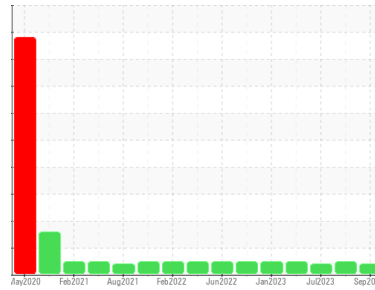




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**925009**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

#### Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. 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>GFL0090856</b>	GFL0090845	GFL0078502
Sample Date	Client Info		<b>15 Sep 2023</b>	17 Aug 2023	11 Jul 2023
Machine Age	kms	Client Info	<b>0</b>	0	0
Oil Age	kms	Client Info	<b>19391</b>	19180	341880
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	ABNORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	<b>3</b>	4	10
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	<1	6
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
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>0</b>	0	1
Copper	ppm	ASTM D5185(m) >330	<b>&lt;1</b>	<1	1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	<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>36</b>	6	28
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 60	<b>41</b>	55	43
Manganese	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m) 1010	<b>526</b>	897	545
Calcium	ppm	ASTM D5185(m) 1070	<b>1586</b>	1057	1605
Phosphorus	ppm	ASTM D5185(m) 1150	<b>801</b>	987	781
Zinc	ppm	ASTM D5185(m) 1270	<b>853</b>	1113	919
Sulfur	ppm	ASTM D5185(m) 2060	<b>2081</b>	2447	1948
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>4</b>	3	6
Sodium	ppm	ASTM D5185(m)	<b>2</b>	3	3
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Fuel	%	ASTM D7593* >3.0	<b>2</b>	<1.0	2.2

### INFRA-RED

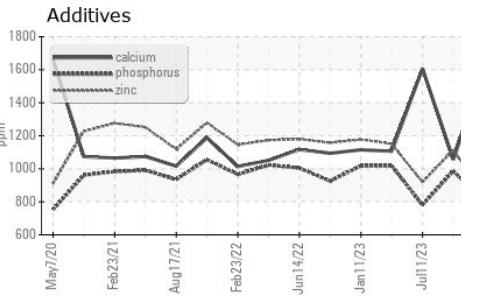
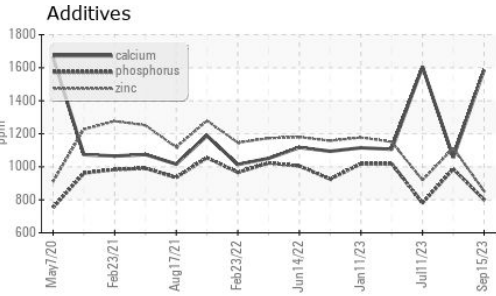
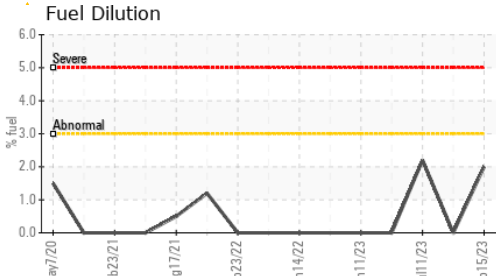
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0</b>	0	0.2
Nitration	Abs/cm	ASTM D7624* >20	<b>6.5</b>	6.5	9.4
Sulfation	Abs/.1mm	ASTM D7415* >30	<b>21.7</b>	19.5	22.7

