



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
933002

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		GFL0092162	GFL0092050	GFL0084624
Sample Date		Client Info		06 Feb 2024	13 Dec 2023	09 Nov 2023
Machine Age	hrs	Client Info		1203	742	457
Oil Age	hrs	Client Info		600	600	457
Filter Age	hrs	Client Info		600	600	457
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	12	26	20
Chromium	ppm	ASTM D5185m	>4	<1	<1	1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	2	2
Lead	ppm	ASTM D5185m	>30	<1	2	<1
Copper	ppm	ASTM D5185m	>35	4	10	0
Tin	ppm	ASTM D5185m	>4	1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

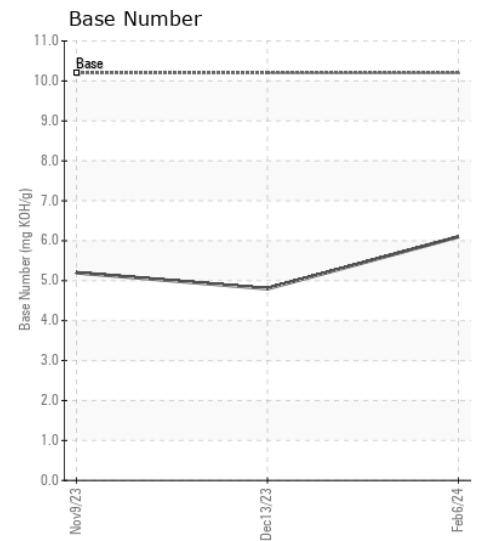
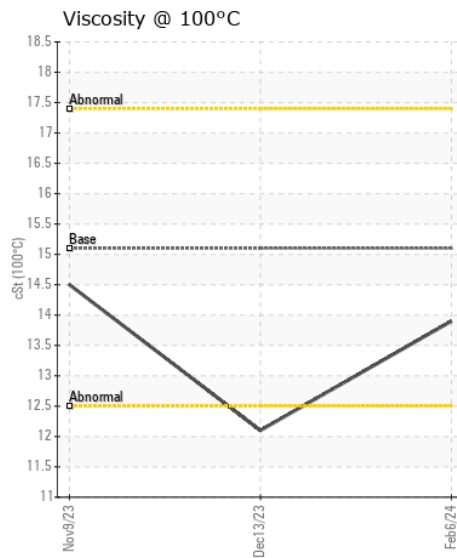
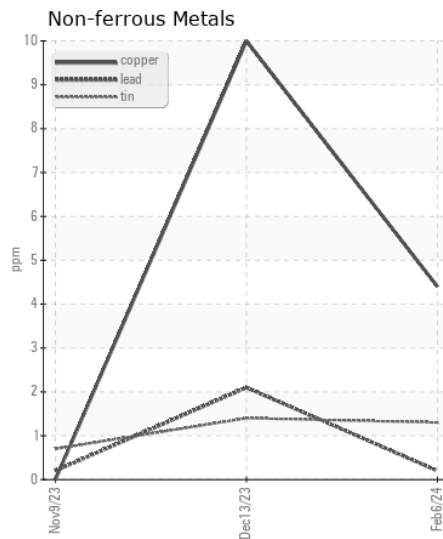
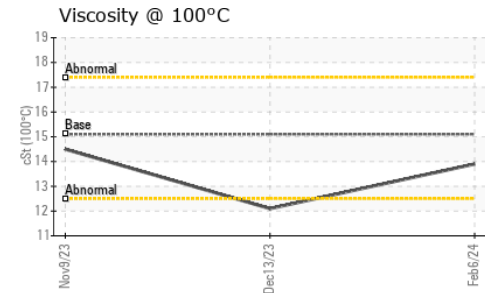
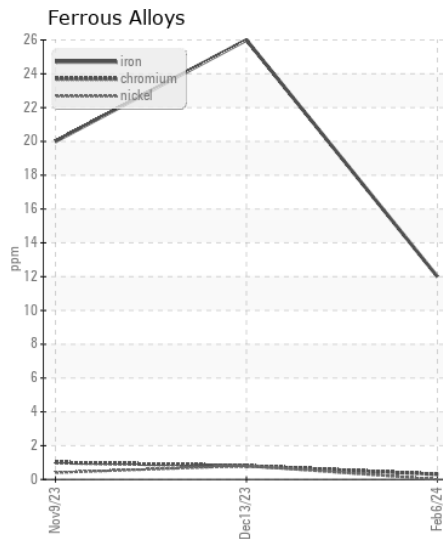
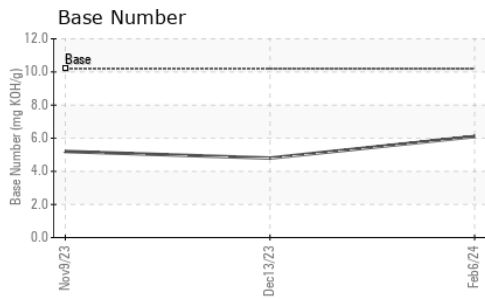
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>+100	20	87	10
Potassium	ppm	ASTM D5185m	>20	0	6	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	9.4	10.5	13.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	21.6	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		3	4	5
Boron	ppm	ASTM D5185m	50	18	13	15
Barium	ppm	ASTM D5185m	5	<1	18	0
Molybdenum	ppm	ASTM D5185m	50	51	56	59
Manganese	ppm	ASTM D5185m	0	1	3	<1
Magnesium	ppm	ASTM D5185m	560	587	729	679
Calcium	ppm	ASTM D5185m	1510	1501	1207	1832
Phosphorus	ppm	ASTM D5185m	780	763	658	886
Zinc	ppm	ASTM D5185m	870	941	894	1134
Sulfur	ppm	ASTM D5185m	2040	2445	2230	2925
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	19.4	19.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.1	4.8	5.2
Visc @ 100°C	cSt	ASTM D445	15.1	13.9	▲ 12.1	14.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0092162
Lab Number : 06084273
Unique Number : 10871718
Test Package : FLEET

Received : 08 Feb 2024
Tested : 09 Feb 2024
Diagnosed : 09 Feb 2024 - Wes Davis

GFL Environmental - 856 - Houston South
 8515 Highway 6 South
 Houston, TX
 US 77083
 Contact: Apolinar Zacarias
 pzacariascano@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: