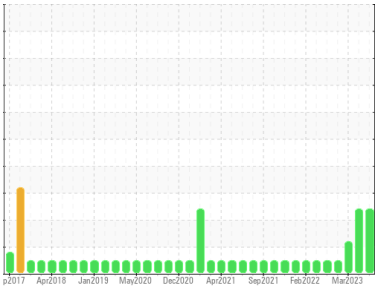
PROBLEM SUMMARY

Sample Rating Trend

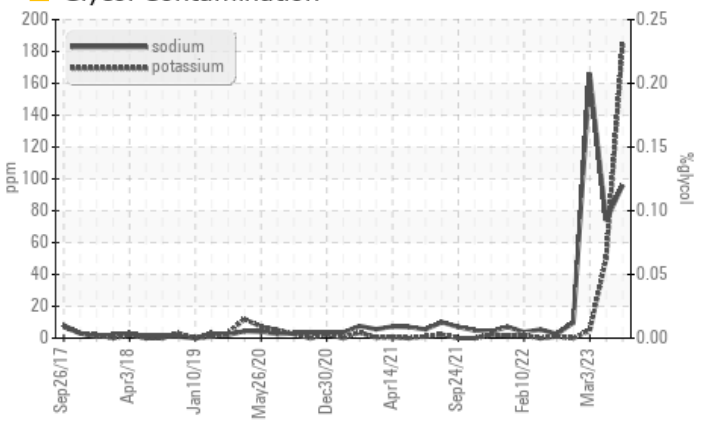


COOL CHEMICALS

Machine Id
2686C
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (50 QTS)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. 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				**ABNORMAL**	ABNORMAL	ABNORMAL
Sodium	ppm	ASTM D5185m		▲ **96**	▲ 74	▲ 166
Potassium	ppm	ASTM D5185m	>20	▲ **185**	▲ 50	5

Customer Id: GFL030
Sample No.: GFL0090102
Lab Number: 05997767
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

07 Jun 2023 Diag: Jonathan Hester

COOL CHEMICALS

We advise that you check for the source of the coolant leak. Check for low coolant level. 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. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

03 Mar 2023 Diag: Jonathan Hester

COOL CHEMICALS

We advise that you check for possible coolant leak. Check for low coolant level. 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. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

14 Nov 2022 Diag: Angela Borella

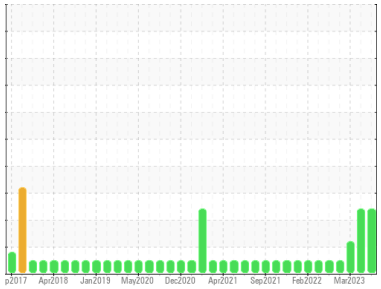
NORMAL

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



COOL CHEMICALS

Machine Id
2686C
Component
Natural Gas Engine
Fluid
PETRO CANADA DURON GEO LD 15W40 (50 QTS)

DIAGNOSIS

Recommendation
We advise that you check for the source of the coolant leak. Check for low coolant level. 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.

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		**GFL0090102**	GFL0070787	GFL0070793
Sample Date		Client Info		**27 Oct 2023**	07 Jun 2023	03 Mar 2023
Machine Age	hrs	Client Info		**15980**	14945	14436
Oil Age	hrs	Client Info		**600**	600	600
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**15**	6	7
Chromium	ppm	ASTM D5185m	>4	**2**	1	<1
Nickel	ppm	ASTM D5185m	>2	**<1**	1	<1
Titanium	ppm	ASTM D5185m		**<1**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	<1	0
Aluminum	ppm	ASTM D5185m	>9	**1**	1	2
Lead	ppm	ASTM D5185m	>30	**10**	2	6
Copper	ppm	ASTM D5185m	>35	**<1**	0	<1
Tin	ppm	ASTM D5185m	>4	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	**8**	11	13
Barium	ppm	ASTM D5185m	5	**0**	0	0
Molybdenum	ppm	ASTM D5185m	50	**50**	54	62
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	560	**503**	551	461
Calcium	ppm	ASTM D5185m	1510	**1478**	1602	1459
Phosphorus	ppm	ASTM D5185m	780	**611**	728	660
Zinc	ppm	ASTM D5185m	870	**836**	1005	924
Sulfur	ppm	ASTM D5185m	2040	**2173**	3068	2391

