



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(P830962)

Machine Id

932001

Component

Diesel Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (40 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0125702	GFL0117976	GFL0117972
Sample Date		Client Info		20 Jun 2024	09 May 2024	09 May 2024
Machine Age	hrs	Client Info		6559	6291	5693
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	2	8	8
Chromium	ppm	ASTM D5185m	>5	0	1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	3	2
Lead	ppm	ASTM D5185m	>150	<1	10	6
Copper	ppm	ASTM D5185m	>90	<1	3	3
Tin	ppm	ASTM D5185m	>5	<1	<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.

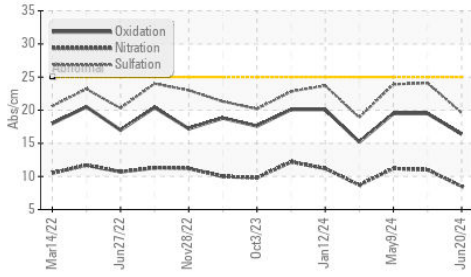
Silicon	ppm	ASTM D5185m	>35	5	12	11
Potassium	ppm	ASTM D5185m	>20	3	3	3
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	8.5	11.0	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	24.1	23.9
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

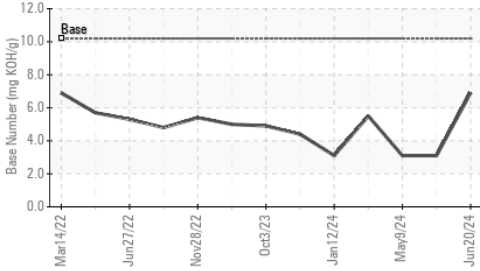
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		6	5	5
Boron	ppm	ASTM D5185m	50	23	4	4
Barium	ppm	ASTM D5185m	5	0	2	2
Molybdenum	ppm	ASTM D5185m	50	47	56	56
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	560	569	527	519
Calcium	ppm	ASTM D5185m	1510	1566	1557	1528
Phosphorus	ppm	ASTM D5185m	780	808	743	711
Zinc	ppm	ASTM D5185m	870	953	902	887
Sulfur	ppm	ASTM D5185m	2040	2838	2563	2463
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	19.5	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.9	3.1	3.1
Visc @ 100°C	cSt	ASTM D445	15.1	14.1	12.9	12.9

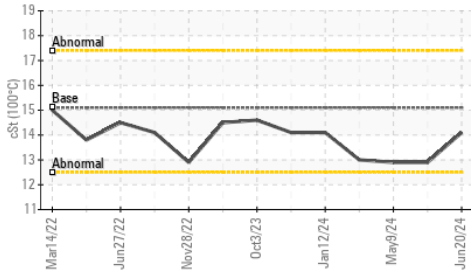
FT-IR (Direct Trend)



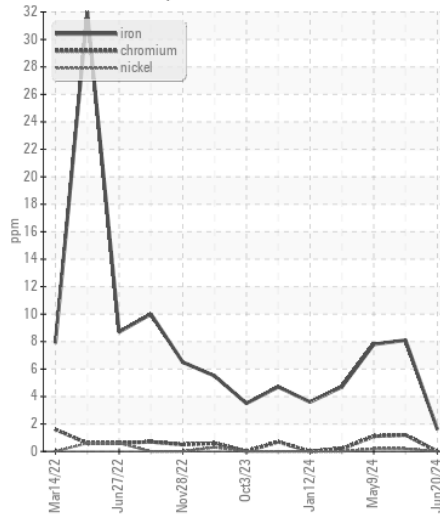
Base Number



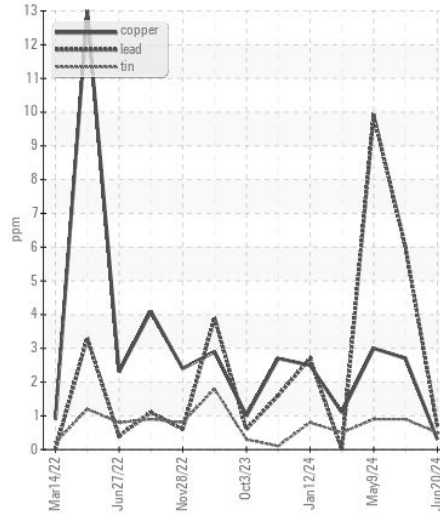
Viscosity @ 100°C



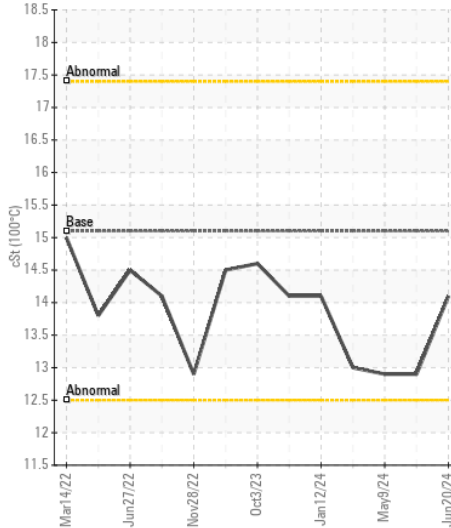
Ferrous Alloys



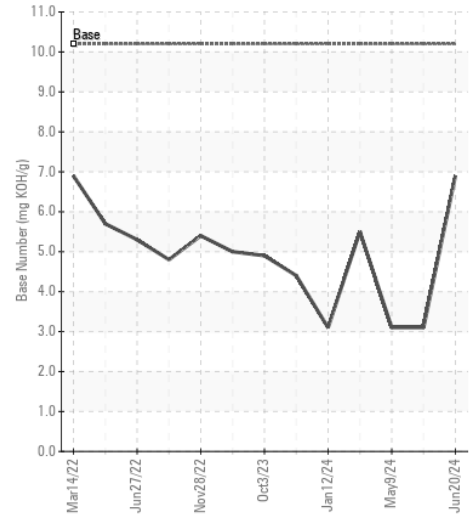
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0125702
Lab Number : 06216709
Unique Number : 11089573
Test Package : FLEET

Received : 21 Jun 2024
Tested : 24 Jun 2024
Diagnosed : 24 Jun 2024 - Wes Davis

GFL Environmental - 030 - Conway Myrtle Beach
 3010 HWY 378
 Conway, SC
 US 29527
 Contact: ARCILIO RUEZ
 aruiz@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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