



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
(YA133453) [B Service]

Machine Id
3689C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (38 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0124486	GFL0124484	GFL0111058
Sample Date		Client Info		15 Jul 2024	08 Jul 2024	06 Mar 2024
Machine Age	hrs	Client Info		20950	20929	19762
Oil Age	hrs	Client Info		700	1167	1145
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	13	37	45
Chromium	ppm	ASTM D5185m	>4	2	▲ 7	▲ 8
Nickel	ppm	ASTM D5185m	>2	<1	2	2
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	4	▲ 12	▲ 16
Lead	ppm	ASTM D5185m	>30	0	2	<1
Copper	ppm	ASTM D5185m	>35	6	2	<1
Tin	ppm	ASTM D5185m	>4	0	1	1
Vanadium	ppm	ASTM D5185m		0	<1	<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.

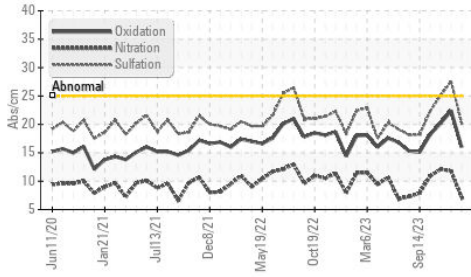
Silicon	ppm	ASTM D5185m	>+100	5	6	8
Potassium	ppm	ASTM D5185m	>20	2	3	3
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.2	11.8	12.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	27.6	25.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	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

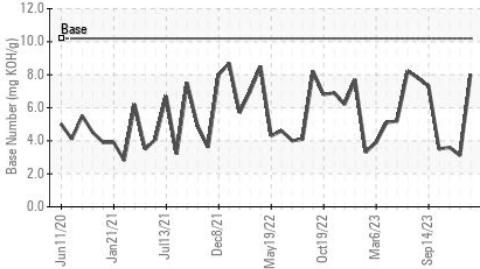
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		6	7	8
Boron	ppm	ASTM D5185m	50	39	3	5
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	49	60	54
Manganese	ppm	ASTM D5185m	0	2	1	2
Magnesium	ppm	ASTM D5185m	560	566	600	566
Calcium	ppm	ASTM D5185m	1510	1549	1760	1556
Phosphorus	ppm	ASTM D5185m	780	851	777	783
Zinc	ppm	ASTM D5185m	870	964	1018	967
Sulfur	ppm	ASTM D5185m	2040	2811	2533	2348
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0	22.4	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	8.0	3.1	3.6
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.0	14.1

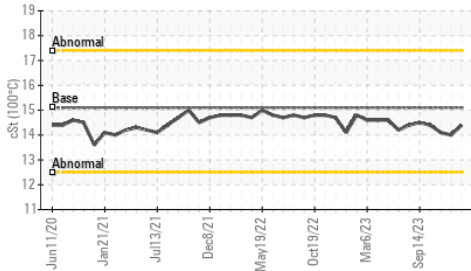
FT-IR (Direct Trend)



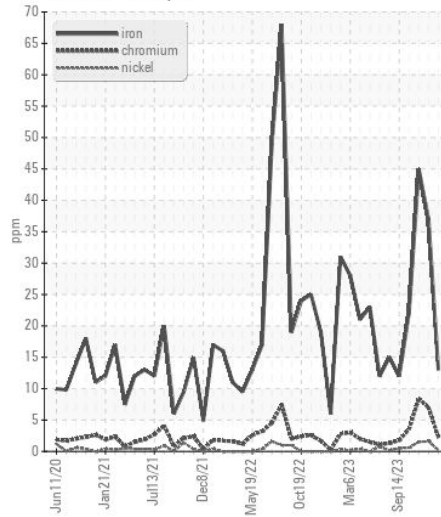
Base Number



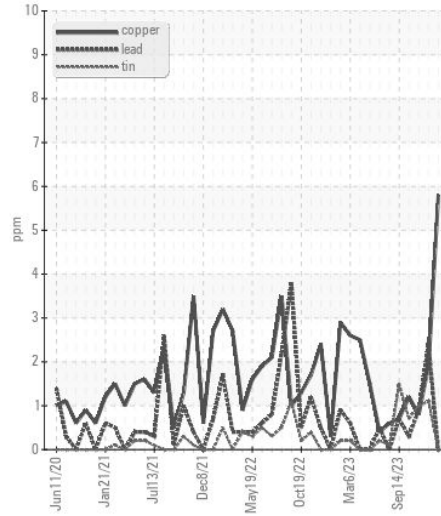
Viscosity @ 100°C



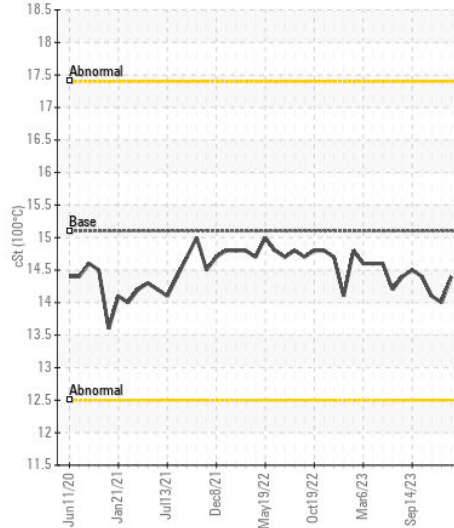
Ferrous Alloys



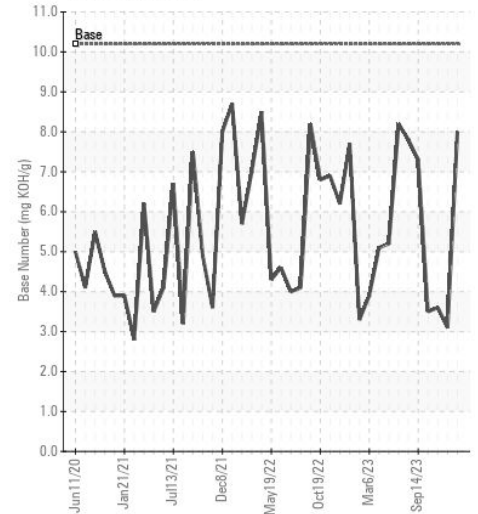
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0124486
Lab Number : 06238783
Unique Number : 11127617
Test Package : FLEET

Received : 17 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 2024 - Wes Davis

GFL Environmental - 006 - Wilmington
 3618 US Highway 421 N
 Wilmington, NC
 US 28401
 Contact: Eric Wood
 eric.wood@gflenv.com
 T: (717)723-1956
 F: (910)762-6880

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)