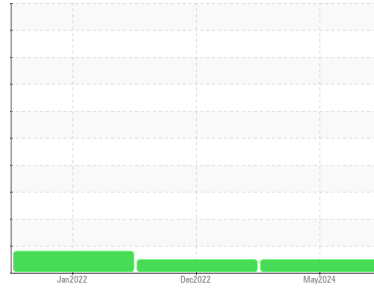




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

731031

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			GFL0119232	GFL0066652	GFL0042090
Sample Date	Client Info			09 May 2024	13 Dec 2022	31 Jan 2022
Machine Age	hrs	Client Info		5196	2425	1213
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			Changed	N/A	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	4	10	▲ 70
Chromium	ppm	ASTM D5185(m)	>4	0	<1	2
Nickel	ppm	ASTM D5185(m)	>2	0	<1	2
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>9	<1	1	4
Lead	ppm	ASTM D5185(m)	>30	0	<1	3
Copper	ppm	ASTM D5185(m)	>35	<1	1	17
Tin	ppm	ASTM D5185(m)	>4	0	0	2
Antimony	ppm	ASTM D5185(m)		0	<1	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	250	49	39	10
Barium	ppm	ASTM D5185(m)	10	0	0	2
Molybdenum	ppm	ASTM D5185(m)	100	51	47	89
Manganese	ppm	ASTM D5185(m)		<1	<1	8
Magnesium	ppm	ASTM D5185(m)	450	518	550	640
Calcium	ppm	ASTM D5185(m)	3000	1472	1539	1057
Phosphorus	ppm	ASTM D5185(m)	1150	723	819	717
Zinc	ppm	ASTM D5185(m)	1350	806	868	834
Sulfur	ppm	ASTM D5185(m)	4250	1981	2116	2005
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

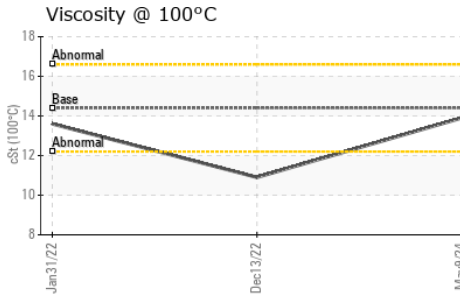
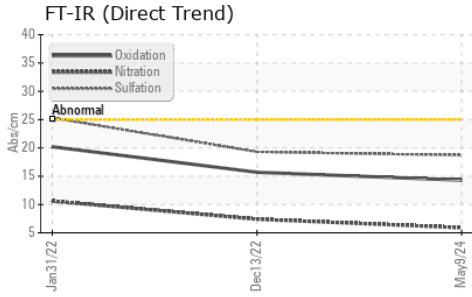
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>+100	3	6	25
Sodium	ppm	ASTM D5185(m)	>158	4	6	4
Potassium	ppm	ASTM D5185(m)	>20	0	<1	4

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.9	7.4	10.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.7	19.3	25.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	14.3	15.7	20.2



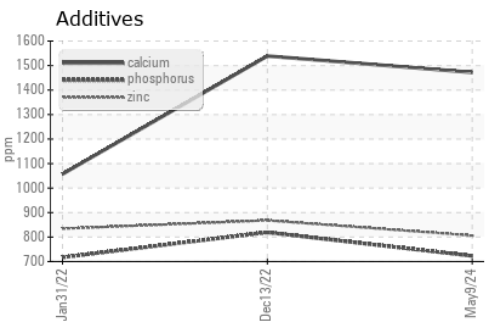
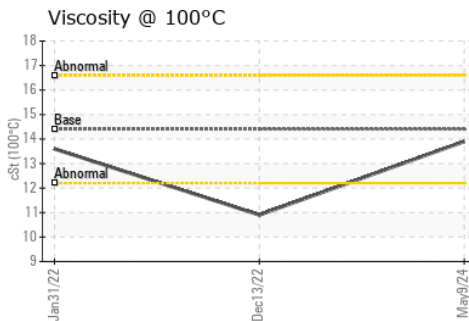
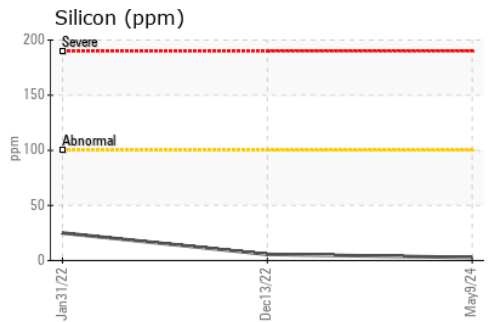
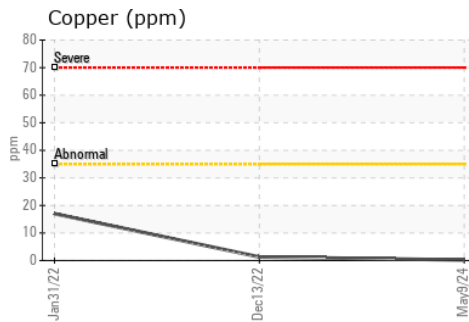
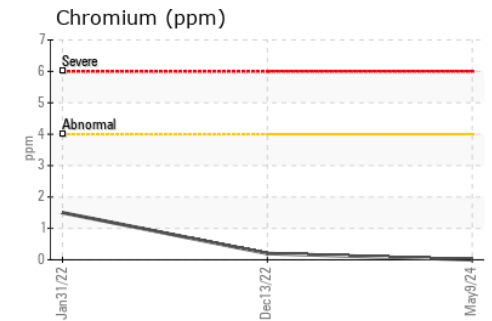
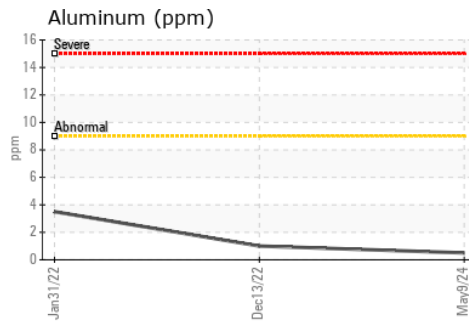
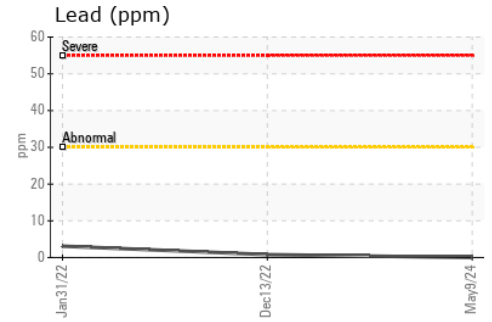
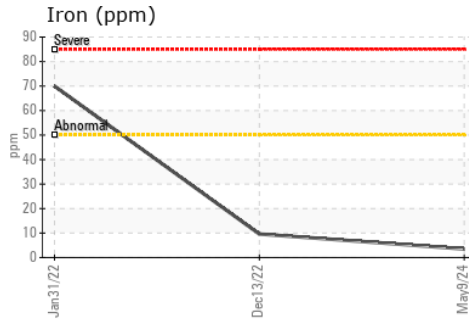
OIL ANALYSIS REPORT



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	13.9	10.9

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119232
Lab Number : 02639806
Unique Number : 5788968
Test Package : MOB 1

GFL Environmental - 253 - TOR APT
 15 Bermondsey Road - Building B
 Toronto, ON
 CA M4B 1Y9

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.

Contact: Natalia Stalynska
 nstalynska@gflenv.com
 T:
 F: