



PROBLEM SUMMARY

Sample Rating Trend

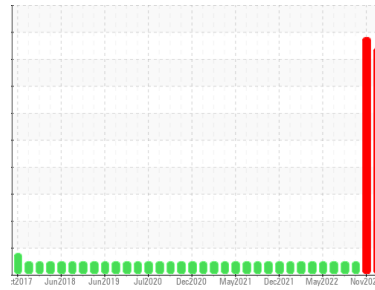
GLYCOL



Machine Id
2689C

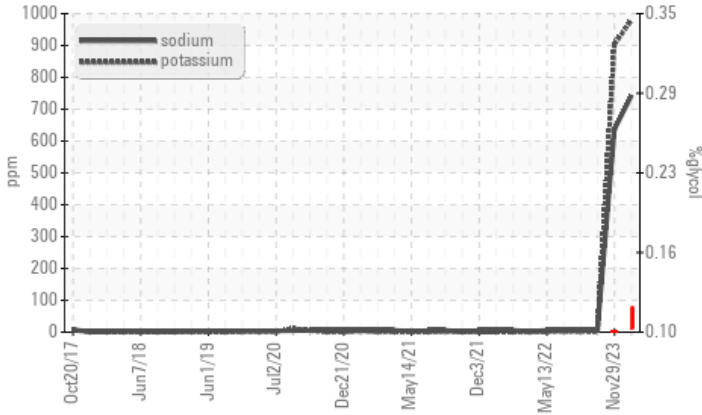
Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (48 QTS)



COMPONENT CONDITION SUMMARY

Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	SEVERE	NORMAL
Sodium	ppm	ASTM D5185m	▲ 742	▲ 636	8
Potassium	ppm	ASTM D5185m >20	▲ 980	▲ 904	0
Glycol	%	*ASTM D2982	● 0.12	● 0.10	---

Customer Id: GFL001
Sample No.: GFL0094645
Lab Number: 06028432
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Glycol Access	---	---	?	We advise that you check for the source of the coolant leak.

HISTORICAL DIAGNOSIS

29 Nov 2023 Diag: Don Baldrige

GLYCOL



We advise that you check for the source of the coolant leak. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is positive. Moderate concentration of visible dirt/debris present in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

view report



01 May 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



30 Jan 2023 Diag: Don Baldrige

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.

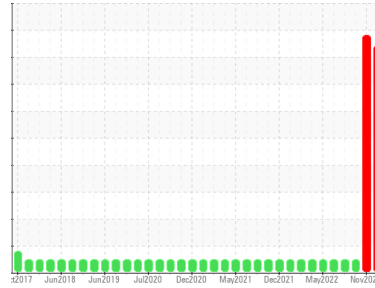
view report





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
2689C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (48 QTS)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is positive.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0094645	GFL0094728	GFL0056717
Sample Date	Client Info	05 Dec 2023	29 Nov 2023	01 May 2023
Machine Age	hrs	4302	4230	2682
Oil Age	hrs	0	0	1334
Oil Changed	Client Info	Not Changed	Changed	Changed
Sample Status		SEVERE	SEVERE	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	22	12	6
Chromium	ppm ASTM D5185m >4	2	2	<1
Nickel	ppm ASTM D5185m >2	0	<1	0
Titanium	ppm ASTM D5185m	<1	<1	0
Silver	ppm ASTM D5185m >3	0	<1	0
Aluminum	ppm ASTM D5185m >9	4	4	2
Lead	ppm ASTM D5185m >30	12	10	0
Copper	ppm ASTM D5185m >35	2	<1	<1
Tin	ppm ASTM D5185m >4	<1	<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	14	16	15
Barium	ppm ASTM D5185m 5	6	0	0
Molybdenum	ppm ASTM D5185m 50	72	65	59
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 560	493	505	629
Calcium	ppm ASTM D5185m 1510	1567	1460	1834
Phosphorus	ppm ASTM D5185m 780	641	637	744
Zinc	ppm ASTM D5185m 870	904	903	1116
Sulfur	ppm ASTM D5185m 2040	2298	2279	2814

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >+100	26	19	5
Sodium	ppm ASTM D5185m	742	636	8
Potassium	ppm ASTM D5185m >20	980	904	0
Glycol	% *ASTM D2982	0.12	0.10	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	0	0	0
Nitration	Abs/cm *ASTM D7624 >20	14.3	14.2	10.5
Sulfation	Abs/.1mm *ASTM D7415 >30	25.8	25.4	21.4

