



# OIL ANALYSIS REPORT

Sample Rating Trend

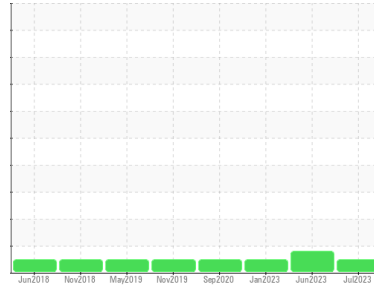
**NORMAL**



Machine Id  
**201001**

Component  
**Diesel Engine**

Fluid  
**PETRO CANADA DURON SHP 15W40 (22 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>GFL0086482</b>	GFL0086498	GFL0068332
Sample Date	Client Info			<b>17 Jul 2023</b>	29 Jun 2023	03 Jan 2023
Machine Age	hrs	Client Info		<b>3327</b>	41580	3103
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	MARGINAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<b>&lt;1.0</b>	▲ 2.9	<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>2</b>	7	7
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185(m)	>30	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>150	<b>&lt;1</b>	2	2
Tin	ppm	ASTM D5185(m)	>5	<b>0</b>	0	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)	0	<b>12</b>	23	13
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>58</b>	58	53
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>932</b>	873	810
Calcium	ppm	ASTM D5185(m)	1070	<b>1056</b>	1079	1263
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1036</b>	1029	1057
Zinc	ppm	ASTM D5185(m)	1270	<b>1153</b>	1136	1139
Sulfur	ppm	ASTM D5185(m)	2060	<b>2617</b>	2572	2707
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

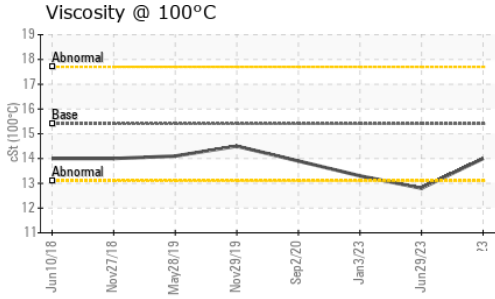
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<b>2</b>	3	3
Sodium	ppm	ASTM D5185(m)		<b>2</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	3	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	<b>0</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.0</b>	6.9	7.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>17.9</b>	17.8	19.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>13.0</b>	13.4	14.3



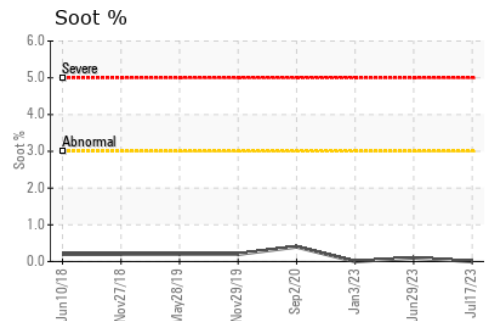
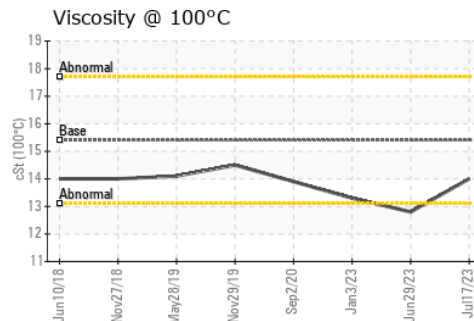
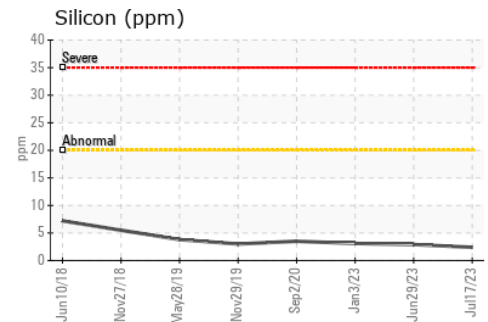
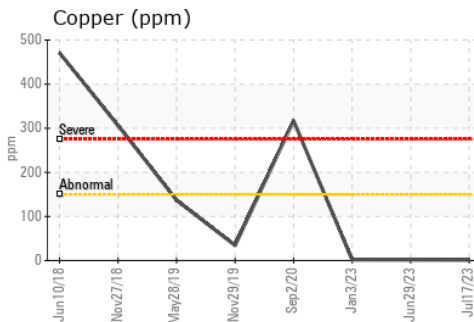
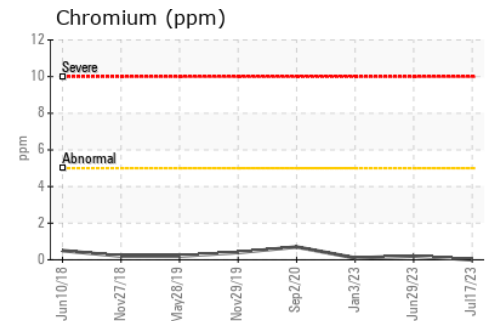
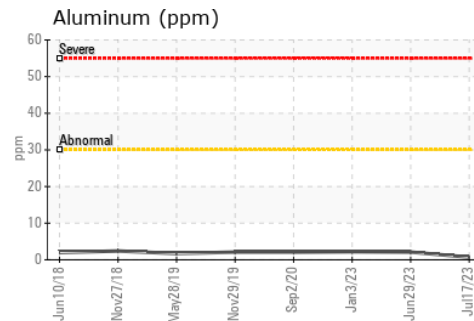
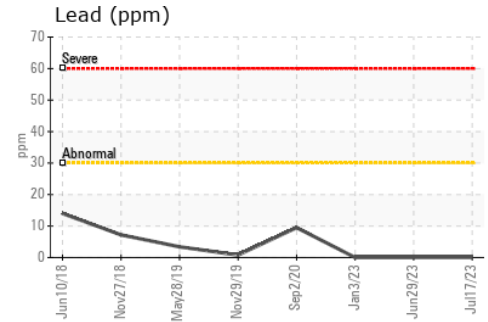
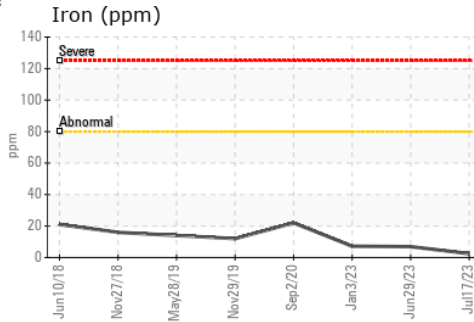
# OIL ANALYSIS REPORT



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	14.0	12.8

## GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
 Sample No. : GFL0086482  
 Lab Number : 02570805  
 Unique Number : 5607851  
 Test Package : MOB 1

**GFL Environmental - 217 - Aurora**  
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 AURORA, ON  
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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.