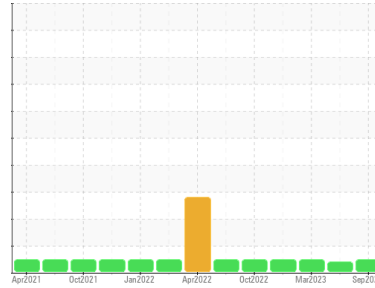




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**411008**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- 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>GFL0090860</b>	GFL0082569	GFL0071305
Sample Date	Client Info		<b>18 Sep 2023</b>	05 Jun 2023	29 Mar 2023
Machine Age	kms	Client Info	<b>0</b>	219058	5455
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>	ABNORMAL	NORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	0.7	<1.0
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	<b>5</b>	10	7
Chromium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	2	3
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>1</b>	1	2
Lead	ppm	ASTM D5185(m) >40	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	<1	<1
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>4</b>	24	3
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>57</b>	45	60
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>916</b>	580	951
Calcium	ppm	ASTM D5185(m) 1070	<b>1072</b>	1650	1125
Phosphorus	ppm	ASTM D5185(m) 1150	<b>1027</b>	872	1072
Zinc	ppm	ASTM D5185(m) 1270	<b>1121</b>	958	1192
Sulfur	ppm	ASTM D5185(m) 2060	<b>2430</b>	2195	2596
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>2</b>	5	2
Sodium	ppm	ASTM D5185(m)	<b>1</b>	2	1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	1	1

## INFRA-RED

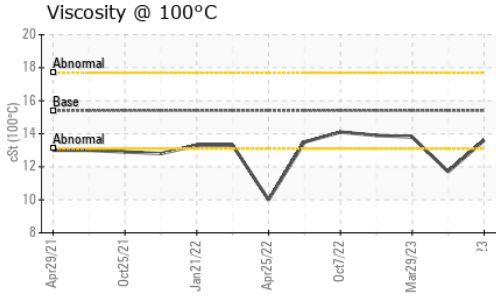
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0.1</b>	0.2	0.1
Nitration	Abs/cm	ASTM D7624* >20	<b>7.2</b>	9.4	8.2
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>18.8</b>	22.1	21.4

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>14.4</b>	20.7	14.9



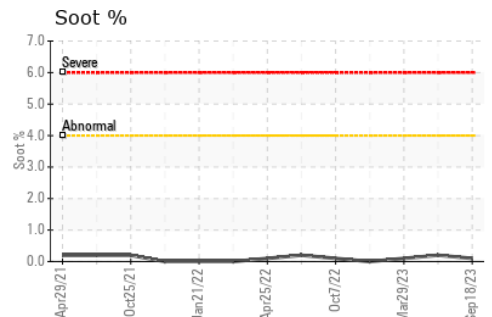
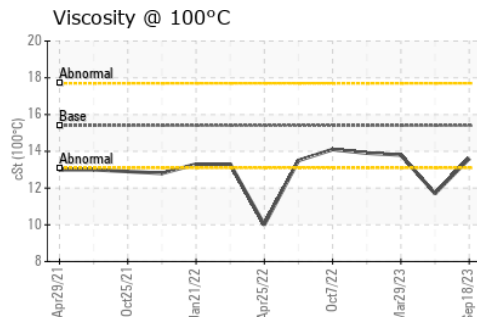
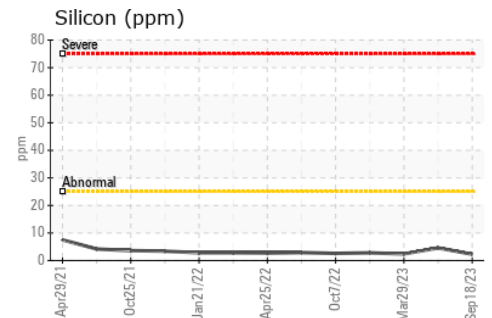
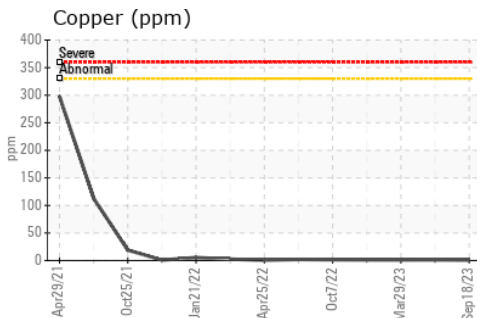
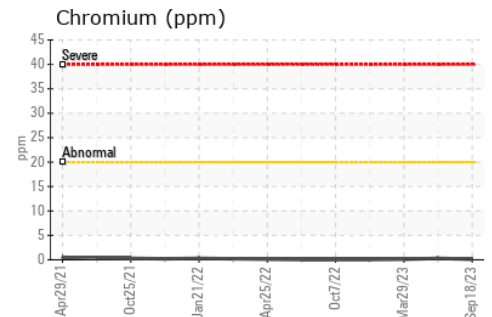
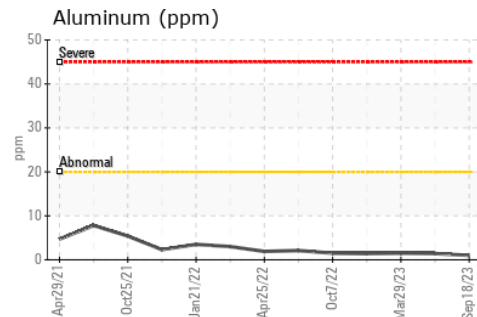
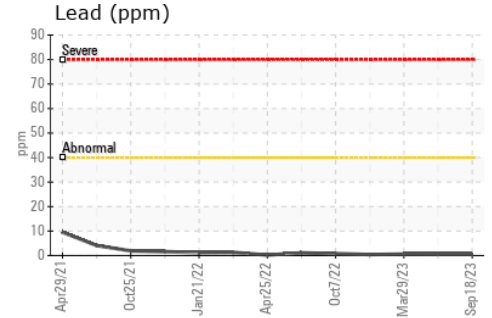
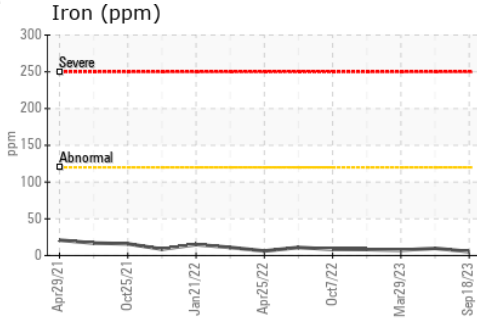
# OIL ANALYSIS REPORT



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	13.6	▲ 11.7

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 246 - Windsor**  
**Sample No.** : GFL0090860 **Received** : 19 Sep 2023  
**Lab Number** : 02583516 **Diagnosed** : 19 Sep 2023  
**Unique Number** : 5644581 **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.

2700 Deziel Dr  
 Windsor, ON  
 CA N8W 5H8  
 Contact: Dave Varga  
 dvarga@gflenv.com  
 T: (519)944-8009  
 F: