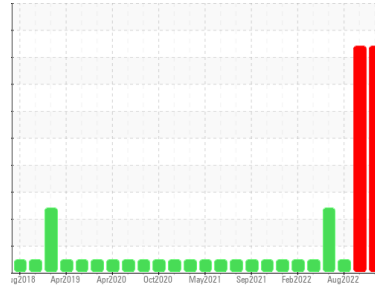




PROBLEM SUMMARY

Sample Rating Trend



GLYCOL



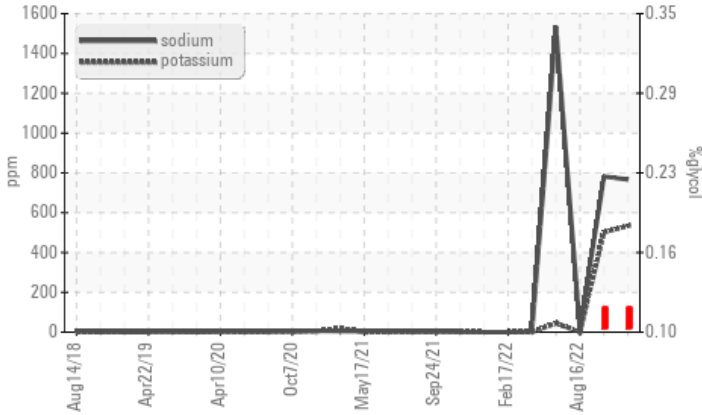
Machine Id
3806C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (10 GAL)

COMPONENT CONDITION SUMMARY

Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	SEVERE	NORMAL
Sodium	ppm	ASTM D5185m		▲ 767	▲ 782	9
Potassium	ppm	ASTM D5185m	>20	▲ 534	▲ 502	0
Glycol	%	*ASTM D2982		● 0.12	● 0.12	---

Customer Id: GFL031
Sample No.: GFL0050894
Lab Number: 05926583
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
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
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

19 May 2023 Diag: Don Baldrige

GLYCOL



We advise that you check for the source of the coolant leak. Oil and filter 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. There is a high concentration of glycol 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](#)



16 Aug 2022 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](#)



13 May 2022 Diag: Jonathan Hester

COOL CHEMICALS



We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

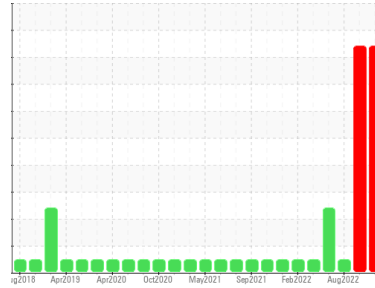
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
3806C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (10 GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Oil and filter change at the time of sampling has been noted. 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. There is a high concentration of glycol present in the oil.

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		GFL0050894	GFL0084249	GFL0050827
Sample Date	Client Info		11 Aug 2023	19 May 2023	16 Aug 2022
Machine Age	hrs	Client Info	12002	11544	9817
Oil Age	hrs	Client Info	12002	11544	1188
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	SEVERE	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	17	9	9
Chromium	ppm	ASTM D5185m >4	2	1	2
Nickel	ppm	ASTM D5185m >2	1	<1	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	3	0	2
Lead	ppm	ASTM D5185m >30	8	5	9
Copper	ppm	ASTM D5185m >35	3	2	2
Tin	ppm	ASTM D5185m >4	<1	<1	<1
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	12	27	21
Barium	ppm	ASTM D5185m 5	0	0	0
Molybdenum	ppm	ASTM D5185m 50	144	148	52
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	543	613	549
Calcium	ppm	ASTM D5185m 1510	1448	1587	1710
Phosphorus	ppm	ASTM D5185m 780	679	833	778
Zinc	ppm	ASTM D5185m 870	976	1022	973
Sulfur	ppm	ASTM D5185m 2040	2576	2956	2351

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	20	21	14
Sodium	ppm	ASTM D5185m	767	782	9
Potassium	ppm	ASTM D5185m >20	534	502	0
Glycol	%	*ASTM D2982	0.12	0.12	---

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	11.1	8.4	13.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.3	20.1	28.8

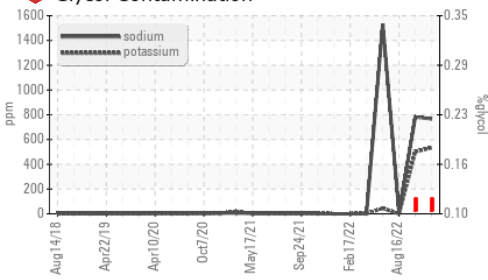
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.7	15.7	25.5
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	6.5	11.1	5.0



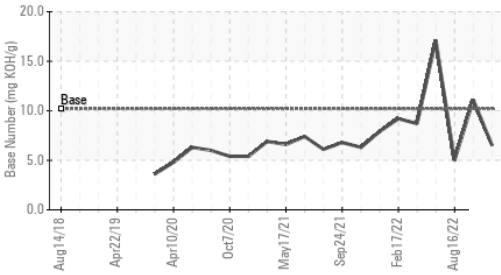
OIL ANALYSIS REPORT

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	NONE
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

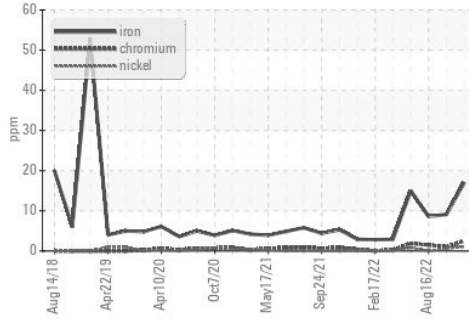
Base Number



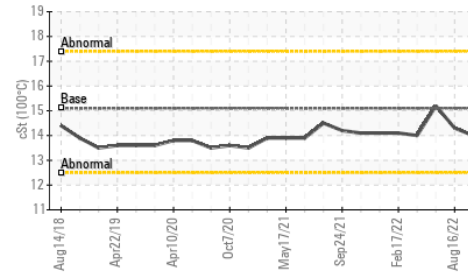
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	13.9	14.0

GRAPHS

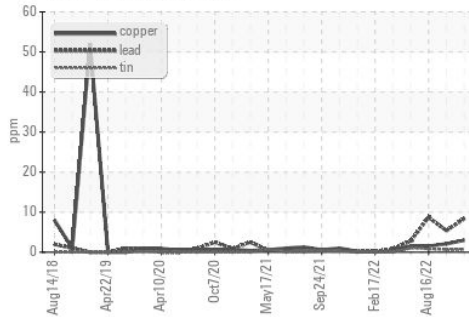
Ferrous Alloys



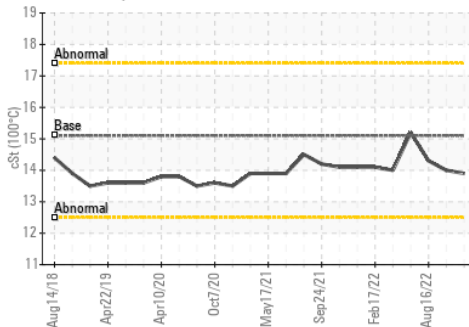
Viscosity @ 100°C



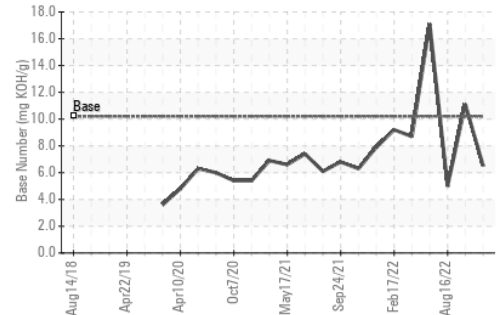
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0050894 **Received** : 16 Aug 2023
Lab Number : 05926583 **Diagnosed** : 18 Aug 2023
Unique Number : 10606530 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 031 - Greenville/Spartanburg
 1635 Antioch Church Rd
 Piedmont, SC
 US 29673
 Contact: TECHNICIAN ACCOUNT
 catherine.anastasio@wearcheck.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: