



Machine Id
514036
Component
Diesel Engine
Fluid
SAE 10W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0120096	GFL0108177	GFL0090880
Sample Date		Client Info		24 Jun 2024	12 Feb 2024	05 Oct 2023
Machine Age	kms	Client Info		177521	118822	62270
Oil Age	kms	Client Info		0	0	0
Filter Age	kms	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	39	44	88
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	1
Nickel	ppm	ASTM D5185(m)	>5	2	2	1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>20	3	6	26
Lead	ppm	ASTM D5185(m)	>40	<1	2	4
Copper	ppm	ASTM D5185(m)	>330	31	63	161
Tin	ppm	ASTM D5185(m)	>15	1	2	7
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

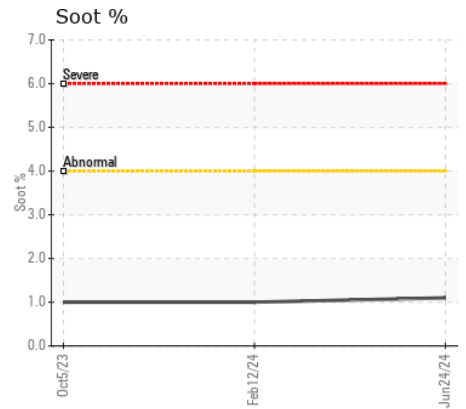
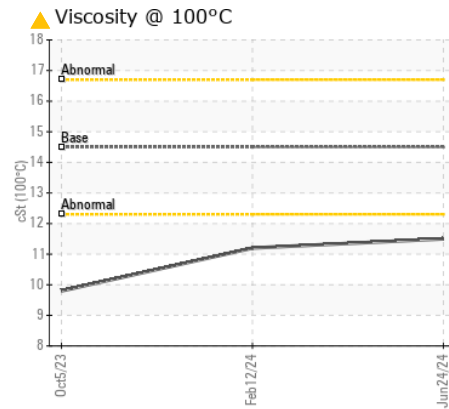
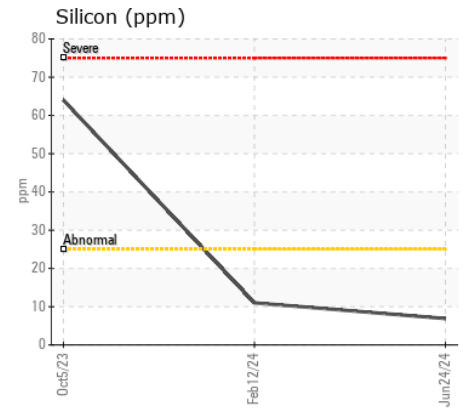
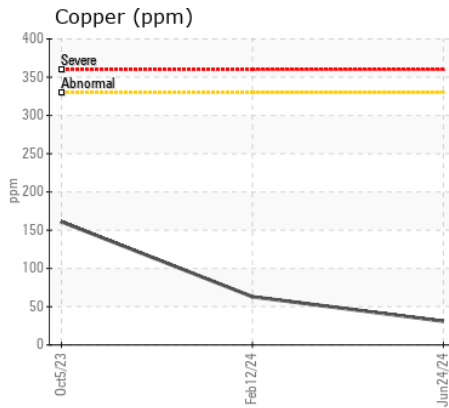
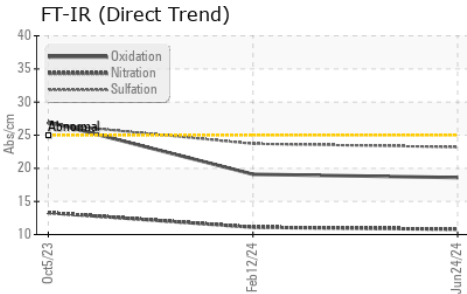
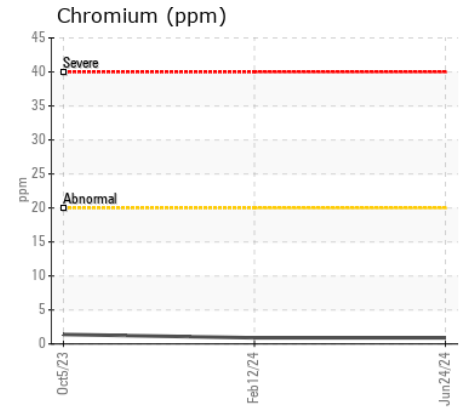
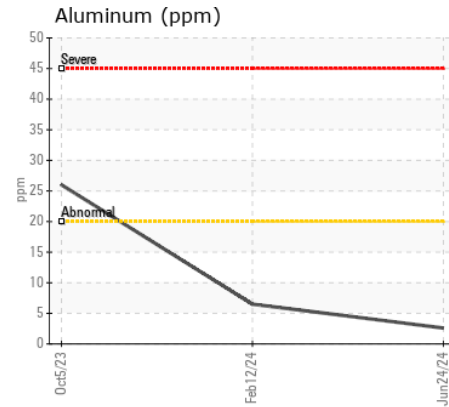
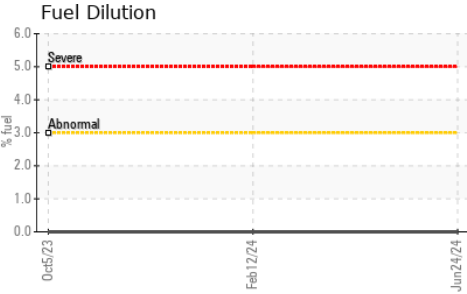
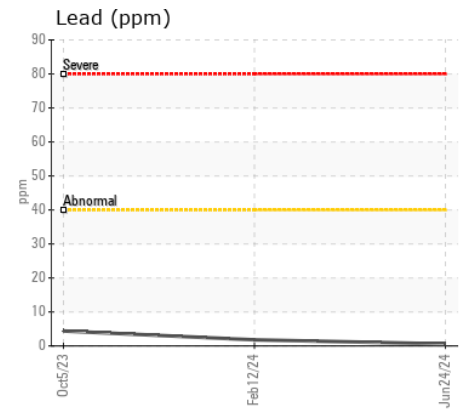
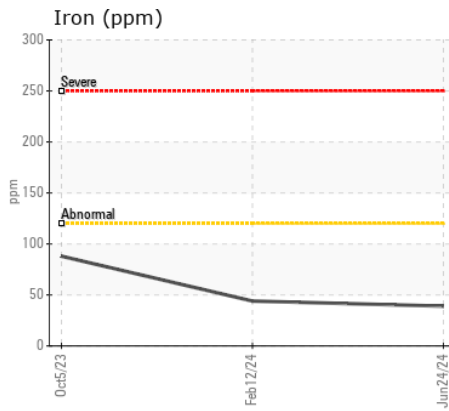
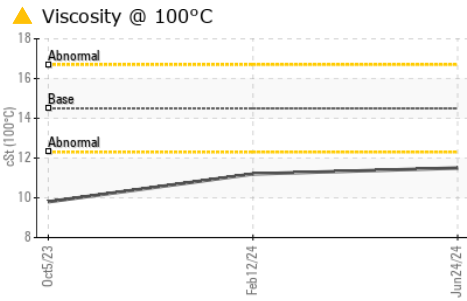
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	11	64
Potassium	ppm	ASTM D5185(m)	>20	4	12	66
