



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(YA141292)

Machine Id

3788C

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (29 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118407	GFL0088519	GFL0083310
Sample Date		Client Info		21 May 2024	03 Oct 2023	20 Jun 2023
Machine Age	hrs	Client Info		4770	4770	4770
Oil Age	hrs	Client Info		369	581	580
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	27	12	12
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	3
Lead	ppm	ASTM D5185m	>30	1	1	2
Copper	ppm	ASTM D5185m	>35	<1	1	<1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
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.

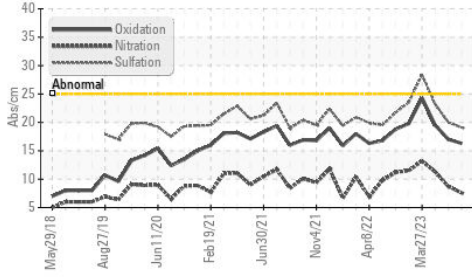
Silicon	ppm	ASTM D5185m	>+100	9	4	4
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.7	11.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	20.0	23.2
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

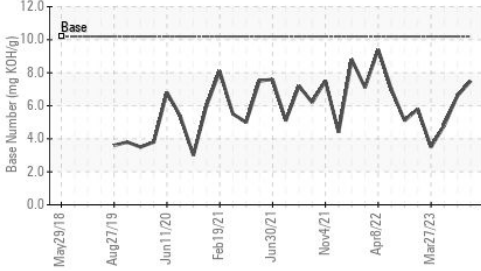
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	5	7
Boron	ppm	ASTM D5185m	50	33	18	14
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	49	52	53
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	576	600	588
Calcium	ppm	ASTM D5185m	1510	1502	1602	1733
Phosphorus	ppm	ASTM D5185m	780	795	786	738
Zinc	ppm	ASTM D5185m	870	933	982	1004
Sulfur	ppm	ASTM D5185m	2040	2733	2495	2777
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	17.0	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.5	6.6	4.8
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.9	15.2

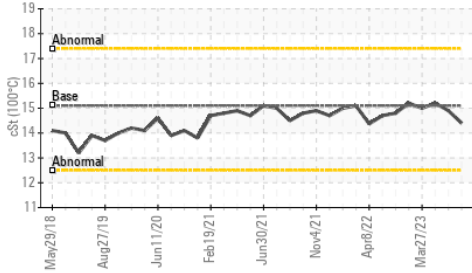
FT-IR (Direct Trend)



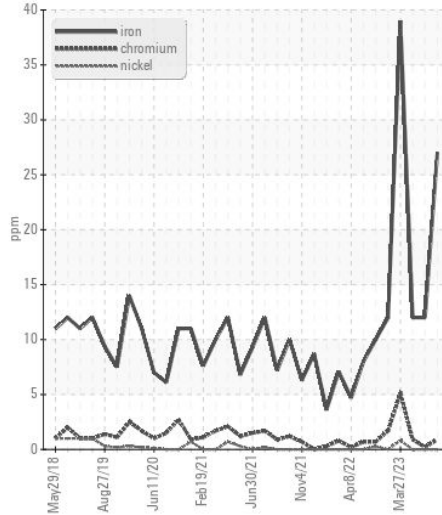
Base Number



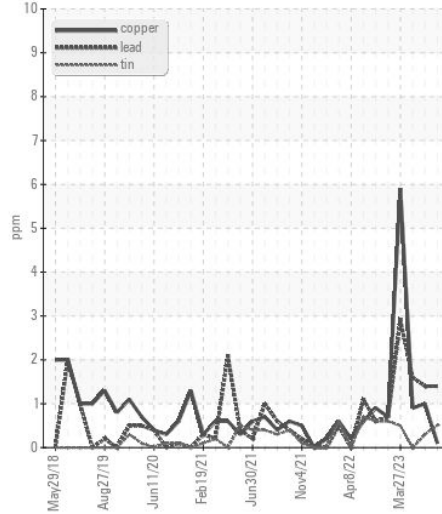
Viscosity @ 100°C



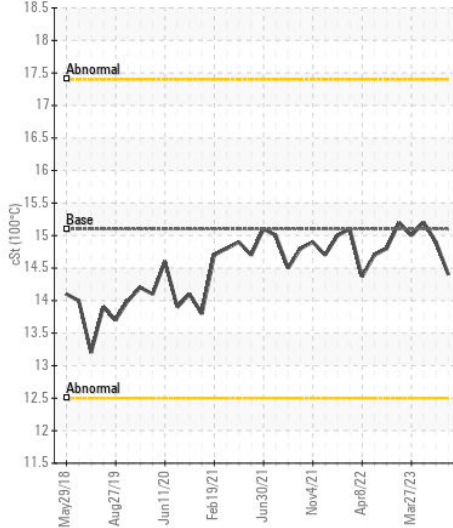
Ferrous Alloys



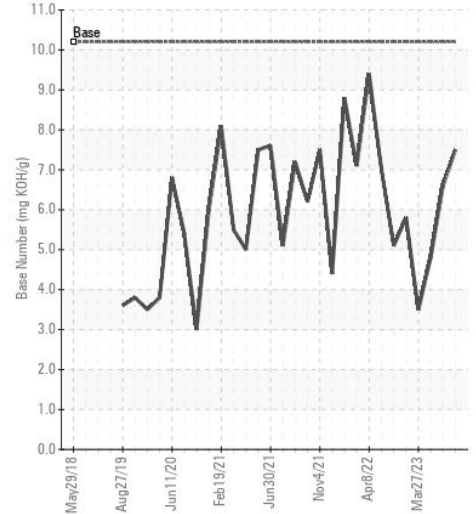
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0118407

Lab Number : 06187037

Unique Number : 11043789

Test Package : FLEET

Received : 21 May 2024

Tested : 23 May 2024

Diagnosed : 23 May 2024 - Wes Davis

GFL Environmental - 017 - Durham

148 Stone Park Court

Durham, NC

US 27703

Contact:

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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)