



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

(YA163372)

Machine Id

930013

Component

Natural Gas Engine

Fluid

PETRO CANADA DURON GEO LD 15W40 (--- GAL)

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		GFL0123373	GFL0082445	GFL0050774
Sample Date		Client Info		20 Jun 2024	07 Sep 2023	28 Mar 2023
Machine Age	hrs	Client Info		7510	7510	6771
Oil Age	hrs	Client Info		7510	932	193
Filter Age	hrs	Client Info		7510	932	193
Oil Changed		Client Info		N/A	Changed	Not Changd
Filter Changed		Client Info		N/A	Changed	Not Changd
Sample Status				ABNORMAL	ATTENTION	SEVERE

WEAR

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

Iron	ppm	ASTM D5185m	>50	16	12	13
Chromium	ppm	ASTM D5185m	>4	2	3	3
Nickel	ppm	ASTM D5185m	>2	0	<1	2
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>9	2	2	3
Lead	ppm	ASTM D5185m	>30	▲ 36	2	5
Copper	ppm	ASTM D5185m	>35	4	2	2
Tin	ppm	ASTM D5185m	>4	<1	2	<1
Vanadium	ppm	ASTM D5185m		<1	0	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.

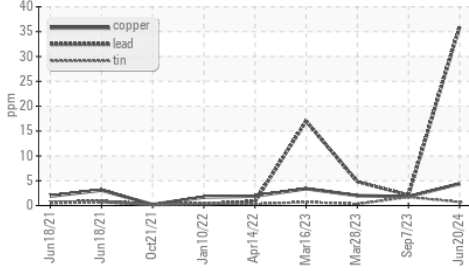
Silicon	ppm	ASTM D5185m	>+100	12	20	25
Potassium	ppm	ASTM D5185m	>20	19	● 58	▲ 1201
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		---	0.0	▲ 0.20
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	13.3	7.8	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.5	19.0	22.7
Silt	scalar	*Visual	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

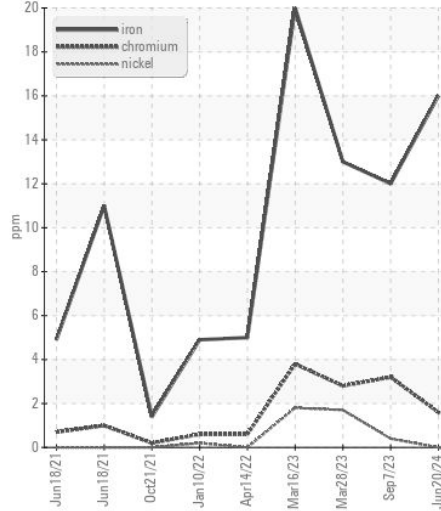
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		13	21	● 948
Boron	ppm	ASTM D5185m	50	8	33	39
Barium	ppm	ASTM D5185m	5	0	44	<1
Molybdenum	ppm	ASTM D5185m	50	52	48	80
Manganese	ppm	ASTM D5185m	0	<1	1	<1
Magnesium	ppm	ASTM D5185m	560	606	508	538
Calcium	ppm	ASTM D5185m	1510	1823	1407	1587
Phosphorus	ppm	ASTM D5185m	780	839	715	777
Zinc	ppm	ASTM D5185m	870	1066	864	959
Sulfur	ppm	ASTM D5185m	2040	2913	2545	2519
Oxidation	Abs/.1mm	*ASTM D7414	>25	25.5	15.6	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	3.0	7.6	10.1
Visc @ 100°C	cSt	ASTM D445	15.1	14.0	14.3	14.3

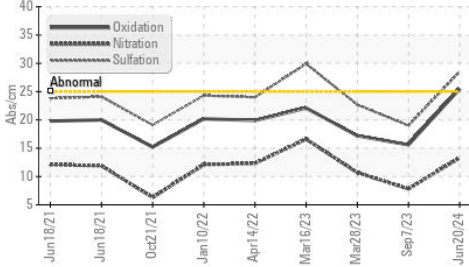
▲ Non-ferrous Metals



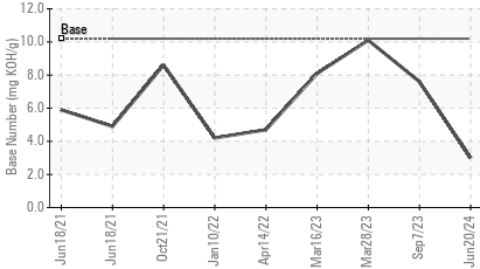
Ferrous Alloys



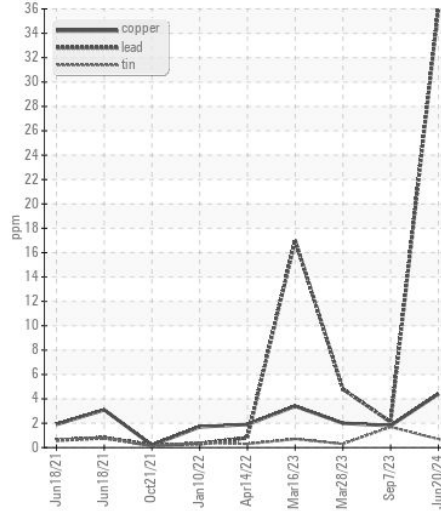
FT-IR (Direct Trend)



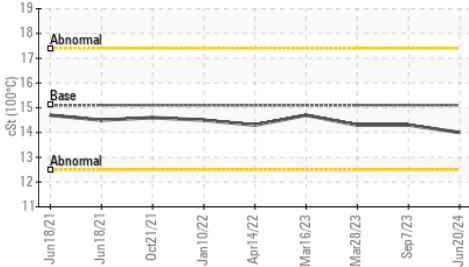
Base Number



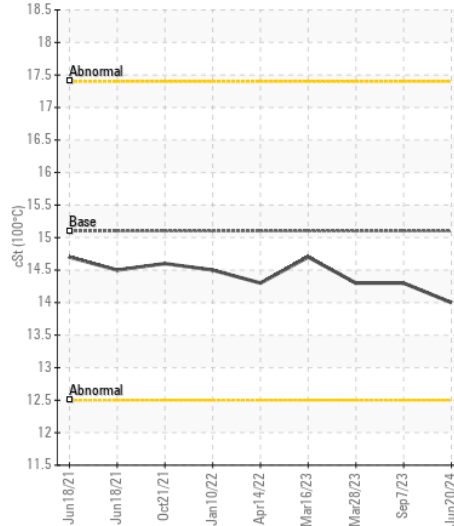
▲ Non-ferrous Metals



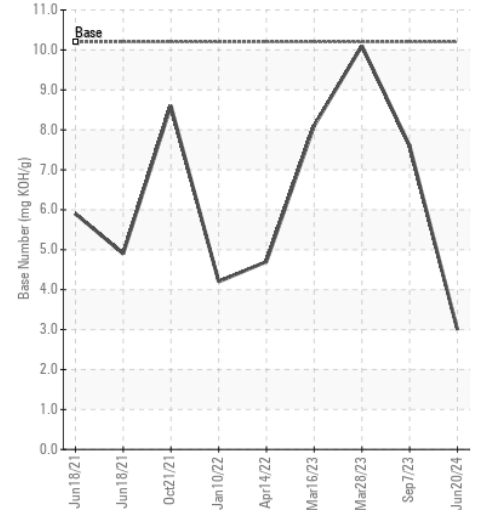
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0123373

Lab Number : 06223338

Unique Number : 11101535

Test Package : FLEET

Received : 28 Jun 2024

Tested : 01 Jul 2024

Diagnosed : 01 Jul 2024 - Don Baldrige

GFL Environmental - 007 - Brunswick

2809 Galloway Road

Bolivia, NC

US 28422

Contact: DONALD CRAVEN

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T:

F: (910)253-4179

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)