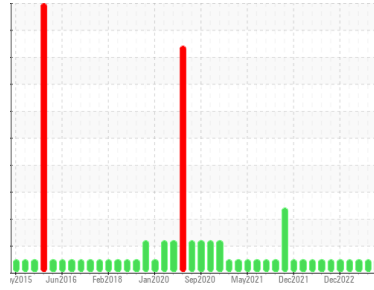




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
(YA117961)

Machine Id
10550C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (28 QTS)

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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0118399	GFL0098137	GFL0088544
Sample Date	Client Info		30 May 2024	23 Jan 2024	13 Sep 2023
Machine Age	hrs	Client Info	9544	9544	9544
Oil Age	hrs	Client Info	248	394	348
Oil Changed	Client Info		N/A	N/A	N/A
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 D5185m >50	13	11	9
Chromium	ppm	ASTM D5185m >4	<1	<1	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m >3	<1	0	0
Aluminum	ppm	ASTM D5185m >9	2	<1	<1
Lead	ppm	ASTM D5185m >30	2	<1	<1
Copper	ppm	ASTM D5185m >35	<1	<1	0
Tin	ppm	ASTM D5185m >4	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	17	16	16
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	53	52	56
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	618	611	630
Calcium	ppm	ASTM D5185m 1510	1854	1659	1784
Phosphorus	ppm	ASTM D5185m 780	880	782	793
Zinc	ppm	ASTM D5185m 870	1062	1019	1020
Sulfur	ppm	ASTM D5185m 2040	3069	2476	2970

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	5	6	4
Sodium	ppm	ASTM D5185m	8	9	7
Potassium	ppm	ASTM D5185m >20	3	2	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0	0
Nitration	Abs/cm	*ASTM D7624 >20	9.6	9.5	9.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.3	19.9	20.2

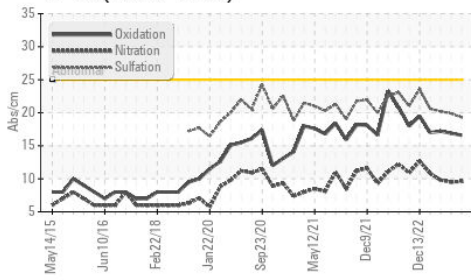
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.6	16.9	17.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	6.4	6.4	6.6

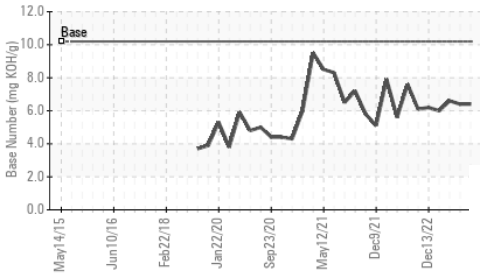


OIL ANALYSIS REPORT

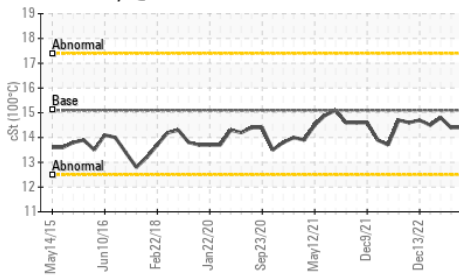
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



VISUAL

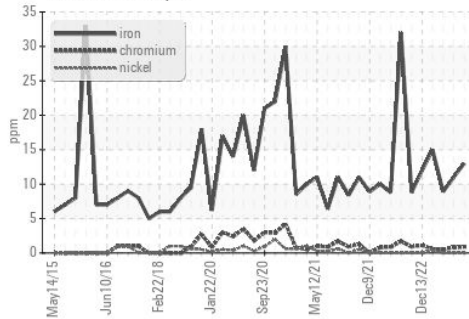
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

FLUID PROPERTIES

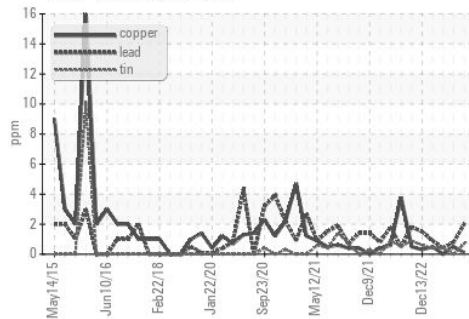
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.8

GRAPHS

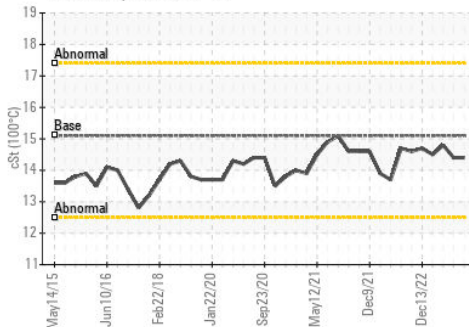
Ferrous Alloys



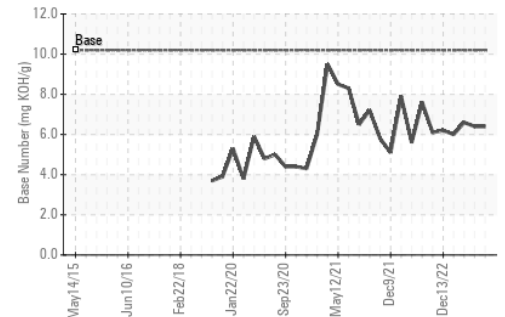
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118399
Lab Number : 06195105
Unique Number : 11057228
Test Package : FLEET

Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

GFL Environmental - 017 - Durham
 148 Stone Park Court
 Durham, NC
 US 27703
 Contact:

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)

bill.waring@wearcheck.com

T: (919)596-1363

F: (919)598-1852