



Machine Id
910038
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (25 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117893	GFL0111732	GFL0111752
Sample Date		Client Info		02 May 2024	18 Apr 2024	22 Feb 2024
Machine Age	hrs	Client Info		9089	8998	838860
Oil Age	hrs	Client Info		0	600	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	2	8	2
Chromium	ppm	ASTM D5185(m)	>20	0	<1	0
Nickel	ppm	ASTM D5185(m)	>2	<1	3	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	3	1
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

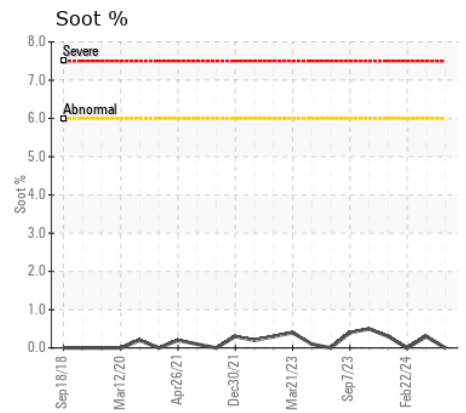
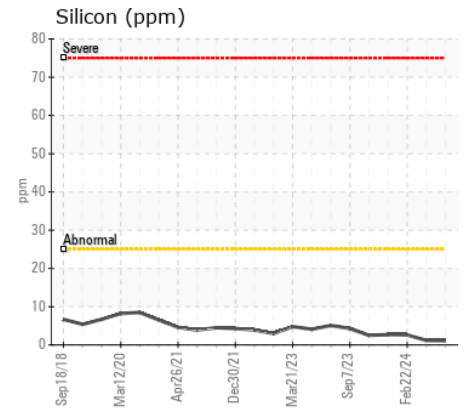
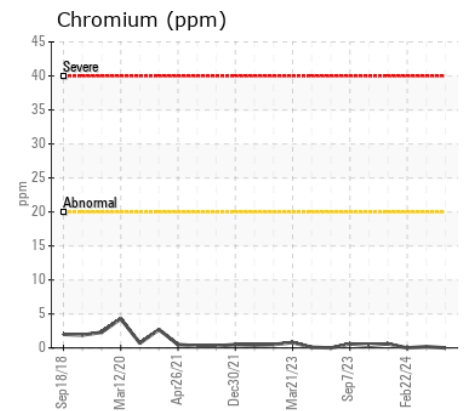
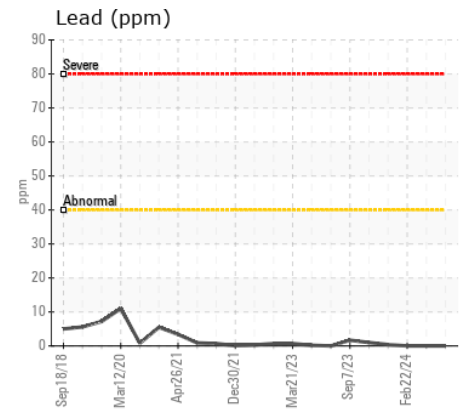
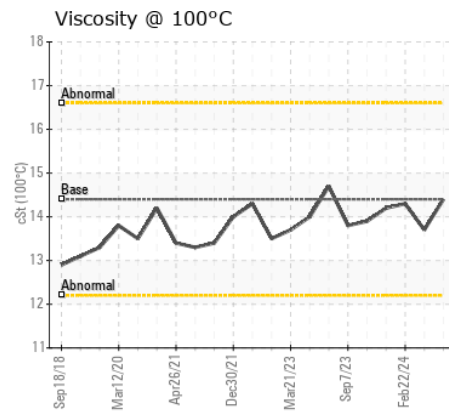
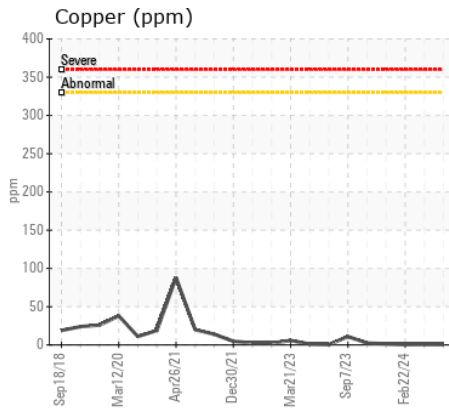
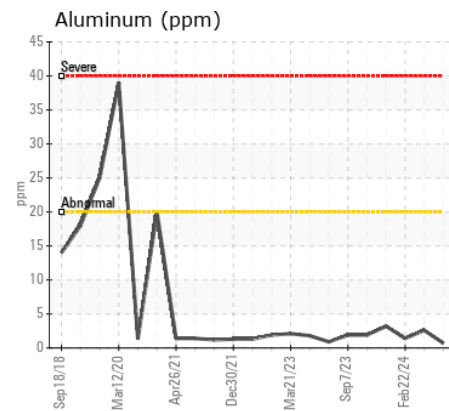
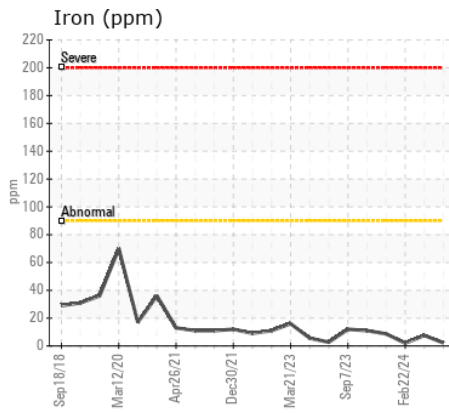
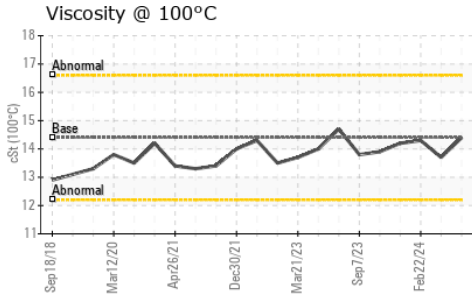
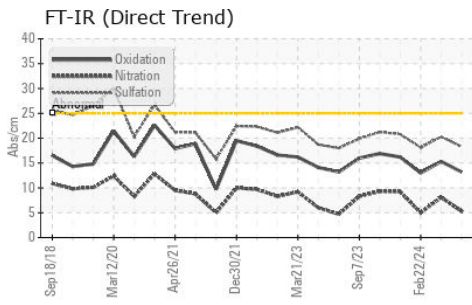
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	1	1	3
Potassium	ppm	ASTM D5185(m)	>20	<1	2	1
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*	>6	0	0.3	0
