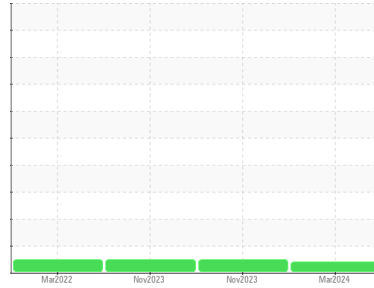




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
834M

Component
Gasoline Engine

Fluid
PETRO CANADA DURON UHP 5W30 (36 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0104291	GFL0059278	GFL0059291
Sample Date	Client Info		06 Mar 2024	25 Nov 2023	16 Nov 2023
Machine Age	mls	Client Info	144321	136531	135920
Oil Age	mls	Client Info	143710	136531	135920
Oil Changed	Client Info		N/A	Not Changd	Changed
Sample Status			ATTENTION	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >150	13	66	7
Chromium	ppm	ASTM D5185m >20	<1	3	<1
Nickel	ppm	ASTM D5185m >5	<1	<1	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >40	4	6	4
Lead	ppm	ASTM D5185m >50	0	0	0
Copper	ppm	ASTM D5185m >155	0	3	11
Tin	ppm	ASTM D5185m >10	<1	0	<1
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	25	2	2
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 64	133	58	52
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 1160	407	879	826
Calcium	ppm	ASTM D5185m 820	1040	1052	937
Phosphorus	ppm	ASTM D5185m 1160	591	929	929
Zinc	ppm	ASTM D5185m 1260	710	1130	1115
Sulfur	ppm	ASTM D5185m 3000	1810	2288	2818

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >30	26	13	6
Sodium	ppm	ASTM D5185m >400	4	11	4
Potassium	ppm	ASTM D5185m >20	2	<1	6
Fuel	%	ASTM D3524 >4.0	0.7	<1.0	<1.0

INFRA-RED

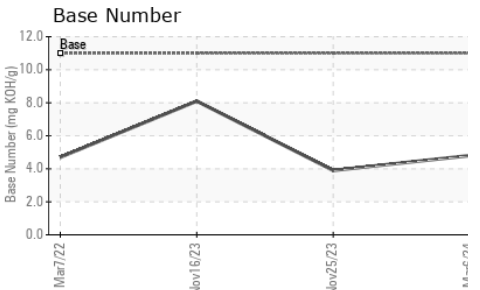
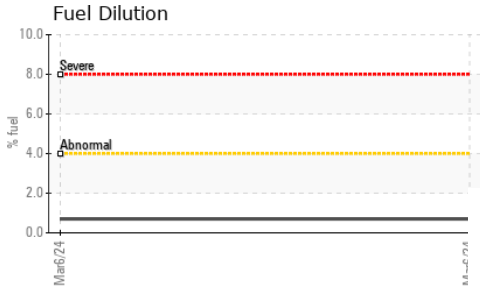
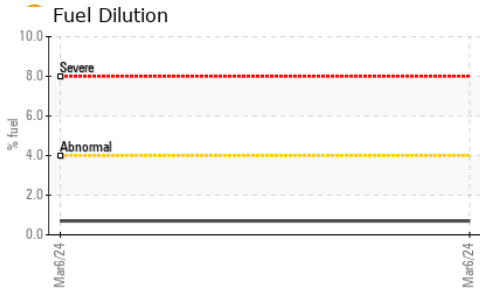
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	1.3	0.2
Nitration	Abs/cm	*ASTM D7624 >20	11.4	16.3	5.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.7	30.6	18.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.9	32.7	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 11.0	4.8	3.9	8.1



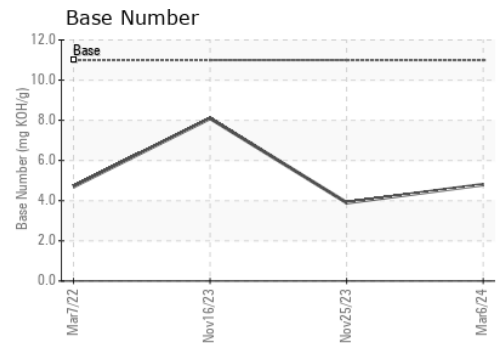
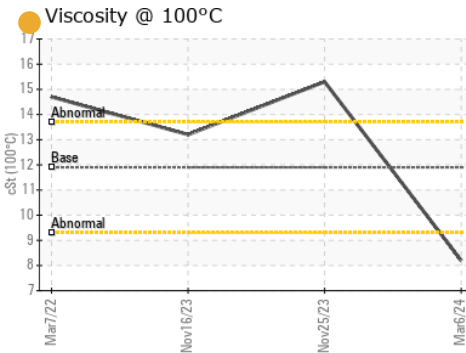
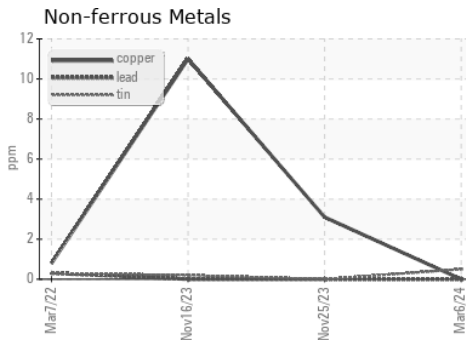
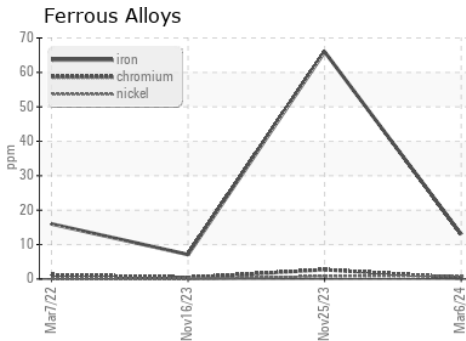
OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9 ● 8.2	15.3	13.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0104291 **Received** : 08 Mar 2024
Lab Number : 06112656 **Tested** : 12 Mar 2024
Unique Number : 10916153 **Diagnosed** : 12 Mar 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 410 - Michigan West
 39000 Van Born Rd
 Wayne, MI
 US 48184
 Contact: Belal Dgheish
 bdgheish@gflenv.com
 T: (734)714-2340
 F:

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)