Fuel	%	ASTM D7593*	>3.0	0.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>4	1.1	1	1
Nitration	Abs/cm	ASTM D7624*	>20	10.8	11.1	13.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.2	23.7	26.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185(m)	>401	2	2	4
Boron	ppm	ASTM D5185(m)		2	3	27
Barium	ppm	ASTM D5185(m)		0	0	<1
Molybdenum	ppm	ASTM D5185(m)		61	70	126
Manganese	ppm	ASTM D5185(m)		<1	<1	5
Magnesium	ppm	ASTM D5185(m)		935	943	688
Calcium	ppm	ASTM D5185(m)		1130	1155	1519
Phosphorus	ppm	ASTM D5185(m)		887	894	633
Zinc	ppm	ASTM D5185(m)		1186	1161	737
Sulfur	ppm	ASTM D5185(m)		1994	2122	1693
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.6	19.1	27.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.5	▲ 11.5	11.2	9.8



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : GFL0120096

Lab Number : 02644292

Unique Number : 5801831

Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)

Received : 27 Jun 2024

Tested : 28 Jun 2024

Diagnosed : 28 Jun 2024 - Kevin Marson

GFL Environmental - 245 - BJ Bear

2616 Cedar Creek Road

Ayr, ON

CA N0B 1E0

Contact: Erik Prpic

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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.