



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
220066
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117346	GFL0099540	GFL0099593
Sample Date		Client Info		16 May 2024	27 Dec 2023	29 Nov 2023
Machine Age	hrs	Client Info		13528	462797	459895
Oil Age	hrs	Client Info		600	0	0
Filter Age	hrs	Client Info		600	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	19	6	15
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	0
Aluminum	ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
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

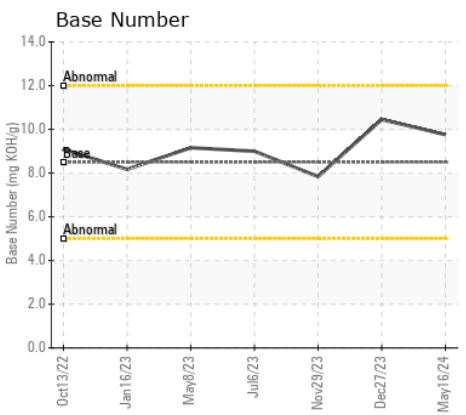
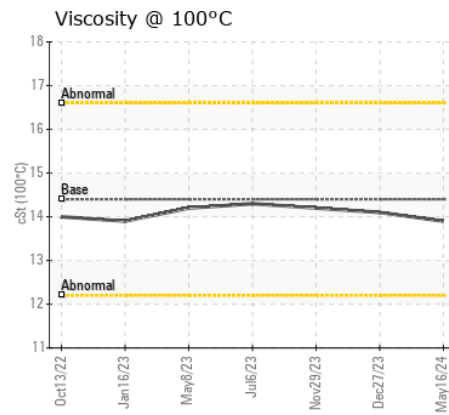
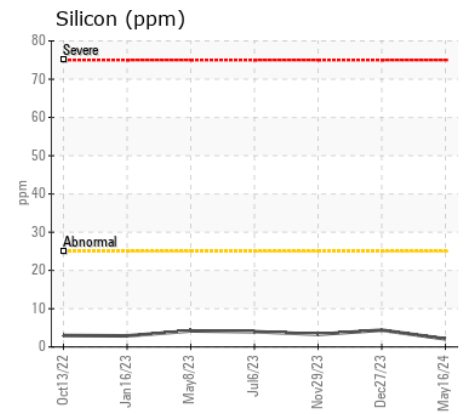
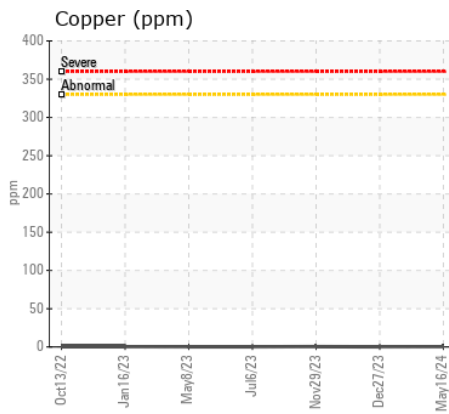
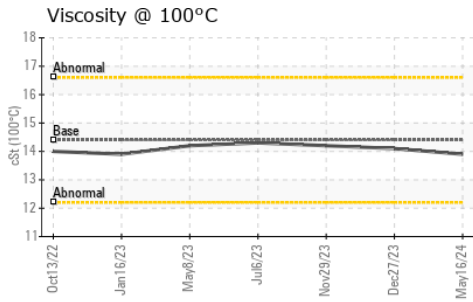
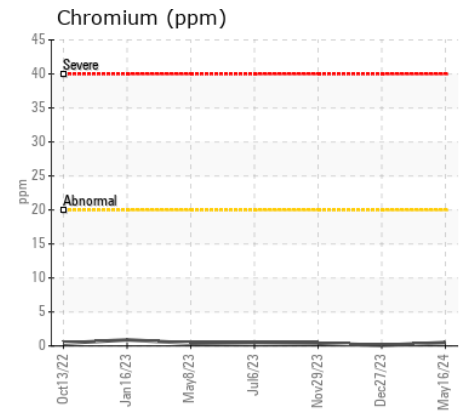
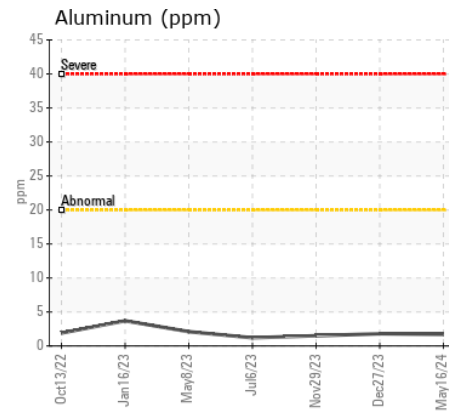
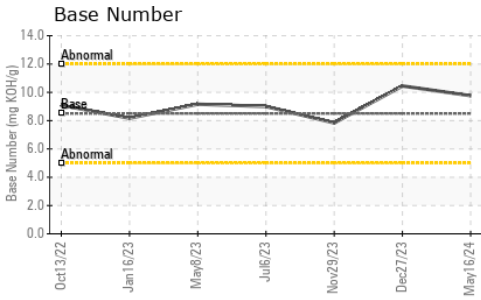
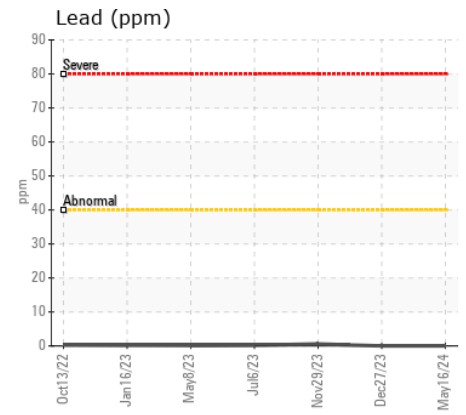
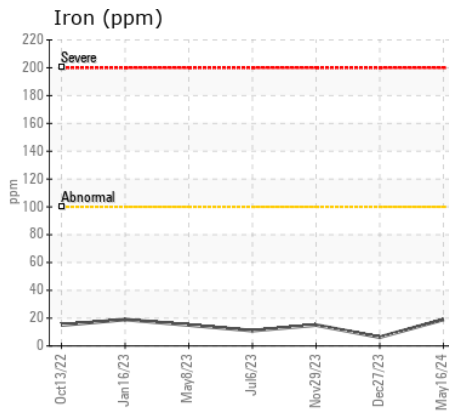
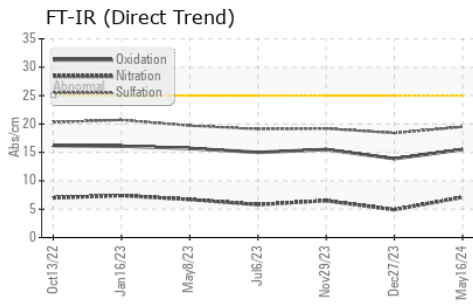
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	4	3
Potassium	ppm	ASTM D5185(m)	>20	1	0	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	7.1	4.9	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.5	18.4	19.2
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)	>158	2	<1	2
Boron	ppm	ASTM D5185(m)	250	3	4	3
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	58	55	56
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	965	916	936
Calcium	ppm	ASTM D5185(m)	3000	1072	1040	1031
Phosphorus	ppm	ASTM D5185(m)	1150	968	971	929
Zinc	ppm	ASTM D5185(m)	1350	1187	1135	1170
Sulfur	ppm	ASTM D5185(m)	4250	2325	2653	2380
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.5	13.9	15.5
Base Number (BN)	mg KOH/g	ASTM D2896*	8.5	9.76	10.45	7.84
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	13.9	14.1	14.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117346
Lab Number : 02637856
Unique Number : 5787018
Test Package : MOB 2
Received : 28 May 2024
Tested : 29 May 2024
Diagnosed : 29 May 2024 - Wes Davis

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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.