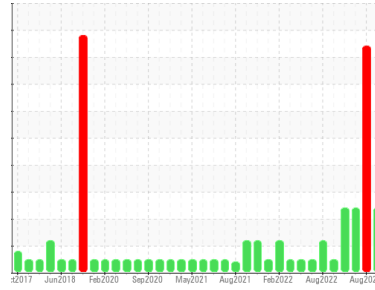




PROBLEM SUMMARY

Sample Rating Trend



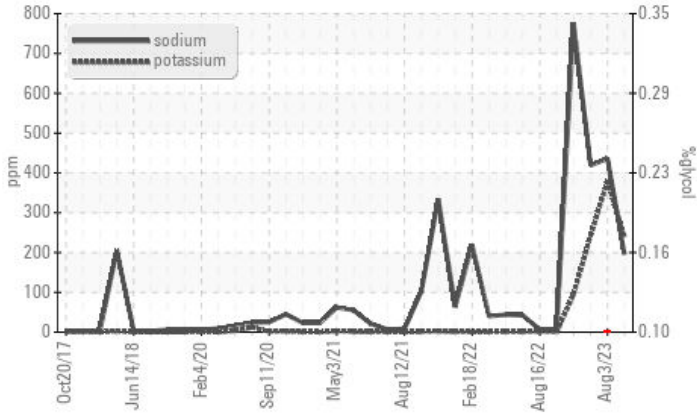
COOLANT



Machine Id
2667C
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (12 GAL)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	SEVERE	ABNORMAL
Sodium	ppm	ASTM D5185m	▲ 196	▲ 436	▲ 419
Potassium	ppm	ASTM D5185m >20	▲ 241	▲ 379	▲ 242

Customer Id: GFL017
Sample No.: GFL0079609
Lab Number: 05920061
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
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

03 Aug 2023 Diag: Jonathan Hester

GLYCOL



We advise that you check for the source of the coolant leak. Check for low coolant level. 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. All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is positive. 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](#)



29 Jun 2023 Diag: Angela Borella

COOLANT



We advise that you check for the source of the 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](#)



28 Feb 2023 Diag: Jonathan Hester

COOLANT



We advise that you check for the source of the 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.

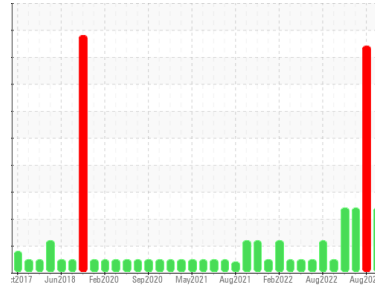
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



COOLANT



Machine Id
2667C

Component
Natural Gas Engine

Fluid
PETRO CANADA DURON GEO LD 15W40 (12 GAL)

DIAGNOSIS

Recommendation

We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0079609	GFL0088559	GFL0083296
Sample Date	Client Info	08 Aug 2023	03 Aug 2023	29 Jun 2023
Machine Age	hrs	Client Info	6792	6792
Oil Age	hrs	Client Info	256	469
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	SEVERE	ABNORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	---	0.10	---

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	7	11	8
Chromium	ppm	ASTM D5185m >4	<1	1	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	<1	<1	0
Aluminum	ppm	ASTM D5185m >9	1	2	<1
Lead	ppm	ASTM D5185m >30	<1	0	0
Copper	ppm	ASTM D5185m >35	<1	0	<1
Tin	ppm	ASTM D5185m >4	0	0	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	26	20	10
Barium	ppm	ASTM D5185m 5	0	0	14
Molybdenum	ppm	ASTM D5185m 50	57	61	52
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	543	588	409
Calcium	ppm	ASTM D5185m 1510	1536	1606	1189
Phosphorus	ppm	ASTM D5185m 780	771	789	505
Zinc	ppm	ASTM D5185m 870	915	988	736
Sulfur	ppm	ASTM D5185m 2040	2566	3092	2270

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	11	21	30
Sodium	ppm	ASTM D5185m	▲ 196	▲ 436	▲ 419
Potassium	ppm	ASTM D5185m >20	▲ 241	▲ 379	▲ 242

INFRA-RED

method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	7.3	9.3	11.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.5	21.1	22.5

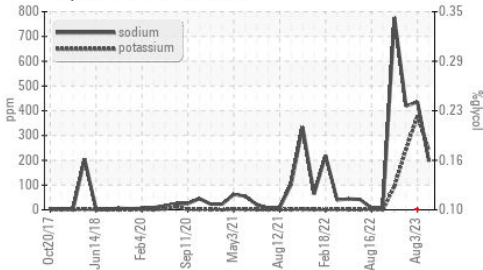
FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.9	16.4	18.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	8.0	8.1	7.6

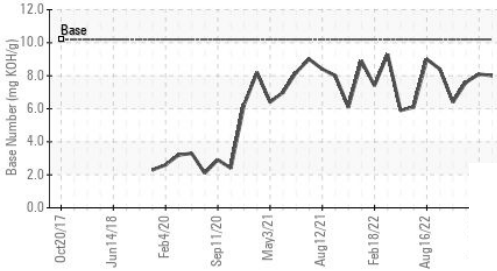


OIL ANALYSIS REPORT

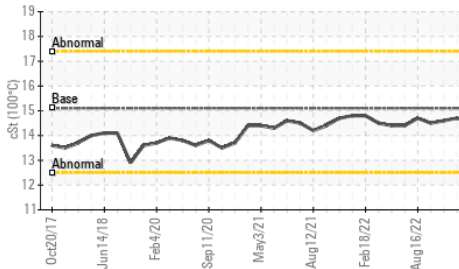
▲ Glycol Contamination



Base Number



Viscosity @ 100°C



VISUAL

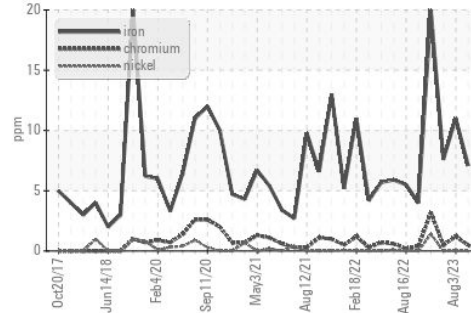
	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar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

FLUID PROPERTIES

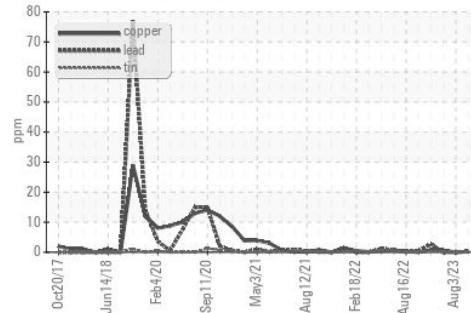
	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	14.6	14.7

GRAPHS

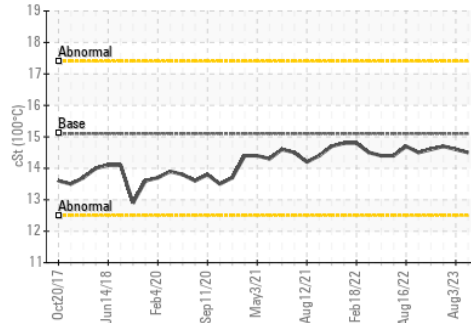
Ferrous Alloys



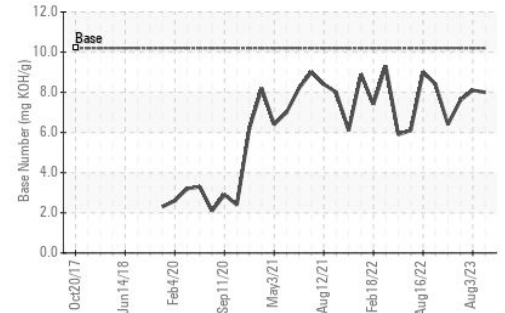
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079609 **Received** : 09 Aug 2023
Lab Number : 05920061 **Diagnosed** : 11 Aug 2023
Unique Number : 10591975 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 017 - Durham
 148 Stone Park Court
 Durham, NC
 US 27703
 Contact: Shane Parks
 shane.parks@gflenv.com
 T: (919)596-1363
 F: (919)598-1852

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)