Nitration	Abs/cm	ASTM D7624*	>20	5.3	8.1	5.0
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3	20.3	18.1
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)	>158	<1	1	<1
Boron	ppm	ASTM D5185(m)	250	20	47	9
Barium	ppm	ASTM D5185(m)	10	0	0	0
Molybdenum	ppm	ASTM D5185(m)	100	61	62	57
Manganese	ppm	ASTM D5185(m)		0	<1	0
Magnesium	ppm	ASTM D5185(m)	450	934	882	920
Calcium	ppm	ASTM D5185(m)	3000	1050	1095	1014
Phosphorus	ppm	ASTM D5185(m)	1150	986	969	995
Zinc	ppm	ASTM D5185(m)	1350	1154	1177	1127
Sulfur	ppm	ASTM D5185(m)	4250	2541	2417	2721
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.2	15.3	13.0
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.4	13.7	14.3



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117893
Lab Number : 02633413
Unique Number : 5774566
Test Package : MOB 1

Received : 06 May 2024
Tested : 06 May 2024
Diagnosed : 06 May 2024 - Wes Davis

GFL Environmental - 217 - Aurora
 14131 BAYVIEW AVE, AURORA YARD
 AURORA, ON
 CA L4G 0K6
 Contact: Mike Havens
 MHavens@gflenv.com

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.

T:
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