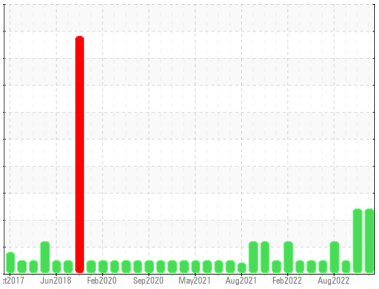
PROBLEM SUMMARY

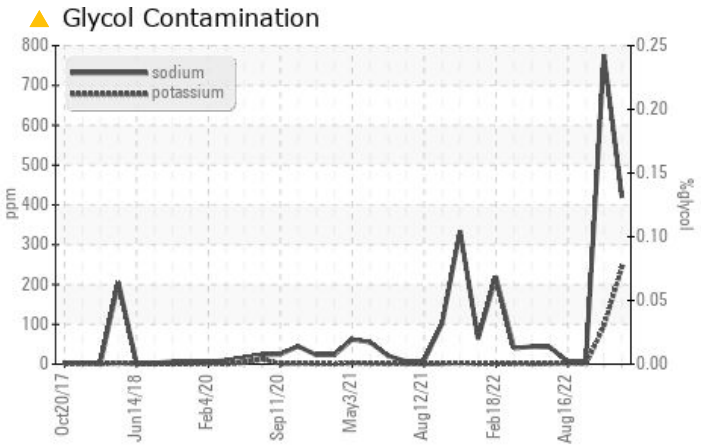
Sample Rating Trend



COOLANT

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

COMPONENT CONDITION SUMMARY



RECOMMENDATION

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.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Sodium	ppm	ASTM D5185m		▲ **419**	▲ 776	7
Potassium	ppm	ASTM D5185m	>20	▲ **242**	▲ 95	0

Customer Id: GFL017
Sample No.: GFL0083296
Lab Number: 05887636
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Angela Borella +1 800-237-1369
angela.borella@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

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

13 Dec 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

16 Aug 2022 Diag: Jonathan Hester

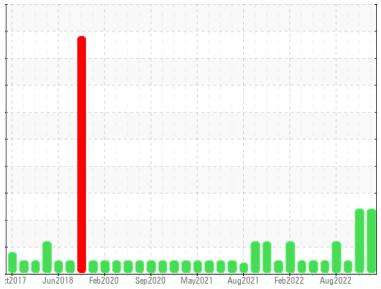
VISUAL METAL

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.Moderate concentration of visible metal present. 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



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 the source of the 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	history 1	history 2
Sample Number		Client Info		**GFL0083296**	GFL0065791	GFL0052737
Sample Date		Client Info		**29 Jun 2023**	28 Feb 2023	13 Dec 2022
Machine Age	hrs	Client Info		**6792**	6792	6792
Oil Age	hrs	Client Info		**469**	604	132
Oil Changed		Client Info		**N/A**	N/A	Changed
Sample Status				**ABNORMAL**	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>50	**8**	20	4
Chromium	ppm	ASTM D5185m	>4	**<1**	3	<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	**<1**	4	1
Lead	ppm	ASTM D5185m	>30	**0**	3	<1
Copper	ppm	ASTM D5185m	>35	**<1**	<1	0
Tin	ppm	ASTM D5185m	>4	**0**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	50	**10**	14	38
Barium	ppm	ASTM D5185m	5	**14**	0	0
Molybdenum	ppm	ASTM D5185m	50	**52**	77	49
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	560	**409**	528	527
Calcium	ppm	ASTM D5185m	1510	**1189**	1789	1551
Phosphorus	ppm	ASTM D5185m	780	**505**	687	770
Zinc	ppm	ASTM D5185m	870	**736**	1039	896
Sulfur	ppm	ASTM D5185m	2040	**2270**	2407	2807

