



# OIL ANALYSIS REPORT

Sample Rating Trend

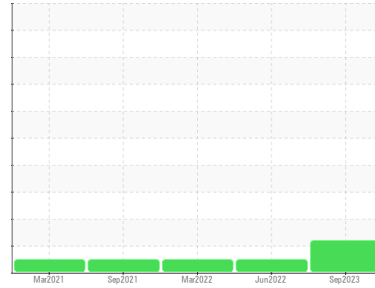
GLYCOL



Machine Id  
**0535**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 10W30 (--- LTR)**



## DIAGNOSIS

### Recommendation

Check for low coolant level. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Water treatment chemicals present, indicating slow coolant leak. Test for glycol is negative. There is no indication of any contamination in the oil.

### Fluid Condition

The condition of the oil is acceptable for the time in service (see recommendation).

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>GFL0093898</b>	GFL0054198	GFL0041450
Sample Date	Client Info	<b>29 Sep 2023</b>	13 Jun 2022	10 Mar 2022
Machine Age	kms	Client Info	<b>152162</b>	0
Oil Age	kms	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	Changed	N/A
Sample Status		<b>ATTENTION</b>	NORMAL	NORMAL

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>100	<b>30</b>	15	22
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	2	2
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
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)	2	<b>9</b>	3	3
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>71</b>	57	57
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	950	<b>904</b>	968	965
Calcium	ppm	ASTM D5185(m)	1050	<b>1120</b>	1034	1013
Phosphorus	ppm	ASTM D5185(m)	995	<b>1020</b>	1036	1053
Zinc	ppm	ASTM D5185(m)	1180	<b>1167</b>	1196	1196
Sulfur	ppm	ASTM D5185(m)	2600	<b>2535</b>	2569	2510
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>15</b>	4	4
Sodium	ppm	ASTM D5185(m)		<b>257</b>	2	3
Potassium	ppm	ASTM D5185(m)	>20	<b>33</b>	<1	2
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	NEG

## INFRA-RED

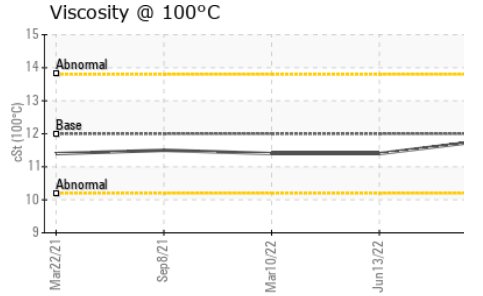
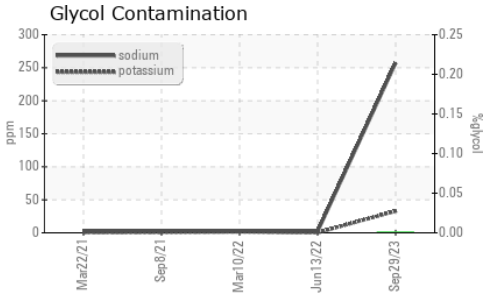
method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	>3	<b>1.4</b>	1	1.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.2</b>	7.7	8.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>22.1</b>	22.9	22.6

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>15.5</b>	16.3	17.0



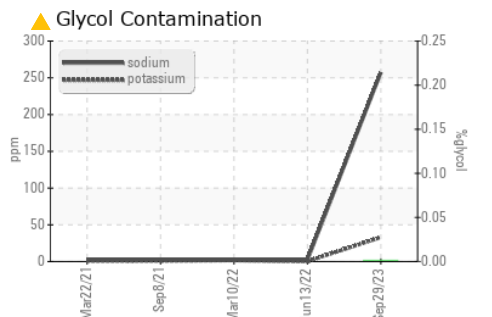
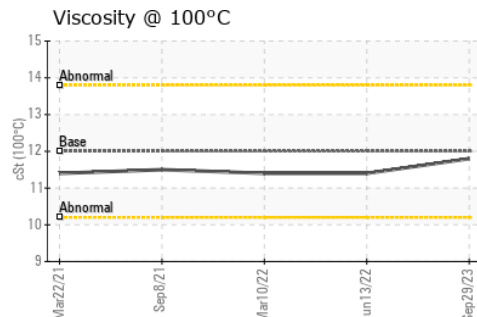
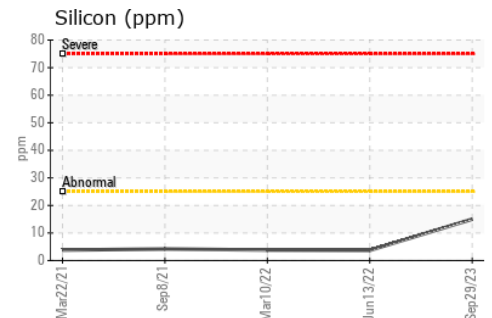
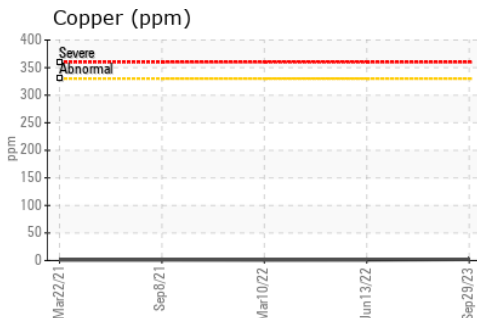
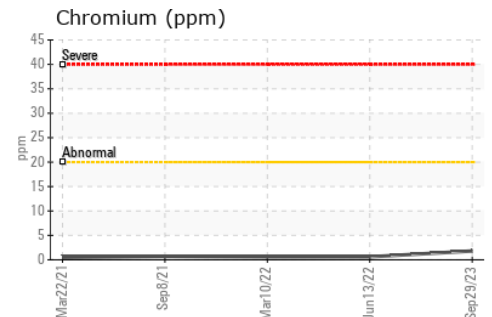
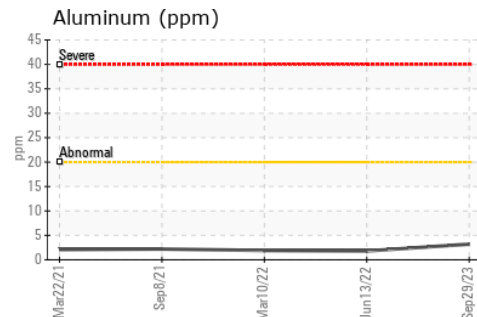
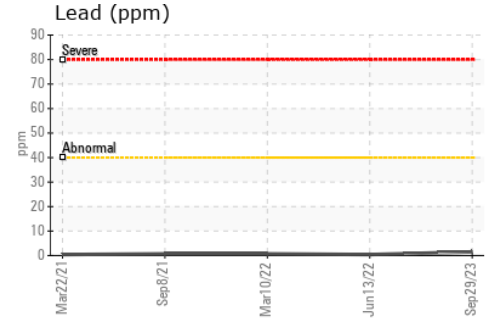
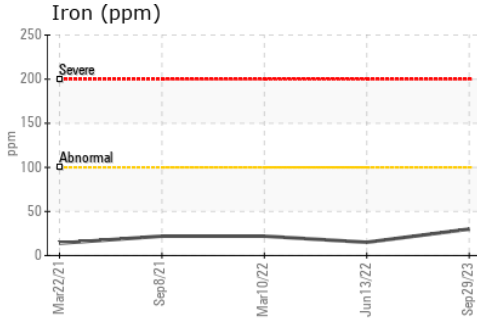
# OIL ANALYSIS REPORT



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

PARAMETER	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.4	11.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0093898 **Received** : 06 Oct 2023  
**Lab Number** : 02587533 **Diagnosed** : 06 Oct 2023  
**Unique Number** : 5656599 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: Glycol )

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.

Contact: Tim Greig  
 tgreig@gflenv.com

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