Vérifier le niveau du fluide de refroidissement. 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**  
Les taux de métaux sont typiques pour la période de rodage d'un nouveau composant.

**Contamination**  
Des produits de traitement de l'eau sont présents, ce qui indique une fuite lente de fluide de refroidissement. Le test de glycol est négatif. Il n'y a aucun indice de contamination dans l'huile.

**Fluid Condition**  
L'état de l'huile est acceptable pour la durée de service (voir recommandation).

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0081619</b>	---	---
Sample Date	Client Info	<b>27 Feb 2024</b>	---	---
Machine Age	kms Client Info	<b>11443</b>	---	---
Oil Age	kms Client Info	<b>600</b>	---	---
Oil Changed	Client Info	<b>Changed</b>	---	---
Sample Status		<b>ATTENTION</b>	---	---

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >100	<b>11</b>	---	---
Chromium	ppm ASTM D5185(m) >20	<b>&lt;1</b>	---	---
Nickel	ppm ASTM D5185(m) >4	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185(m)	<b>0</b>	---	---
Silver	ppm ASTM D5185(m) >3	<b>0</b>	---	---
Aluminum	ppm ASTM D5185(m) >20	<b>5</b>	---	---
Lead	ppm ASTM D5185(m) >40	<b>&lt;1</b>	---	---
Copper	ppm ASTM D5185(m) >330	<b>6</b>	---	---
Tin	ppm ASTM D5185(m) >15	<b>0</b>	---	---
Antimony	ppm ASTM D5185(m)	<b>0</b>	---	---
Vanadium	ppm ASTM D5185(m)	<b>0</b>	---	---
Beryllium	ppm ASTM D5185(m)	<b>0</b>	---	---
Cadmium	ppm ASTM D5185(m)	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 2	<b>31</b>	---	---
Barium	ppm ASTM D5185(m) 0	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185(m) 50	<b>134</b>	---	---
Manganese	ppm ASTM D5185(m) 0	<b>0</b>	---	---
Magnesium	ppm ASTM D5185(m) 950	<b>894</b>	---	---
Calcium	ppm ASTM D5185(m) 1050	<b>1035</b>	---	---
Phosphorus	ppm ASTM D5185(m) 995	<b>958</b>	---	---
Zinc	ppm ASTM D5185(m) 1180	<b>1111</b>	---	---
Sulfur	ppm ASTM D5185(m) 2600	<b>2593</b>	---	---
Lithium	ppm ASTM D5185(m)	<b>&lt;1</b>	---	---

## CONTAMINANTS

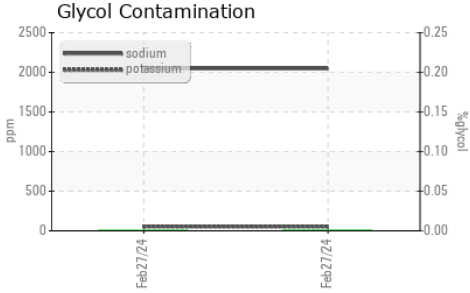
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >25	<b>29</b>	---	---
Sodium	ppm ASTM D5185(m)	<b>2046</b>	---	---
Potassium	ppm ASTM D5185(m) >20	<b>53</b>	---	---
Glycol	% ASTM D7922*	<b>0.0</b>	---	---

## INFRA-RED

method	limit/base	current	history1	history2
Soot %	% ASTM D7844* >3	<b>0</b>	---	---
Nitration	Abs/cm ASTM D7624* >20	<b>10.6</b>	---	---
Sulfation	Abs./1mm ASTM D7415* >30	<b>21.0</b>	---	---



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### FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	>25	14.8	---

