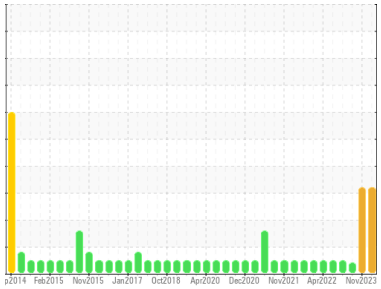
OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
10272C AUTOCAR ACX64
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (29 QTS)

DIAGNOSIS

Recommendation
The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The oil viscosity is lower than normal. Additive levels indicate the addition of a different brand, or type of oil. The BN level is low. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0103217**	GFL0094753	GFL0094689
Sample Date		Client Info		**10 Jan 2024**	21 Nov 2023	02 Oct 2023
Machine Age	hrs	Client Info		**4855**	4609	4274
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ATTENTION

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 D5185m	>50	**13**	10	9
Chromium	ppm	ASTM D5185m	>4	**1**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**<1**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>9	**1**	1	2
Lead	ppm	ASTM D5185m	>30	**25**	19	10
Copper	ppm	ASTM D5185m	>35	**2**	1	<1
Tin	ppm	ASTM D5185m	>4	**2**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**21**	19	21
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	50	**29**	24	36
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	560	▲ **268**	▲ 255	351
Calcium	ppm	ASTM D5185m	1510	▲ **926**	▲ 829	1084
Phosphorus	ppm	ASTM D5185m	780	▲ **495**	▲ 465	552
Zinc	ppm	ASTM D5185m	870	▲ **493**	▲ 433	588
Sulfur	ppm	ASTM D5185m	2040	**2088**	1881	1971

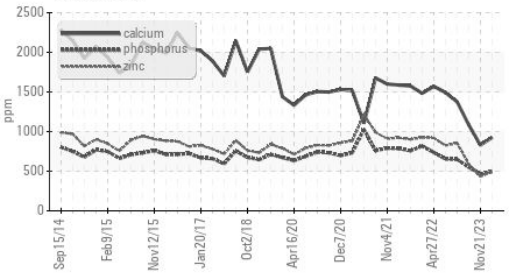
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	**3**	3	3
Sodium	ppm	ASTM D5185m		**6**	8	8
Potassium	ppm	ASTM D5185m	>20	**1**	3	3

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	**8.6**	8.6	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	**27.6**	27.8	24.8

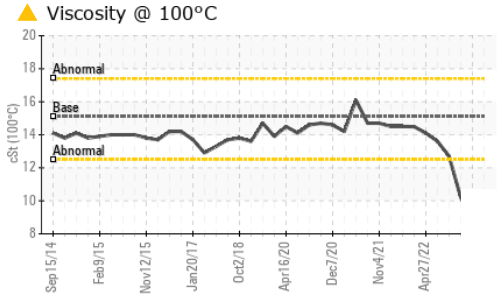
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**32.9**	33.3	26.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	▲ **0.0**	▲ 0.0	3.1

OIL ANALYSIS REPORT

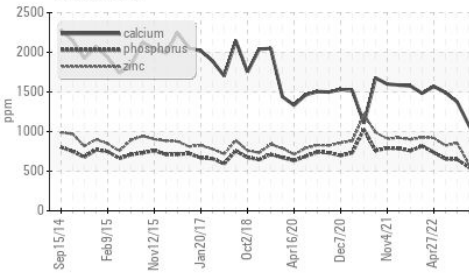
Additives



Viscosity @ 100°C



Additives

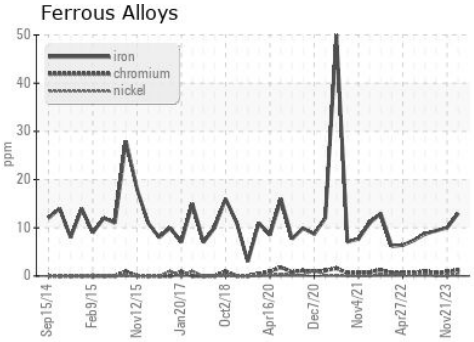


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**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

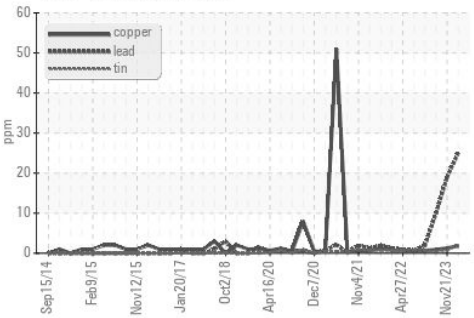
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	▲ **9.2**	▲ 9	▲ 10.2

GRAPHS

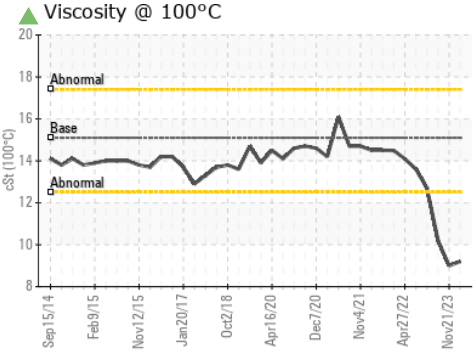
Ferrous Alloys



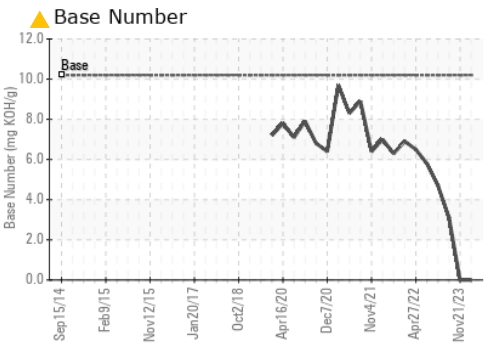
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103217
Lab Number : 06058971
Unique Number : 10830353
Test Package : FLEET

Recieved : 12 Jan 2024
Diagnosed : 15 Jan 2024
Diagnostician : Don Baldridge

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

GFL Environmental - 001 - Raleigh(CNG)
3741 Conquest Drive
Garner, NC
US 27529
Contact: Ronald Gregory
rgregory@gflenv.com
T:
F: (919)662-1730