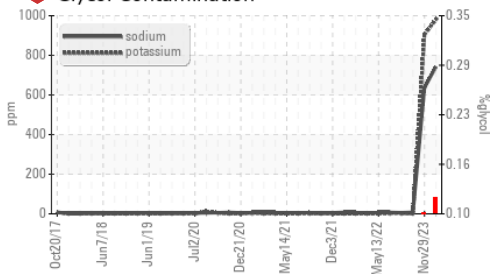
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	22.1	21.4	18.4
Base Number (BN)	mg KOH/g ASTM D2896 10.2	5.0	4.9	4.0



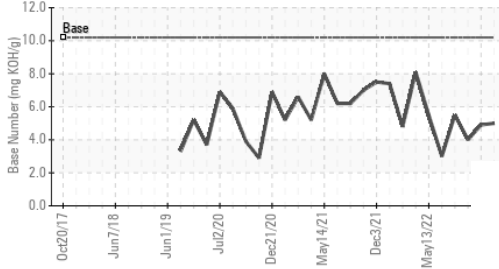
OIL ANALYSIS REPORT

Glycol Contamination



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

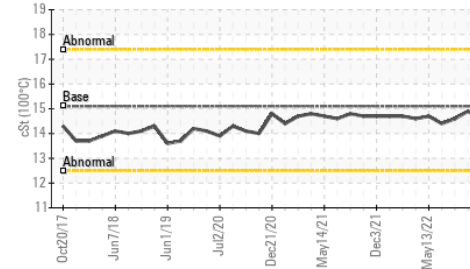
Base Number



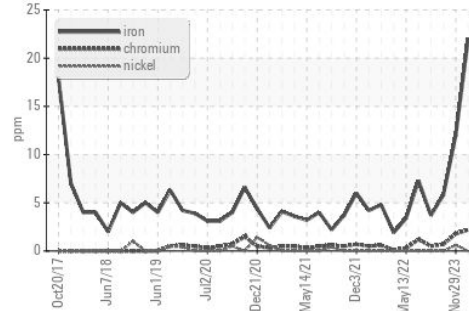
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.5	14.6

GRAPHS

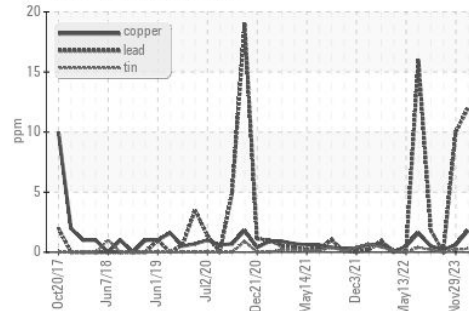
Viscosity @ 100°C



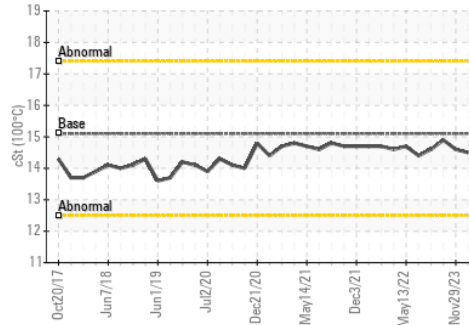
Ferrous Alloys



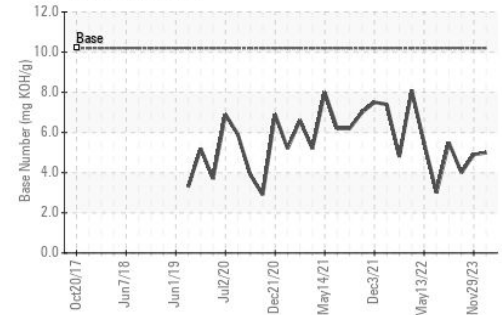
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0094645 Received : 07 Dec 2023
 Lab Number : 06028432 Diagnosed : 11 Dec 2023
 Unique Number : 10778223 Diagnostician : Don Baldrige
 Test Package : FLEET

GFL Environmental - 001 - Raleigh(CNG)
 3741 Conquest Drive
 Garner, NC
 US 27529
 Contact: Craig Johnson
 craig.johnson@gflenv.com
 T: (919)662-7100
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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)