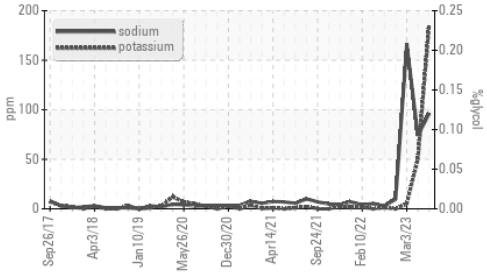
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	**12**	11	21
Sodium	ppm	ASTM D5185m		▲ **96**	▲ 74	▲ 166
Potassium	ppm	ASTM D5185m	>20	▲ **185**	▲ 50	5

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		**0**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**12.2**	10.2	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**26.7**	22.0	23.9

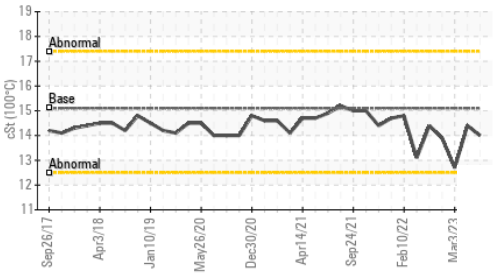
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**23.9**	19.3	17.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	**2.6**	4.7	3.3

OIL ANALYSIS REPORT

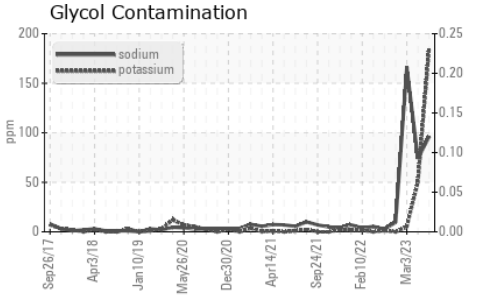
Glycol Contamination



Viscosity @ 100°C



Glycol Contamination

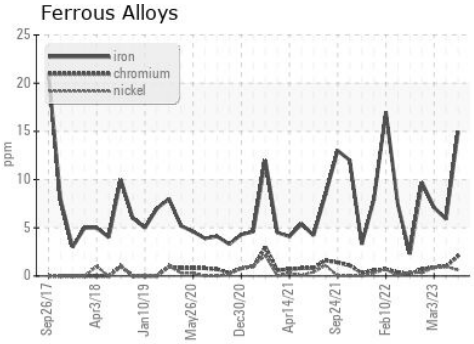


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

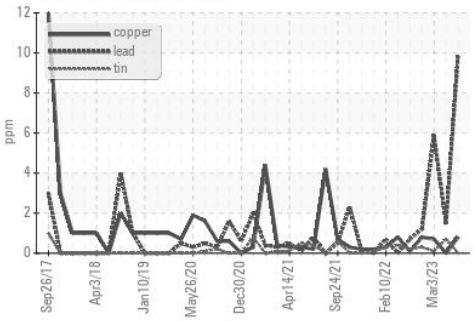
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	**14.0**	14.4	12.7

GRAPHS

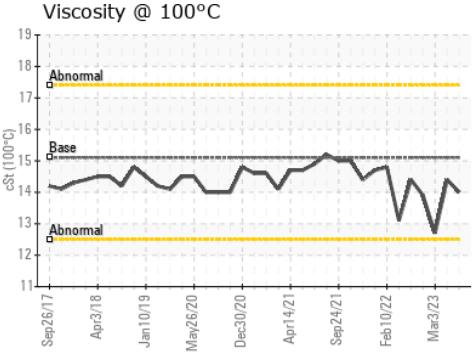
Ferrous Alloys



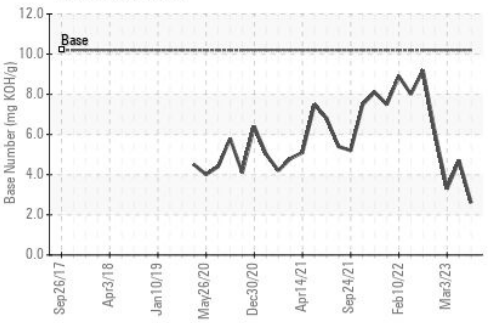
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0090102
Lab Number : 05997767
Unique Number : 10726127
Test Package : FLEET (Additional Tests: Glycol)

Received : 03 Nov 2023
Diagnosed : 07 Nov 2023
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)

GFL Environmental - 030 - Conway Myrtle Beach
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Conway, SC
US 29527
Contact: CHET STROSCHINE
cstroschine@gflenv.com
T:
F:

Report Id: GFL030 [WUSCAR] 05997767 (Generated: 11/08/2023 03:54:25) Rev: 1

Submitted By: CHET STROSCHINE