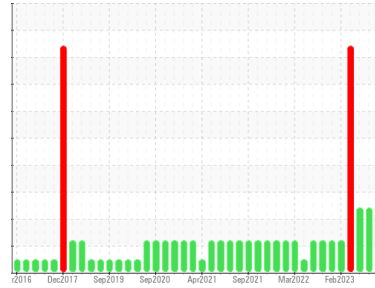




PROBLEM SUMMARY

Sample Rating Trend



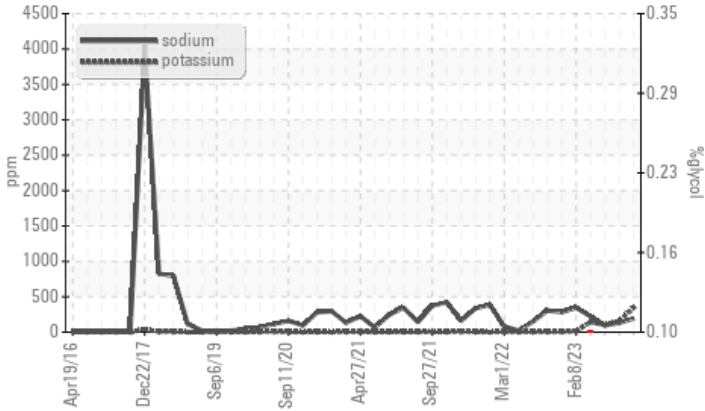
COOLANT



Machine Id
2618C
 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	ABNORMAL	ABNORMAL
Sodium	ppm	ASTM D5185m	▲ 193	▲ 133	▲ 95
Potassium	ppm	ASTM D5185m >20	▲ 344	▲ 157	▲ 102

Customer Id: GFL017
 Sample No.: GFL0079608
 Lab Number: 05920060
 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: Doug Bogart

COOLANT



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](#)



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](#)



20 Jun 2023 Diag: Jonathan Hester

GLYCOL



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. Test for glycol is positive. The BN result indicates that there is suitable alkalinity remaining in the oil.

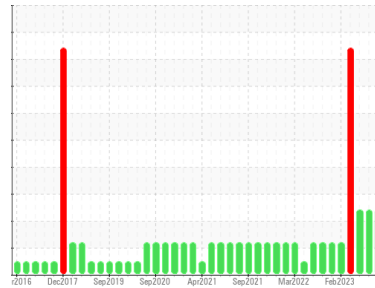
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



COOLANT



Machine Id
2618C

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		GFL0079608	GFL0079604	GFL0083303
Sample Date	Client Info		08 Aug 2023	03 Aug 2023	29 Jun 2023
Machine Age	hrs	Client Info	10732	10732	10732
Oil Age	hrs	Client Info	245	245	398
Oil Changed	Client Info		N/A	N/A	N/A
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	7	7	5
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	0	0
Aluminum	ppm	ASTM D5185m >9	2	1	<1
Lead	ppm	ASTM D5185m >30	<1	0	0
Copper	ppm	ASTM D5185m >35	<1	0	0
Tin	ppm	ASTM D5185m >4	<1	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	18	13	21
Barium	ppm	ASTM D5185m 5	0	0	14
Molybdenum	ppm	ASTM D5185m 50	58	49	53
Manganese	ppm	ASTM D5185m 0	<1	<1	<1
Magnesium	ppm	ASTM D5185m 560	554	566	591
Calcium	ppm	ASTM D5185m 1510	1557	1580	1621
Phosphorus	ppm	ASTM D5185m 780	785	782	785
Zinc	ppm	ASTM D5185m 870	936	983	990
Sulfur	ppm	ASTM D5185m 2040	2646	2942	3015

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	11	15	12
Sodium	ppm	ASTM D5185m	▲ 193	▲ 133	▲ 95
Potassium	ppm	ASTM D5185m >20	▲ 344	▲ 157	▲ 102

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	7.8	9.2	8.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	19.3	19.7	20.5

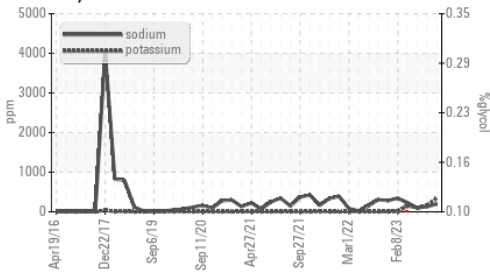
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.1	16.2	16.9
Base Number (BN)	mg KOH/g	ASTM D2896 10.2	8.4	8.3	8.6

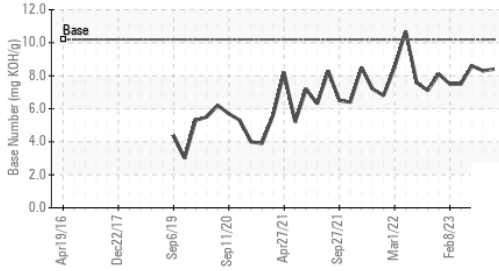


OIL ANALYSIS REPORT

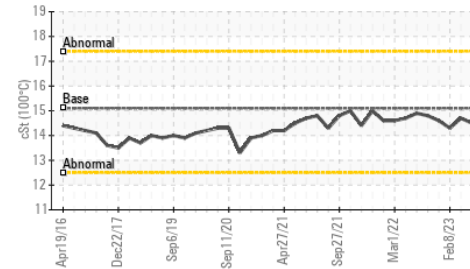
Glycol Contamination



Base Number



Viscosity @ 100°C

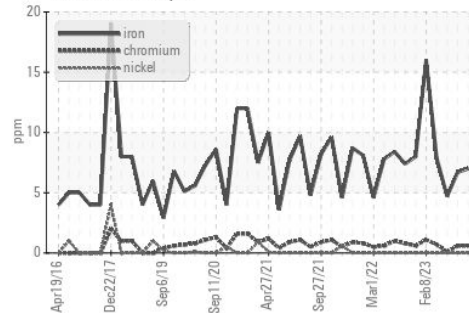


VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual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

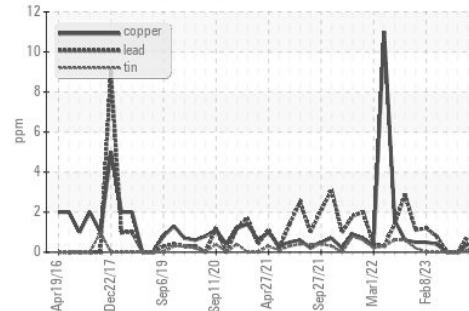
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.1	14.4	14.6	14.5

GRAPHS

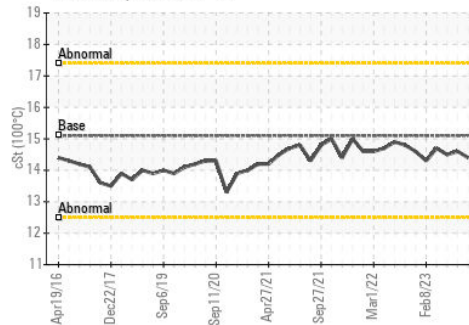
Ferrous Alloys



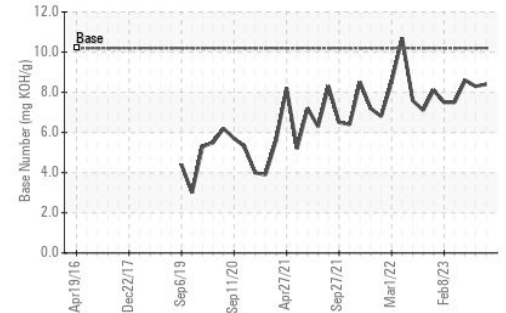
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079608 **Received** : 09 Aug 2023
Lab Number : 05920060 **Diagnosed** : 11 Aug 2023
Unique Number : 10591974 **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)