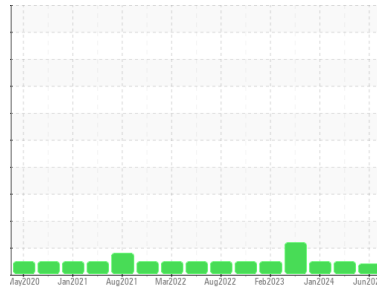




# OIL ANALYSIS REPORT

Sample Rating Trend



## VISCOSITY



Machine Id  
**722003**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

#### Fluid Condition

Viscosity of sample indicates oil is within SAE 30 range, advise investigate. 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>GFL0113223</b>	GFL0102864	GFL0102876
Sample Date	Client Info		<b>18 Jun 2024</b>	27 Mar 2024	08 Jan 2024
Machine Age	hrs	Client Info	<b>0</b>	28841	28377
Oil Age	hrs	Client Info	<b>29441</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	NORMAL	NORMAL

### 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) >120	<b>2</b>	4	5
Chromium	ppm	ASTM D5185(m) >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	<1	0
Silver	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	2	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) 250	<b>157</b>	45	48
Barium	ppm	ASTM D5185(m) 10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 100	<b>5</b>	42	12
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 450	<b>54</b>	466	156
Calcium	ppm	ASTM D5185(m) 3000	<b>1972</b>	1697	1917
Phosphorus	ppm	ASTM D5185(m) 1150	<b>890</b>	727	911
Zinc	ppm	ASTM D5185(m) 1350	<b>1043</b>	869	1096
Sulfur	ppm	ASTM D5185(m) 4250	<b>2761</b>	2079	2853
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

### CONTAMINANTS

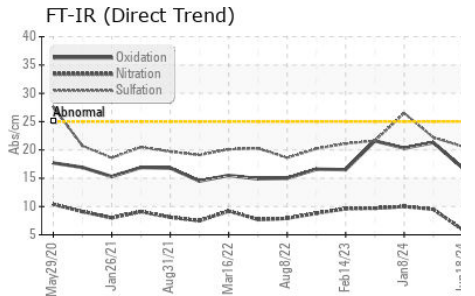
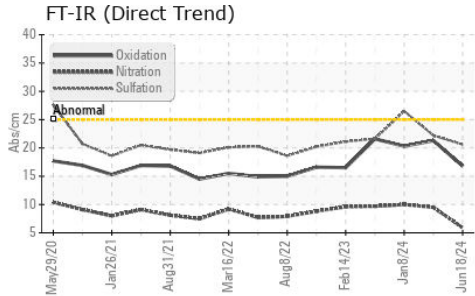
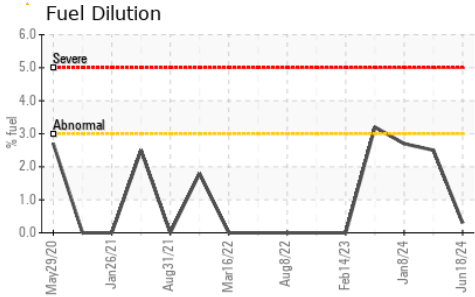
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>2</b>	3	3
Sodium	ppm	ASTM D5185(m) >158	<b>2</b>	2	3
Potassium	ppm	ASTM D5185(m) >20	<b>6</b>	1	5
Fuel	%	ASTM D7593* >3.0	<b>0.3</b>	2.5	2.7

### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624* >20	<b>5.9</b>	9.5	10.0
Sulfation	Abs./1mm	ASTM D7415* >30	<b>20.6</b>	22.2	26.5



# OIL ANALYSIS REPORT

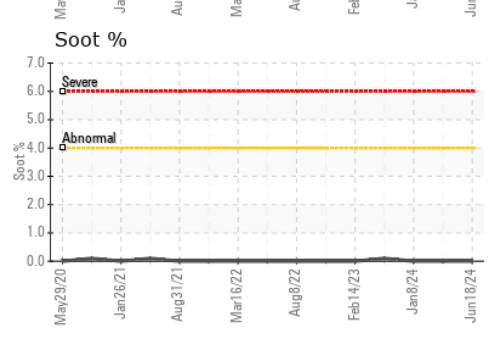
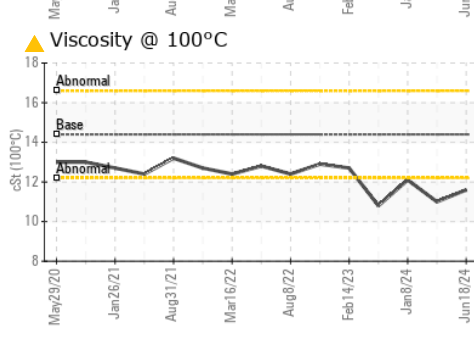
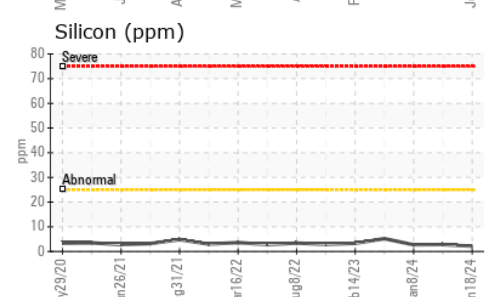
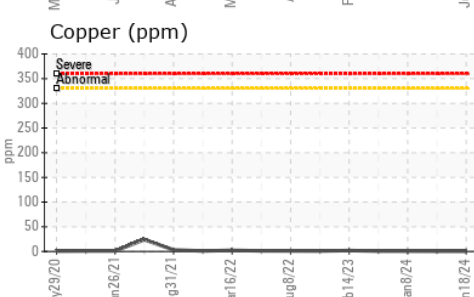
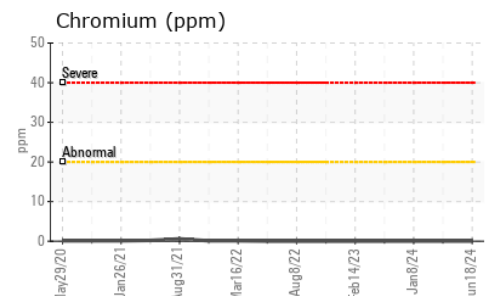
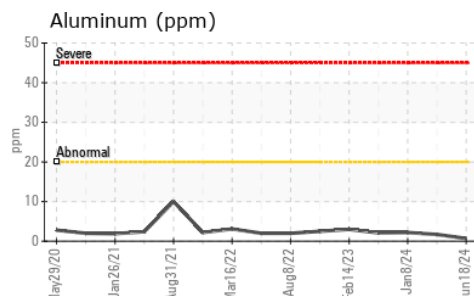
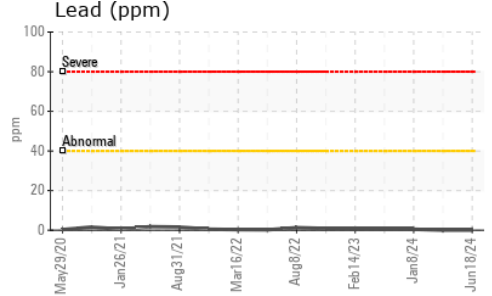
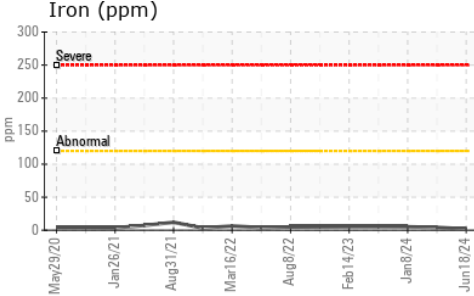


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/1mm	ASTM D7414*	>25	<b>16.8</b>	21.3	20.3

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)	14.4	<b>▲ 11.6</b>	11.0	12.1

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0113223 **Received** : 20 Jun 2024  
**Lab Number** : **02643183** **Tested** : 21 Jun 2024  
**Unique Number** : 5800722 **Diagnosed** : 21 Jun 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: FuelDilution, PercentFuel )

**GFL Environmental - 246 - Windsor**  
 2700 Deziel Dr  
 Windsor, ON  
 CA N8W 5H8  
 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.