



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
511010
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		GFL0115552	GFL0067053	GFL0055391
Sample Date		Client Info		02 Apr 2024	21 Dec 2022	26 Jul 2022
Machine Age	kms	Client Info		484717	283014	225767
Oil Age	kms	Client Info		0	177777	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Chngd	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	62	25	24
Chromium	ppm	ASTM D5185(m)	>20	1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	2	2	1
Titanium	ppm	ASTM D5185(m)	>2	<1	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	5	4	3
Lead	ppm	ASTM D5185(m)	>40	2	2	2
Copper	ppm	ASTM D5185(m)	>330	14	12	16
Tin	ppm	ASTM D5185(m)	>15	1	1	1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

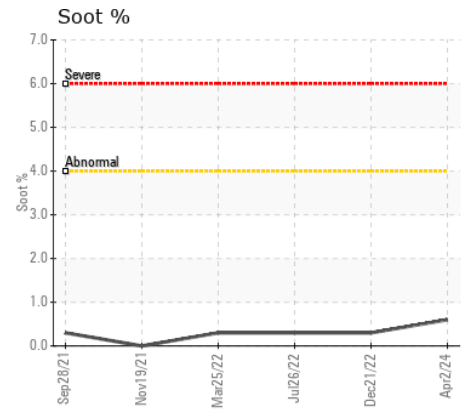
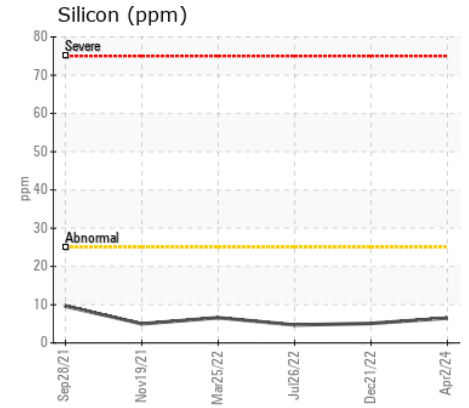
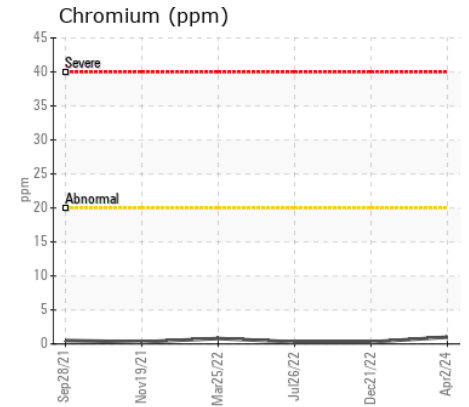
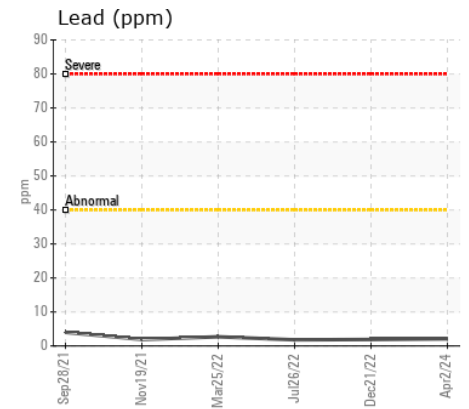
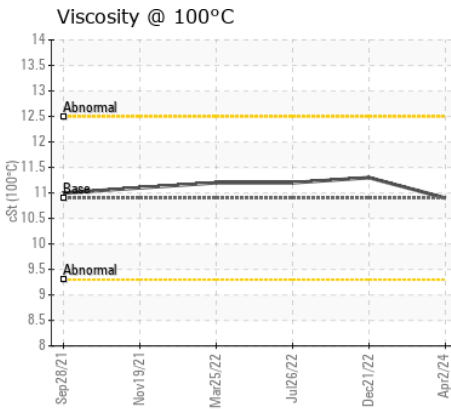
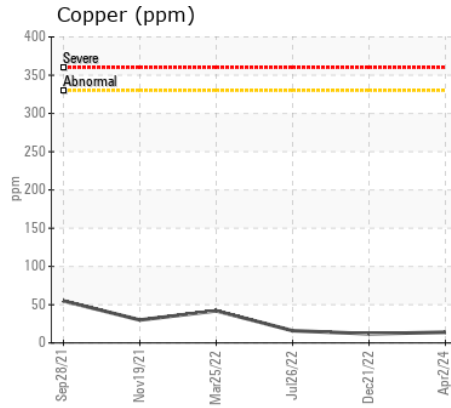
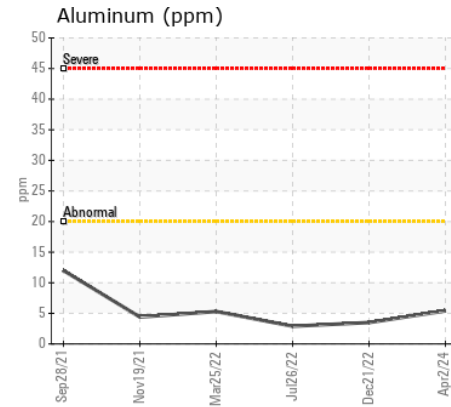
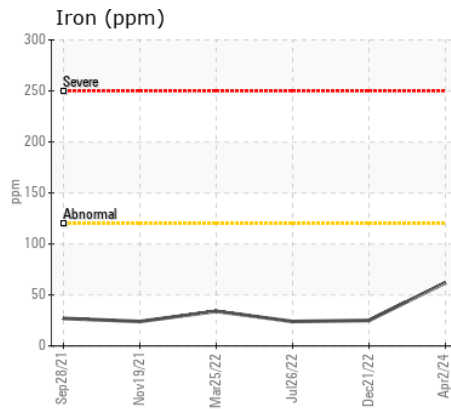
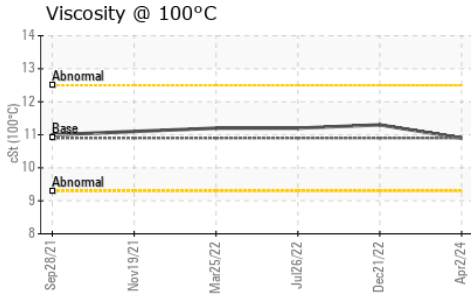
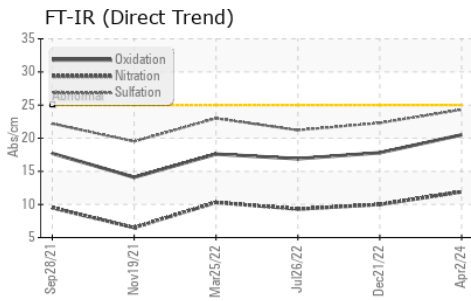
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	5	5
Potassium	ppm	ASTM D5185(m)	>20	3	4	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	0.6	0.3	0.3
Nitration	Abs/cm	ASTM D7624*	>20	11.9	10.0	9.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	24.3	22.3	21.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		2	2	2
Boron	ppm	ASTM D5185(m)	250	2	1	4
Barium	ppm	ASTM D5185(m)	10	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	100	64	62	62
Manganese	ppm	ASTM D5185(m)		0	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	982	975	997
Calcium	ppm	ASTM D5185(m)	3000	1154	1134	1135
Phosphorus	ppm	ASTM D5185(m)	1150	935	1006	973
Zinc	ppm	ASTM D5185(m)	1350	1217	1185	1227
Sulfur	ppm	ASTM D5185(m)	4250	2179	2325	2390
Oxidation	Abs/.1mm	ASTM D7414*	>25	20.5	17.8	16.9
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	10.9	11.3	11.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0115552
Lab Number : 02626858
Unique Number : 5759990
Test Package : MOB 1
Received : 05 Apr 2024
Tested : 05 Apr 2024
Diagnosed : 05 Apr 2024 - Wes Davis

GFL Environmental - 245 - BJ Bear
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 Contact: Erik Prpic
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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.