



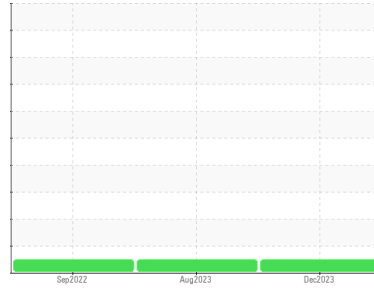
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**OR872**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**



## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

Fuel content negligible. 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>GFL0076991</b>	GFL0077025	GFL0054678
Sample Date	Client Info		<b>01 Dec 2023</b>	10 Aug 2023	02 Sep 2022
Machine Age	hrs	Client Info	<b>21348</b>	20882	19622
Oil Age	hrs	Client Info	<b>466</b>	795	1500
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</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	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>9</b>	8	13
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >25	<b>1</b>	1	1
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185(m)	<b>0</b>	<1	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) 0	<b>77</b>	93	4
Barium	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>24</b>	13	59
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>384</b>	205	977
Calcium	ppm	ASTM D5185(m) 1070	<b>1794</b>	2056	1092
Phosphorus	ppm	ASTM D5185(m) 1150	<b>987</b>	1059	1079
Zinc	ppm	ASTM D5185(m) 1270	<b>1185</b>	1179	1197
Sulfur	ppm	ASTM D5185(m) 2060	<b>2908</b>	2990	2617
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

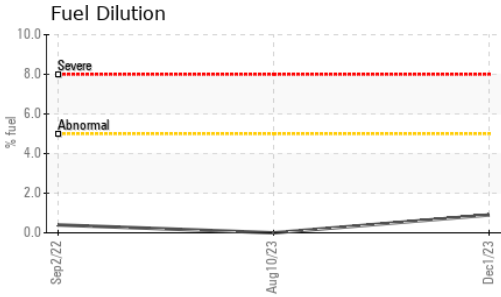
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>3</b>	3	2
Sodium	ppm	ASTM D5185(m)	<b>2</b>	2	2
Potassium	ppm	ASTM D5185(m) >20	<b>3</b>	6	<1
Fuel	%	ASTM D7593* >5	<b>0.9</b>	<1.0	0.4

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.3</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624* >20	<b>6.2</b>	6.0	6.3
Sulfation	Abs./1mm	ASTM D7415* >30	<b>19.2</b>	19.4	20.4



# OIL ANALYSIS REPORT

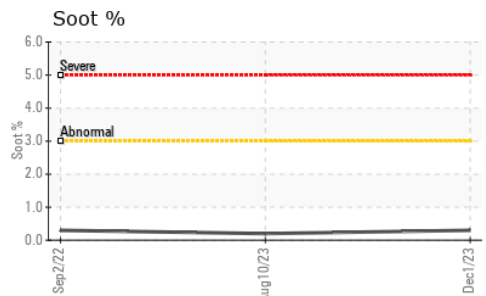
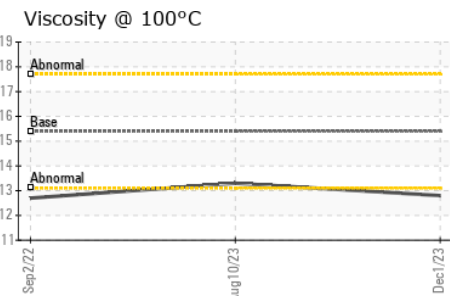
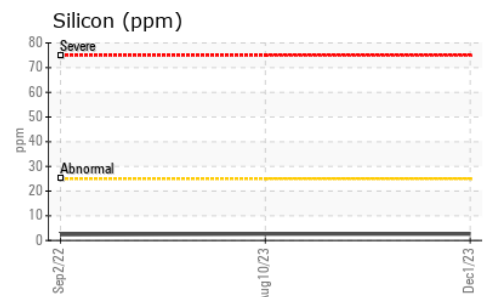
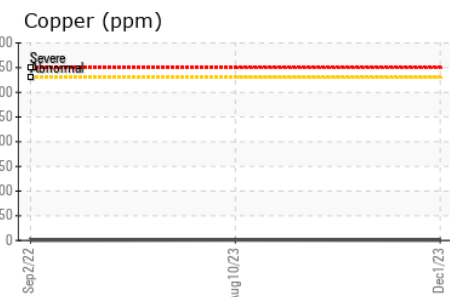
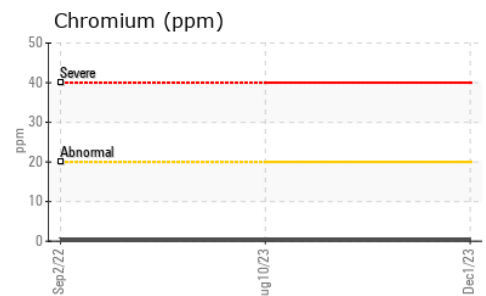
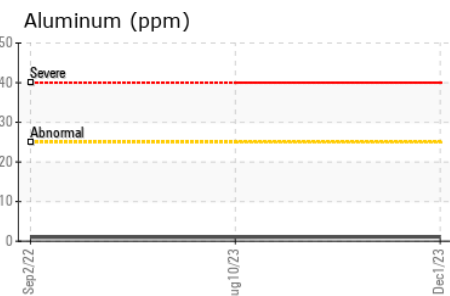
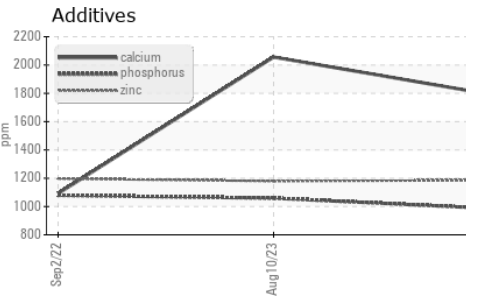
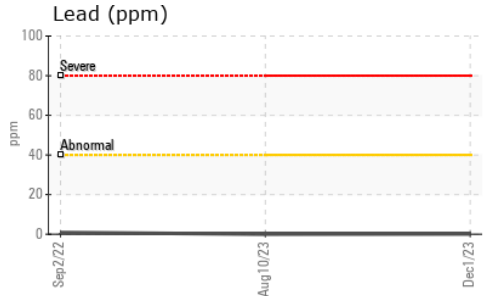
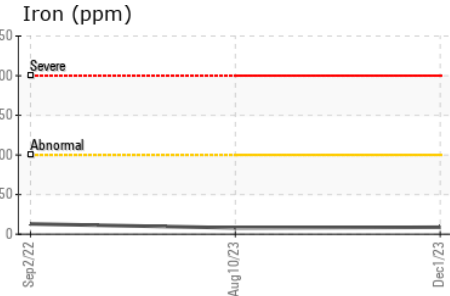
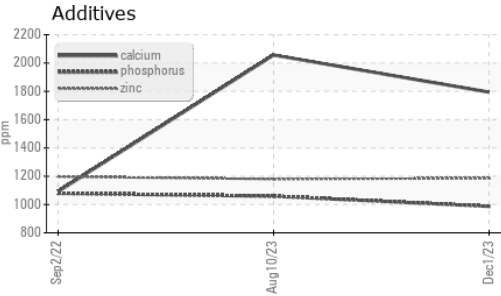


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>14.1</b>	13.2	14.3

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)	15.4	<b>12.8</b>	13.3	12.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 575 - Squamish Hauling  
**Sample No.** : GFL0076991 **Received** : 06 Dec 2023  
**Lab Number** : **02601104** **Diagnosed** : 08 Dec 2023  
**Unique Number** : 5694189 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FUELDILUTION, PercentFuel )

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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.