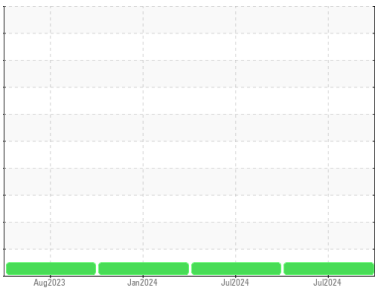
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
931014
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		**GFL0119229**	GFL0119245	GFL0102921
Sample Date		Client Info		**10 Jul 2024**	04 Jul 2024	22 Jan 2024
Machine Age	kms	Client Info		**0**	47891	3588
Oil Age	kms	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**NORMAL**	NORMAL	NORMAL

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**	17	20
Chromium	ppm	ASTM D5185(m)	>5	**<1**	1	1
Nickel	ppm	ASTM D5185(m)	>4	**<1**	<1	1
Titanium	ppm	ASTM D5185(m)	>5	**0**	0	0
Silver	ppm	ASTM D5185(m)	>3	**0**	0	0
Aluminum	ppm	ASTM D5185(m)	>25	**1**	3	4
Lead	ppm	ASTM D5185(m)	>40	**1**	18	9
Copper	ppm	ASTM D5185(m)	>150	**<1**	2	2
Tin	ppm	ASTM D5185(m)	>4	**0**	1	<1
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	**36**	7	8
Barium	ppm	ASTM D5185(m)	10	**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)	100	**47**	58	55
Manganese	ppm	ASTM D5185(m)		**<1**	<1	<1
Magnesium	ppm	ASTM D5185(m)	450	**540**	615	585
Calcium	ppm	ASTM D5185(m)	3000	**1575**	1815	1748
Phosphorus	ppm	ASTM D5185(m)	1150	**699**	741	735
Zinc	ppm	ASTM D5185(m)	1350	**894**	975	958
Sulfur	ppm	ASTM D5185(m)	4250	**2074**	2060	2126
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

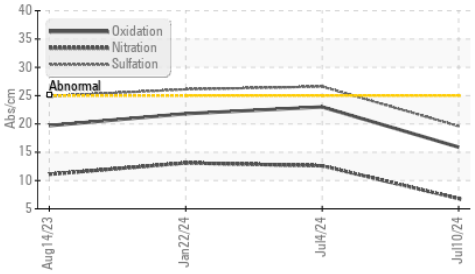
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	**3**	4	5
Sodium	ppm	ASTM D5185(m)	>158	**4**	10	9
Potassium	ppm	ASTM D5185(m)	>20	**<1**	4	7

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*		**0**	0	0
Nitration	Abs/cm	ASTM D7624*	>20	**6.8**	12.6	13.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	**19.6**	26.6	26.1

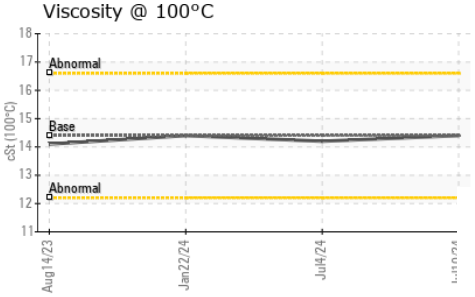
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	**15.9**	23.0	21.8

OIL ANALYSIS REPORT

FT-IR (Direct Trend)



Viscosity @ 100°C

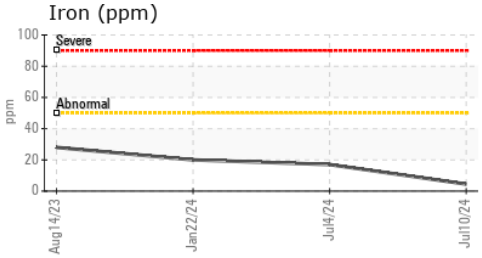


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**VLITE**	---	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	---	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	---	NONE
Silt	scalar	Visual*	NONE	**NONE**	---	NONE
Debris	scalar	Visual*	NONE	**NONE**	---	NONE
Sand/Dirt	scalar	Visual*	NONE	**NONE**	---	NONE
Appearance	scalar	Visual*	NORML	**NORML**	---	NORML
Odor	scalar	Visual*	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	**NEG**	NEG	NEG
Free Water	scalar	Visual*		**NEG**	NEG	NEG

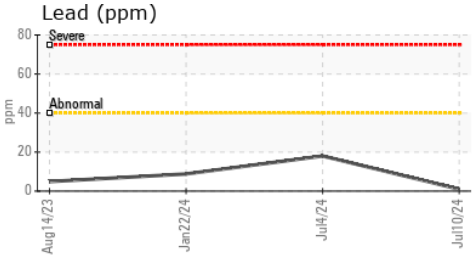
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	14.4	**14.4**	14.2	14.4

GRAPHS

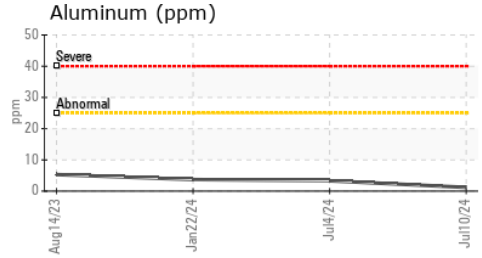
Iron (ppm)



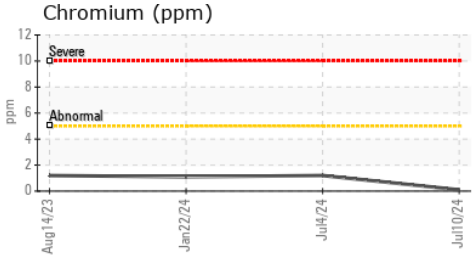
Lead (ppm)



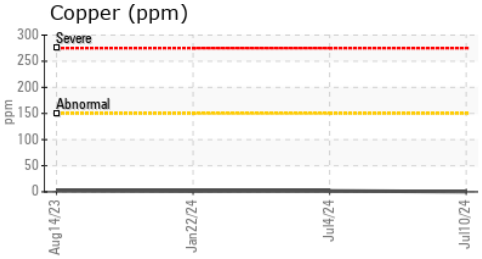
Aluminum (ppm)



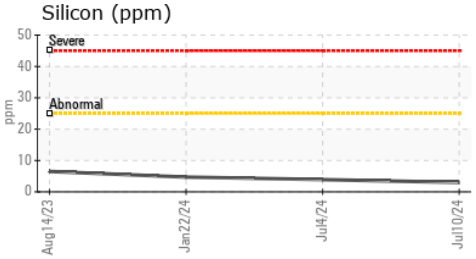
Chromium (ppm)



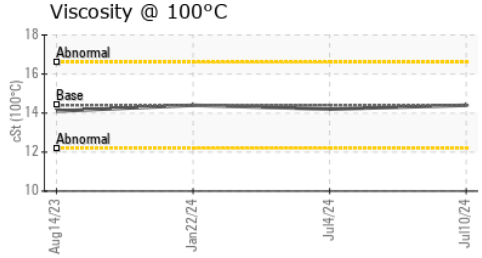
Copper (ppm)



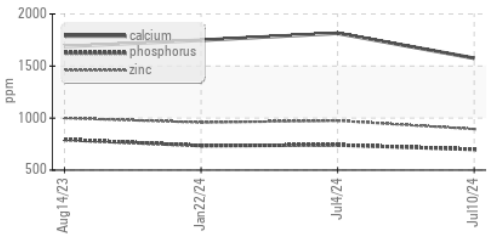
Silicon (ppm)



Viscosity @ 100°C



Additives



ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0119229
Lab Number : 02648082
Unique Number : 5813634
Test Package : MOB 1 (Additional Tests: Visual)

Received : 16 Jul 2024
Tested : 16 Jul 2024
Diagnosed : 16 Jul 2024 - Kevin Marson

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.

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