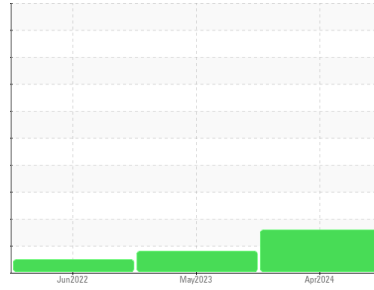




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
401022
 Component
Transmission (Auto)
 Fluid
PETRO CANADA SYNTHETIC BLEND ATF (--- GAL)

DIAGNOSIS

Recommendation

The fluid change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. We recommend an early resample to monitor this condition.

Wear

Aluminum and iron ppm levels are abnormal. Torque converter wear is indicated. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

There is no indication of any contamination in the fluid.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of fluid. The AN level is acceptable for this fluid. The fluid is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0117305	GFL0077625	GFL0052682
Sample Date	Client Info		16 Apr 2024	23 May 2023	07 Jun 2022
Machine Age	kms	Client Info	21330	685858	0
Oil Age	kms	Client Info	1822	0	0
Oil Changed	Client Info		Changed	Changed	N/A
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	
PQ	ASTM D8184*	>50	6	---	---	
Iron	ppm	ASTM D5185(m)	>160	▲ 194	121	96
Chromium	ppm	ASTM D5185(m)	>5	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>5	0	0	0
Aluminum	ppm	ASTM D5185(m)	>50	▲ 84	▲ 65	46
Lead	ppm	ASTM D5185(m)	>50	13	7	5
Copper	ppm	ASTM D5185(m)	>225	66	39	23
Tin	ppm	ASTM D5185(m)	>10	5	3	2
Antimony	ppm	ASTM D5185(m)		0	0	<1
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)	90	69	75	83
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	<1
Manganese	ppm	ASTM D5185(m)		1	1	<1
Magnesium	ppm	ASTM D5185(m)		1	1	1
Calcium	ppm	ASTM D5185(m)	30	103	106	103
Phosphorus	ppm	ASTM D5185(m)	310	227	253	242
Zinc	ppm	ASTM D5185(m)	40	11	8	8
Sulfur	ppm	ASTM D5185(m)	2800	1144	1180	1183
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

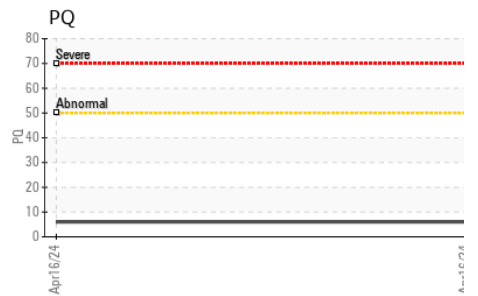
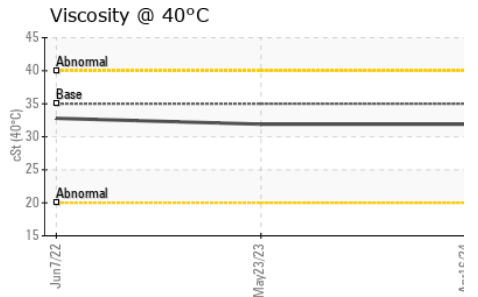
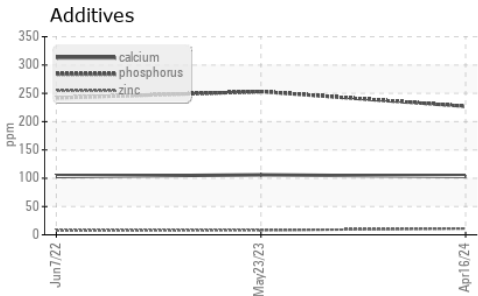
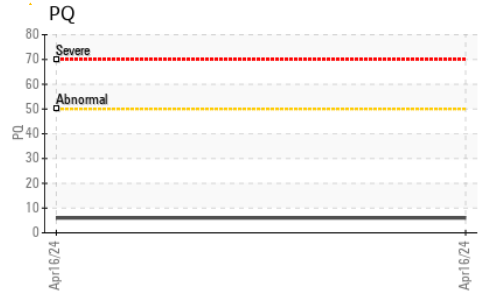
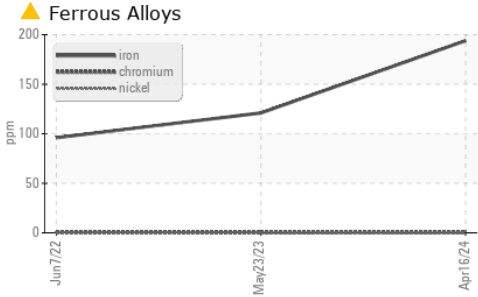
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Silicon	ppm	ASTM D5185(m)	>20	17	14	13
Sodium	ppm	ASTM D5185(m)		9	9	7
Potassium	ppm	ASTM D5185(m)	>20	2	2	2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.26	1.18	1.19	1.26



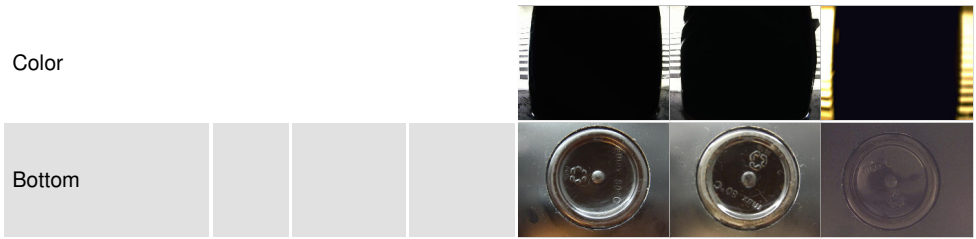
OIL ANALYSIS REPORT



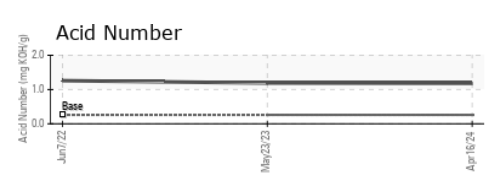
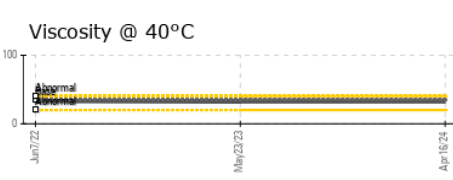
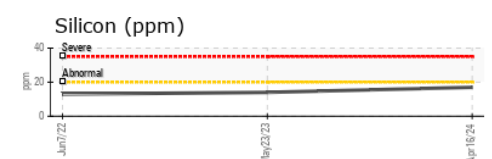
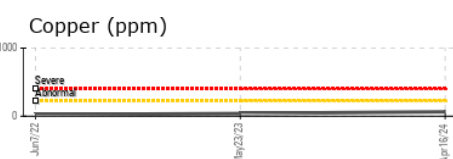
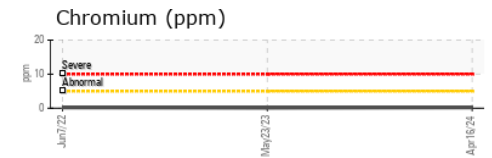
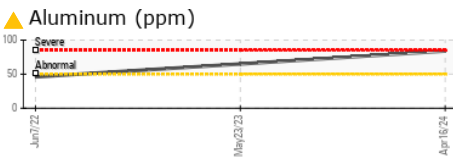
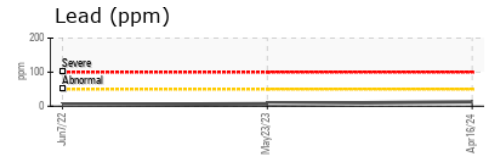
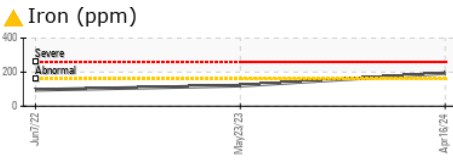
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	LIGHT	LIGHT
Appearance	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 @ 40°C	cSt	ASTM D7279(m)	35.0	31.9	32.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0117305
Lab Number : 02631001
Unique Number : 5772154
Test Package : MOB 2 (Additional Tests: PQ, TAN Man)
Received : 23 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 23 Apr 2024 - Kevin Marson

GFL Environmental - 550 - Rocky View County
 220 Carmek Blvd
 Rocky View County, AB
 CA T1X 1X1
 Contact: GFL Calgary
 calgarymaintenance@gflenv.com

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.

T:
 F: (403)369-6163