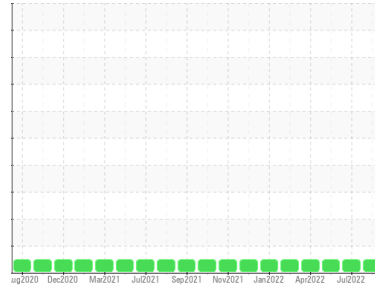




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
830010

Component
Diesel Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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		GFL0069710	GFL0050817	GFL0043330
Sample Date	Client Info		19 May 2023	04 Jul 2022	21 Apr 2022
Machine Age	hrs	Client Info	7319	4771	4459
Oil Age	hrs	Client Info	7319	312	629
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method		<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	9	7	8
Chromium	ppm	ASTM D5185m	<1	<1	<1
Nickel	ppm	ASTM D5185m	<1	0	<1
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m	0	2	2
Lead	ppm	ASTM D5185m	2	1	<1
Copper	ppm	ASTM D5185m	1	<1	<1
Tin	ppm	ASTM D5185m	<1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	8	19	8
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	57	50	48
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	640	554	535
Calcium	ppm	ASTM D5185m	1653	1710	1548
Phosphorus	ppm	ASTM D5185m	765	739	647
Zinc	ppm	ASTM D5185m	1063	968	938
Sulfur	ppm	ASTM D5185m	2828	2928	1986

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	4	4	3
Sodium	ppm	ASTM D5185m	7	6	6
Potassium	ppm	ASTM D5185m	2	0	0

INFRA-RED

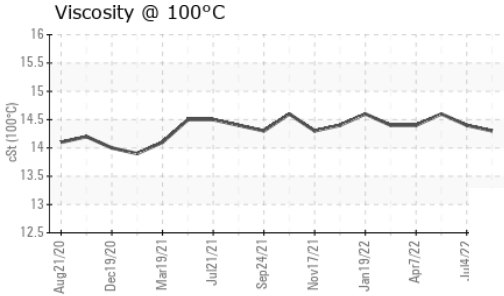
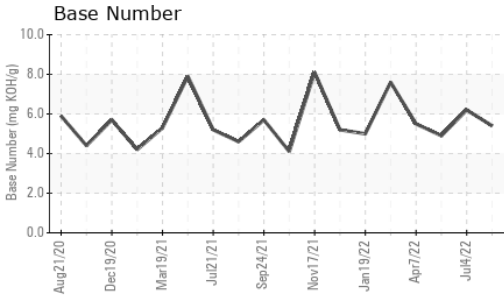
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	11.4	10.5	11.8
Sulfation	Abs/.1mm	*ASTM D7415	20.1	20.1	23.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	16.5	17.0	18.8
Base Number (BN)	mg KOH/g	ASTM D2896	5.4	6.2	4.9



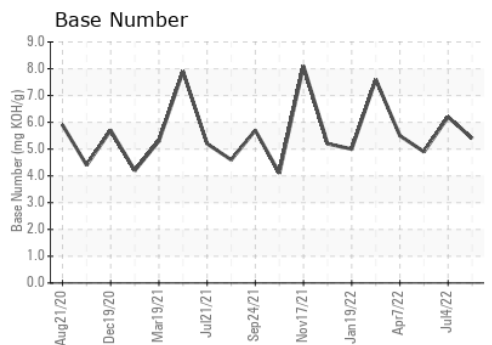
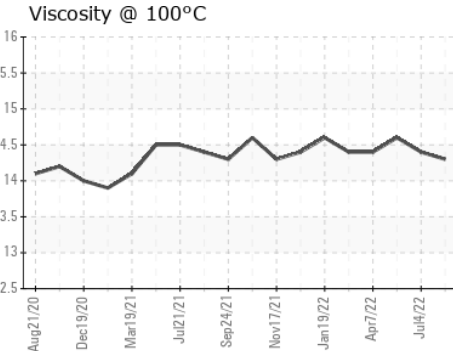
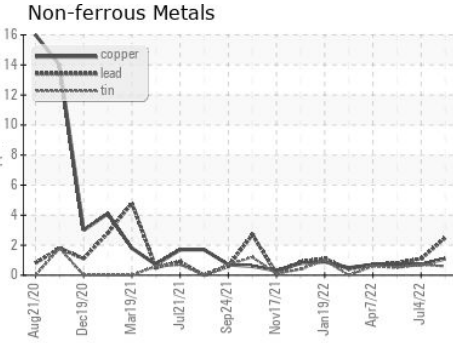
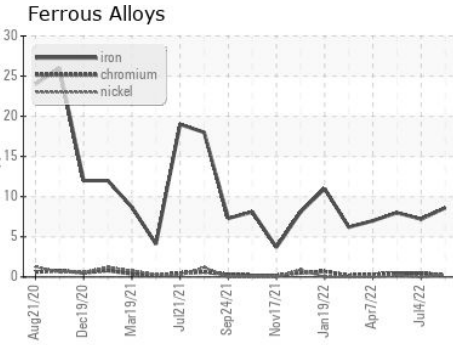
OIL ANALYSIS REPORT



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	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.3	14.4	14.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0069710 **Received** : 22 May 2023
Lab Number : 05853826 **Diagnosed** : 23 May 2023
Unique Number : 10483181 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 031 - Greenville/Spartanburg
 1635 Antioch Church Rd
 Piedmont, SC
 US 29673
 Contact: TECHNICIAN ACCOUNT
 catherine.anastasio@wearcheck.com

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)