



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
3646c
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

▲ Wear

Piston, ring and cylinder 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	GFL0109523	---	---
Sample Date	Client Info	03 Apr 2024	---	---
Machine Age	hrs	Client Info	0	---
Oil Age	hrs	Client Info	1200	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	▲ 63	---
Chromium	ppm	ASTM D5185m	>4	▲ 9	---
Nickel	ppm	ASTM D5185m	>2	0	---
Titanium	ppm	ASTM D5185m		0	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>9	▲ 7	---
Lead	ppm	ASTM D5185m	>30	5	---
Copper	ppm	ASTM D5185m	>35	26	---
Tin	ppm	ASTM D5185m	>4	<1	---
Vanadium	ppm	ASTM D5185m		0	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	50	15	---
Barium	ppm	ASTM D5185m	5	0	---
Molybdenum	ppm	ASTM D5185m	50	61	---
Manganese	ppm	ASTM D5185m	0	2	---
Magnesium	ppm	ASTM D5185m	560	775	---
Calcium	ppm	ASTM D5185m	1510	1377	---
Phosphorus	ppm	ASTM D5185m	780	909	---
Zinc	ppm	ASTM D5185m	870	1058	---
Sulfur	ppm	ASTM D5185m	2040	2725	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	21	---
Sodium	ppm	ASTM D5185m		8	---
Potassium	ppm	ASTM D5185m	>20	0	---

INFRA-RED

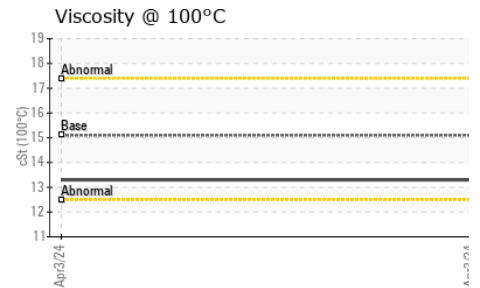
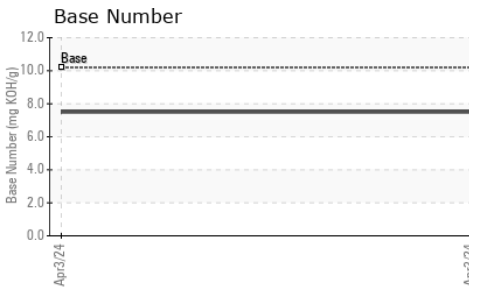
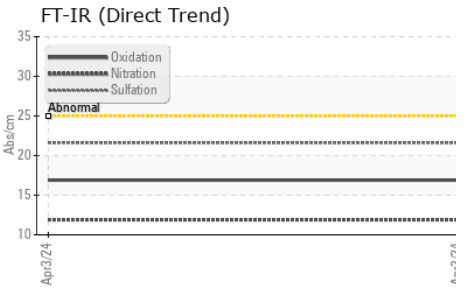
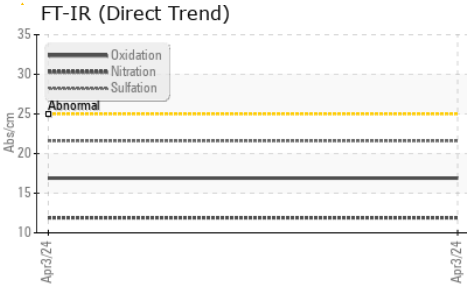
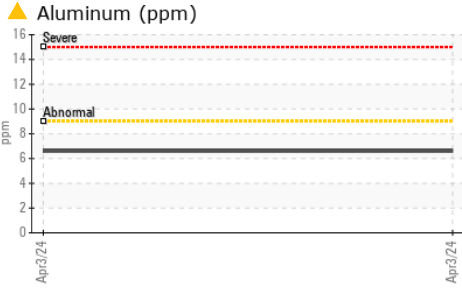
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	11.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.5	---



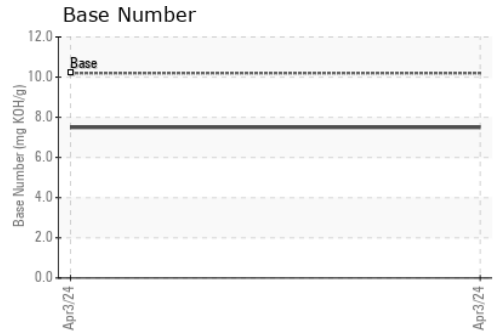
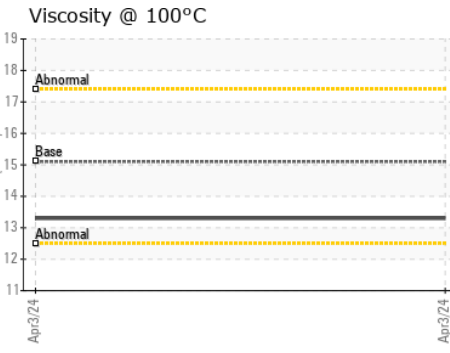
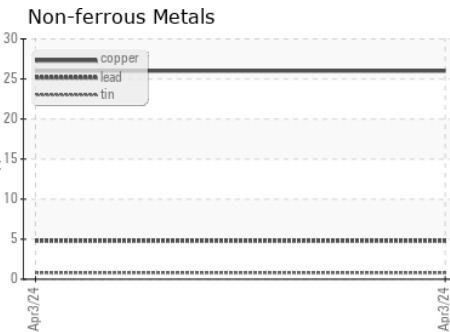
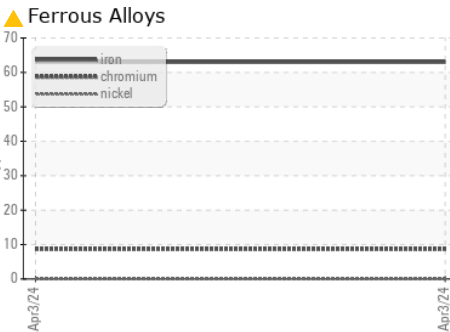
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.3	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109523
Lab Number : 06141098
Unique Number : 10965906
Test Package : FLEET

Received : 08 Apr 2024
Tested : 09 Apr 2024
Diagnosed : 10 Apr 2024 - Jonathan Hester

GFL Environmental - 019 - Greenville/TriEast
 415 Staton Road
 Greenville, NC
 US 27834
 Contact: Gerald Fowler
 gfwler@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)