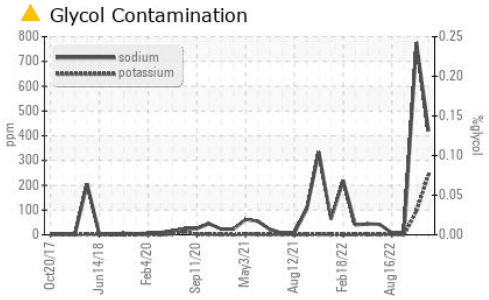
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>+100	**30**	15	3
Sodium	ppm	ASTM D5185m		▲ **419**	▲ 776	7
Potassium	ppm	ASTM D5185m	>20	▲ **242**	▲ 95	0

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844		**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**11.3**	11.8	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.5**	24.3	20.8

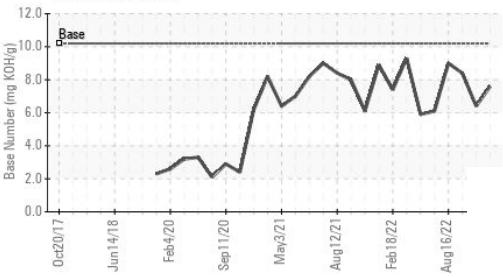
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**18.1**	18.2	17.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	**7.6**	6.4	8.4

OIL ANALYSIS REPORT

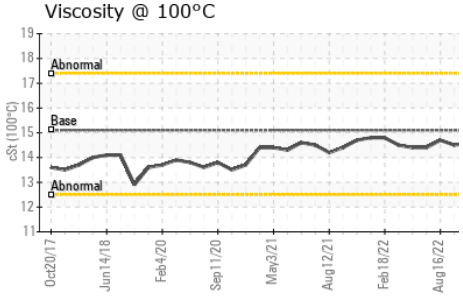
Glycol Contamination



Base Number



Viscosity @ 100°C

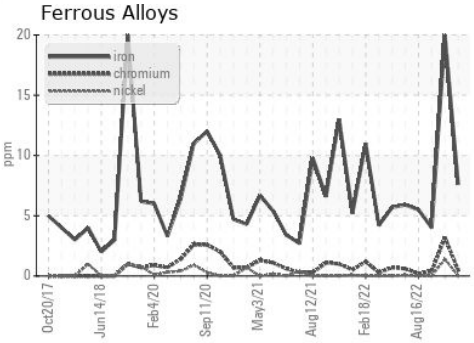


VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	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

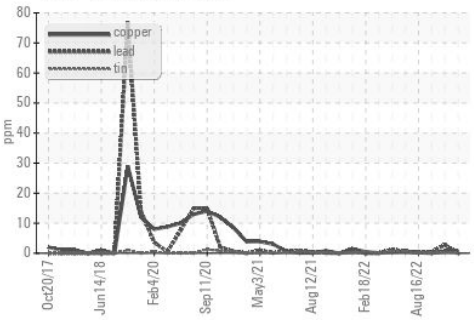
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.1	**14.7**	14.6	14.5

GRAPHS

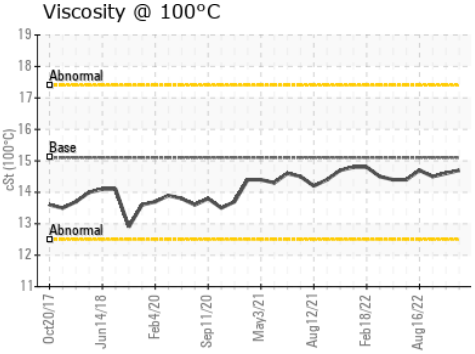
Ferrous Alloys



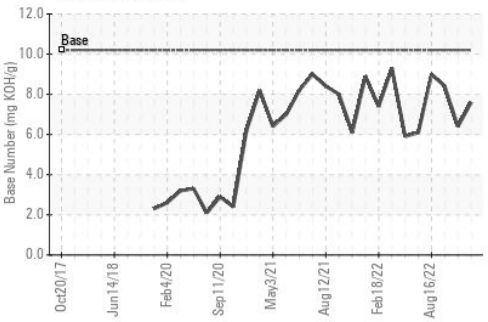
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083296
Lab Number : 05887636
Unique Number : 10538119
Test Package : FLEET

Received : 30 Jun 2023
Diagnosed : 06 Jul 2023
Diagnostician : Angela Borella

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 - 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