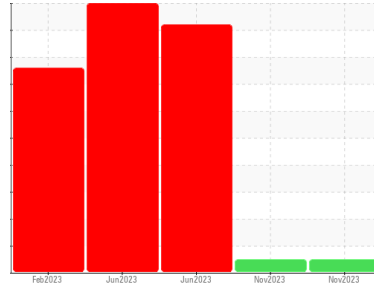




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**8135**

Component

**Diesel Engine**

Fluid

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

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

Metal levels are typical for a new component breaking in.

### 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>GFL0101729</b>	GFL0101711	GFL0085950
Sample Date	Client Info		<b>28 Nov 2023</b>	25 Nov 2023	21 Jun 2023
Machine Age	hrs	Client Info	<b>494</b>	473	68360
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>NORMAL</b>	NORMAL	SEVERE

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	▲ 4.9
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	0.0	● 0.112

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >100	<b>14</b>	80	2
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	2	<1
Nickel	ppm	ASTM D5185(m) >4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >3	<b>&lt;1</b>	1	<1
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	4	<1
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	3	<1
Copper	ppm	ASTM D5185(m) >330	<b>14</b>	77	13
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	1	0
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>3</b>	5	2
Barium	ppm	ASTM D5185(m) 0	<b>1</b>	9	0
Molybdenum	ppm	ASTM D5185(m) 50	<b>55</b>	54	79
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	5	<1
Magnesium	ppm	ASTM D5185(m) 950	<b>923</b>	855	855
Calcium	ppm	ASTM D5185(m) 1050	<b>1013</b>	1016	928
Phosphorus	ppm	ASTM D5185(m) 995	<b>956</b>	840	995
Zinc	ppm	ASTM D5185(m) 1180	<b>1115</b>	1065	1084
Sulfur	ppm	ASTM D5185(m) 2600	<b>2499</b>	2083	2467
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

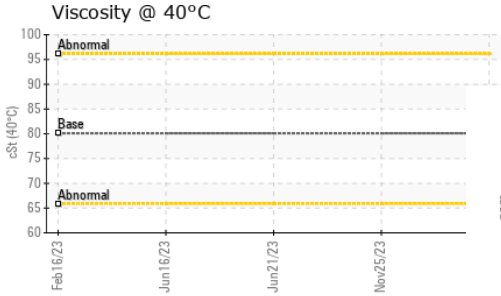
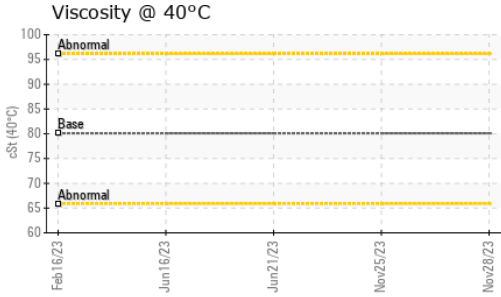
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>6</b>	29	4
Sodium	ppm	ASTM D5185(m)	<b>6</b>	36	▲ 721
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	5	▲ 6

## INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >3	<b>0.1</b>	0.9	0
Nitration	Abs/cm	ASTM D7624* >20	<b>5.1</b>	9.7	6.7
Sulfation	Abs./1mm	ASTM D7415* >30	<b>18.2</b>	21.7	18.2



