



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(YA145296)

Machine Id

10420C

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (30 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0123385	GFL0082464	GFL0050744
Sample Date		Client Info		20 Jun 2024	09 Aug 2023	22 Feb 2023
Machine Age	hrs	Client Info		97036	6225	5519
Oil Age	hrs	Client Info		97036	728	1243
Filter Age	hrs	Client Info		97036	728	1243
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	7	17	17
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	1	2	2
Lead	ppm	ASTM D5185m	>30	<1	2	<1
Copper	ppm	ASTM D5185m	>35	4	▲ 84	▲ 41
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	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.

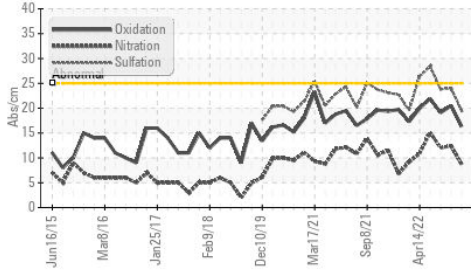
Silicon	ppm	ASTM D5185m	>+100	3	4	7
Potassium	ppm	ASTM D5185m	>20	4	4	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Soot %	%	*ASTM D7844		0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.7	12.4	12.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	24.0	23.8
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	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

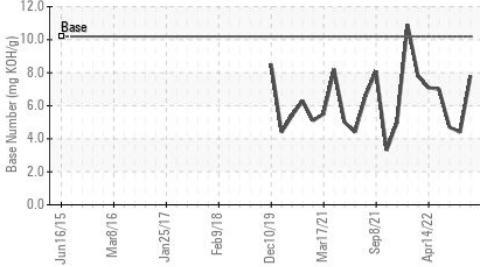
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	25	▲ 120
Boron	ppm	ASTM D5185m	50	21	4	9
Barium	ppm	ASTM D5185m	5	0	0	0
Molybdenum	ppm	ASTM D5185m	50	49	57	54
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	600	607	510
Calcium	ppm	ASTM D5185m	1510	1672	1837	1698
Phosphorus	ppm	ASTM D5185m	780	853	702	661
Zinc	ppm	ASTM D5185m	870	1050	1046	900
Sulfur	ppm	ASTM D5185m	2040	3029	2889	2421
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	20.5	19.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	7.8	4.4	4.7
Visc @ 100°C	cSt	ASTM D445	15.1	14.3	14.7	14.0

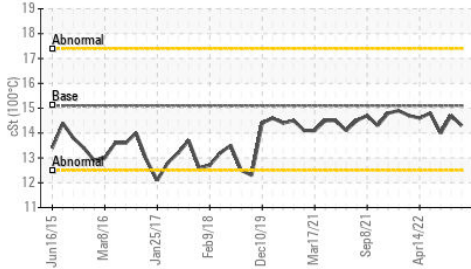
FT-IR (Direct Trend)



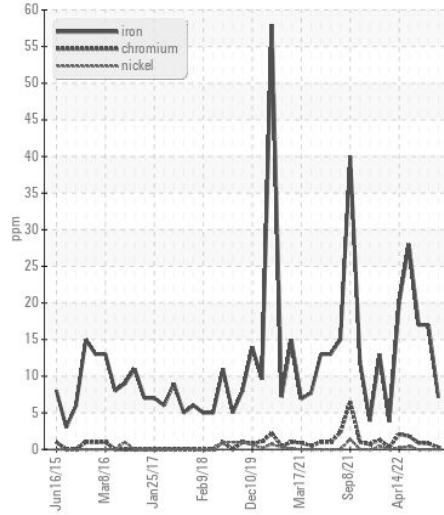
Base Number



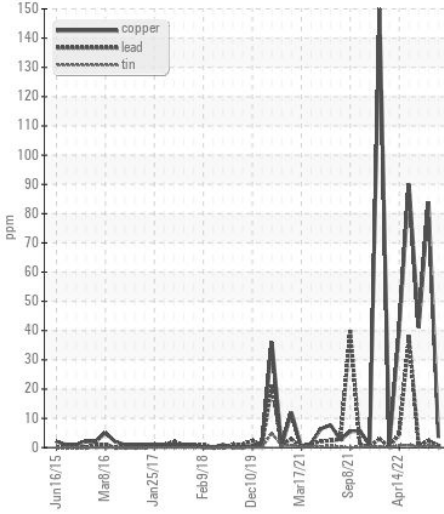
Viscosity @ 100°C



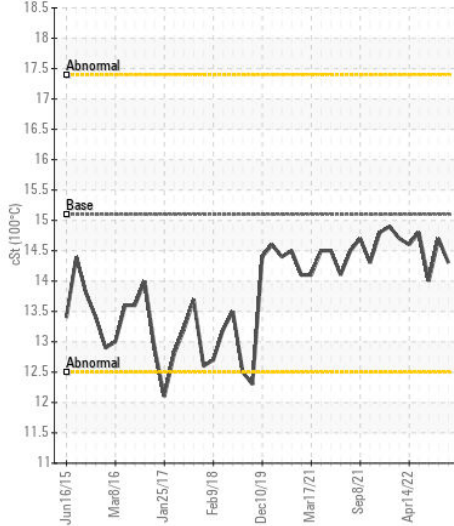
Ferrous Alloys



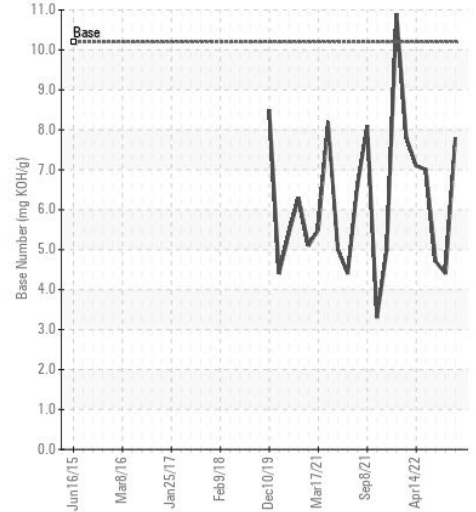
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0123385
Lab Number : 06223339
Unique Number : 11101536
Test Package : FLEET

Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Wes Davis

GFL Environmental - 007 - Brunswick
 2809 Galloway Road
 Bolivia, NC
 US 28422
 Contact: DONALD CRAVEN
 dcraven@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: (910)253-4179