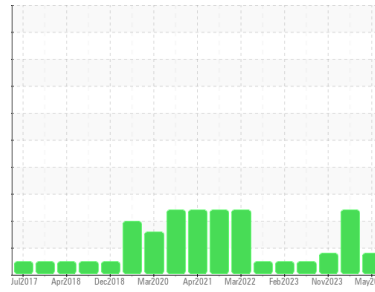




# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id

**8423**

Component

**Diesel Engine**

Fluid

**PETRO CANADA DURON SHP 15W40 (20 LTR)**

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

### Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>GFL0116857</b>	GFL0110727	GFL0085663
Sample Date	Client Info		<b>09 May 2024</b>	05 Feb 2024	13 Nov 2023
Machine Age	hrs	Client Info	<b>3055</b>	3055	3055
Oil Age	hrs	Client Info	<b>3055</b>	3055	3055
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	SEVERE	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	<b>45</b>	30	24
Chromium	ppm	ASTM D5185(m)	>20	<b>1</b>	1	<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>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>1</b>	2	1
Lead	ppm	ASTM D5185(m)	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<b>1</b>	<1	1
Tin	ppm	ASTM D5185(m)	>15	<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>1</b>	2	2
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185(m)	60	<b>54</b>	51	55
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)	1010	<b>867</b>	811	879
Calcium	ppm	ASTM D5185(m)	1070	<b>915</b>	912	979
Phosphorus	ppm	ASTM D5185(m)	1150	<b>872</b>	859	904
Zinc	ppm	ASTM D5185(m)	1270	<b>1061</b>	1012	1110
Sulfur	ppm	ASTM D5185(m)	2060	<b>2048</b>	2184	2221
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

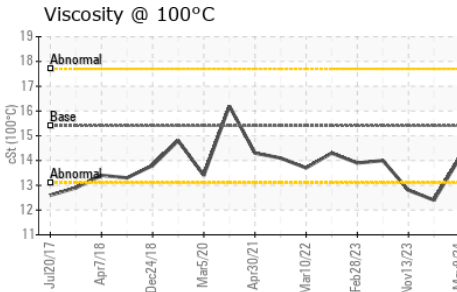
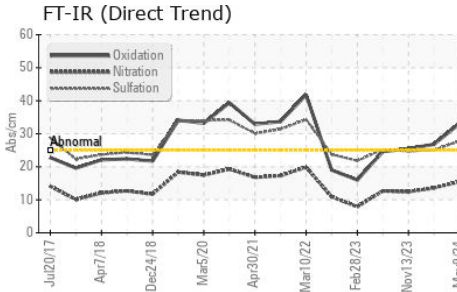
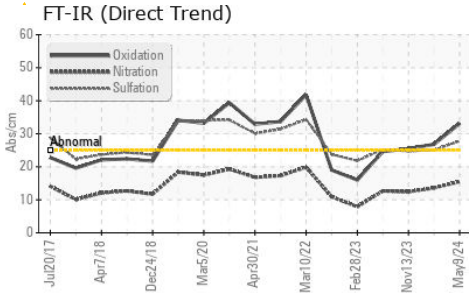
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	6	5
Sodium	ppm	ASTM D5185(m)		<b>8</b>	5	4
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	1	<1
Fuel	%	ASTM D7593*	>5	<b>▲ 7.4</b>	▲ 9.5	▲ 6.5

## INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	<b>0.7</b>	0.6	0.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>15.5</b>	13.6	12.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>27.8</b>	25.1	24.7



