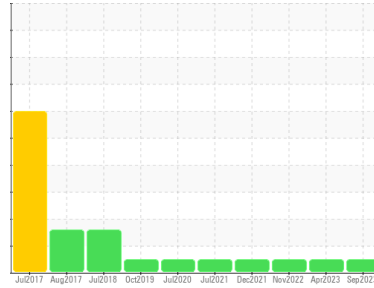




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**7811**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- LTR)**

## 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>GFL0085669</b>	GFL0070440	GFL0059886
Sample Date	Client Info		<b>20 Sep 2023</b>	27 Apr 2023	15 Nov 2022
Machine Age	hrs	Client Info	<b>10365</b>	10365	0
Oil Age	hrs	Client Info	<b>0</b>	0	316
Oil Changed	Client Info		<b>Changed</b>	Changed	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
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>80	<b>67</b>	39	49
Chromium	ppm	ASTM D5185(m)	>5	<b>2</b>	1	1
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>3</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>4</b>	2	1
Copper	ppm	ASTM D5185(m)	>150	<b>3</b>	3	8
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	<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)	0	<b>2</b>	2	6
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>66</b>	63	60
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1047</b>	1016	940
Calcium	ppm	ASTM D5185(m)	1070	<b>1157</b>	1182	1110
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1049</b>	1131	1065
Zinc	ppm	ASTM D5185(m)	1270	<b>1300</b>	1265	1209
Sulfur	ppm	ASTM D5185(m)	2060	<b>2361</b>	2516	2493
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>20	<b>6</b>	5	6
Sodium	ppm	ASTM D5185(m)		<b>3</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	<1	2

## INFRA-RED

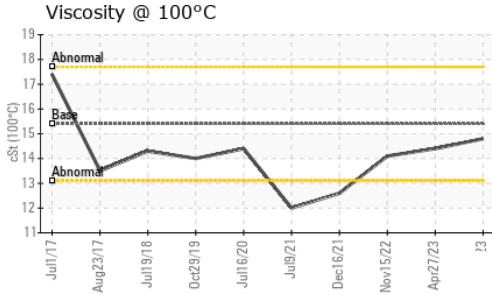
	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>1.2</b>	0.7	0.7
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.8</b>	11.3	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>25.5</b>	22.7	21.8

## FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.4</b>	20.5	18.0



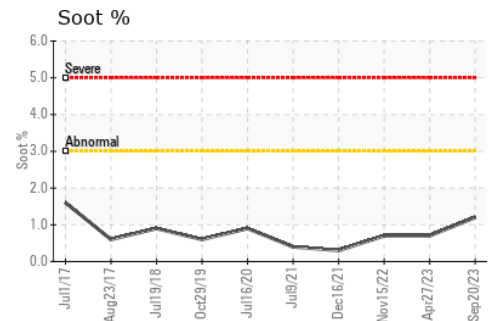
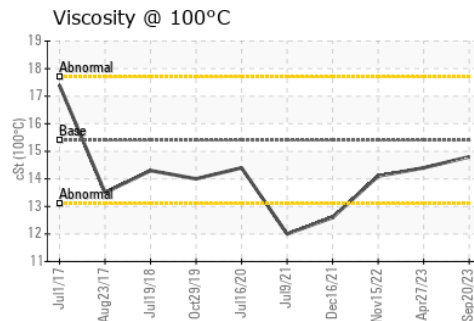
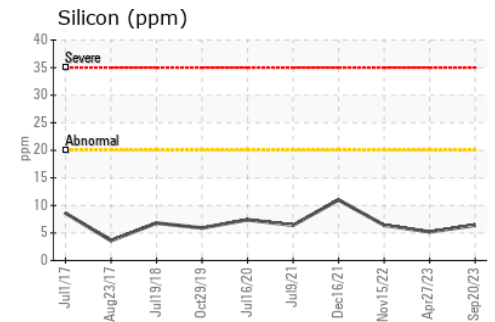
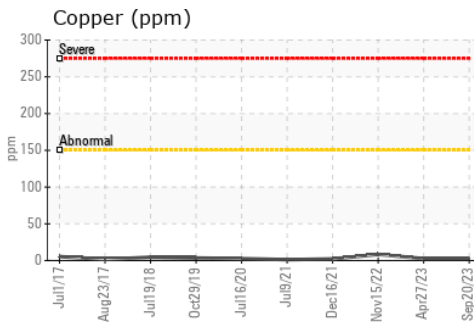
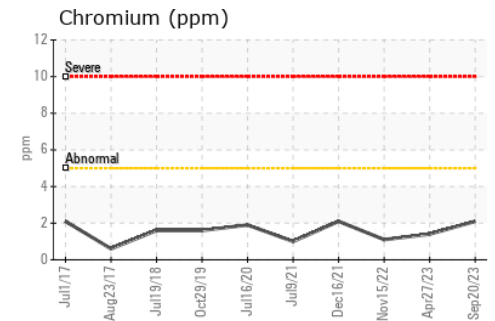
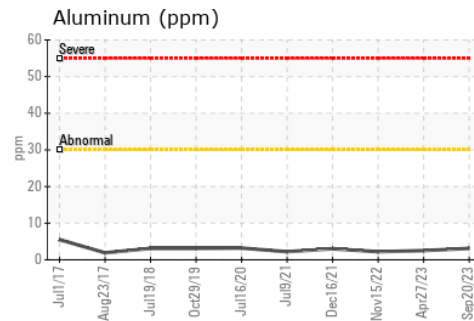
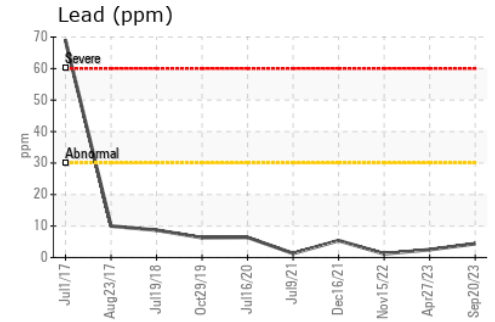
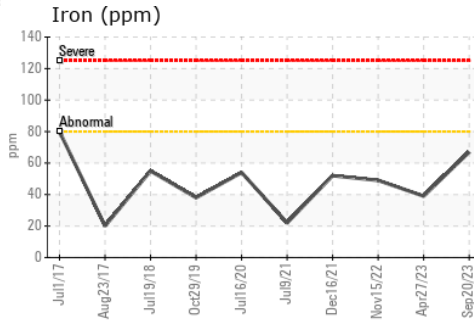
# OIL ANALYSIS REPORT



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)	15.4	14.8	14.4

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 221 - Windsor**  
**Sample No.** : GFL0085669 **Received** : 25 Sep 2023  
**Lab Number** : 02584793 **Diagnosed** : 25 Sep 2023  
**Unique Number** : 5645858 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1

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: Rhys Marotte  
 rmarotte@gflenv.com

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