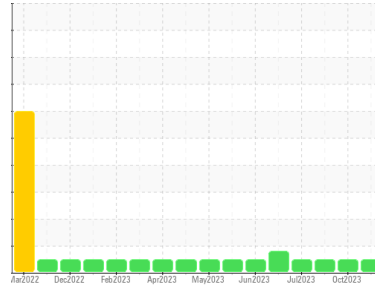




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
810014

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 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 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	GFL0083173	GFL0083138	GFL0083127
Sample Date	Client Info	13 Nov 2023	13 Oct 2023	16 Aug 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>50	27	16	10
Chromium	ppm	ASTM D5185m	>4	2	2	<1
Nickel	ppm	ASTM D5185m	>2	1	1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	6	4	3
Lead	ppm	ASTM D5185m	>30	6	3	0
Copper	ppm	ASTM D5185m	>35	3	3	0
Tin	ppm	ASTM D5185m	>4	1	2	0
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m	50	4	11	11
Barium	ppm	ASTM D5185m	5	0	10	0
Molybdenum	ppm	ASTM D5185m	50	73	87	76
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	560	824	781	692
Calcium	ppm	ASTM D5185m	1510	1581	2139	1963
Phosphorus	ppm	ASTM D5185m	780	947	969	786
Zinc	ppm	ASTM D5185m	870	1204	1289	1224
Sulfur	ppm	ASTM D5185m	2040	2952	3597	3858

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185m	>+100	16	6	3
Sodium	ppm	ASTM D5185m		6	25	4
Potassium	ppm	ASTM D5185m	>20	2	3	0

INFRA-RED

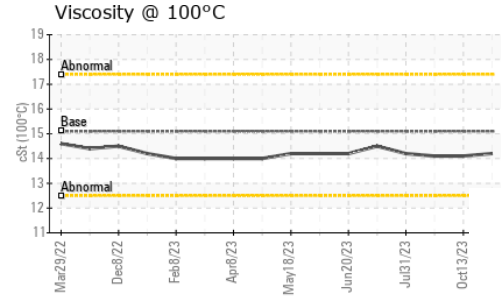
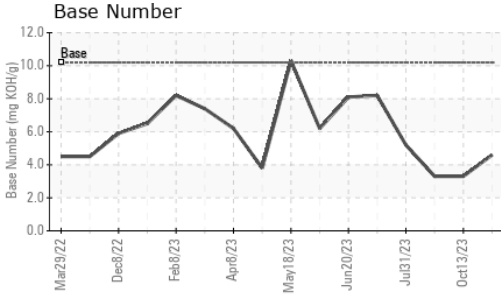
method	limit/base	current	history1	history2		
Soot %	%	*ASTM D7844		0.2	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.5	11.9	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.7	24.3	21.0

FLUID DEGRADATION

method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.5	19.7	17.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	4.6	3.3	3.3



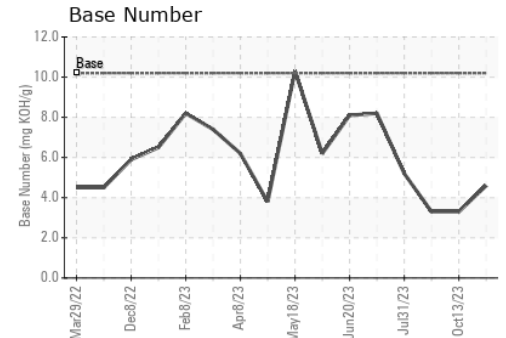
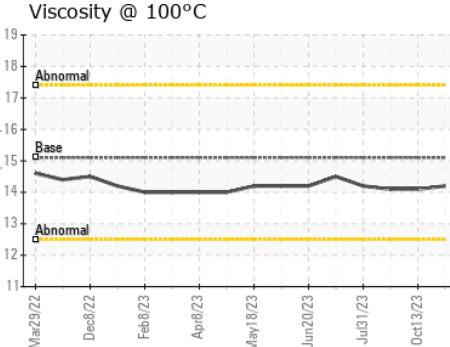
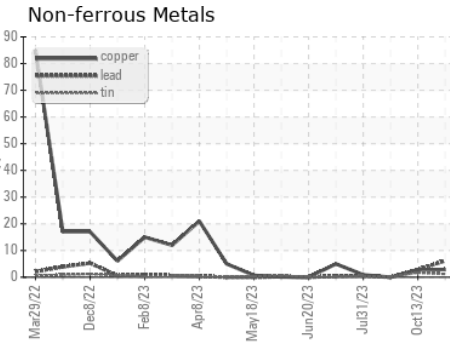
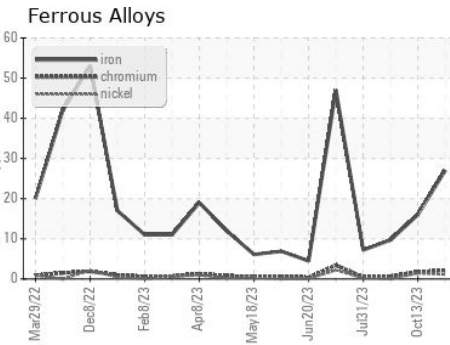
OIL ANALYSIS REPORT



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	14.2	14.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083173 **Received** : 20 Nov 2023
Lab Number : 06011988 **Diagnosed** : 21 Nov 2023
Unique Number : 10751132 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 074 - Douglas - Transwaste
 1219 Landfill Road
 Douglas, GA
 US 31533
 Contact: CURTIS JACOBS
 CURTIS.JACOBS@GFLENV.COM
 T: (912)384-6001
 F:

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)