



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**MACK 426134 (S/N 1M2AX07C6GM026343)**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0109557</b>	---	---
Sample Date	Client Info		<b>12 Mar 2024</b>	---	---
Machine Age	kms	Client Info	<b>11690</b>	---	---
Oil Age	kms	Client Info	<b>600</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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)	>120	<b>24</b>	---	---
Chromium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	---	---
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	---	---
Copper	ppm	ASTM D5185(m)	>330	<b>3</b>	---	---
Tin	ppm	ASTM D5185(m)	>15	<b>&lt;1</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)	0	<b>73</b>	---	---
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185(m)	60	<b>11</b>	---	---
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185(m)	1010	<b>14</b>	---	---
Calcium	ppm	ASTM D5185(m)	1070	<b>2228</b>	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	<b>995</b>	---	---
Zinc	ppm	ASTM D5185(m)	1270	<b>1140</b>	---	---
Sulfur	ppm	ASTM D5185(m)	2060	<b>3176</b>	---	---
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	---	---

## CONTAMINANTS

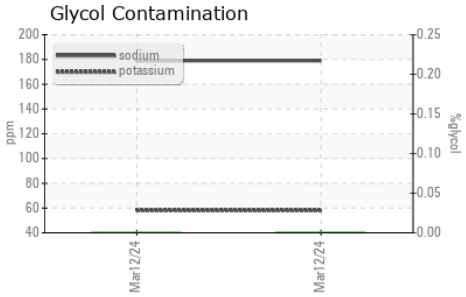
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>7</b>	---	---
Sodium	ppm	ASTM D5185(m)		<b>179</b>	---	---
Potassium	ppm	ASTM D5185(m)	>20	<b>58</b>	---	---
Glycol	%	ASTM D7922*		<b>0.0</b>	---	---

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>4	<b>0.2</b>	---	---
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.5</b>	---	---
Sulfation	Abs./1mm	ASTM D7415*	>30	<b>27.7</b>	---	---



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### FLUID DEGRADATION

Method	Limit/Base	Current	History1	History2
Oxidation	Abs./1mm ASTM D7414*	<b>22.7</b>	---	---

