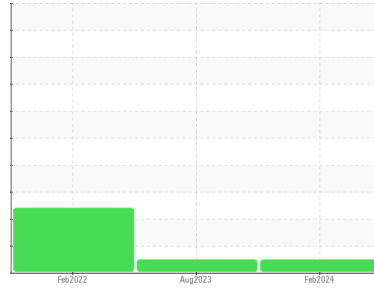




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
931026
 Component
Natural Gas Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

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		GFL0102936	GFL0087026	GFL0042088
Sample Date	Client Info		14 Feb 2024	15 Aug 2023	04 Feb 2022
Machine Age	hrs	Client Info	5028	15189	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	33	43	▲ 81
Chromium	ppm	ASTM D5185(m) >5	2	3	3
Nickel	ppm	ASTM D5185(m) >4	2	2	2
Titanium	ppm	ASTM D5185(m) >5	0	0	19
Silver	ppm	ASTM D5185(m) >3	0	<1	<1
Aluminum	ppm	ASTM D5185(m) >25	12	15	21
Lead	ppm	ASTM D5185(m) >40	16	18	3
Copper	ppm	ASTM D5185(m) >150	3	4	17
Tin	ppm	ASTM D5185(m) >4	1	2	3
Antimony	ppm	ASTM D5185(m)	0	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	<1
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	8	13	8
Barium	ppm	ASTM D5185(m) 10	0	<1	4
Molybdenum	ppm	ASTM D5185(m) 100	61	63	57
Manganese	ppm	ASTM D5185(m)	<1	1	10
Magnesium	ppm	ASTM D5185(m) 450	658	678	625
Calcium	ppm	ASTM D5185(m) 3000	1824	1880	1535
Phosphorus	ppm	ASTM D5185(m) 1150	881	881	757
Zinc	ppm	ASTM D5185(m) 1350	1056	1070	953
Sulfur	ppm	ASTM D5185(m) 4250	2188	2052	1950
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	7	8	▲ 33
Sodium	ppm	ASTM D5185(m) >158	13	11	7
Potassium	ppm	ASTM D5185(m) >20	8	4	45

INFRA-RED

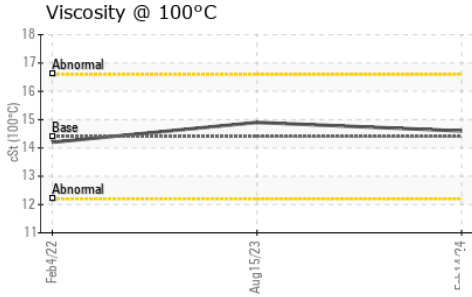
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	12.2	4.6
Sulfation	Abs./1mm	ASTM D7415*	>30	26.9	14.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	23.2	8.3



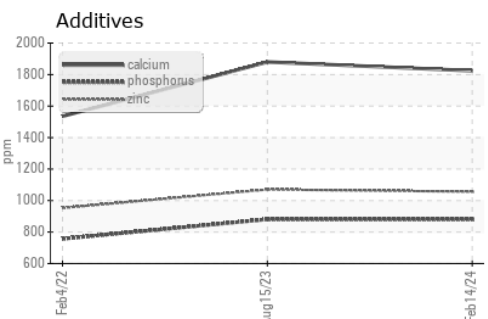
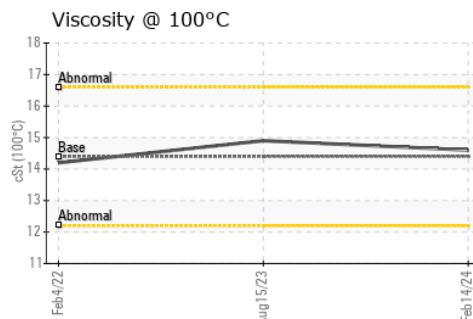
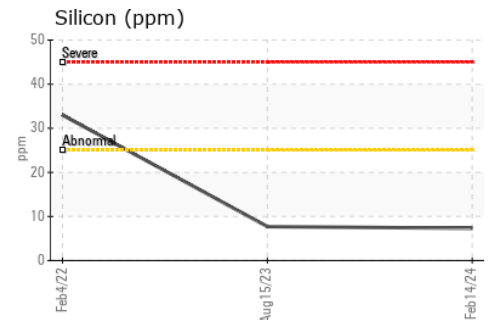
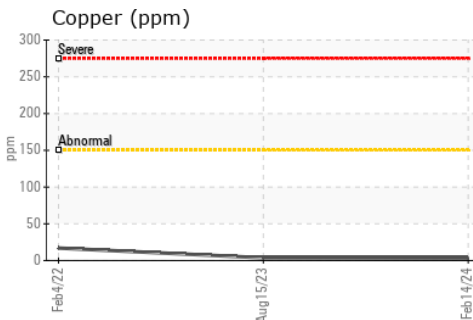
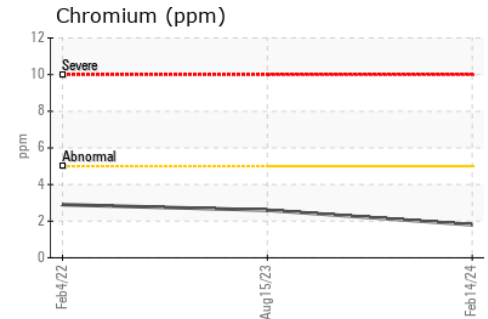
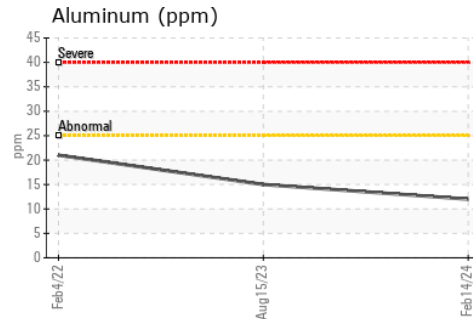
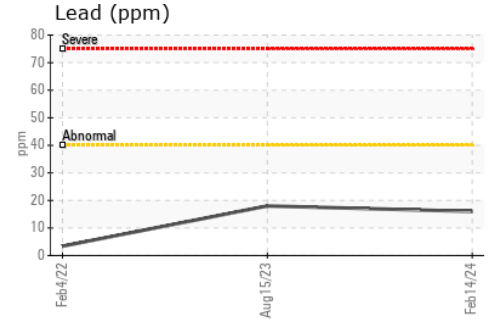
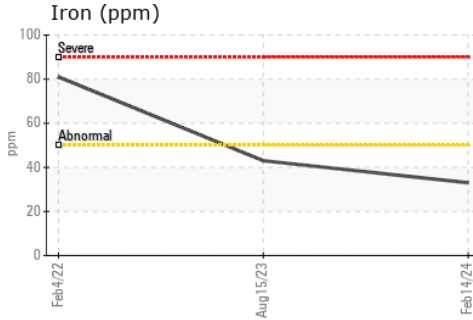
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	14.6	14.9	14.2

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0102936
Lab Number : **02621680**
Unique Number : 5746799
Test Package : MOB 1
Received : 13 Mar 2024
Tested : 13 Mar 2024
Diagnosed : 13 Mar 2024 - Kevin Marson

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9
 Contact: Natalia Stalynska
 nstalynska@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:
F: