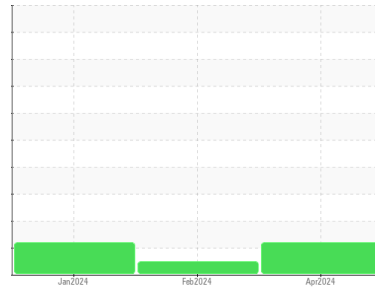




OIL ANALYSIS REPORT

Sample Rating Trend



COOL CHEMICALS



Machine Id
433020
 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. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0114434	GFL0114496	GFL0103963
Sample Date	Client Info		09 Apr 2024	24 Feb 2024	27 Jan 2024
Machine Age	mls	Client Info	21105	862	603
Oil Age	mls	Client Info	0	862	603
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	NORMAL	ABNORMAL

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	14	12	31
Chromium	ppm	ASTM D5185m >4	<1	0	<1
Nickel	ppm	ASTM D5185m >2	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	12	4	11
Lead	ppm	ASTM D5185m >30	<1	0	1
Copper	ppm	ASTM D5185m >35	3	3	15
Tin	ppm	ASTM D5185m >4	<1	0	1
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	6	23	7
Barium	ppm	ASTM D5185m 5	0	0	2
Molybdenum	ppm	ASTM D5185m 50	51	53	48
Manganese	ppm	ASTM D5185m 0	2	2	13
Magnesium	ppm	ASTM D5185m 560	565	675	710
Calcium	ppm	ASTM D5185m 1510	1611	1727	1143
Phosphorus	ppm	ASTM D5185m 780	750	930	653
Zinc	ppm	ASTM D5185m 870	936	1150	872
Sulfur	ppm	ASTM D5185m 2040	2822	2945	2233

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	7	8	33
Sodium	ppm	ASTM D5185m	8	5	4
Potassium	ppm	ASTM D5185m >20	▲ 60	16	▲ 51

INFRA-RED

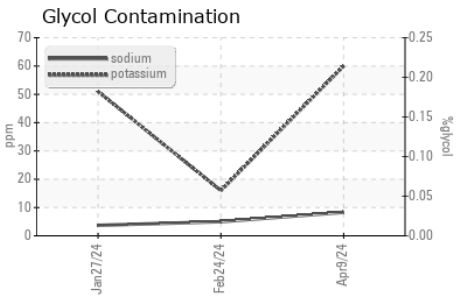
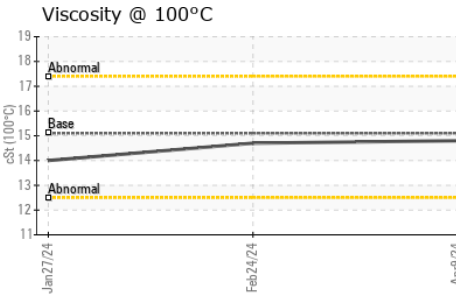
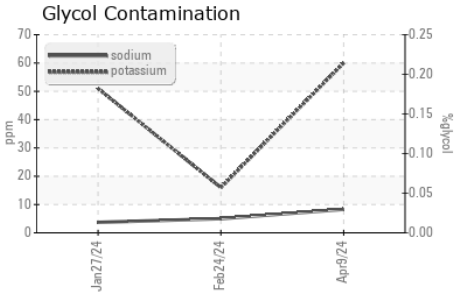
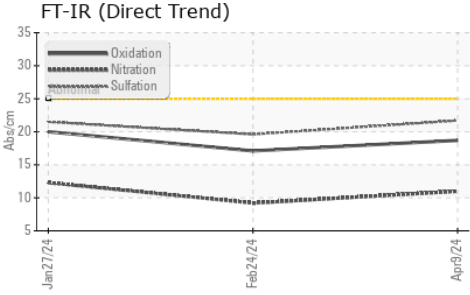
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	11.0	9.2	12.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.7	19.6	21.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.7	17.1	20.0
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	4.9	6.8	4.9



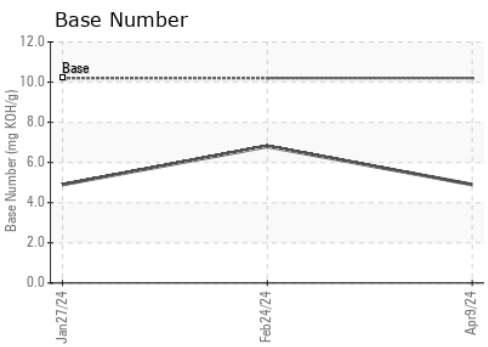
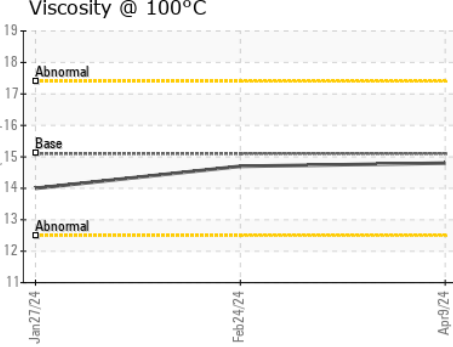
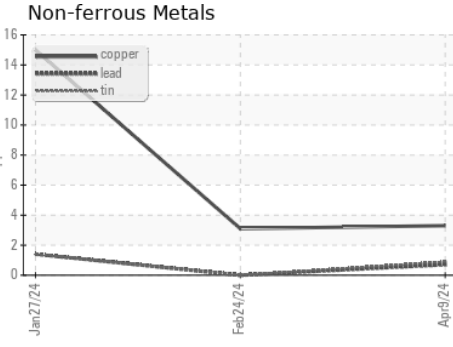
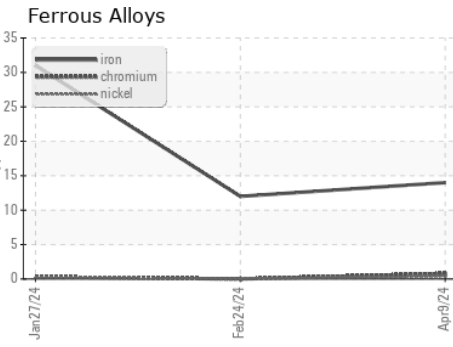
OIL ANALYSIS REPORT



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	14.8	14.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0114434
Lab Number : 06150922
Unique Number : 10981000
Test Package : FLEET (Additional Tests: Glycol)

Received : 16 Apr 2024

Tested : 19 Apr 2024

Diagnosed : 19 Apr 2024 - Jonathan Hester

GFL Environmental - 865 - East Mount Hauling
 7213 East Mount Houston Road
 Houston, TX
 US 77050

Contact: Saul Castillo
 saul.castillo@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)

T:
F: