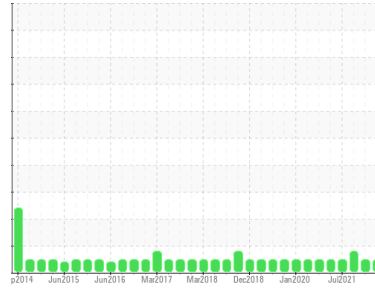




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
3600C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (9 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		GFL0087534	GFL0071799	GFL0043344
Sample Date	Client Info		07 Aug 2023	18 Apr 2023	07 Apr 2022
Machine Age	hrs	Client Info	19766	19388	19388
Oil Age	hrs	Client Info	528	150	218
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			NORMAL	NORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	11	8	16
Chromium	ppm	ASTM D5185m >4	<1	2	2
Nickel	ppm	ASTM D5185m >2	<1	<1	<1
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m >3	<1	0	<1
Aluminum	ppm	ASTM D5185m >9	<1	<1	2
Lead	ppm	ASTM D5185m >30	<1	<1	<1
Copper	ppm	ASTM D5185m >35	16	12	▲ 63
Tin	ppm	ASTM D5185m >4	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	31	34	21
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	50	48	57
Manganese	ppm	ASTM D5185m 0	<1	2	<1
Magnesium	ppm	ASTM D5185m 560	575	525	584
Calcium	ppm	ASTM D5185m 1510	1608	1422	1688
Phosphorus	ppm	ASTM D5185m 780	799	714	808
Zinc	ppm	ASTM D5185m 870	978	879	974
Sulfur	ppm	ASTM D5185m 2040	2988	2612	2236

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	5	7	4
Sodium	ppm	ASTM D5185m	7	6	10
Potassium	ppm	ASTM D5185m >20	2	2	<1

INFRA-RED

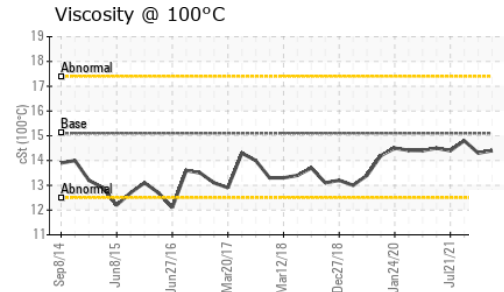
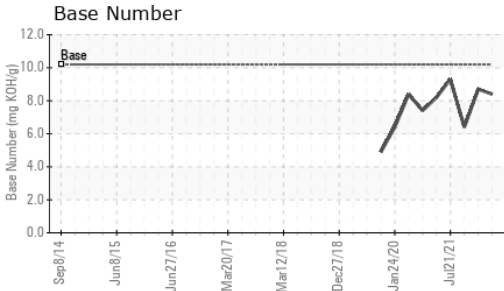
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	7.3	6.9	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.3	18.3	20.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.1	15.4	17.7
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	8.4	8.7	6.4



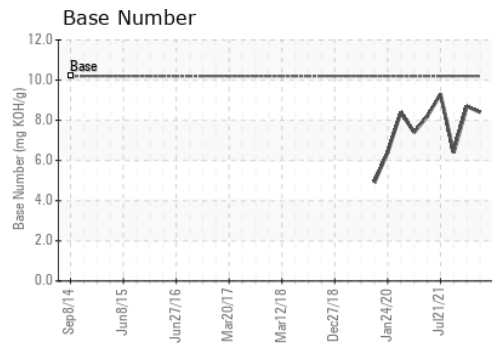
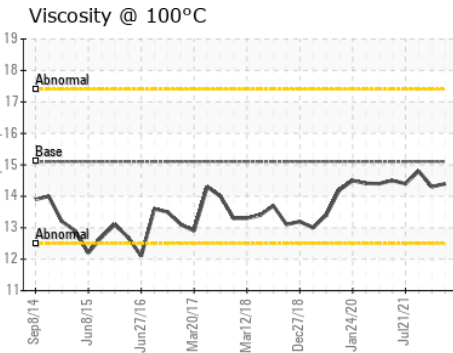
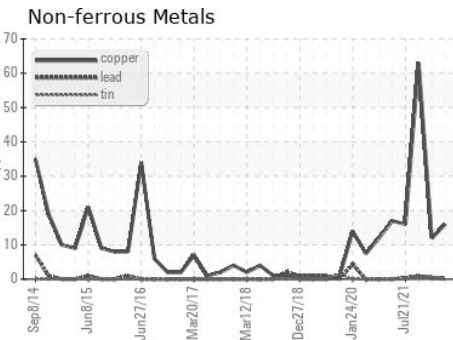
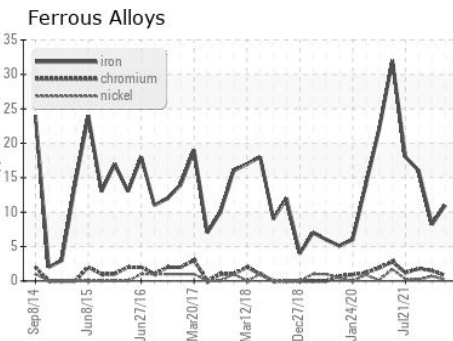
OIL ANALYSIS REPORT



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	14.4	14.3	14.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0087534
Lab Number : **05918354**
Unique Number : 10590268
Test Package : FLEET

GFL Environmental - 331 - Columbus
 180 Ada Moore Rd
 Columbus, NC
 US 28722
 Contact: Matt Segars
 matt.segars@gflenv.com
 T: (800)207-6618
 F: (252)617-2494

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)