# OIL ANALYSIS REPORT

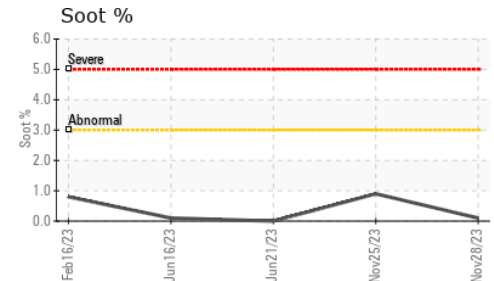
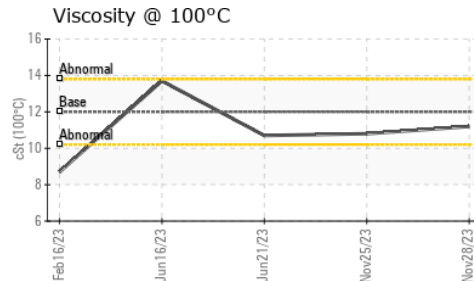
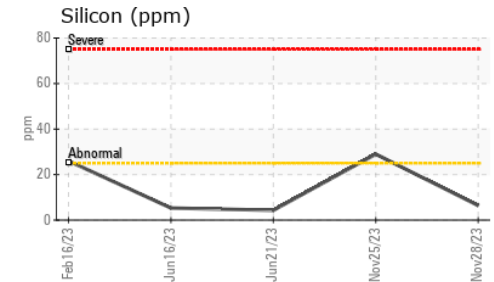
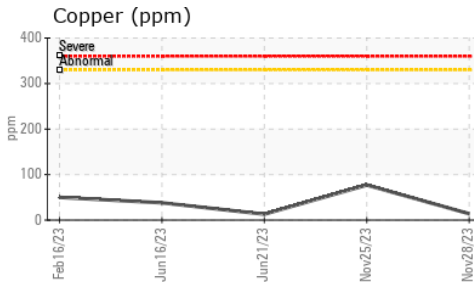
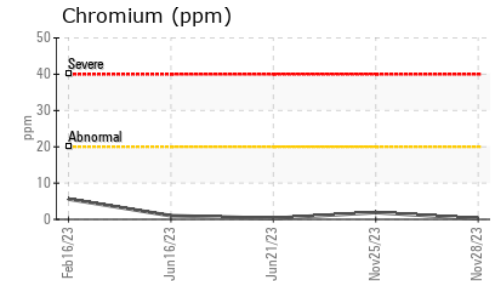
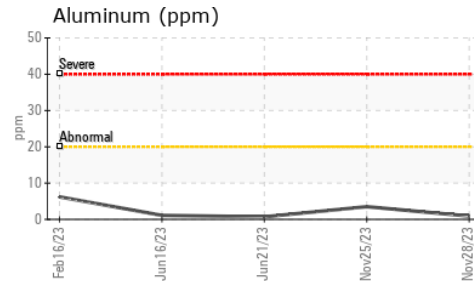
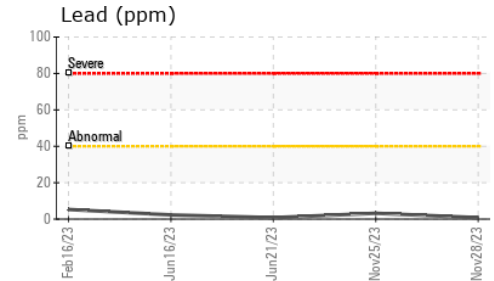
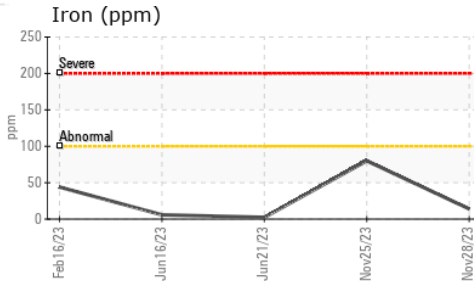


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>13.5</b>	18.1	15.0

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 @ 40°C	cSt	ASTM D7279(m)	80.1	<b>73.3</b>	---	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	<b>11.2</b>	10.8	10.7
Viscosity Index (VI)	Scale	ASTM D2270*	144	<b>144</b>	---	---

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 554 - Edmonton SW**  
**Sample No.** : GFL0101729 **Received** : 11 Dec 2023 **8409 -15th Street NW**  
**Lab Number** : **02602123** **Diagnosed** : 11 Dec 2023 **Edmonton, AB**  
**Unique Number** : 5695208 **Diagnostician** : Wes Davis **CA T6P 0B8**  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI ) **Contact: Tim Greig**  
**tgreig@gflenv.com**

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.