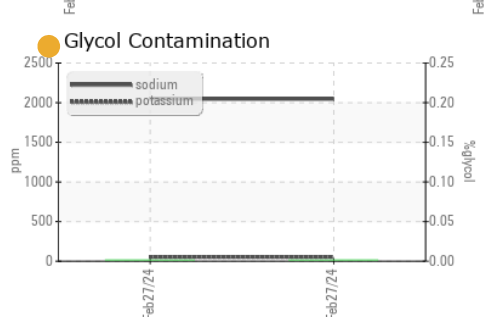
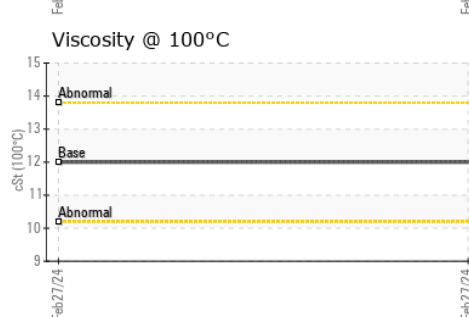
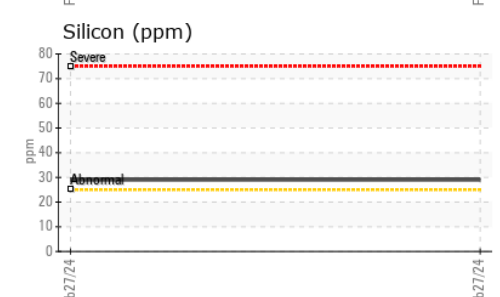
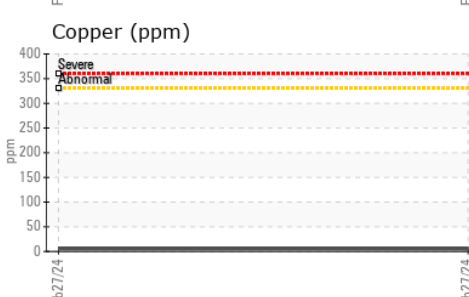
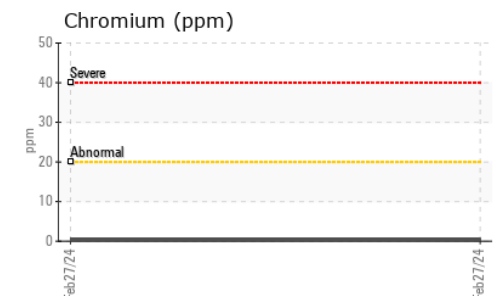
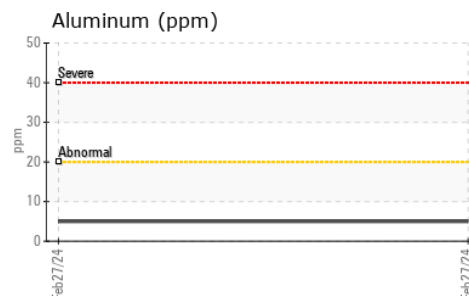
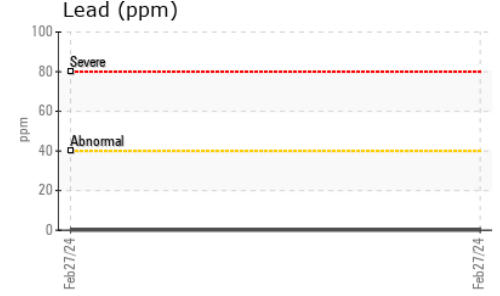
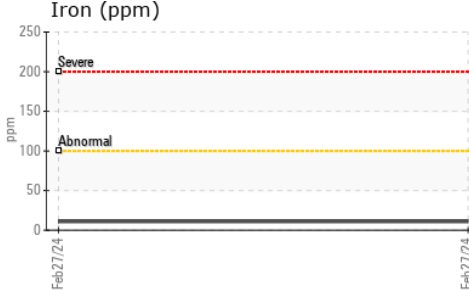
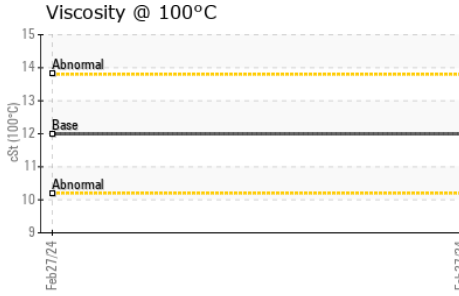
### VISUAL

Method	Limit/Base	Current	History1	History2
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 D7279(m)	12.00	12.0	---

### GRAPHS



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0081619 **Received** : 29 Feb 2024  
**Lab Number** : 02618908 **Tested** : 29 Feb 2024  
**Unique Number** : 5736018 **Diagnosed** : 01 Mar 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

**GFL Environmental - 774**  
 169 Route 117  
 Mont-Tremblant, QC  
 CA J8E 1A1  
 Contact: Stephane Filteau  
 sfilteau@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.

T:  
F: