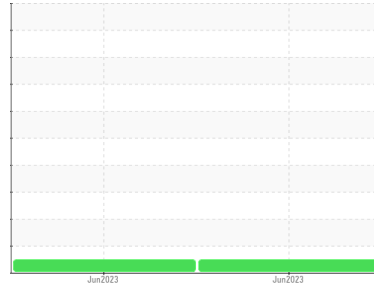




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
733022

Component
Natural Gas Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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	history 1	history 2
Sample Number	Client Info		GFL0084595	GFL0084680	---
Sample Date	Client Info		22 Jun 2023	07 Jun 2023	---
Machine Age	mls	Client Info	5621	4175	---
Oil Age	mls	Client Info	0	0	---
Oil Changed	Client Info		Not Chngd	Not Chngd	---
Sample Status			NORMAL	NORMAL	---

WEAR METALS

	method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m >50	36	37	---
Chromium	ppm	ASTM D5185m >4	<1	<1	---
Nickel	ppm	ASTM D5185m >2	1	<1	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >9	8	6	---
Lead	ppm	ASTM D5185m >30	0	0	---
Copper	ppm	ASTM D5185m >35	18	19	---
Tin	ppm	ASTM D5185m >4	1	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m 50	12	19	---
Barium	ppm	ASTM D5185m 5	1	1	---
Molybdenum	ppm	ASTM D5185m 50	50	52	---
Manganese	ppm	ASTM D5185m 0	13	14	---
Magnesium	ppm	ASTM D5185m 560	775	798	---
Calcium	ppm	ASTM D5185m 1510	1186	1208	---
Phosphorus	ppm	ASTM D5185m 780	673	751	---
Zinc	ppm	ASTM D5185m 870	936	944	---
Sulfur	ppm	ASTM D5185m 2040	2815	2929	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >+100	37	41	---
Sodium	ppm	ASTM D5185m	4	4	---
Potassium	ppm	ASTM D5185m >20	31	31	---

INFRA-RED

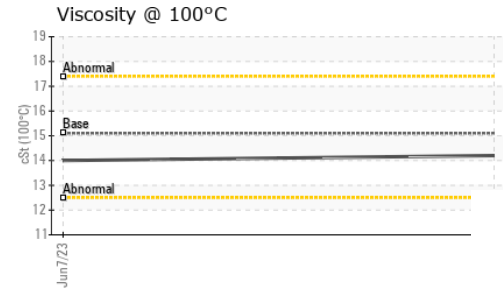
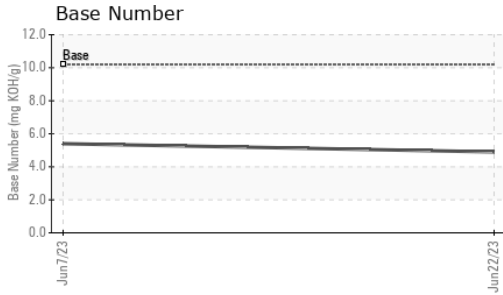
	method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624 >20	11.5	10.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.4	21.1	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414 >25	20.8	20.4	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	4.9	5.4	---



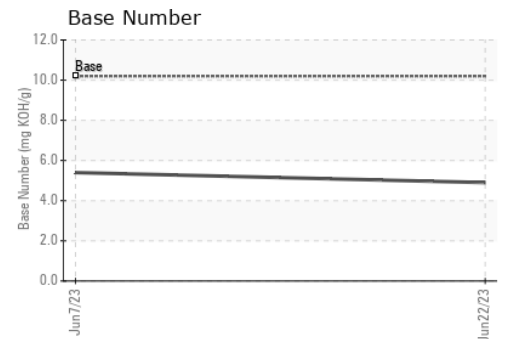
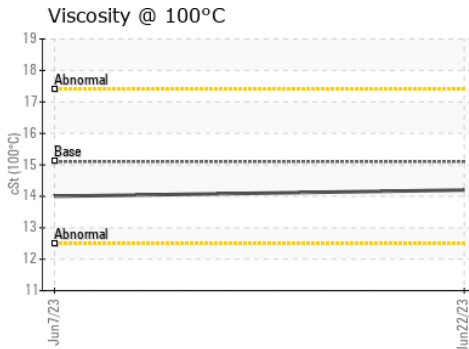
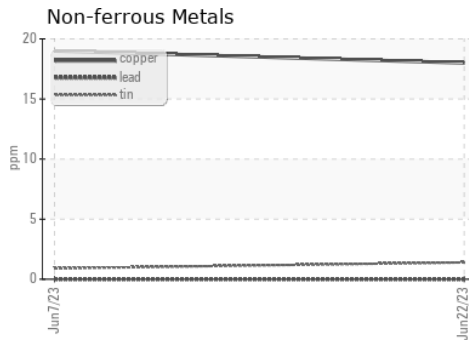
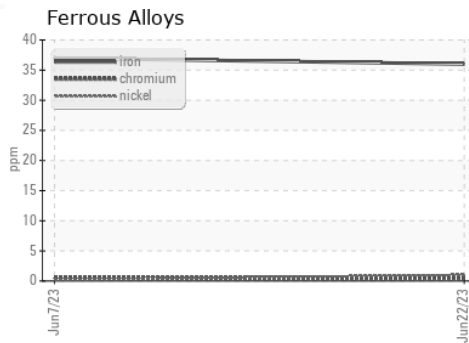
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	14.2	14.0

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0084595 **Received** : 27 Jun 2023
Lab Number : 05884926 **Diagnosed** : 30 Jun 2023
Unique Number : 10535409 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: KEITH ROWALD
 krowald@gflenv.com
 T: (303)641-3906
 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)