



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**2307**  
 Component  
**Front Diesel Engine**  
 Fluid  
**CASTROL HYPURON 15W40 (24 LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0125803</b>	GFL0111113	GFL0089055
Sample Date		Client Info		<b>06 Jun 2024</b>	07 Feb 2024	09 Aug 2023
Machine Age	kms	Client Info		<b>182017</b>	188463	170149
Oil Age	kms	Client Info		<b>0</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>130	<b>28</b>	17	6
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
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>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185(m)	>20	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>125	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

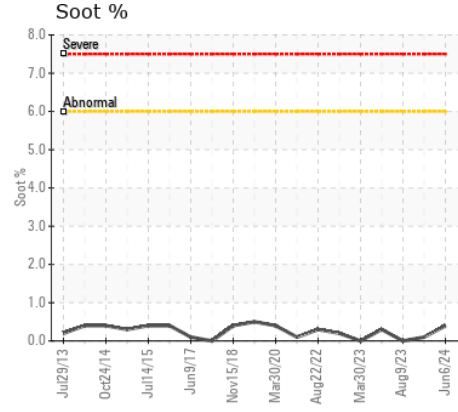
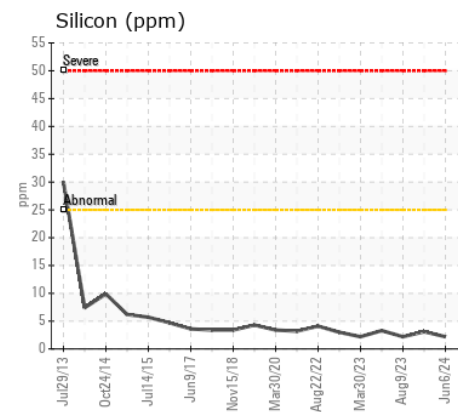
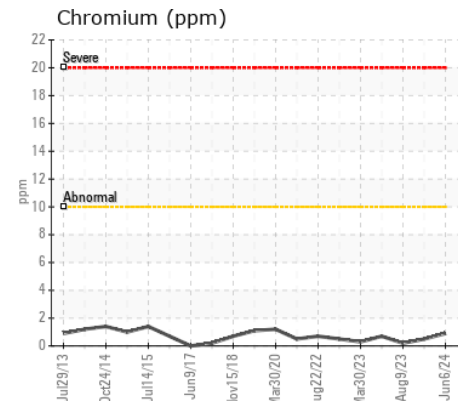
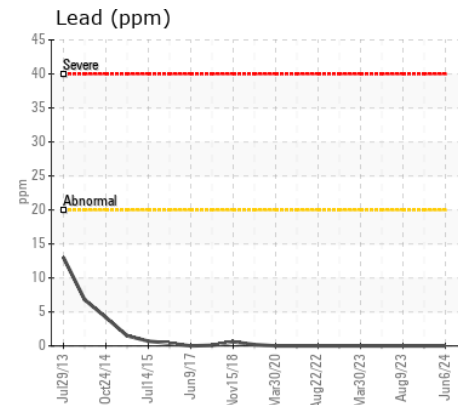
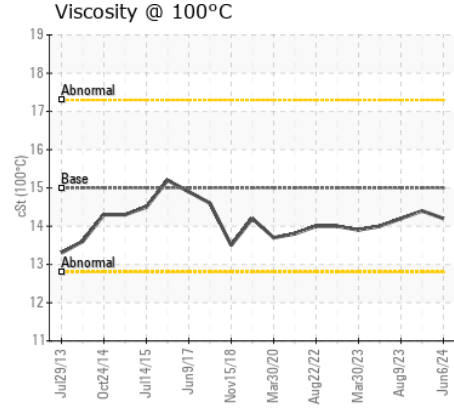
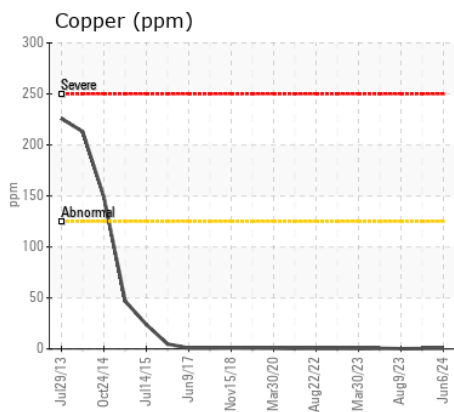
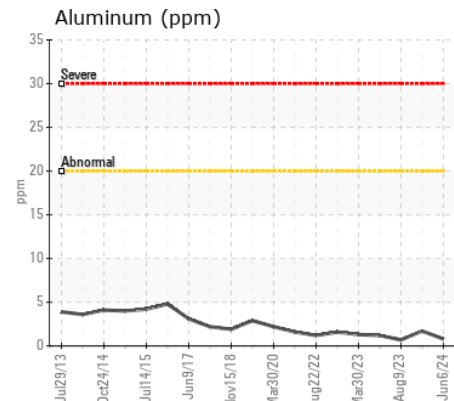
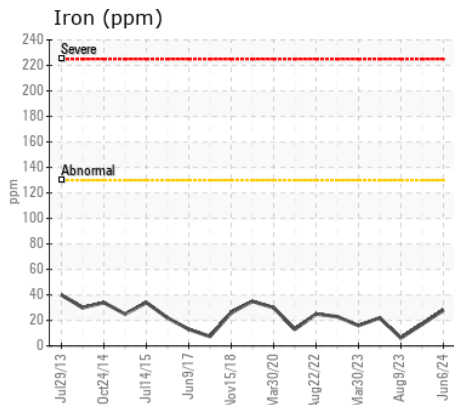
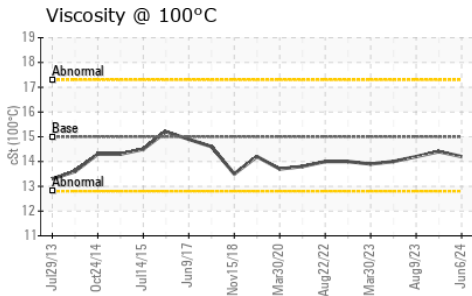
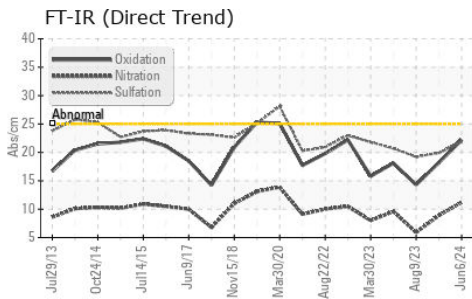
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	3	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>6	<b>0.4</b>	0.1	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>11.2</b>	8.9	5.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.9</b>	19.9	19.2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<b>1</b>	1	1
Boron	ppm	ASTM D5185(m)		<b>4</b>	6	2
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>60</b>	58	56
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>970</b>	945	951
Calcium	ppm	ASTM D5185(m)		<b>1042</b>	1061	1032
Phosphorus	ppm	ASTM D5185(m)		<b>974</b>	980	1040
Zinc	ppm	ASTM D5185(m)		<b>1189</b>	1169	1151
Sulfur	ppm	ASTM D5185(m)		<b>2350</b>	2599	2551
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.2</b>	18.2	14.3
Visc @ 100°C	cSt	ASTM D7279(m)	15.0	<b>14.2</b>	14.4	14.2



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0125803  
**Lab Number** : 02640652  
**Unique Number** : 5789814  
**Test Package** : MOB 1  
**Received** : 10 Jun 2024  
**Tested** : 10 Jun 2024  
**Diagnosed** : 10 Jun 2024 - Wes Davis

**GFL Environmental - 225 - COT(D2)**  
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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.