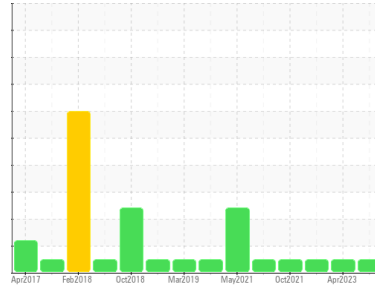




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**9131**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 10W30 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

### Fluid Condition

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>GFL0085930</b>	GFL0077964	GFL0053090
Sample Date	Client Info		<b>07 Jul 2023</b>	02 Apr 2023	02 Jun 2022
Machine Age	kms	Client Info	<b>734012</b>	19188	0
Oil Age	kms	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	Changed
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## 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>48</b>	36	13
Chromium	ppm	ASTM D5185(m)	>4	<b>2</b>	2	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>15</b>	9	3
Lead	ppm	ASTM D5185(m)	>45	<b>1</b>	1	<1
Copper	ppm	ASTM D5185(m)	>85	<b>10</b>	33	12
Tin	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</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)	2	<b>3</b>	2	90
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	10
Molybdenum	ppm	ASTM D5185(m)	50	<b>58</b>	59	2
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	5
Magnesium	ppm	ASTM D5185(m)	950	<b>925</b>	971	683
Calcium	ppm	ASTM D5185(m)	1050	<b>971</b>	1105	1258
Phosphorus	ppm	ASTM D5185(m)	995	<b>953</b>	1038	703
Zinc	ppm	ASTM D5185(m)	1180	<b>1107</b>	1143	753
Sulfur	ppm	ASTM D5185(m)	2600	<b>2194</b>	2422	2510
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>10</b>	7	15
Sodium	ppm	ASTM D5185(m)		<b>8</b>	7	35
Potassium	ppm	ASTM D5185(m)	>20	<b>9</b>	0	5
Glycol	%	ASTM D7922*		<b>0.0</b>	NEG	0.0

## INFRA-RED

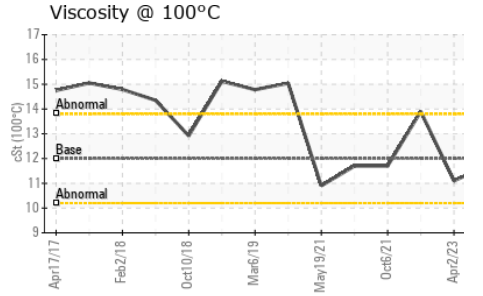
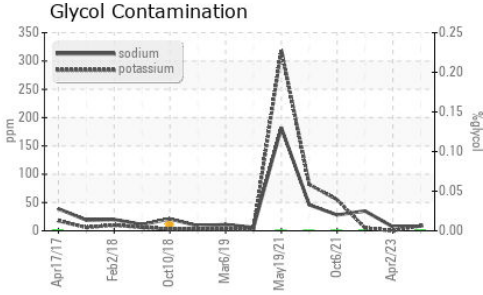
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1.2</b>	0.8	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.0</b>	9.3	6.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>23.6</b>	21.3	20.1

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>20.3</b>	16.6	12.1



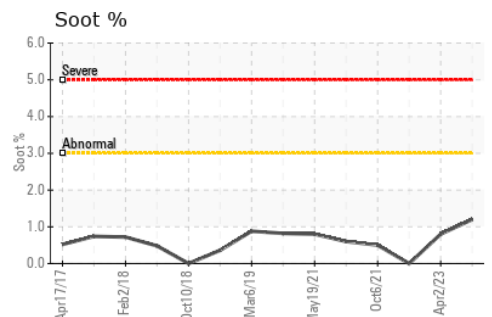
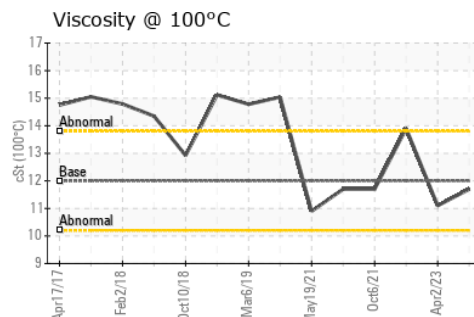
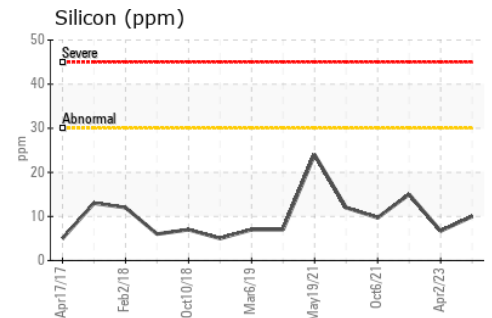
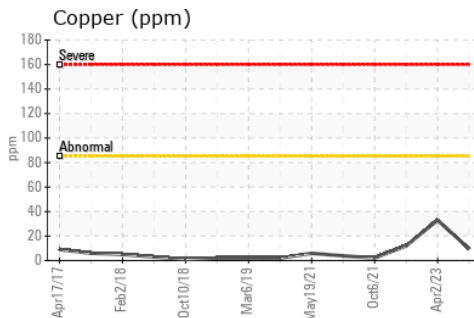
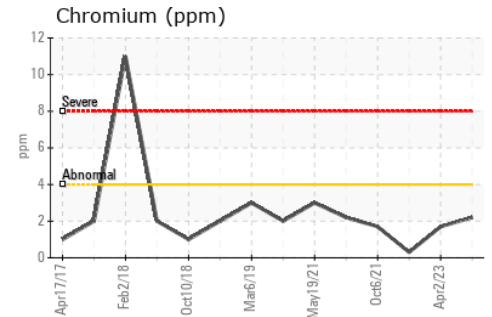
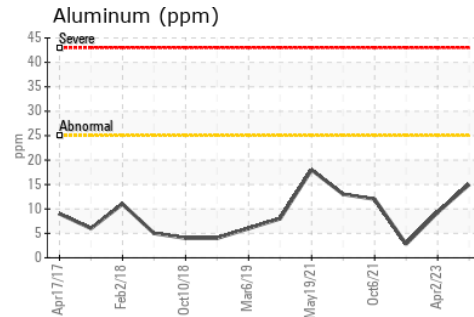
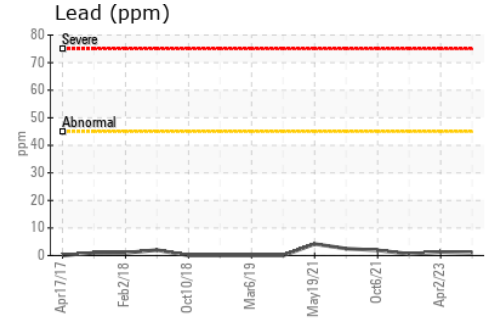
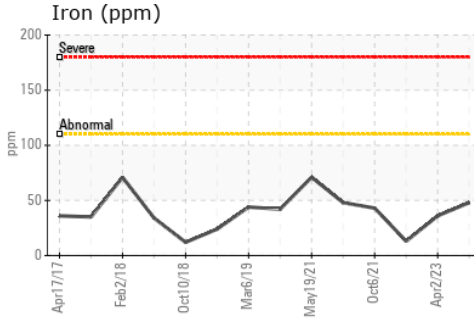
# OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.1	13.9

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 554 - Edmonton SW  
**Sample No.** : GFL0085930 **Received** : 13 Jul 2023  
**Lab Number** : 02569639 **Diagnosed** : 13 Jul 2023  
**Unique Number** : 5606685 **Diagnostician** : Wes Davis  
**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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