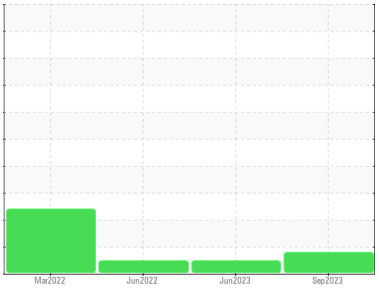
PROBLEM SUMMARY

Sample Rating Trend

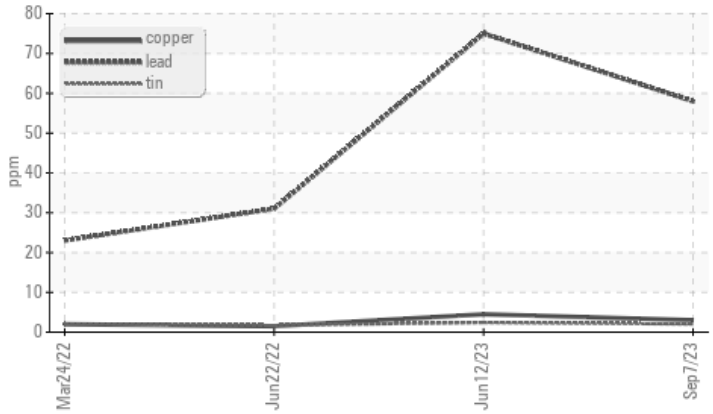


WEAR

Machine Id
524016-902
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	NORMAL
Lead	ppm	ASTM D5185m	>40	▲ **58**	75	31

Customer Id: GFL632
Sample No.: GFL0051012
Lab Number: 05947839
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

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

12 Jun 2023 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor.Metal levels are typical for a new component breaking in. 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

22 Jun 2022 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.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

24 Mar 2022 Diag: Jonathan Hester

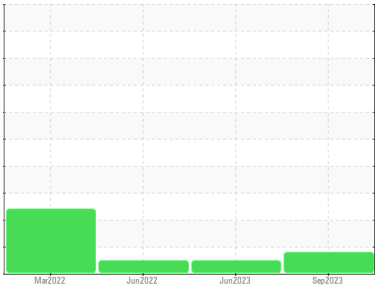
GLYCOL

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. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WEAR

Machine Id
524016-902
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
The lead level is abnormal. All other component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0051012**	GFL0051015	GFL0051016
Sample Date		Client Info		**07 Sep 2023**	12 Jun 2023	22 Jun 2022
Machine Age	hrs	Client Info		**17287**	635	15079
Oil Age	hrs	Client Info		**400**	635	490
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**34**	45	39
Chromium	ppm	ASTM D5185m	>20	**2**	3	3
Nickel	ppm	ASTM D5185m	>4	**0**	0	<1
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>3	**<1**	0	0
Aluminum	ppm	ASTM D5185m	>20	**8**	4	7
Lead	ppm	ASTM D5185m	>40	▲ **58**	75	31
Copper	ppm	ASTM D5185m	>330	**3**	4	2
Tin	ppm	ASTM D5185m	>15	**2**	2	2
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	<1	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**4**	4	10
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**68**	71	68
Manganese	ppm	ASTM D5185m	0	**<1**	1	<1
Magnesium	ppm	ASTM D5185m	1010	**993**	1120	923
Calcium	ppm	ASTM D5185m	1070	**1183**	1343	1183
Phosphorus	ppm	ASTM D5185m	1150	**1077**	1148	1000
Zinc	ppm	ASTM D5185m	1270	**1297**	1442	1298
Sulfur	ppm	ASTM D5185m	2060	**3238**	3584	2909

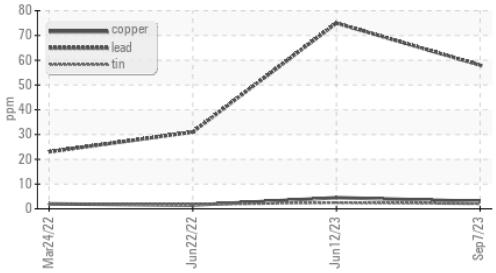
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**5**	7	4
Sodium	ppm	ASTM D5185m		**7**	6	27
Potassium	ppm	ASTM D5185m	>20	**16**	6	26

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.6**	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	**11.6**	13.5	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	**24.1**	27.0	23.6

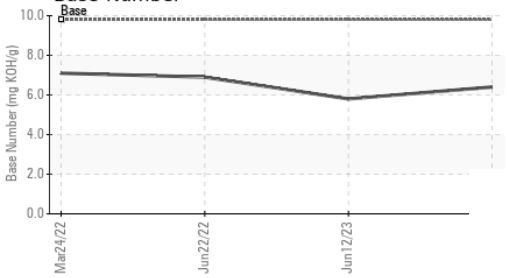
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.9**	24.0	19.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**6.4**	5.8	6.9

OIL ANALYSIS REPORT

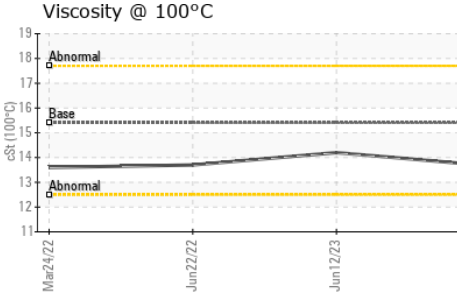
Non-ferrous Metals



Base Number



Viscosity @ 100°C

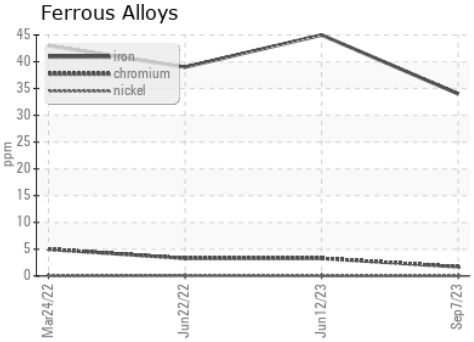


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

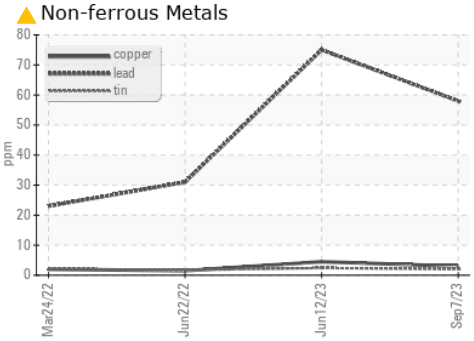
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	**13.7**	14.2	13.7

GRAPHS

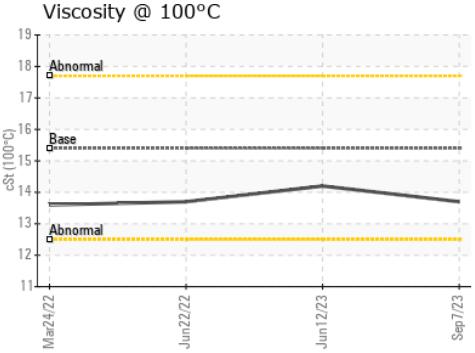
Ferrous Alloys



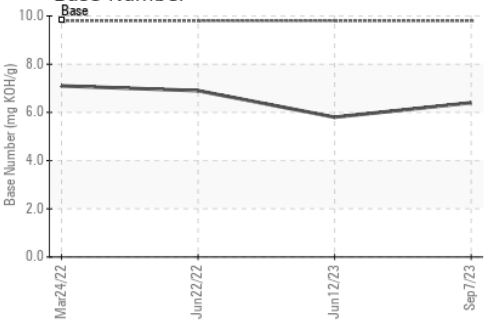
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0051012
Lab Number : 05947839
Unique Number : 10643798
Test Package : FLEET

Received : 12 Sep 2023
Diagnosed : 14 Sep 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 - 632 - SWD Harrison
4102 Industrail Pkwy
Harrison, MI
US 48625
Contact: RON TROJANEK
rtrojanek@gflenv.com
T:
F: