



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
10738C AUTOCAR ACX
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON GEO LD 15W40 (28 QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0117498	GFL0094759	GFL0089263
Sample Date		Client Info		12 May 2024	22 Nov 2023	31 Jul 2023
Machine Age	hrs	Client Info		0	17964	17222
Oil Age	hrs	Client Info		0	3669	2927
Filter Age	hrs	Client Info		0	3669	0
Oil Changed		Client Info		N/A	Changed	Not Changd
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Valve wear is indicated. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	42	19	16
Chromium	ppm	ASTM D5185m	>4	▲ 6	2	2
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	4	2
Lead	ppm	ASTM D5185m	>30	21	9	20
Copper	ppm	ASTM D5185m	>35	4	2	1
Tin	ppm	ASTM D5185m	>4	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	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.

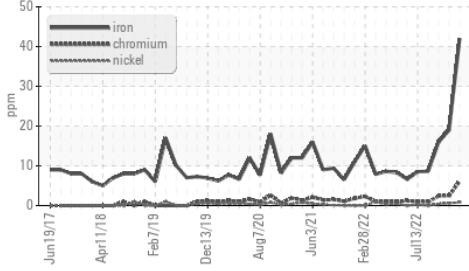
Silicon	ppm	ASTM D5185m	>+100	21	6	4
Potassium	ppm	ASTM D5185m	>20	14	10	3
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	13.6	12.2	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.5	25.3	27.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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

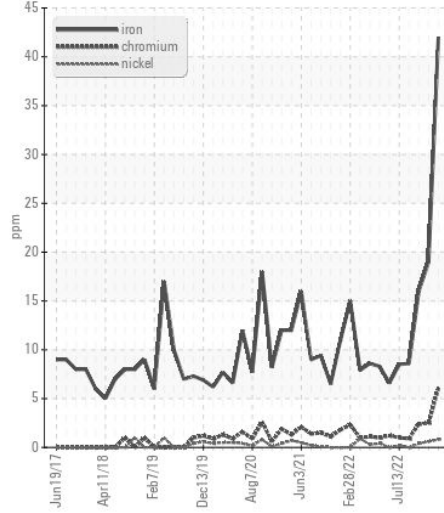
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		31	19	13
Boron	ppm	ASTM D5185m	50	8	8	6
Barium	ppm	ASTM D5185m	5	<1	0	0
Molybdenum	ppm	ASTM D5185m	50	64	58	52
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	560	653	594	556
Calcium	ppm	ASTM D5185m	1510	1910	1712	1683
Phosphorus	ppm	ASTM D5185m	780	901	761	696
Zinc	ppm	ASTM D5185m	870	1067	1046	967
Sulfur	ppm	ASTM D5185m	2040	2825	2833	2692
Oxidation	Abs/.1mm	*ASTM D7414	>25	27.5	20.8	22.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	2.8	4.2	3.6
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.8	14.4

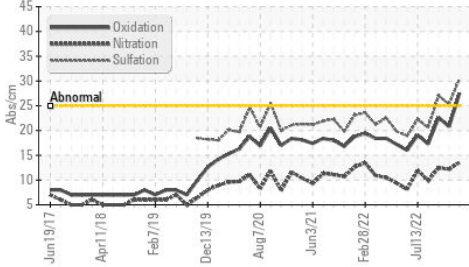
▲ Ferrous Alloys



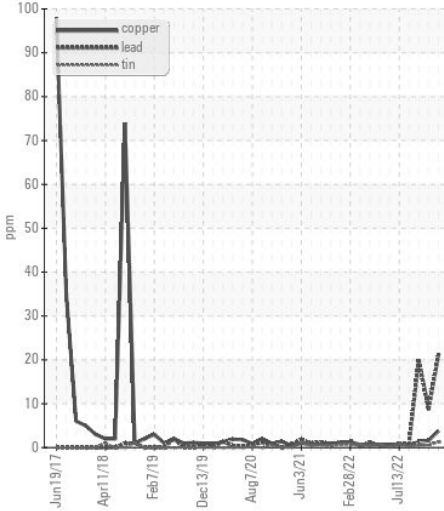
▲ Ferrous Alloys



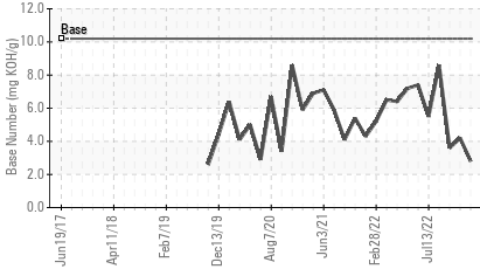
FT-IR (Direct Trend)



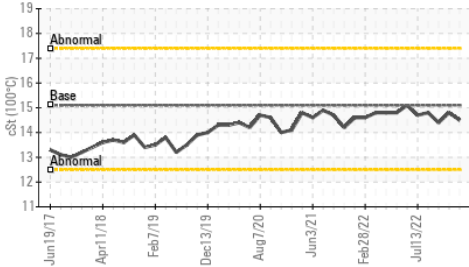
Non-ferrous Metals



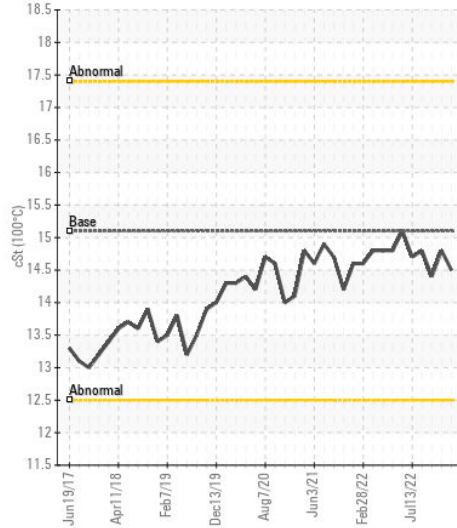
Base Number



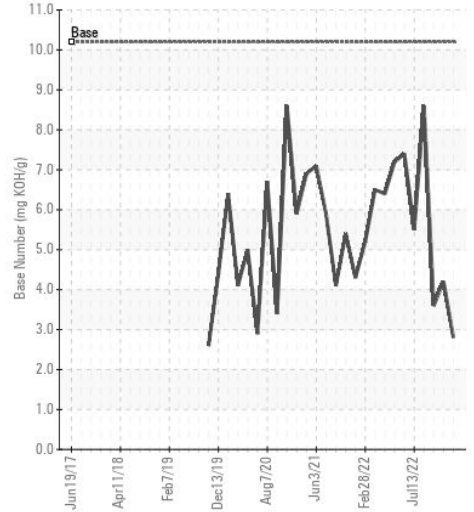
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0117498
 Lab Number : 06176923
 Unique Number : 11022976
 Test Package : FLEET

Received : 13 May 2024
 Tested : 14 May 2024
 Diagnosed : 14 May 2024 - Don Baldrige

GFL Environmental - 001 - Raleigh(CNG)
 3741 Conquest Drive
 Garner, NC
 US 27529
 Contact: Ronald Gregory
 rgregory@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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