



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

Machine Id  
**501125**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 10W30 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>GFL0120314</b>	GFL0108187	GFL0049033
Sample Date		Client Info		<b>04 Jun 2024</b>	30 Jan 2024	22 Mar 2022
Machine Age	kms	Client Info		<b>627721</b>	579987	362003
Oil Age	kms	Client Info		<b>47734</b>	0	0
Filter Age	kms	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	N/A	N/A
Filter Changed		Client Info		<b>Changed</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	ABNORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>80	<b>18</b>	20	21
Chromium	ppm	ASTM D5185(m)	>5	<b>1</b>	2	2
Nickel	ppm	ASTM D5185(m)	>2	<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	0
Aluminum	ppm	ASTM D5185(m)	>30	<b>8</b>	6	7
Lead	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	2	<1
Copper	ppm	ASTM D5185(m)	>150	<b>5</b>	4	6
Tin	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**CONTAMINATION**

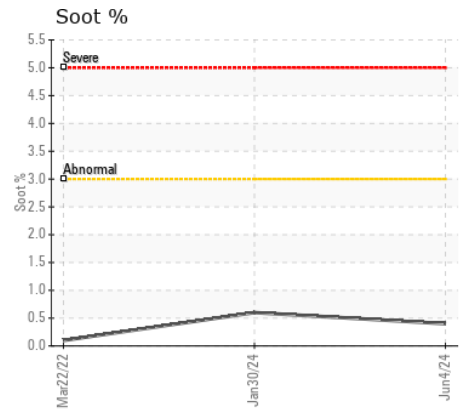
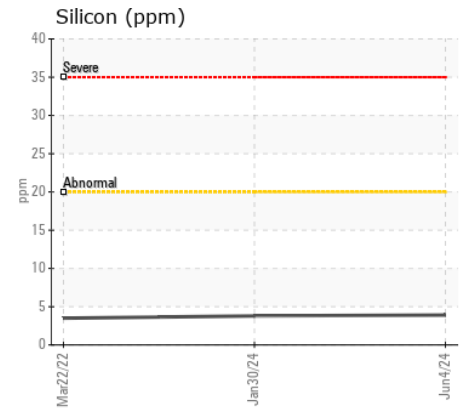
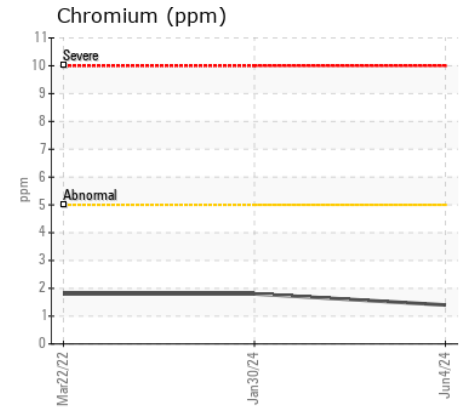
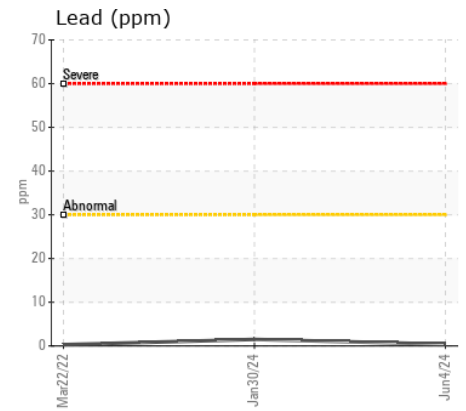
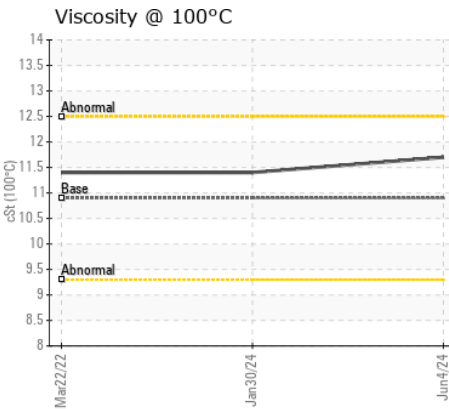
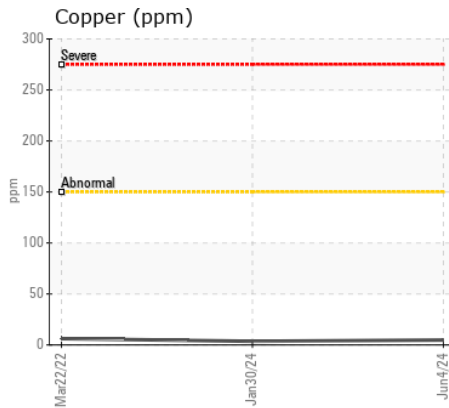
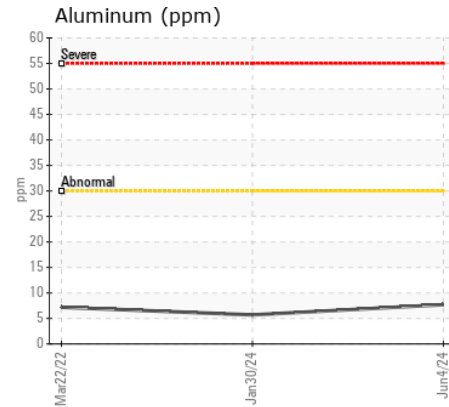
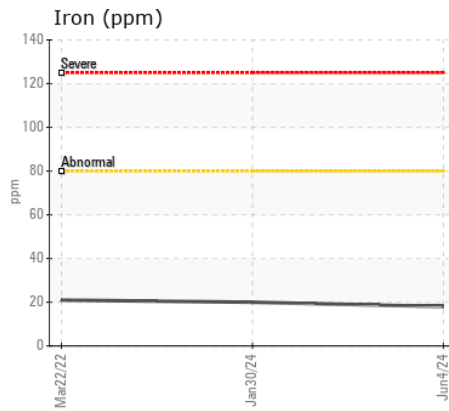
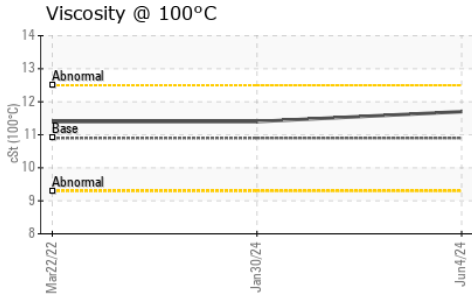
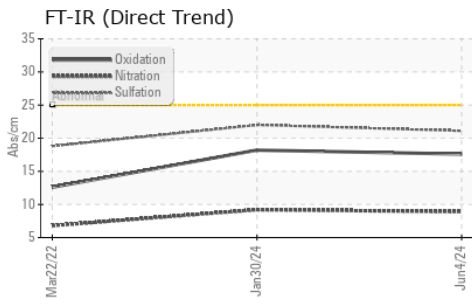
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>20	<b>4</b>	4	4
Potassium	ppm	ASTM D5185(m)	>20	<b>2</b>	1	6
Fuel		WC Method	>5	<b>&lt;1.0</b>	0.4	0.2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>3	<b>0.4</b>	0.6	0.1
Nitration	Abs/cm	ASTM D7624*	>20	<b>8.9</b>	9.2	6.8
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>21.1</b>	22.0	18.8
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>2</b>	2	3
Boron	ppm	ASTM D5185(m)	250	<b>9</b>	3	4
Barium	ppm	ASTM D5185(m)	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	100	<b>53</b>	62	61
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	450	<b>860</b>	987	1008
Calcium	ppm	ASTM D5185(m)	3000	<b>1259</b>	1112	1067
Phosphorus	ppm	ASTM D5185(m)	1150	<b>948</b>	1003	1059
Zinc	ppm	ASTM D5185(m)	1350	<b>1183</b>	1207	1233
Sulfur	ppm	ASTM D5185(m)	4250	<b>2217</b>	2283	2266
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>17.6</b>	18.2	12.6
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	<b>11.7</b>	▲ 11.4	▲ 11.4



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0120314  
**Lab Number** : 02640409  
**Unique Number** : 5789571  
**Test Package** : MOB 1  
**Received** : 07 Jun 2024  
**Tested** : 07 Jun 2024  
**Diagnosed** : 07 Jun 2024 - Wes Davis

**GFL Environmental - 245 - BJ Bear**  
 2616 Cedar Creek Road  
 Ayr, ON  
 CA N0B 1E0  
 Contact: Erik Prpic  
 eprpic@gflenv.com  
 T: (519)570-9000  
 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.