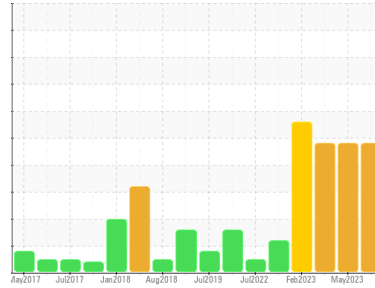




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**4790**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

Test for glycol is positive. There is a light concentration of glycol present in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0097641</b>	GFL0078004	GFL0077970
Sample Date	Client Info		<b>10 Sep 2023</b>	14 May 2023	29 Apr 2023
Machine Age	hrs	Client Info	<b>14575</b>	14154	14033
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>110	<b>41</b>	24	62
Chromium	ppm	ASTM D5185(m)	>4	<b>2</b>	<1	2
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>6</b>	5	16
Lead	ppm	ASTM D5185(m)	>45	<b>2</b>	<1	2
Copper	ppm	ASTM D5185(m)	>85	<b>24</b>	6	25
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<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)	2	<b>2</b>	<1	2
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	50	<b>104</b>	95	132
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	950	<b>879</b>	966	875
Calcium	ppm	ASTM D5185(m)	1050	<b>994</b>	1072	1027
Phosphorus	ppm	ASTM D5185(m)	995	<b>773</b>	1055	917
Zinc	ppm	ASTM D5185(m)	1180	<b>1096</b>	1170	1093
Sulfur	ppm	ASTM D5185(m)	2600	<b>2262</b>	2552	2335
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>30	<b>18</b>	8	10
Sodium	ppm	ASTM D5185(m)		<b>▲ 955</b>	▲ 858	▲ 1725
Potassium	ppm	ASTM D5185(m)	>20	<b>▲ 7</b>	▲ 13	▲ 57
Glycol	%	ASTM D7922*		<b>▲ 0.016</b>	▲ 0.022	▲ 0.047

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	0.2	0.6
Nitration	Abs/cm	ASTM D7624*	>20	<b>13.5</b>	10.2	15.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.9</b>	20.1	24.0

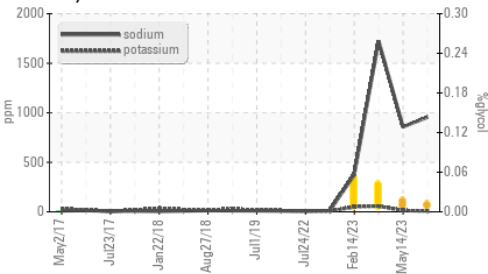
## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>23.5</b>	16.7	20.1

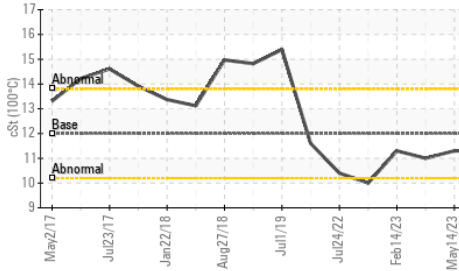


# OIL ANALYSIS REPORT

## ▲ Glycol Contamination



## Viscosity @ 100°C



## VISUAL

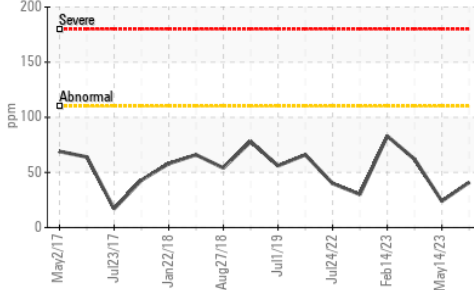
method	limit/base	current	history1	history2
Emulsified Water	scalar Visual*	>0.2	NEG	NEG
Free Water	scalar Visual*	NEG	NEG	NEG

## FLUID PROPERTIES

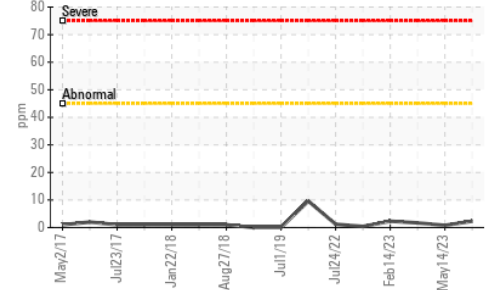
method	limit/base	current	history1	history2
Visc @ 100°C	cSt ASTM D7279(m)	12.00	11.3	11.0

## GRAPHS

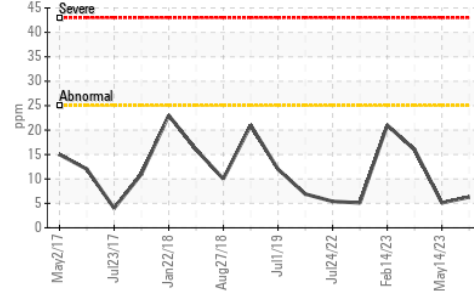
### Iron (ppm)



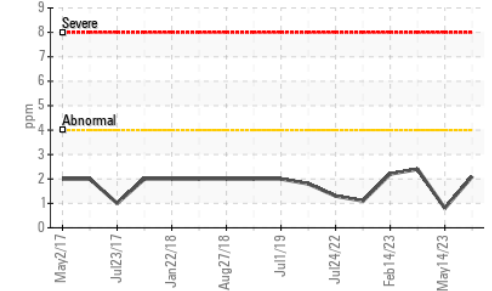
### Lead (ppm)



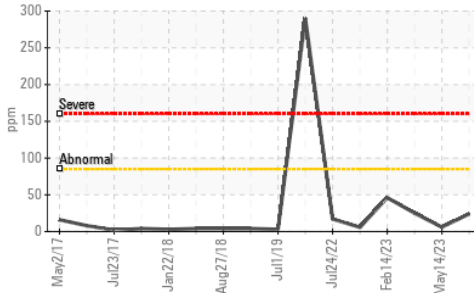
### Aluminum (ppm)



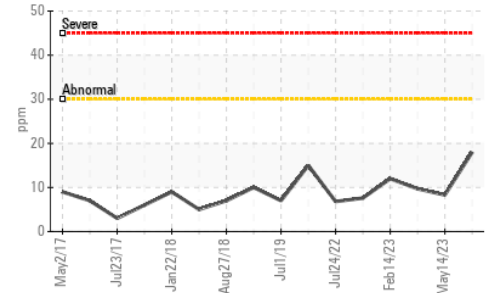
### Chromium (ppm)



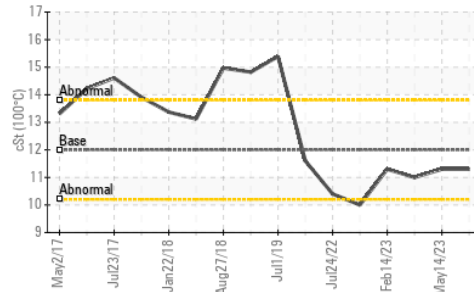
### Copper (ppm)



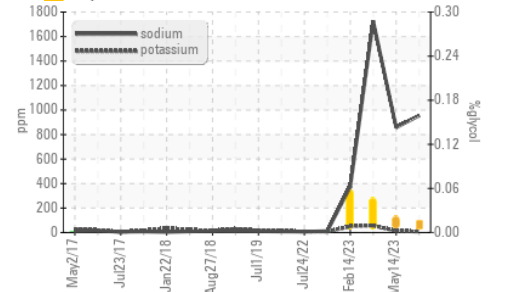
### Silicon (ppm)



## Viscosity @ 100°C



## ▲ Glycol Contamination



ISO 17025:2017  
Accredited  
Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0097641 **Received** : 17 Oct 2023  
**Lab Number** : 02589503 **Diagnosed** : 17 Oct 2023  
**Unique Number** : 5658569 **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.

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