



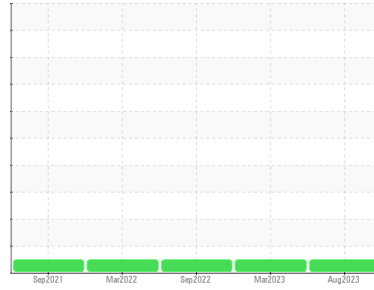
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
731058
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- LTR)



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 condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0085883	GFL0064336	GFL0054882
Sample Date	Client Info		24 Aug 2023	17 Mar 2023	02 Sep 2022
Machine Age	hrs	Client Info	5242	4308	3177
Oil Age	hrs	Client Info	1200	1200	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >50	11	13	13
Chromium	ppm	ASTM D5185(m) >4	1	<1	<1
Nickel	ppm	ASTM D5185(m) >2	0	<1	<1
Titanium	ppm	ASTM D5185(m)	<1	<1	<1
Silver	ppm	ASTM D5185(m) >3	0	0	0
Aluminum	ppm	ASTM D5185(m) >9	3	2	2
Lead	ppm	ASTM D5185(m) >30	1	1	<1
Copper	ppm	ASTM D5185(m) >35	1	1	1
Tin	ppm	ASTM D5185(m) >4	<1	<1	<1
Antimony	ppm	ASTM D5185(m)	0	<1	0
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 50	8	9	7
Barium	ppm	ASTM D5185(m) 5	0	0	0
Molybdenum	ppm	ASTM D5185(m) 50	86	54	54
Manganese	ppm	ASTM D5185(m) 0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m) 560	643	600	549
Calcium	ppm	ASTM D5185(m) 1510	1498	1733	1574
Phosphorus	ppm	ASTM D5185(m) 780	761	818	720
Zinc	ppm	ASTM D5185(m) 870	894	955	882
Sulfur	ppm	ASTM D5185(m) 2040	2199	2093	2019
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >+100	5	4	4
Sodium	ppm	ASTM D5185(m)	7	9	8
Potassium	ppm	ASTM D5185(m) >20	<1	<1	<1

INFRA-RED

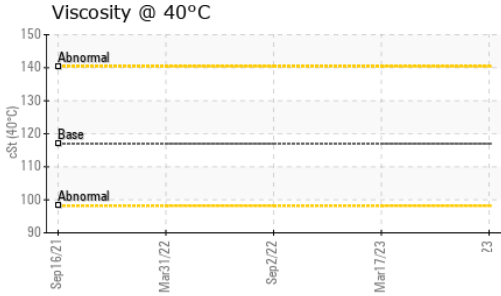
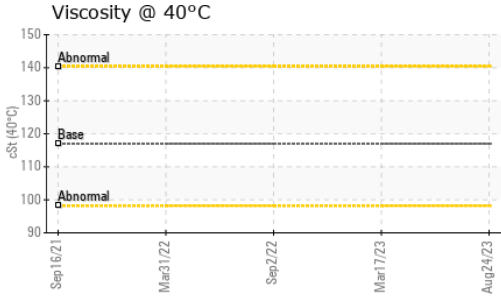
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	11.0	10.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	23.4	22.6

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4	14.6



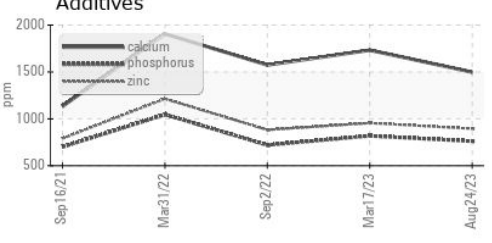
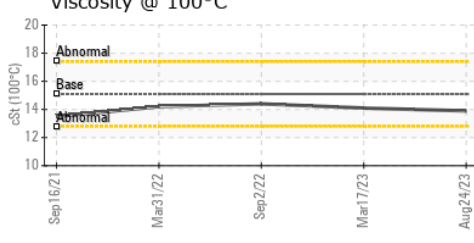
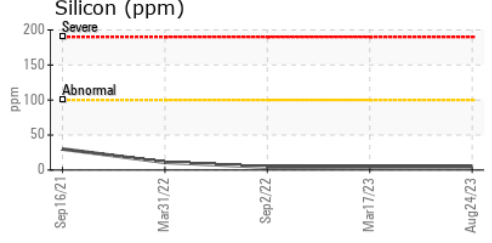
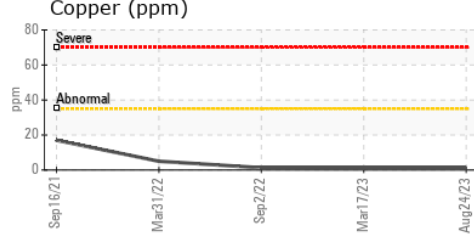
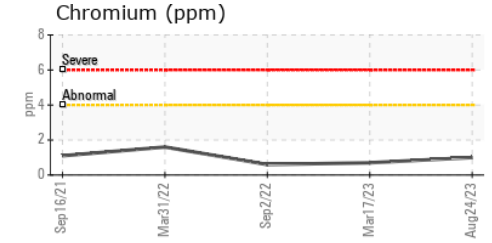
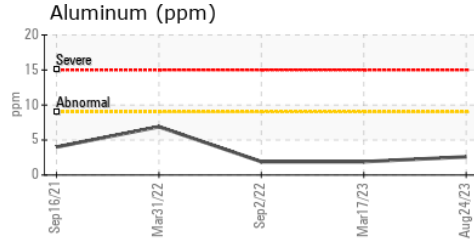
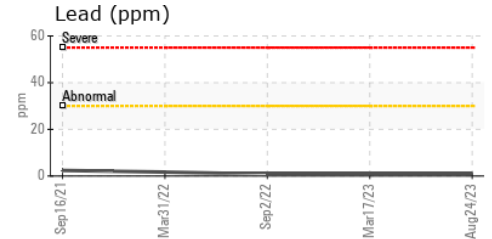
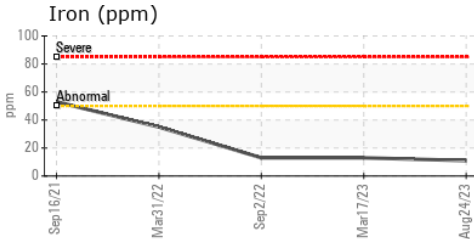
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
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	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	117.0	99.8	---
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	13.9	14.1
Viscosity Index (VI)	Scale	ASTM D2270*	134	141	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 209 - Hamilton**
Sample No. : GFL0085883 **Received** : 29 Aug 2023
Lab Number : 02579084 **Diagnosed** : 29 Aug 2023
Unique Number : 5632144 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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