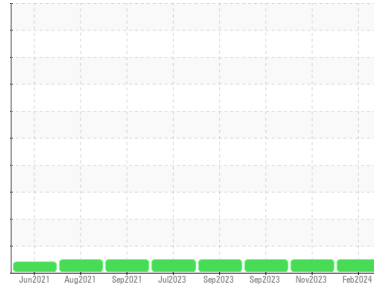




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
910077
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (38 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0094456	GFL0094378	GFL0042859
Sample Date	Client Info		21 Feb 2024	30 Nov 2023	29 Sep 2023
Machine Age	hrs	Client Info	6994	6435	0
Oil Age	hrs	Client Info	6994	0	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >120	13	10	3
Chromium	ppm	ASTM D5185(m) >20	<1	0	0
Nickel	ppm	ASTM D5185(m) >5	<1	<1	0
Titanium	ppm	ASTM D5185(m) >2	0	0	0
Silver	ppm	ASTM D5185(m) >2	0	<1	<1
Aluminum	ppm	ASTM D5185(m) >20	4	3	2
Lead	ppm	ASTM D5185(m) >40	1	<1	<1
Copper	ppm	ASTM D5185(m) >330	4	2	2
Tin	ppm	ASTM D5185(m) >15	<1	<1	0
Antimony	ppm	ASTM D5185(m)	0	0	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 250	23	28	54
Barium	ppm	ASTM D5185(m) 10	0	<1	0
Molybdenum	ppm	ASTM D5185(m) 100	86	87	86
Manganese	ppm	ASTM D5185(m)	0	0	0
Magnesium	ppm	ASTM D5185(m) 450	152	124	67
Calcium	ppm	ASTM D5185(m) 3000	2065	2075	2112
Phosphorus	ppm	ASTM D5185(m) 1150	961	932	929
Zinc	ppm	ASTM D5185(m) 1350	1153	1152	1133
Sulfur	ppm	ASTM D5185(m) 4250	2884	2762	2975
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

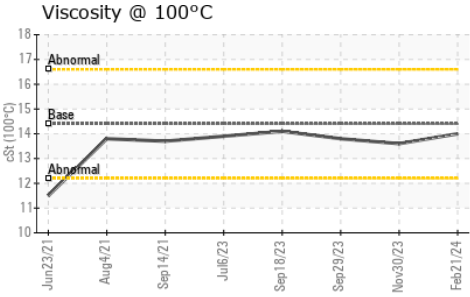
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	5	3	3
Sodium	ppm	ASTM D5185(m) >158	4	3	3
Potassium	ppm	ASTM D5185(m) >20	2	0	1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844* >4	0.5	0.4	0.1
Nitration	Abs/cm	ASTM D7624* >20	10.7	10.1	8.0
Sulfation	Abs./1mm	ASTM D7415* >30	22.1	20.6	18.0



OIL ANALYSIS REPORT



FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	ASTM D7414*	>25	16.8	15.4	13.0

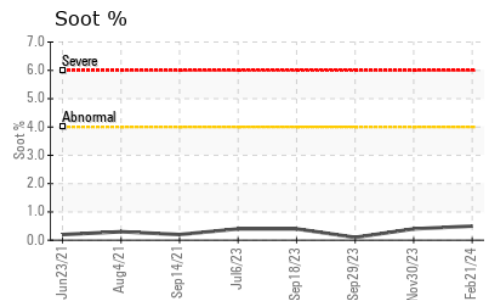
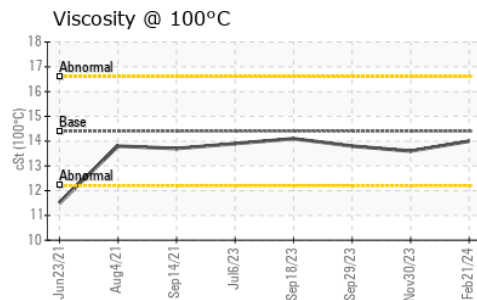
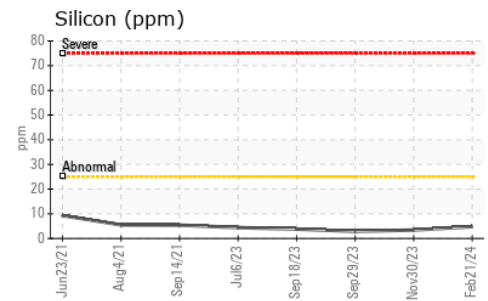
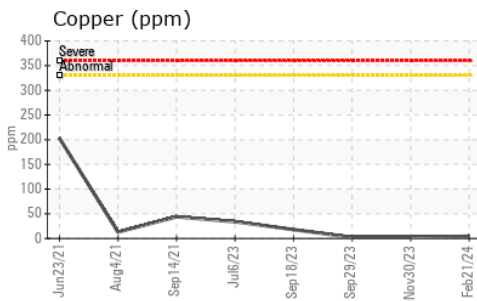
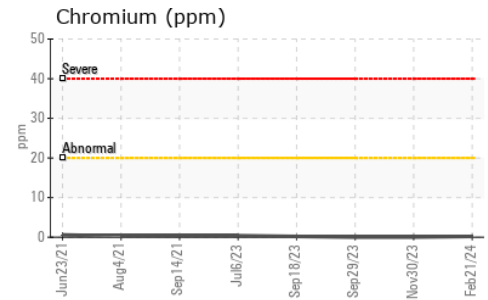
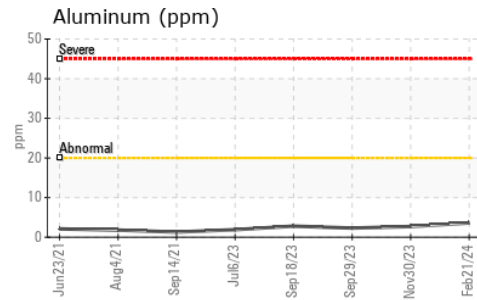
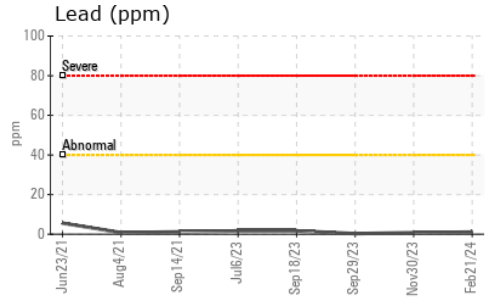
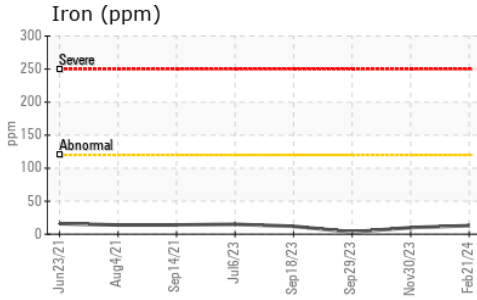
VISUAL

	method	limit/base	current	history1	history2	
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES

	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.0	13.6	13.8

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0094456
Lab Number : 02617338
Unique Number : 5734448
Test Package : MOB 1

GFL Environmental - 222 - Sandhill
 SANDHILL DISPOSAL & RECYCLING DIVIS, 19 COMMERCE ROAD
 ORANGEVILLE, ON
 CA L9W 3X5
 Contact: GLENN COOK
 gcook@gflenv.com
 T: (519)940-4167
 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.