



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(41KM9B)
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		GFL0108064	GFL0108105	GFL0102444
Sample Date		Client Info		21 Feb 2024	30 Jan 2024	04 Jan 2024
Machine Age	hrs	Client Info		1029	882	723
Oil Age	hrs	Client Info		1029	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Chngd	N/A	Not Chngd
Filter Changed		Client Info		Not Chngd	N/A	Not Chngd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	72	73	59
Chromium	ppm	ASTM D5185m	>4	2	1	1
Nickel	ppm	ASTM D5185m	>2	2	3	2
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	<1
Aluminum	ppm	ASTM D5185m	>9	9	8	6
Lead	ppm	ASTM D5185m	>30	5	6	3
Copper	ppm	ASTM D5185m	>35	20	24	19
Tin	ppm	ASTM D5185m	>4	3	4	3
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

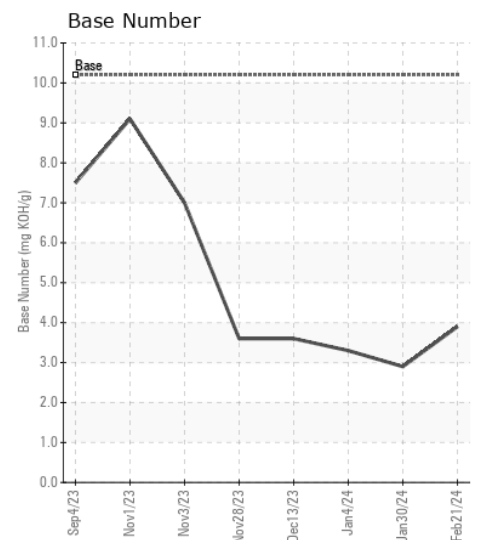
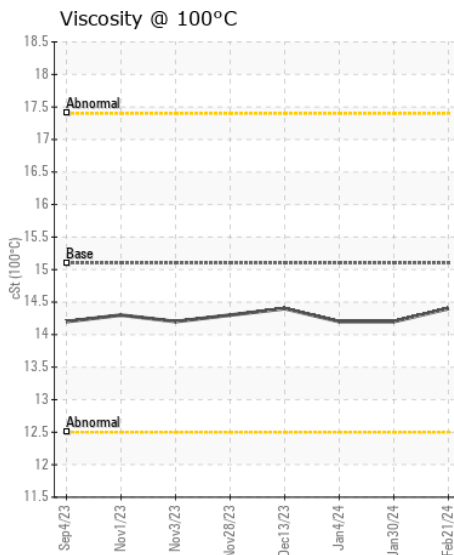
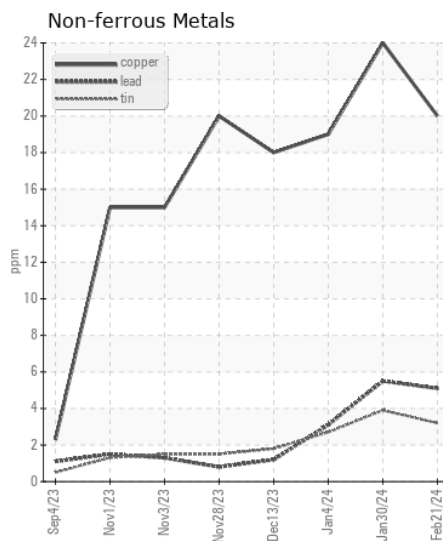
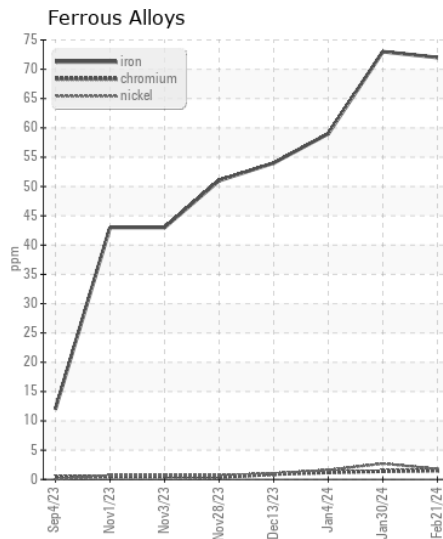
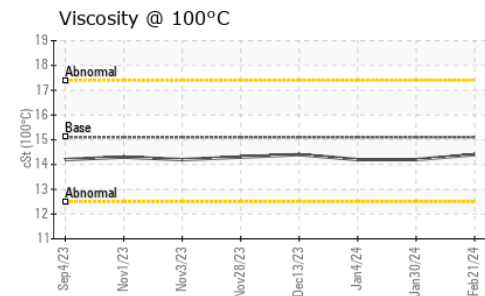
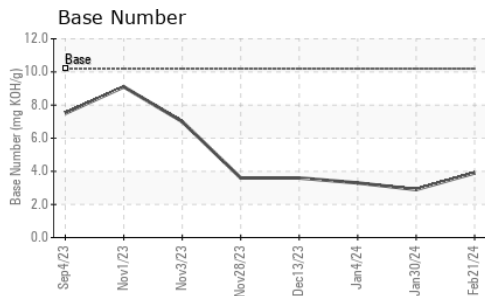
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	30	32	30
Potassium	ppm	ASTM D5185m	>20	5	7	6
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	13.6	13.8	12.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.8	26.3	24.9
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		8	2	2
Boron	ppm	ASTM D5185m	50	9	3	6
Barium	ppm	ASTM D5185m	5	0	18	3
Molybdenum	ppm	ASTM D5185m	50	66	62	53
Manganese	ppm	ASTM D5185m	0	12	13	10
Magnesium	ppm	ASTM D5185m	560	887	832	778
Calcium	ppm	ASTM D5185m	1510	1486	1283	1165
Phosphorus	ppm	ASTM D5185m	780	861	768	740
Zinc	ppm	ASTM D5185m	870	1073	968	894
Sulfur	ppm	ASTM D5185m	2040	2498	2566	2291
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.0	25.0	23.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.9	2.9	3.3
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.2	14.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0108064
Lab Number : 06103583
Unique Number : 10901813
Test Package : FLEET

Received : 28 Feb 2024
Tested : 01 Mar 2024
Diagnosed : 01 Mar 2024 - Wes Davis

GFL Environmental - 836 - Kansas City Hauling
 7801 East Truman Road
 Kansas City, MO
 US 64126
 Contact: Loyce Stewart
 loyce.stewart@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)

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F: