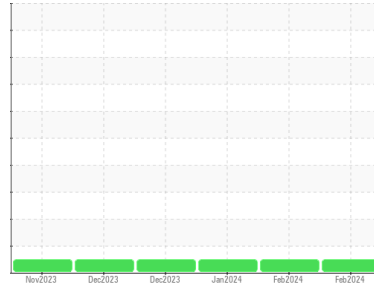




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
834047

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 suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2	
Sample Number	Client Info	GFL0114104	GFL0108057	GFL0108123	
Sample Date	Client Info	28 Feb 2024	21 Feb 2024	29 Jan 2024	
Machine Age	hrs	Client Info	1163	1123	997
Oil Age	hrs	Client Info	1163	1123	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	72	72	91
Chromium	ppm	ASTM D5185m >4	<1	<1	1
Nickel	ppm	ASTM D5185m >2	2	2	3
Titanium	ppm	ASTM D5185m	<1	0	<1
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >9	5	6	7
Lead	ppm	ASTM D5185m >30	2	3	4
Copper	ppm	ASTM D5185m >35	17	20	29
Tin	ppm	ASTM D5185m >4	2	2	3
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 50	2	5	6
Barium	ppm	ASTM D5185m 5	3	0	18
Molybdenum	ppm	ASTM D5185m 50	57	65	84
Manganese	ppm	ASTM D5185m 0	14	14	19
Magnesium	ppm	ASTM D5185m 560	984	927	1212
Calcium	ppm	ASTM D5185m 1510	1367	1327	1739
Phosphorus	ppm	ASTM D5185m 780	877	872	1085
Zinc	ppm	ASTM D5185m 870	1059	1057	1361
Sulfur	ppm	ASTM D5185m 2040	2585	2511	3936

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	31	33	45
Sodium	ppm	ASTM D5185m	6	8	5
Potassium	ppm	ASTM D5185m >20	2	2	4

INFRA-RED

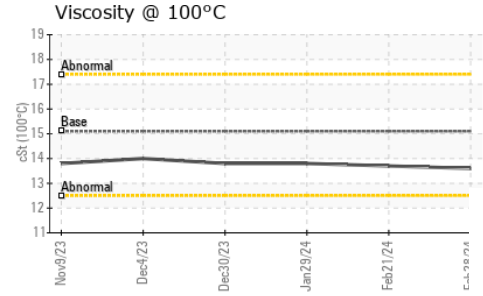
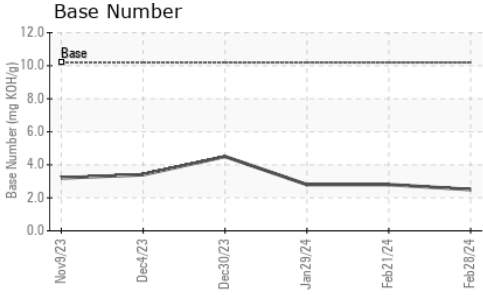
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0	0	0
Nitration	Abs/cm	*ASTM D7624 >20	13.9	13.6	13.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	27.1	26.8	26.0

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	26.3	▲ 25.4	24.2
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	2.5	2.8	2.8



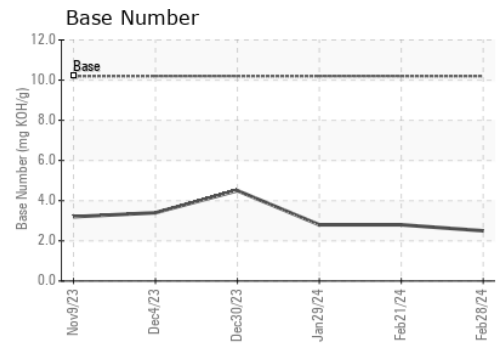
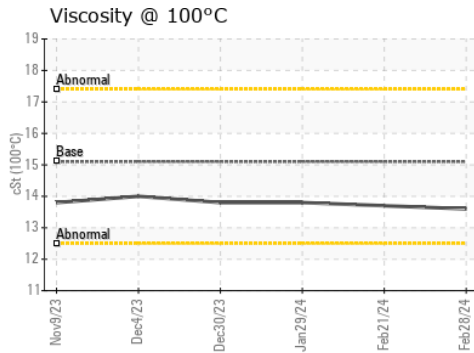
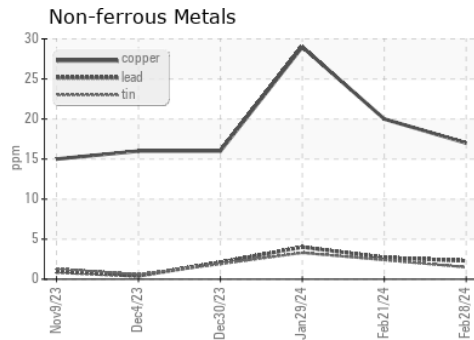
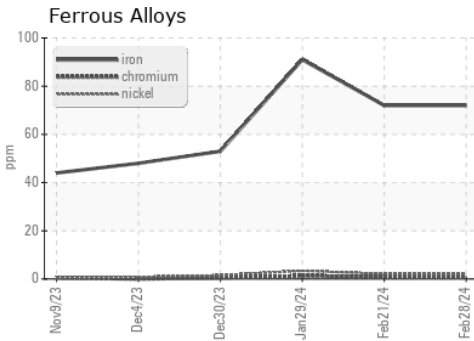
OIL ANALYSIS REPORT



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	LIGHT	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	13.6	13.7	13.8

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0114104
Lab Number : 06107981
Unique Number : 10911478
Test Package : FLEET

Received : 04 Mar 2024
Tested : 05 Mar 2024
Diagnosed : 06 Mar 2024 - Jonathan Hester

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: JOHNNY PEREZ
 johnny.perez@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: