



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
834050
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		GFL0122819	GFL0118847	GFL0114190
Sample Date		Client Info		22 May 2024	01 May 2024	01 Apr 2024
Machine Age	hrs	Client Info		1458	1325	1179
Oil Age	hrs	Client Info		1458	1325	1179
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	67	62	66
Chromium	ppm	ASTM D5185m	>5	2	1	2
Nickel	ppm	ASTM D5185m	>4	2	<1	2
Titanium	ppm	ASTM D5185m	>5	0	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>25	5	3	4
Lead	ppm	ASTM D5185m	>40	4	3	2
Copper	ppm	ASTM D5185m	>150	13	12	16
Tin	ppm	ASTM D5185m	>4	3	2	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
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.

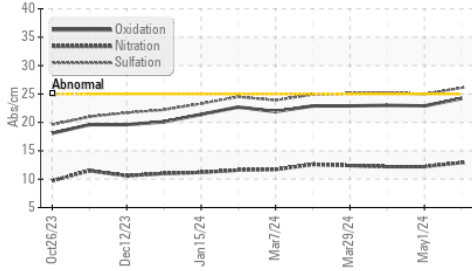
Silicon	ppm	ASTM D5185m	>25	20	18	22
Potassium	ppm	ASTM D5185m	>20	2	<1	4
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	12.9	12.2	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.1	25.0	25.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

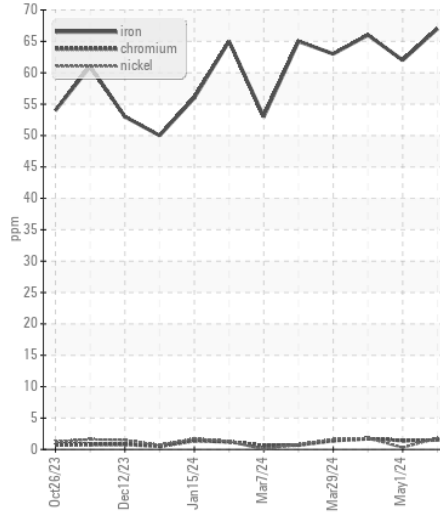
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	4	4
Boron	ppm	ASTM D5185m	50	9	4	8
Barium	ppm	ASTM D5185m	5	<1	2	4
Molybdenum	ppm	ASTM D5185m	50	70	68	68
Manganese	ppm	ASTM D5185m	0	9	8	9
Magnesium	ppm	ASTM D5185m	560	827	808	739
Calcium	ppm	ASTM D5185m	1510	1365	1426	1267
Phosphorus	ppm	ASTM D5185m	780	794	838	784
Zinc	ppm	ASTM D5185m	870	1054	1070	994
Sulfur	ppm	ASTM D5185m	2040	2770	3002	2620
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.2	22.9	23.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	2.8	3.0	3.3
Visc @ 100°C	cSt	ASTM D445	15.1	14.2	14.3	14.3

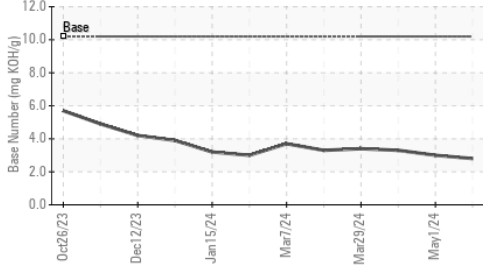
FT-IR (Direct Trend)



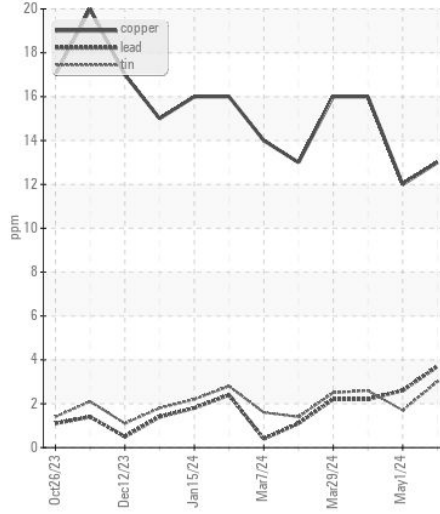
Ferrous Alloys



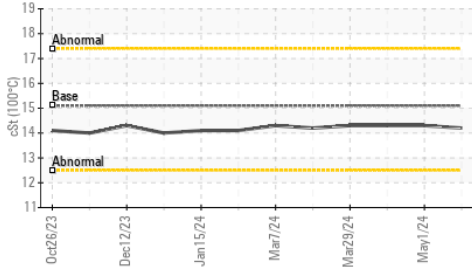
Base Number



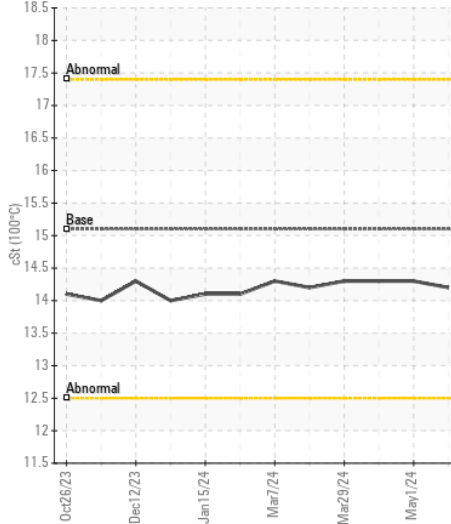
Non-ferrous Metals



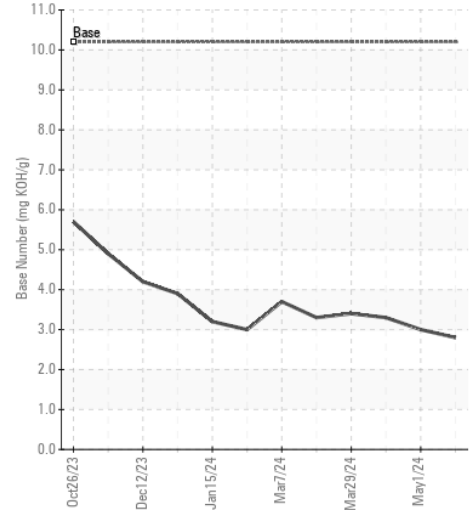
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0122819
Lab Number : 06190229
Unique Number : 11046981
Test Package : FLEET

Received : 24 May 2024
Tested : 29 May 2024
Diagnosed : 29 May 2024 - Sean Felton

GFL Environmental - 837 - Harrison TS
 22820 S State Route 291
 Harrisonville, MO
 US 64701
 Contact: SARA PATRICK
 spatrick@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)

T:
F: