



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
10496C 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		GFL0117496	GFL0103266	GFL0056749
Sample Date		Client Info		13 May 2024	01 Dec 2023	23 May 2023
Machine Age	hrs	Client Info		4468	3510	2282
Oil Age	hrs	Client Info		958	0	991
Filter Age	hrs	Client Info		0	0	991
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

The chromium level is abnormal. All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	41	24	49
Chromium	ppm	ASTM D5185m	>4	▲ 7	4	▲ 7
Nickel	ppm	ASTM D5185m	>2	0	<1	2
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	3	9
Lead	ppm	ASTM D5185m	>30	1	<1	9
Copper	ppm	ASTM D5185m	>35	1	<1	3
Tin	ppm	ASTM D5185m	>4	0	<1	1
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.

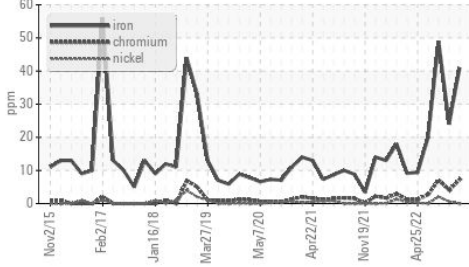
Silicon	ppm	ASTM D5185m	>+100	11	16	10
Potassium	ppm	ASTM D5185m	>20	5	5	10
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	11.3	8.5	14.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.6	19.0	28.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	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

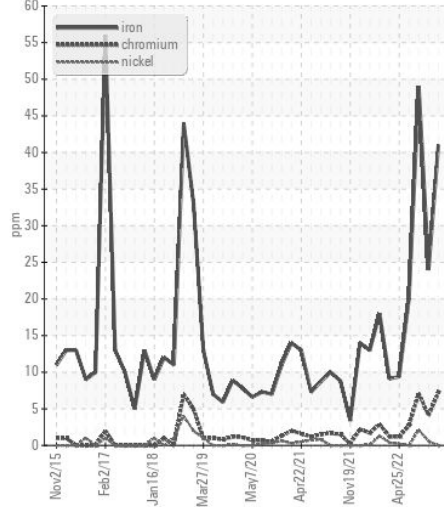
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		11	5	13
Boron	ppm	ASTM D5185m	50	0	23	9
Barium	ppm	ASTM D5185m	5	0	2	0
Molybdenum	ppm	ASTM D5185m	50	58	48	62
Manganese	ppm	ASTM D5185m	0	3	3	1
Magnesium	ppm	ASTM D5185m	560	608	513	656
Calcium	ppm	ASTM D5185m	1510	1716	1458	1795
Phosphorus	ppm	ASTM D5185m	780	775	706	772
Zinc	ppm	ASTM D5185m	870	1007	884	1069
Sulfur	ppm	ASTM D5185m	2040	2786	3397	2782
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.6	16.3	24.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.9	7.7	2.9
Visc @ 100°C	cSt	ASTM D445	15.1	14.7	14.6	14.5

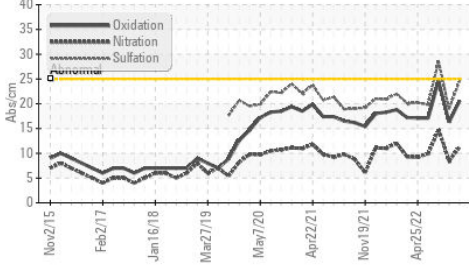
▲ Ferrous Alloys



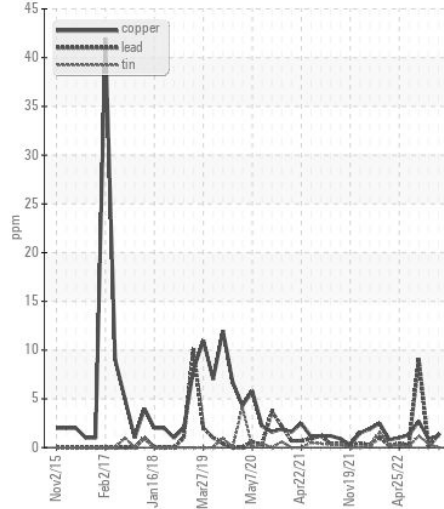
▲ Ferrous Alloys



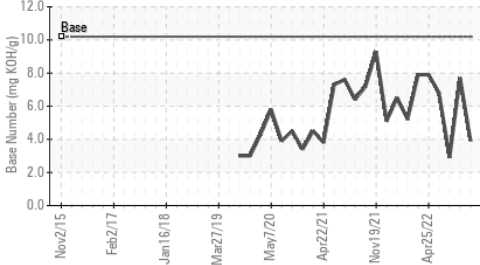
FT-IR (Direct Trend)



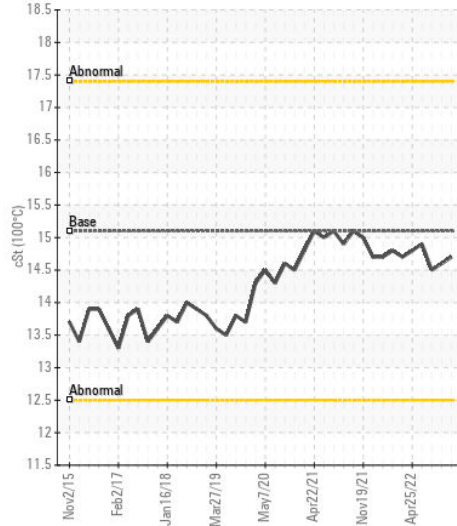
Non-ferrous Metals



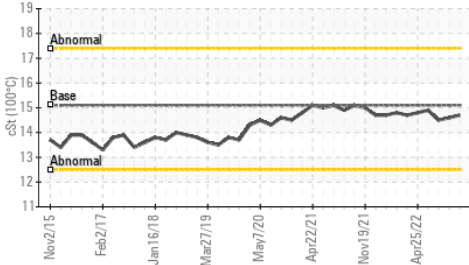
Base Number



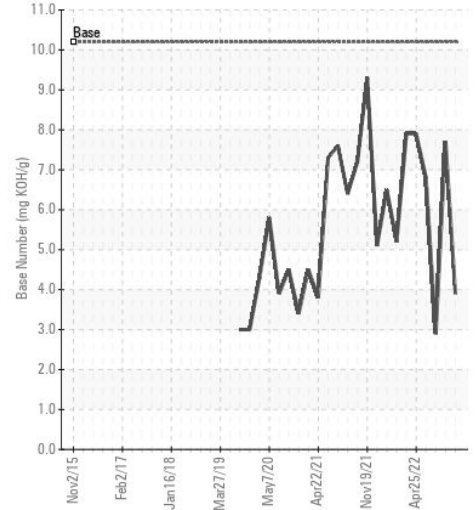
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0117496
 Lab Number : 06178327
 Unique Number : 11029653
 Test Package : FLEET

Received : 14 May 2024
 Tested : 17 May 2024
 Diagnosed : 17 May 2024 - Sean Felton

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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