# OIL ANALYSIS REPORT

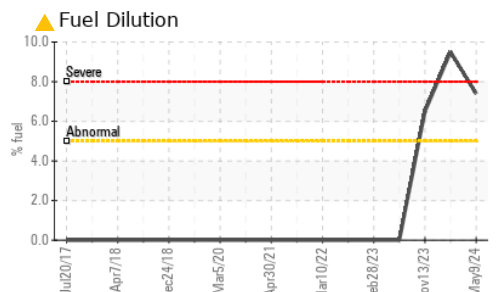
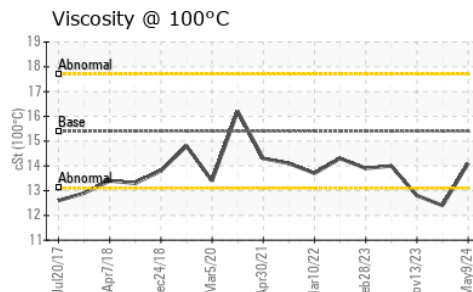
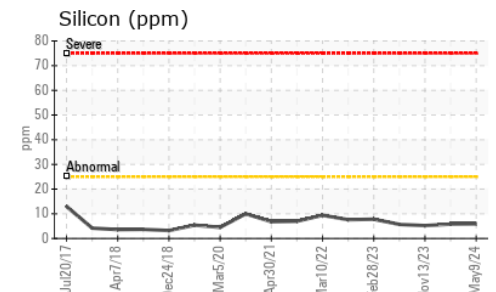
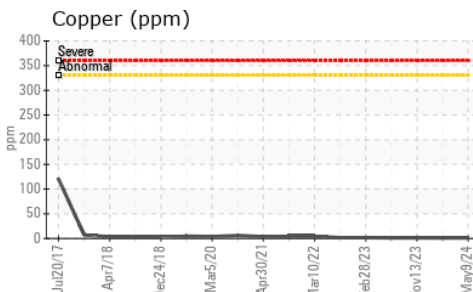
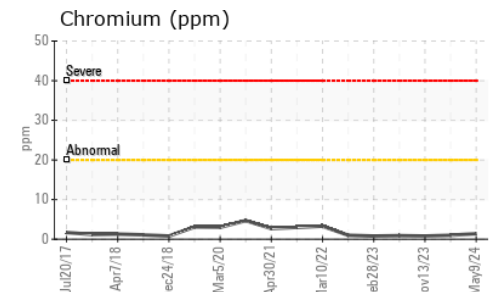
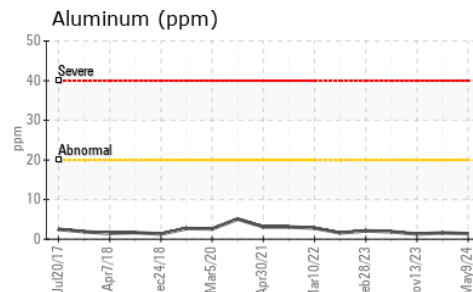
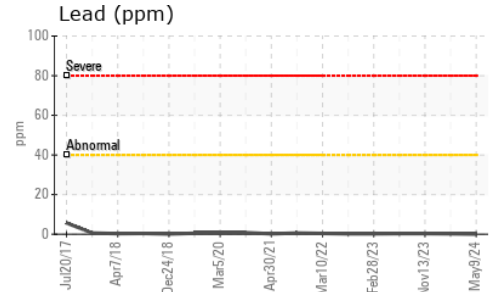
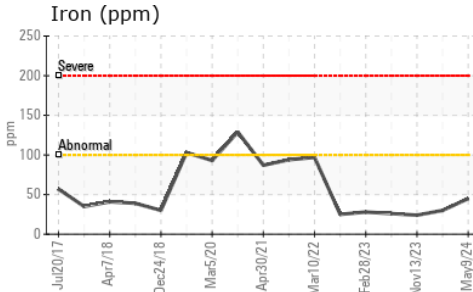


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	<b>33.1</b>	26.8	25.5

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 @ 100°C	cSt	ASTM D7279(m)	15.4	<b>14.1</b>	▲ 12.4	12.8

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0116857  
**Lab Number** : 02634866  
**Unique Number** : 5776019  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel )

**GFL Environmental - 221 - Windsor**  
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 T: (519)948-8126  
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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.