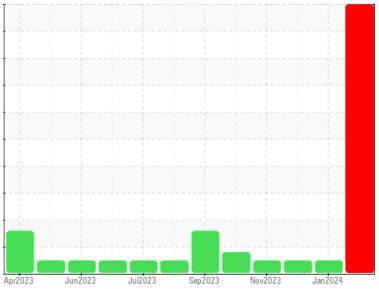
PROBLEM SUMMARY

Machine Id
732027
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

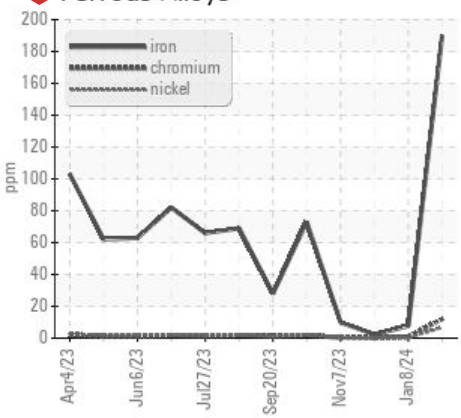
Sample Rating Trend



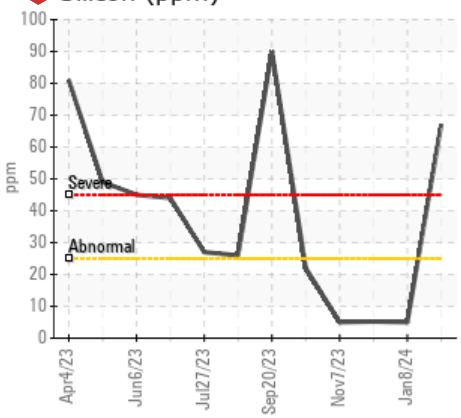
WEAR

COMPONENT CONDITION SUMMARY

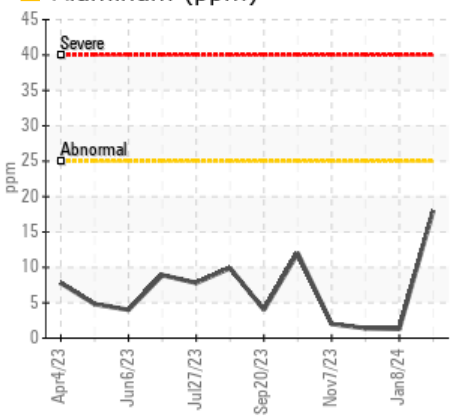
Ferrous Alloys



Silicon (ppm)



Aluminum (ppm)



RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	**190**	8	2
Chromium	ppm	ASTM D5185m	>5	**12**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**7**	<1	0
Aluminum	ppm	ASTM D5185m	>25	**18**	1	1
Silicon	ppm	ASTM D5185m	>25	**67**	5	5

Customer Id: GFL836
Sample No.: GFL0103308
Lab Number: 06070358
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

08 Jan 2024 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

05 Dec 2023 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

07 Nov 2023 Diag: Wes Davis

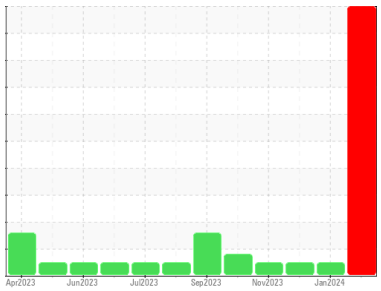
NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
732027
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (--- GAL)

DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Piston, ring and cylinder wear is indicated. Valve wear is indicated.

Contamination

Elemental level of silicon (Si) above normal.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0103308**	GFL0103343	GFL0099911
Sample Date		Client Info		**23 Jan 2024**	08 Jan 2024	05 Dec 2023
Machine Age	hrs	Client Info		**1836**	1765	1588
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**SEVERE**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.1	**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**190**	8	2
Chromium	ppm	ASTM D5185m	>5	**12**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**7**	<1	0
Titanium	ppm	ASTM D5185m	>5	**<1**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**18**	1	1
Lead	ppm	ASTM D5185m	>40	**12**	4	0
Copper	ppm	ASTM D5185m	>150	**3**	<1	<1
Tin	ppm	ASTM D5185m	>4	**2**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**6**	24	33
Barium	ppm	ASTM D5185m	5	**0**	0	3
Molybdenum	ppm	ASTM D5185m	50	**73**	52	48
Manganese	ppm	ASTM D5185m	0	**5**	<1	0
Magnesium	ppm	ASTM D5185m	560	**691**	592	492
Calcium	ppm	ASTM D5185m	1510	**2035**	1637	1482
Phosphorus	ppm	ASTM D5185m	780	**921**	816	733
Zinc	ppm	ASTM D5185m	870	**953**	1019	895
Sulfur	ppm	ASTM D5185m	2040	**2244**	2513	2565

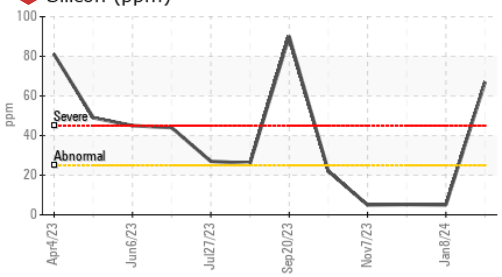
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**67**	5	5
Sodium	ppm	ASTM D5185m		**13**	6	2
Potassium	ppm	ASTM D5185m	>20	**4**	1	2

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0.1**	0	0
Nitration	Abs/cm	*ASTM D7624	>20	**15.3**	10.0	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**29.0**	23.2	19.9

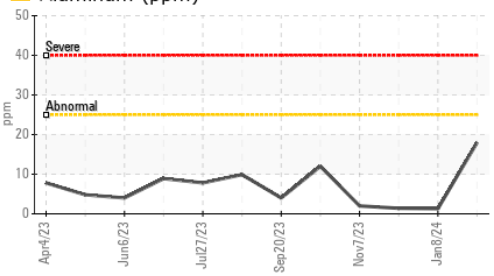
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**26.5**	19.1	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	**3.1**	5.0	6.8

OIL ANALYSIS REPORT

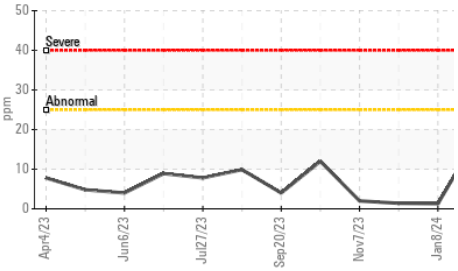
Silicon (ppm)



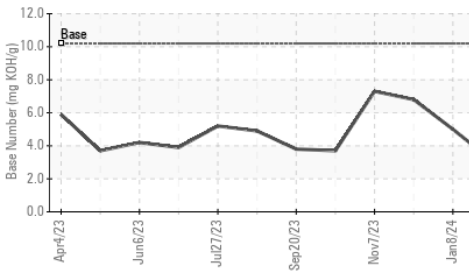
Aluminum (ppm)



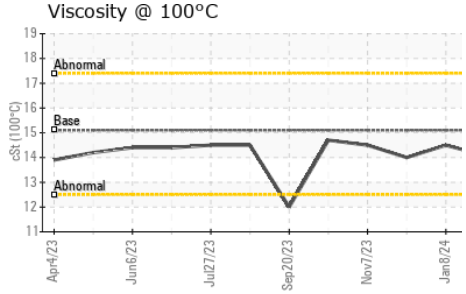
Aluminum (ppm)



Base Number



Viscosity @ 100°C

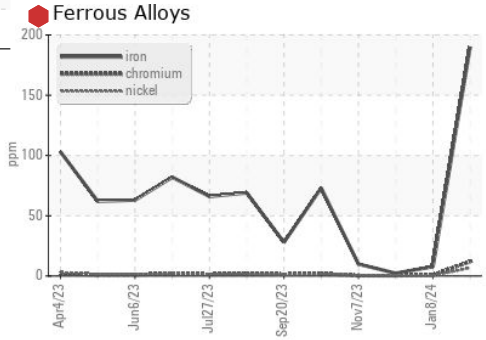


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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
Free Water	scalar	*Visual		**NEG**	NEG	NEG

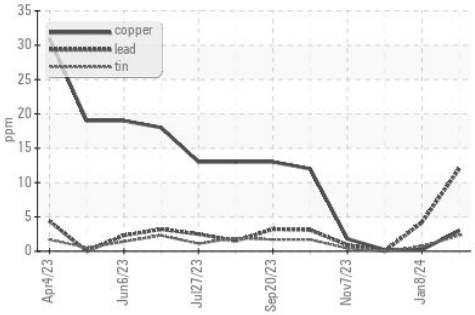
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	**14.07**	14.5	14.0

GRAPHS

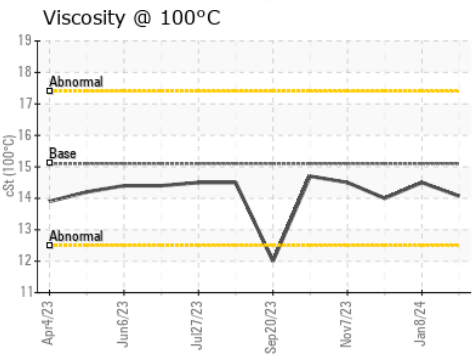
Ferrous Alloys



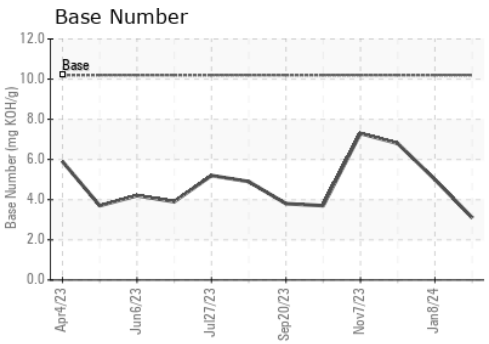
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0103308
Lab Number : 06070358
Unique Number : 10847035
Test Package : FLEET

Recieved : 25 Jan 2024
Diagnosed : 01 Feb 2024
Diagnostician : Jonathan Hester

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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T: (580)461-1509
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