



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
AUTOCAR 933046
 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		GFL0109612	GFL0109649	---
Sample Date		Client Info		12 Jul 2024	17 May 2024	---
Machine Age	hrs	Client Info		1154	776	---
Oil Age	hrs	Client Info		1154	776	---
Filter Age	hrs	Client Info		1154	776	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				NORMAL	NORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	33	32	---
Chromium	ppm	ASTM D5185m	>4	2	1	---
Nickel	ppm	ASTM D5185m	>2	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>9	4	3	---
Lead	ppm	ASTM D5185m	>30	9	3	---
Copper	ppm	ASTM D5185m	>35	14	11	---
Tin	ppm	ASTM D5185m	>4	2	<1	---
Vanadium	ppm	ASTM D5185m		<1	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.

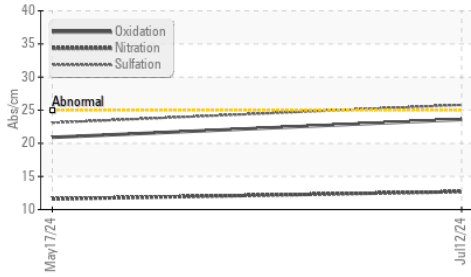
Silicon	ppm	ASTM D5185m	>+100	66	78	---
Potassium	ppm	ASTM D5185m	>20	7	4	---
Water		WC Method	>0.1	NEG	NEG	---
Soot %	%	*ASTM D7844		0	0	---
Nitration	Abs/cm	*ASTM D7624	>20	12.7	11.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.8	23.1	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	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	>0.1	NEG	NEG	---

FLUID CONDITION

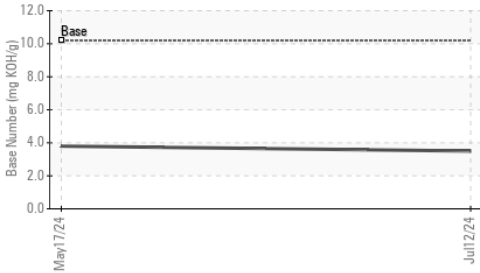
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	5	---
Boron	ppm	ASTM D5185m	50	8	10	---
Barium	ppm	ASTM D5185m	5	5	6	---
Molybdenum	ppm	ASTM D5185m	50	57	54	---
Manganese	ppm	ASTM D5185m	0	4	4	---
Magnesium	ppm	ASTM D5185m	560	742	780	---
Calcium	ppm	ASTM D5185m	1510	1381	1351	---
Phosphorus	ppm	ASTM D5185m	780	748	700	---
Zinc	ppm	ASTM D5185m	870	950	941	---
Sulfur	ppm	ASTM D5185m	2040	2318	2773	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.6	20.9	---
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.5	3.8	---
Visc @ 100°C	cSt	ASTM D445	15.1	12.3	12.1	---

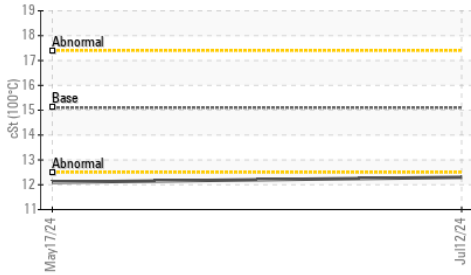
FT-IR (Direct Trend)



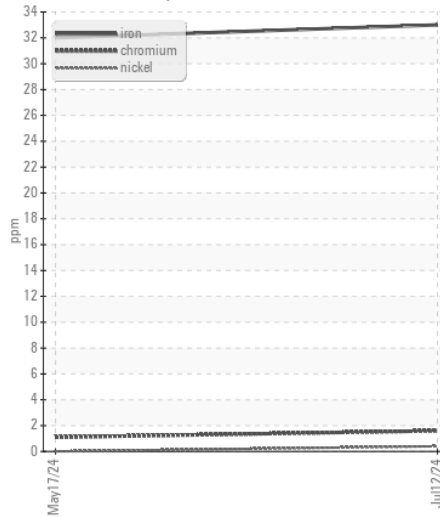
Base Number



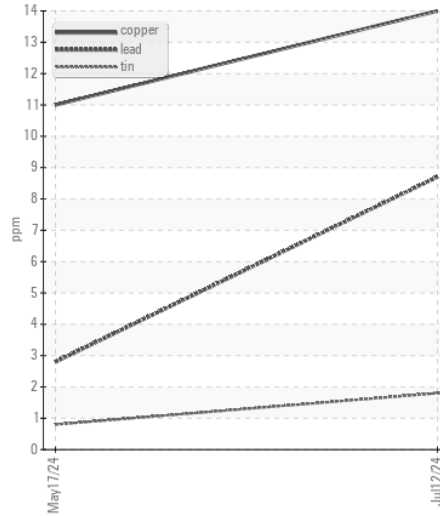
Viscosity @ 100°C



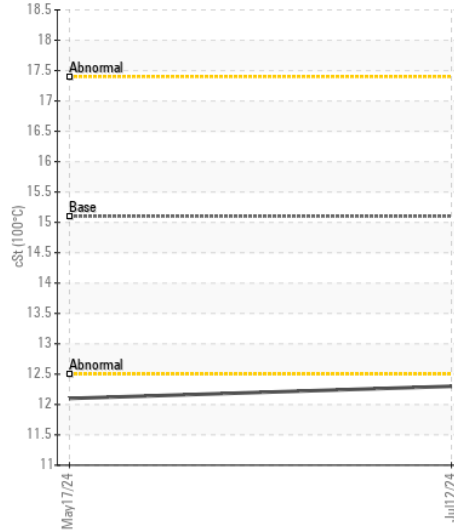
Ferrous Alloys



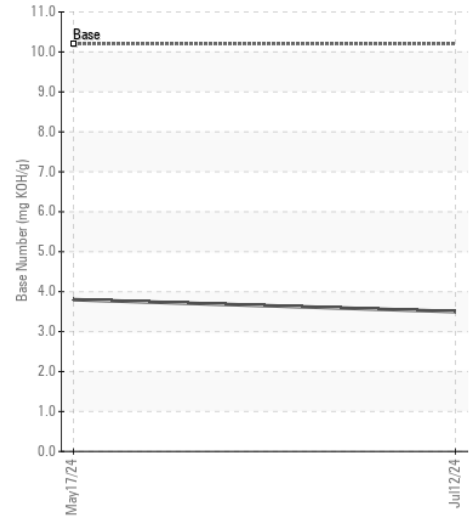
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109612
Lab Number : 06239859
Unique Number : 11128693
Test Package : FLEET

Received : 18 Jul 2024
Tested : 18 Jul 2024
Diagnosed : 19 Jul 2024 - Don Baldrige

GFL Environmental - 331 - Columbus
 180 Ada Moore Rd
 Columbus, NC
 US 28722

Contact: Matt Segars
 matt.segars@gflenv.com
 T: (800)207-6618
 F: (252)617-2494

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)