



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
414053
Component
Diesel Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (60 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0092689	GFL0092671	---
Sample Date		Client Info		16 Jan 2024	28 Nov 2023	---
Machine Age	hrs	Client Info		742	742	---
Oil Age	hrs	Client Info		710	742	---
Filter Age	hrs	Client Info		710	0	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>120	12	40	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>5	2	7	---
Titanium	ppm	ASTM D5185m	>2	0	<1	---
Silver	ppm	ASTM D5185m	>2	1	<1	---
Aluminum	ppm	ASTM D5185m	>20	7	26	---
Lead	ppm	ASTM D5185m	>40	2	0	---
Copper	ppm	ASTM D5185m	>330	142	209	---
Tin	ppm	ASTM D5185m	>15	0	4	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

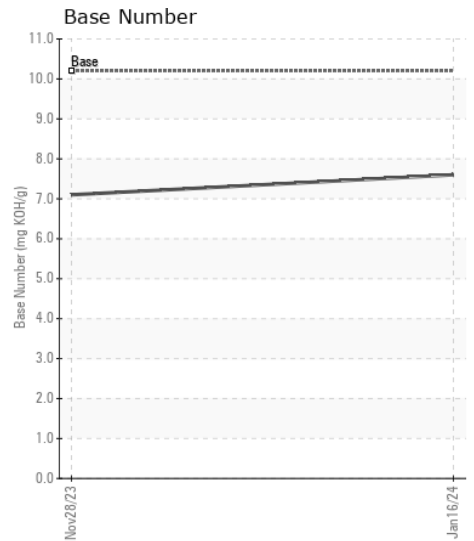
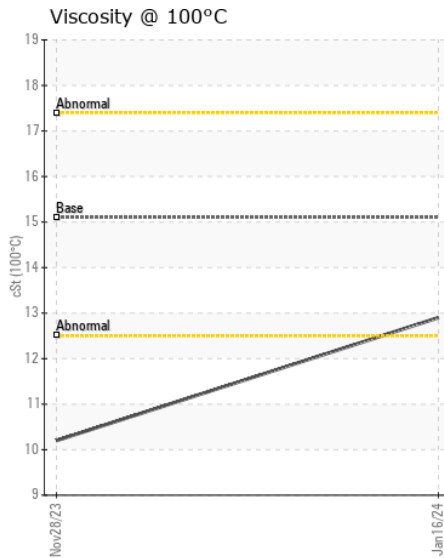
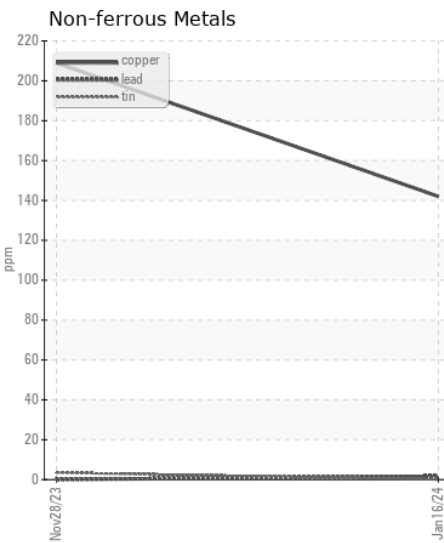
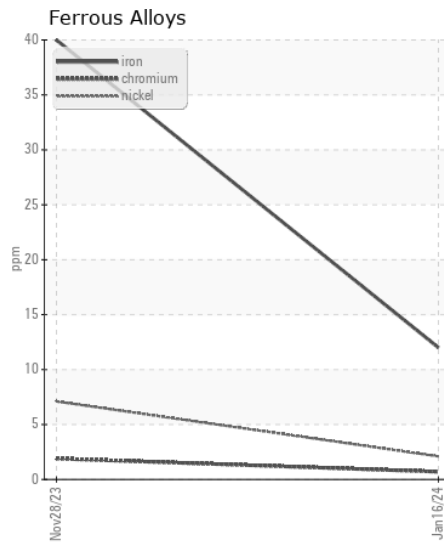
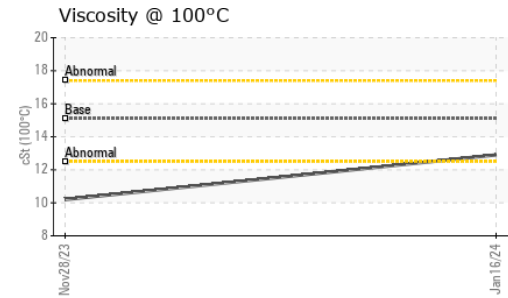
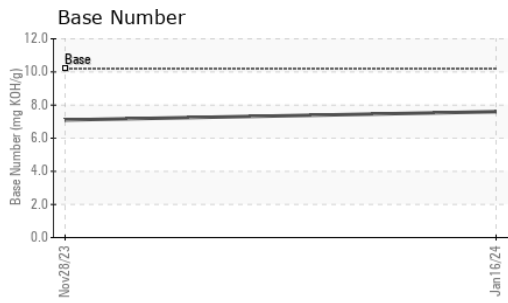
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	▲ 66	---
Potassium	ppm	ASTM D5185m	>20	20	67	---
Fuel		WC Method	>3.0	<1.0	0.4	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>4	0.3	0.4	---
Nitration	Abs/cm	*ASTM D7624	>20	7.8	11.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.3	24.0	---
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	>0.2	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	5	---
Boron	ppm	ASTM D5185m	50	8	86	---
Barium	ppm	ASTM D5185m	5	0	0	---
Molybdenum	ppm	ASTM D5185m	50	63	104	---
Manganese	ppm	ASTM D5185m	0	<1	4	---
Magnesium	ppm	ASTM D5185m	560	931	723	---
Calcium	ppm	ASTM D5185m	1510	1181	1285	---
Phosphorus	ppm	ASTM D5185m	780	1054	682	---
Zinc	ppm	ASTM D5185m	870	1215	829	---
Sulfur	ppm	ASTM D5185m	2040	3314	2145	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	22.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.6	7.1	---
Visc @ 100°C	cSt	ASTM D445	15.1	12.9	10.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0092689 **Received** : 17 Jan 2024
Lab Number : 06063479 **Diagnosed** : 19 Jan 2024
Unique Number : 10834861 **Diagnostician** : Wes Davis
Test Package : FLEET

GFL Environmental - 005 - Wilson/Tri-East (CNG)
 2810 Contentnea Road S
 Wilson, NC
 US 27893-8501
 Contact: WALTER SKOKOWSKI
 walter.skokowski@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: