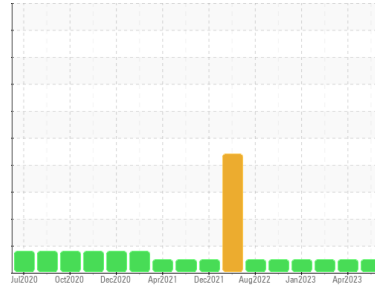




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
810013

Component
Natural Gas Engine

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

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		GFL0090072	GFL0070784	GFL0070781
Sample Date	Client Info		02 Nov 2023	27 Apr 2023	07 Apr 2023
Machine Age	hrs	Client Info	8372	7234	7110
Oil Age	hrs	Client Info	600	600	600
Oil Changed		Client Info	Changed	N/A	Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	5	5	9
Chromium	ppm	ASTM D5185m >4	<1	0	0
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	<1	<1	2
Lead	ppm	ASTM D5185m >30	0	0	0
Copper	ppm	ASTM D5185m >35	1	<1	2
Tin	ppm	ASTM D5185m >4	0	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	39	34	6
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	48	52	45
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	533	618	452
Calcium	ppm	ASTM D5185m 1510	1461	1688	1449
Phosphorus	ppm	ASTM D5185m 780	667	800	565
Zinc	ppm	ASTM D5185m 870	888	1003	781
Sulfur	ppm	ASTM D5185m 2040	2296	2753	1904

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	6	5	4
Sodium	ppm	ASTM D5185m	6	6	8
Potassium	ppm	ASTM D5185m >20	0	0	0

INFRA-RED

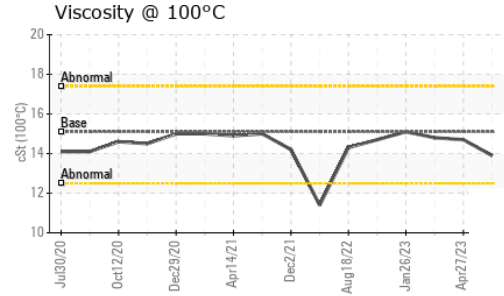
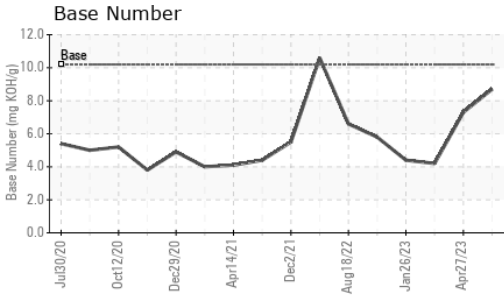
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624 >20	7.8	7.6	10.9
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.7	17.4	22.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.4	15.7	18.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	8.7	7.3	4.2



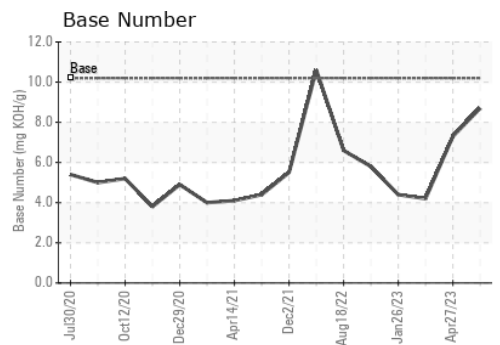
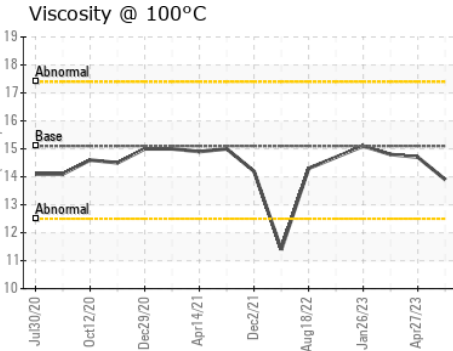
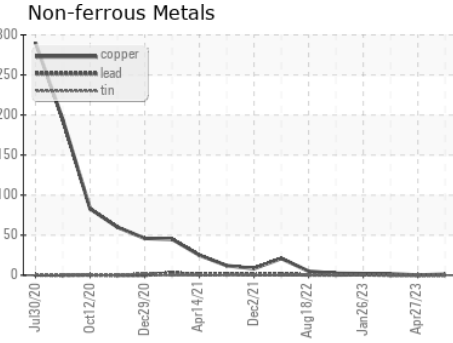
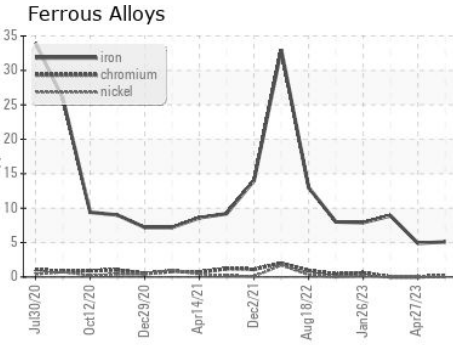
OIL ANALYSIS REPORT



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	13.9	14.7	14.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0090072 **Received** : 03 Nov 2023
Lab Number : **05997747** **Diagnosed** : 06 Nov 2023
Unique Number : 10726107 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 030 - Conway Myrtle Beach
 3010 HWY 378
 Conway, SC
 US 29527
 Contact: CHET STROSCHINE
 cstroschine@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)