



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
834015
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0102444	GFL0102411	GFL0102540
Sample Date		Client Info		04 Jan 2024	13 Dec 2023	28 Nov 2023
Machine Age	hrs	Client Info		723	582	482
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	N/A	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	59	54	51
Chromium	ppm	ASTM D5185m	>4	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	2	1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>9	6	5	3
Lead	ppm	ASTM D5185m	>30	3	1	<1
Copper	ppm	ASTM D5185m	>35	19	18	20
Tin	ppm	ASTM D5185m	>4	3	2	2
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

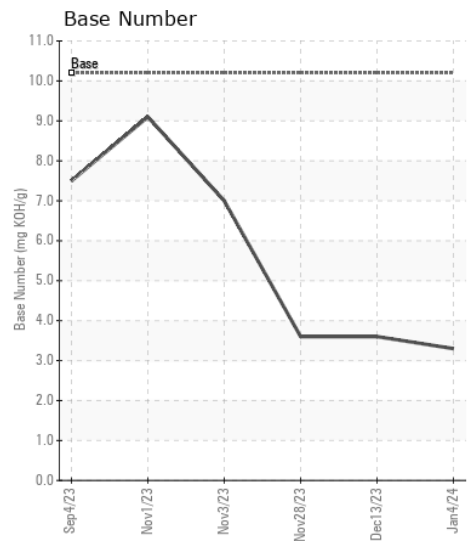
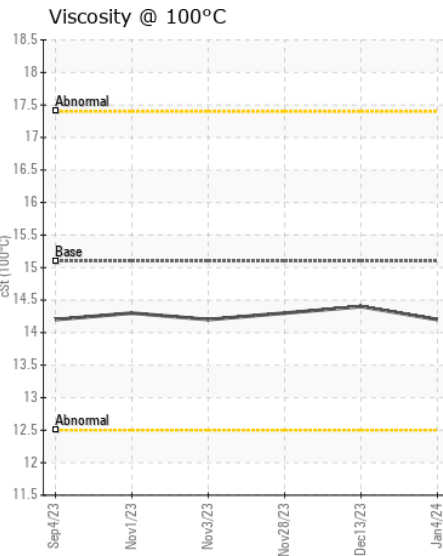
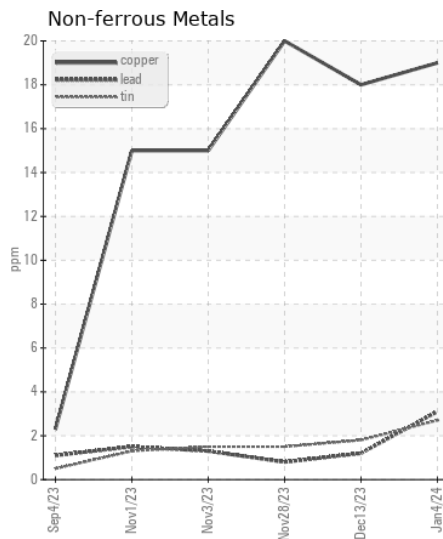
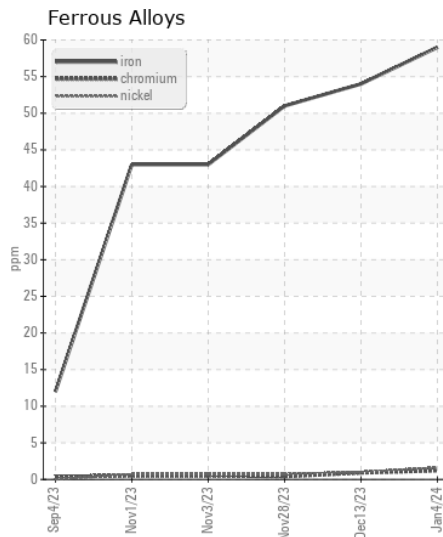
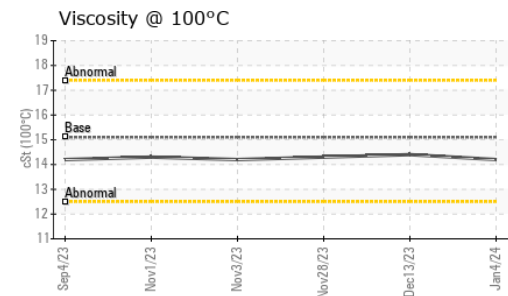
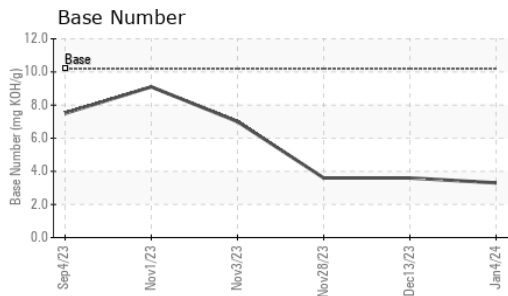
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	30	32	34
Potassium	ppm	ASTM D5185m	>20	6	4	6
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	12.9	12.5	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.9	23.5	22.3
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		2	4	0
Boron	ppm	ASTM D5185m	50	6	5	7
Barium	ppm	ASTM D5185m	5	3	4	9
Molybdenum	ppm	ASTM D5185m	50	53	54	54
Manganese	ppm	ASTM D5185m	0	10	10	10
Magnesium	ppm	ASTM D5185m	560	778	805	716
Calcium	ppm	ASTM D5185m	1510	1165	1208	1205
Phosphorus	ppm	ASTM D5185m	780	740	679	636
Zinc	ppm	ASTM D5185m	870	894	915	868
Sulfur	ppm	ASTM D5185m	2040	2291	2294	2267
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.2	21.8	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.3	3.6	3.6
Visc @ 100°C	cSt	ASTM D445	15.1	14.2	14.4	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0102444 **Received** : 11 Jan 2024
Lab Number : 06058666 **Diagnosed** : 12 Jan 2024
Unique Number : 10830048 **Diagnostician** : Wes Davis
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)