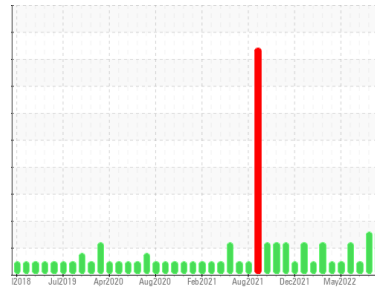




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
10770C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (30 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Cylinder, crank, or cam shaft wear is indicated.

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		GFL0123390	GFL05985446	GFL0050772
Sample Date	Client Info		20 Jun 2024	19 Oct 2023	12 Apr 2023
Machine Age	hrs	Client Info	14518	0	14518
Oil Age	hrs	Client Info	14518	0	1171
Oil Changed		Client Info	N/A	N/A	Changed
Sample Status			ABNORMAL	ABNORMAL	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	▲ 60	▲ 65	37
Chromium	ppm	ASTM D5185m >4	▲ 4	▲ 6	1
Nickel	ppm	ASTM D5185m >2	3	2	0
Titanium	ppm	ASTM D5185m	<1	1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	2	3	11
Lead	ppm	ASTM D5185m >30	9	2	3
Copper	ppm	ASTM D5185m >35	24	7	2
Tin	ppm	ASTM D5185m >4	<1	1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	4	20	8
Barium	ppm	ASTM D5185m 5	<1	3	0
Molybdenum	ppm	ASTM D5185m 50	56	54	64
Manganese	ppm	ASTM D5185m 0	1	2	2
Magnesium	ppm	ASTM D5185m 560	565	543	967
Calcium	ppm	ASTM D5185m 1510	1816	1521	1147
Phosphorus	ppm	ASTM D5185m 780	738	758	1033
Zinc	ppm	ASTM D5185m 870	1051	940	1264
Sulfur	ppm	ASTM D5185m 2040	2877	2440	3761

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	13	13	4
Sodium	ppm	ASTM D5185m	17	14	3
Potassium	ppm	ASTM D5185m >20	21	4	8

INFRA-RED

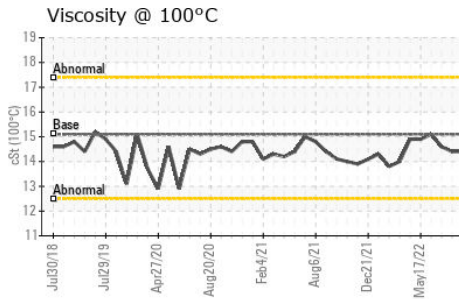
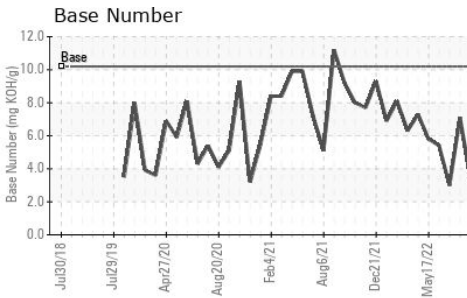
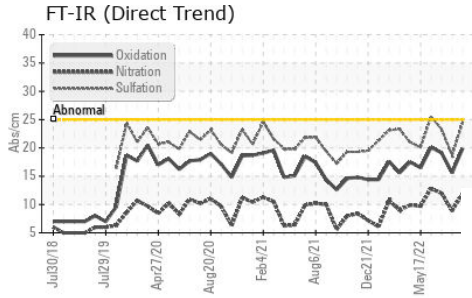
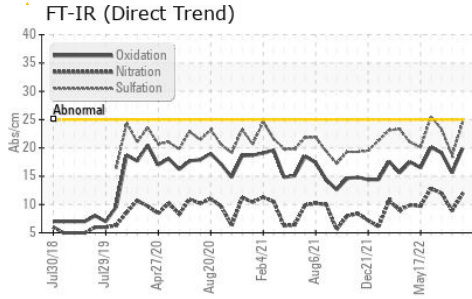
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	11.9	8.9	12.0
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.5	18.7	23.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.9	15.6	19.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	3.4	7.1	3.0



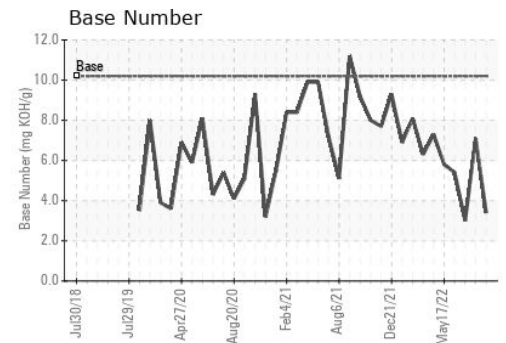
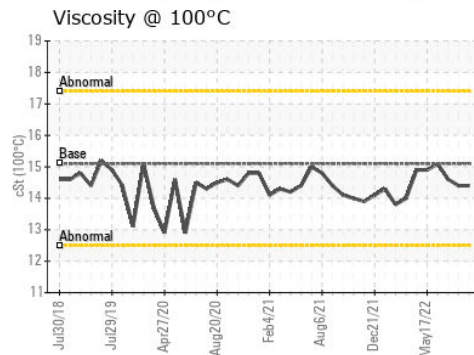
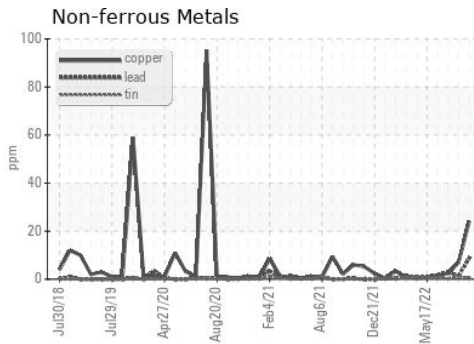
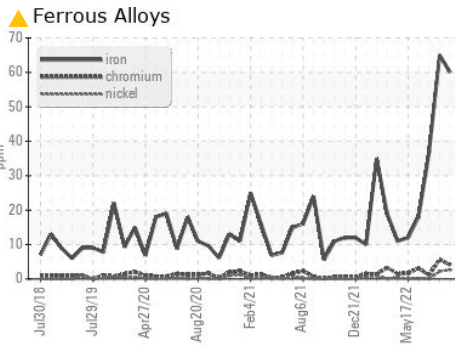
OIL ANALYSIS REPORT



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	14.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0123390
 Lab Number : 06223345
 Unique Number : 11101542
 Test Package : FLEET

Received : 28 Jun 2024
 Tested : 01 Jul 2024
 Diagnosed : 01 Jul 2024 - Don Baldrige

GFL Environmental - 007 - Brunswick
 2809 Galloway Road
 Bolivia, NC
 US 28422
 Contact: DONALD CRAVEN
 dcraven@gflenv.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)

F: (910)253-4179