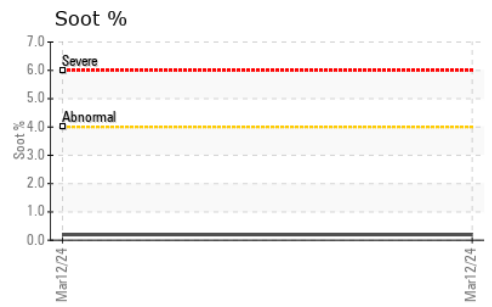
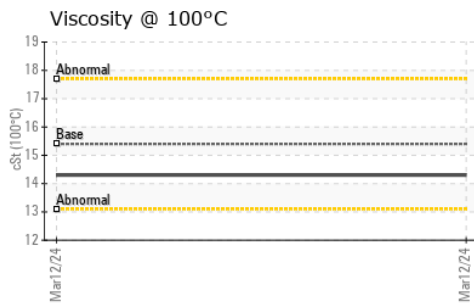
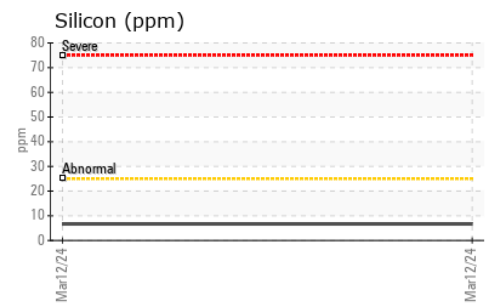
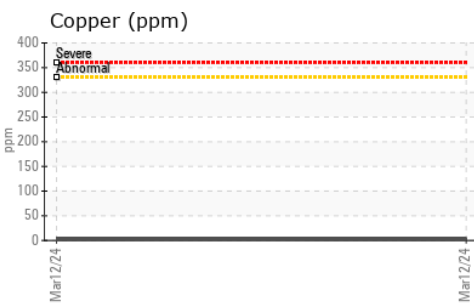
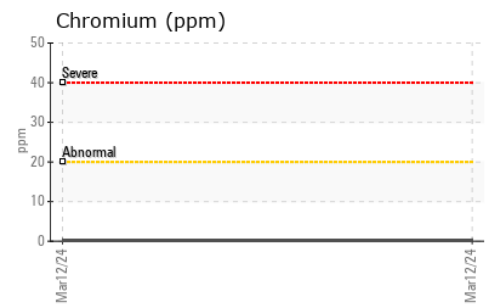
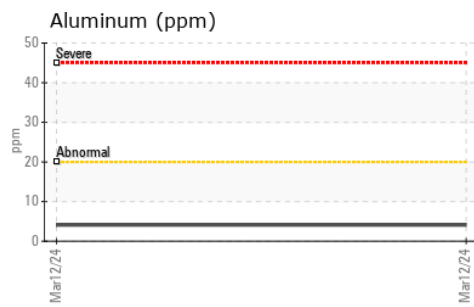
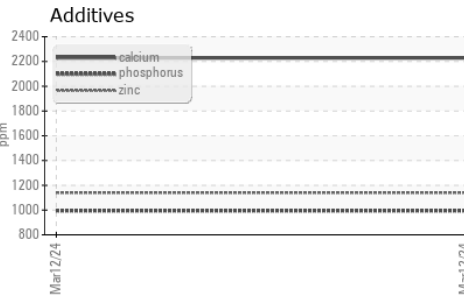
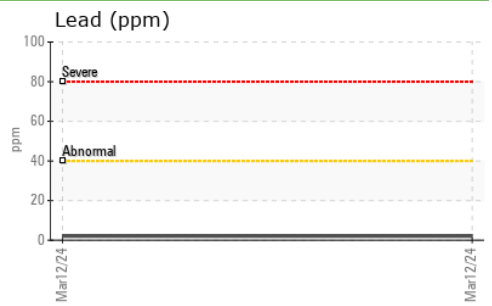
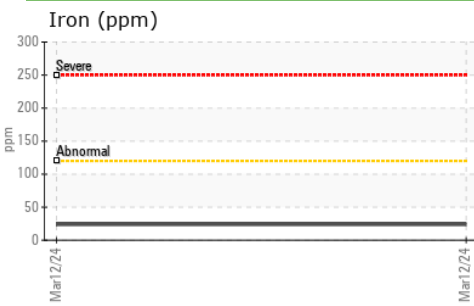
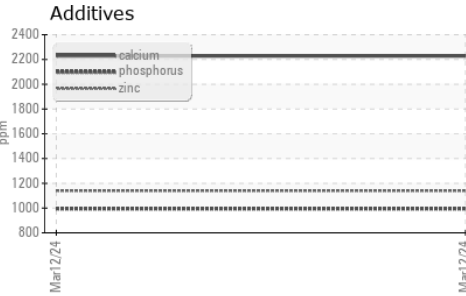
### VISUAL

Method	Limit/Base	Current	History1	History2
Emulsified Water	scalar Visual*	<b>NEG</b>	---	---
Free Water	scalar Visual*	<b>NEG</b>	---	---

### FLUID PROPERTIES

Method	Limit/Base	Current	History1	History2
Visc @ 100°C	cSt ASTM D7279(m)	<b>14.3</b>	---	---

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental Inc. - 536 - Fort frances**  
**Sample No.** : GFL0109557 **Received** : 18 Mar 2024 **Fire #174 Hwy 11/71**  
**Lab Number** : **02622571** **Tested** : 18 Mar 2024 **Fort Frances, ON**  
**Unique Number** : 5747690 **Diagnosed** : 18 Mar 2024 - Kevin Marson **CA P9A 3M2**  
**Test Package** : MOB 1 ( Additional Tests: Glycol ) **Contact: Jodi Holden**  
**Tested at external lab.** **jholden@gflenv.com**  
**Validity of results and interpretation are based on the sample and information as supplied.** **T: (807)274-6255**  
**F:**

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.