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	<b>19.9</b>	14.6	22.7



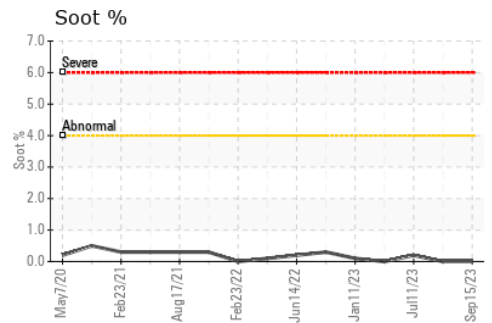
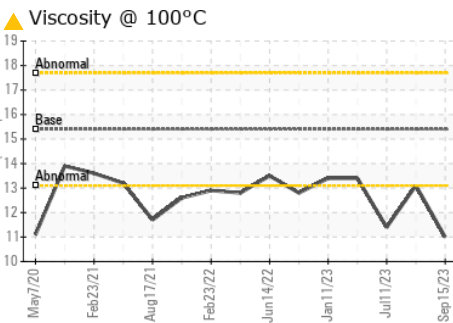
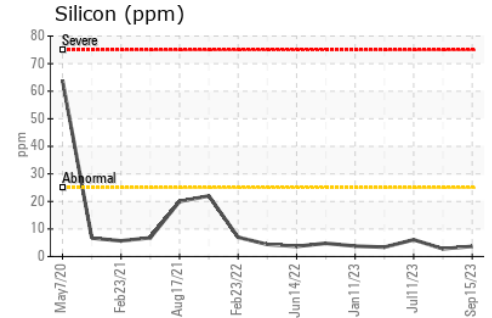
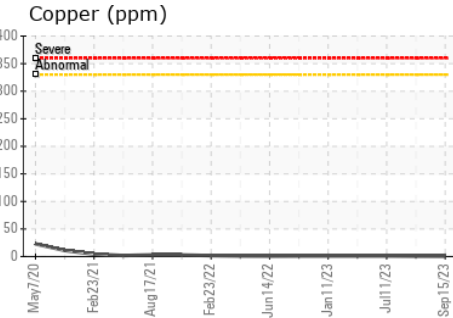
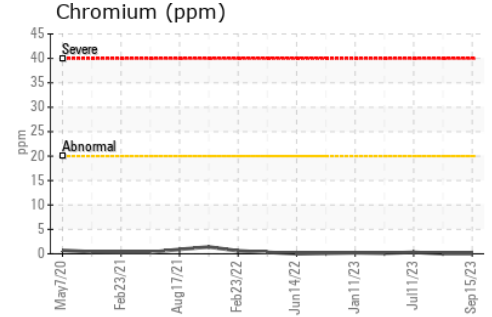
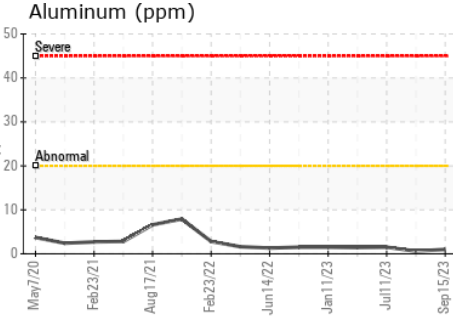
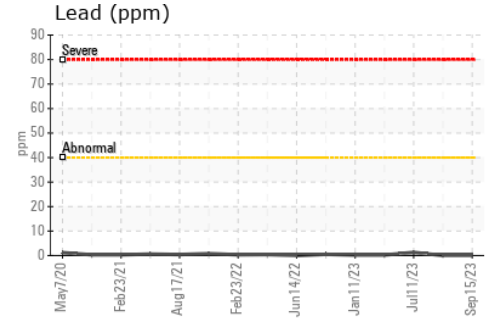
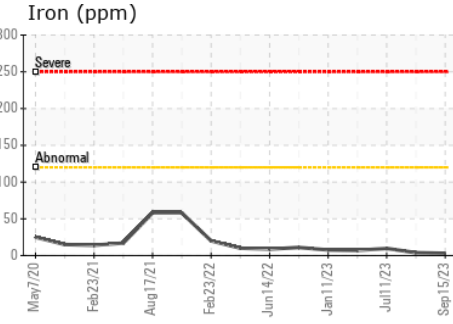
# OIL ANALYSIS REPORT



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)	▲ 11.0	13.1	▲ 11.4

### GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 246 - Windsor**  
**Sample No.** : GFL0090856 **Received** : 19 Sep 2023 2700 Deziel Dr  
**Lab Number** : 02583514 **Diagnosed** : 20 Sep 2023 Windsor, ON  
**Unique Number** : 5644579 **Diagnostician** : Bill Quesnel CA N8W 5H8  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )  
 Contact: Dave Varga  
 dvarga@gflenv.com  
 T: (519)944-8009  
 F:

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.