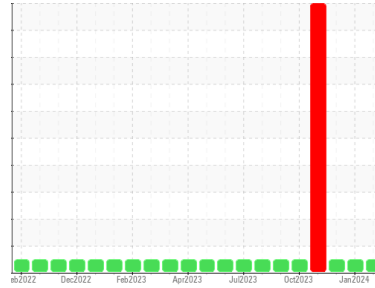




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
731120

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

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 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		GFL0109766	GFL0103353	GFL0099945
Sample Date	Client Info		30 Jan 2024	02 Jan 2024	29 Nov 2023
Machine Age	hrs	Client Info	6774	6596	6430
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			NORMAL	NORMAL	NORMAL

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	39	3	13
Chromium	ppm	ASTM D5185m >4	2	<1	<1
Nickel	ppm	ASTM D5185m >2	<1	0	0
Titanium	ppm	ASTM D5185m	<1	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	4	2	2
Lead	ppm	ASTM D5185m >30	2	<1	3
Copper	ppm	ASTM D5185m >35	<1	<1	1
Tin	ppm	ASTM D5185m >4	1	1	<1
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 50	12	25	8
Barium	ppm	ASTM D5185m 5	0	0	2
Molybdenum	ppm	ASTM D5185m 50	50	49	59
Manganese	ppm	ASTM D5185m 0	<1	<1	0
Magnesium	ppm	ASTM D5185m 560	494	545	847
Calcium	ppm	ASTM D5185m 1510	1627	1631	1123
Phosphorus	ppm	ASTM D5185m 780	746	827	945
Zinc	ppm	ASTM D5185m 870	938	965	1170
Sulfur	ppm	ASTM D5185m 2040	2513	2577	4222

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	12	6	8
Sodium	ppm	ASTM D5185m	19	6	2
Potassium	ppm	ASTM D5185m >20	1	0	4

INFRA-RED

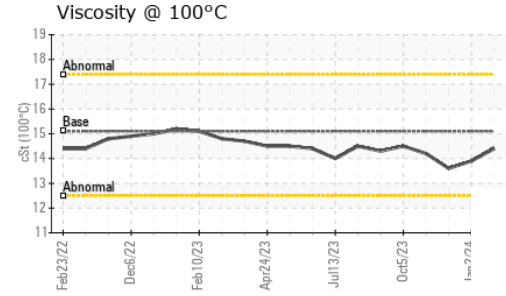
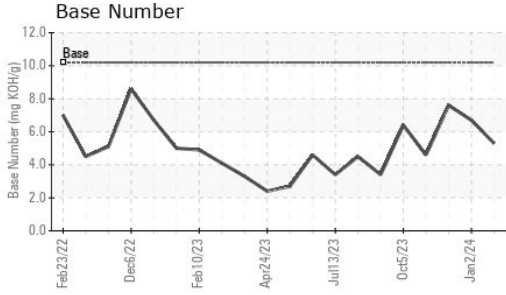
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0	0.4
Nitration	Abs/cm	*ASTM D7624 >20	10.9	8.8	9.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.5	19.2	21.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.8	16.0	18.3
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	5.3	6.7	7.6



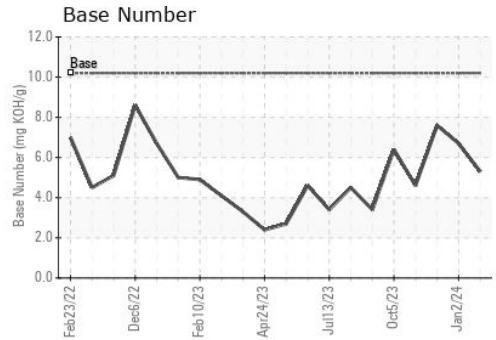
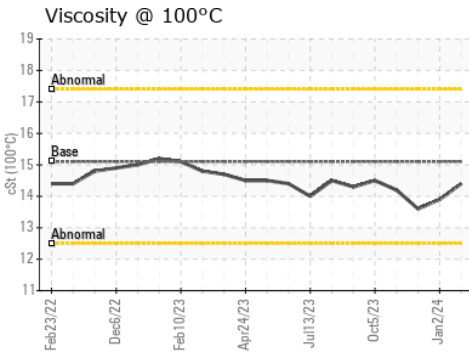
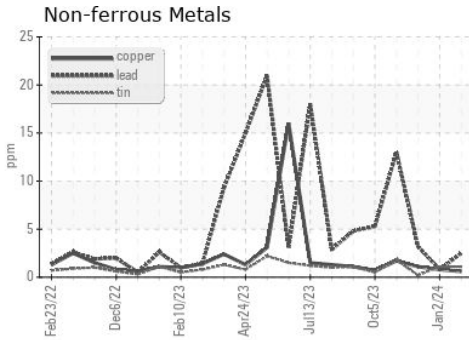
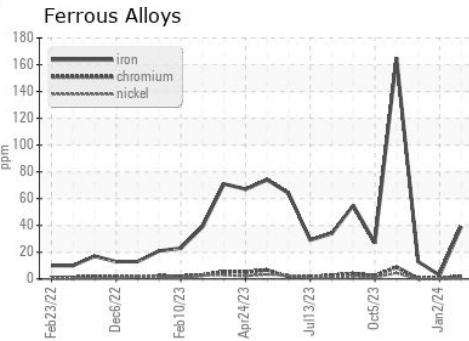
OIL ANALYSIS REPORT



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	14.4	13.9	13.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109766 **Received** : 01 Feb 2024
Lab Number : **06077479** **Diagnosed** : 04 Feb 2024
Unique Number : 10859570 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Robert Hart
 rhart@gflenv.com
 T: (580)461-1509
 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)