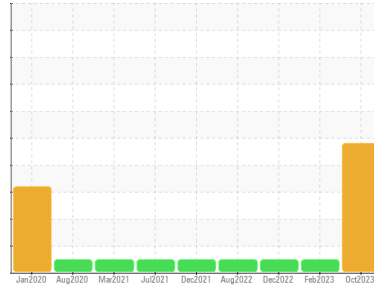




# OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id  
**4500**

Component  
**Natural Gas Engine**

Fluid  
**PETRO CANADA DURON GEO LD 15W40 (--- GAL)**

## 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 moderate concentration of glycol present in the oil. There is a moderate concentration of water 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>GFL0094397</b>	GFL0063945	GFL0055398
Sample Date	Client Info	<b>13 Oct 2023</b>	24 Feb 2023	07 Dec 2022
Machine Age	hrs	Client Info	<b>16860</b>	16860
Oil Age	hrs	Client Info	<b>16860</b>	16860
Oil Changed	Client Info	<b>N/A</b>	Changed	Changed
Sample Status		<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >50	<b>19</b>	5	7
Chromium	ppm	ASTM D5185(m) >4	<b>2</b>	0	<1
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >9	<b>4</b>	1	2
Lead	ppm	ASTM D5185(m) >30	<b>2</b>	<1	1
Copper	ppm	ASTM D5185(m) >35	<b>2</b>	1	1
Tin	ppm	ASTM D5185(m) >4	<b>0</b>	0	<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) 50	<b>46</b>	10	10
Barium	ppm	ASTM D5185(m) 5	<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>131</b>	50	53
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 560	<b>643</b>	523	586
Calcium	ppm	ASTM D5185(m) 1510	<b>1338</b>	1641	1699
Phosphorus	ppm	ASTM D5185(m) 780	<b>743</b>	707	796
Zinc	ppm	ASTM D5185(m) 870	<b>834</b>	882	933
Sulfur	ppm	ASTM D5185(m) 2040	<b>2330</b>	1958	1994
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >+100	<b>15</b>	5	7
Sodium	ppm	ASTM D5185(m)	<b>▲ 1044</b>	8	4
Potassium	ppm	ASTM D5185(m) >20	<b>▲ 113</b>	1	0
Glycol	%	ASTM D7922*	<b>▲ 0.059</b>	---	---

## INFRA-RED

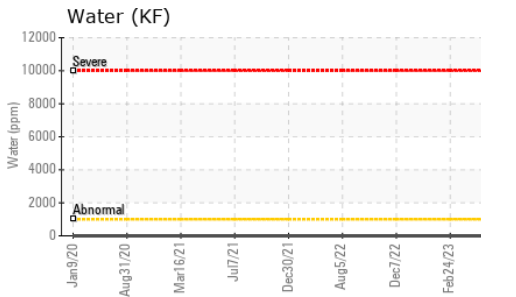
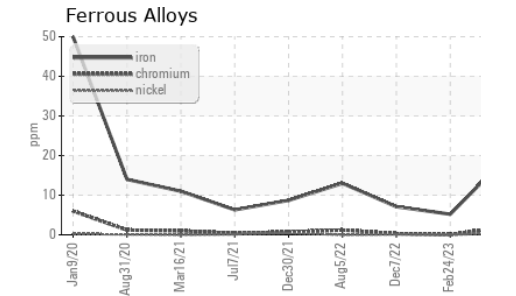
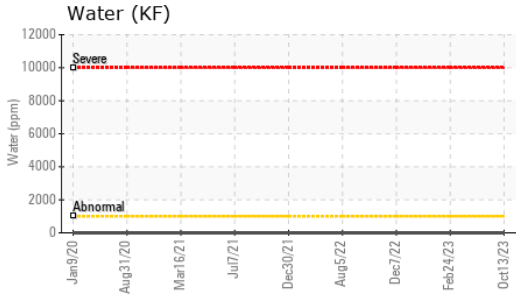
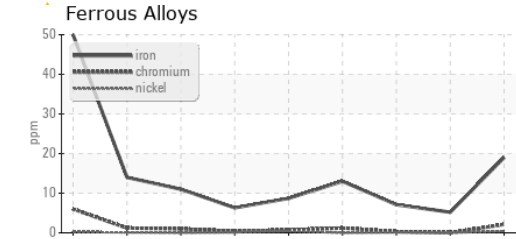
method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	<b>0</b>	0	0	
Nitration	Abs/cm	ASTM D7624*	<b>&gt;20</b>	<b>9.4</b>	8.5	11.9
Sulfation	Abs/.1mm	ASTM D7415*	<b>&gt;30</b>	<b>20.4</b>	19.8	24.7

## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	ASTM D7414*	<b>&gt;25</b>	<b>15.1</b>	13.8	21.9



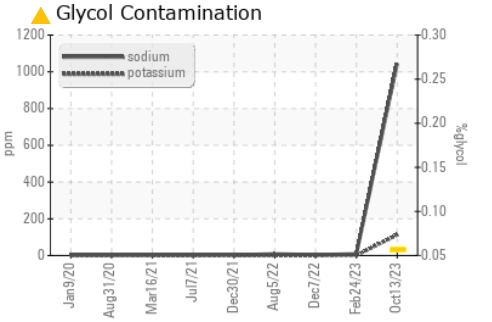
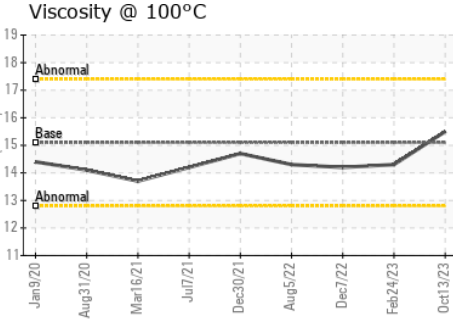
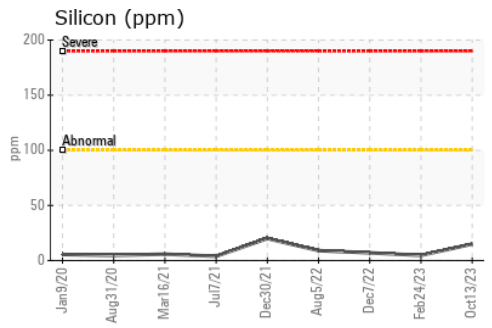
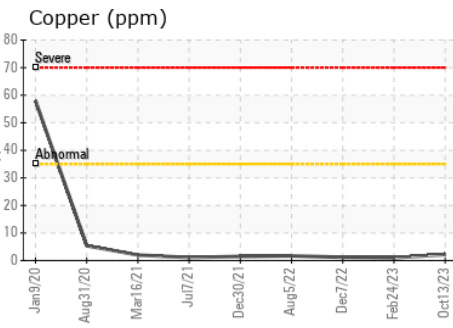
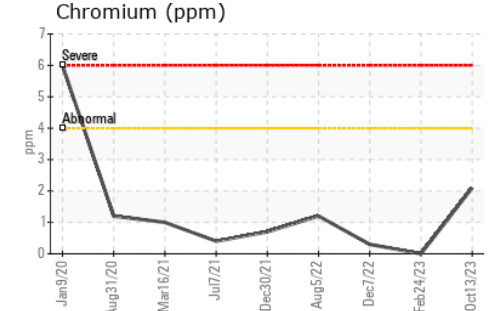
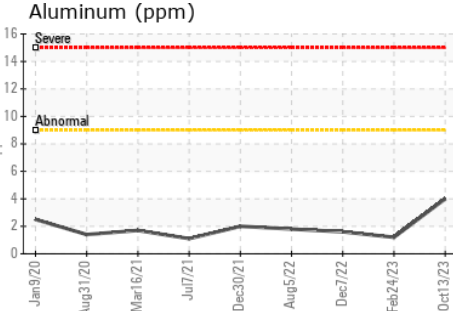
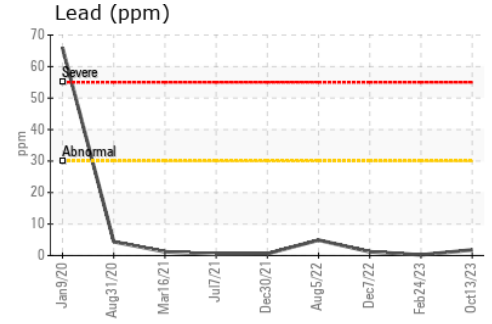
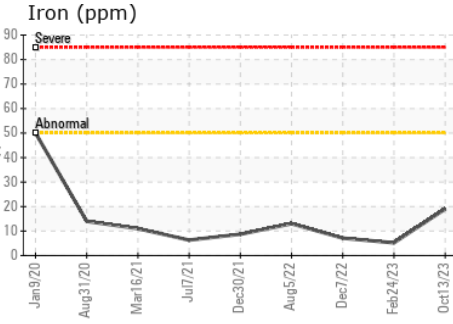
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1 ▲ .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)	15.1	15.5	14.3

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0094397  
**Lab Number** : 02589273  
**Unique Number** : 5658339  
**Test Package** : MOB 1 ( Additional Tests: Glycol, KF )  
**Received** : 16 Oct 2023  
**Diagnosed** : 16 Oct 2023  
**Diagnostician** : Kevin Marson

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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