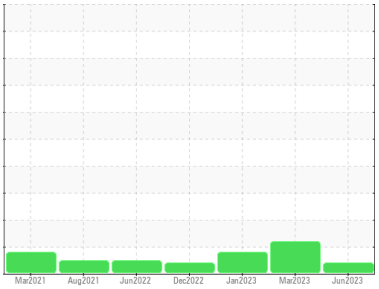
PROBLEM SUMMARY

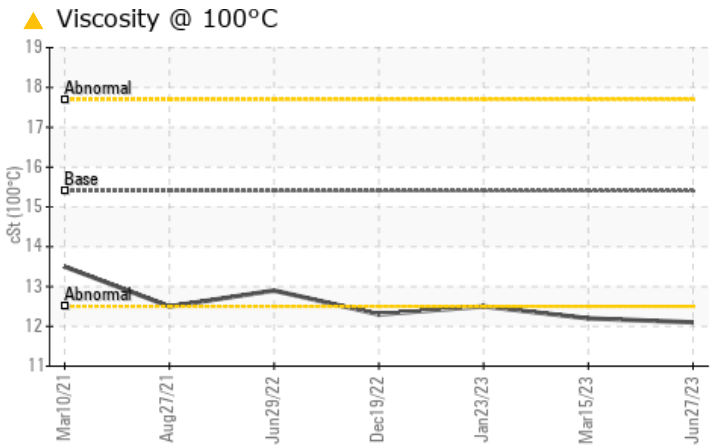
Sample Rating Trend



VISCOSITY

Machine Id
725011-507
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	ABNORMAL	ABNORMAL
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **12.1**	▲ 12.2	12.5

Customer Id: GFL626
Sample No.: GFL0062194
Lab Number: 05887720
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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.

HISTORICAL DIAGNOSIS

15 Mar 2023 Diag: Jonathan Hester

WEAR

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.Cylinder, crank, or cam shaft wear is indicated. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report

23 Jan 2023 Diag: Sean Felton

WEAR

No corrective action is recommended at this time. Resample at the next service interval to monitor.Cylinder, crank, or cam shaft wear is indicated. All other 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

19 Dec 2022 Diag: Jonathan Hester

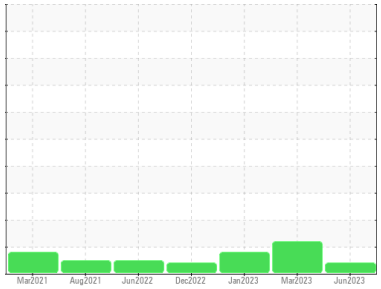
VISCOSITY

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY

Machine Id
725011-507
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

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

Fluid Condition
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number		Client Info		**GFL0062194**	GFL0062235	GFL0062214
Sample Date		Client Info		**27 Jun 2023**	15 Mar 2023	23 Jan 2023
Machine Age	hrs	Client Info		**39268**	38898	38697
Oil Age	hrs	Client Info		**226**	201	173
Oil Changed		Client Info		**N/A**	Changed	Not Changd
Sample Status				**ATTENTION**	ABNORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel		WC Method	>5	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>100	**59**	▲ 106	▲ 108
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	1
Nickel	ppm	ASTM D5185m	>4	**<1**	1	1
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	4	3
Lead	ppm	ASTM D5185m	>40	**3**	4	4
Copper	ppm	ASTM D5185m	>330	**2**	4	4
Tin	ppm	ASTM D5185m	>15	**1**	1	1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

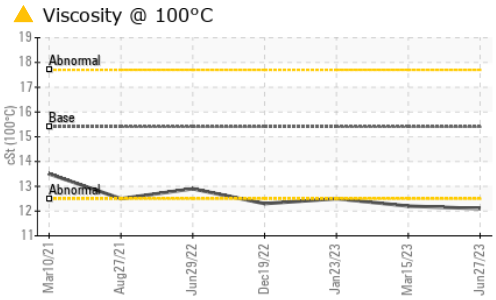
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	**3**	5	4
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**63**	63	65
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**875**	867	893
Calcium	ppm	ASTM D5185m	1070	**1110**	1147	1118
Phosphorus	ppm	ASTM D5185m	1150	**962**	945	976
Zinc	ppm	ASTM D5185m	1270	**1186**	1178	1218
Sulfur	ppm	ASTM D5185m	2060	**2901**	2625	2620

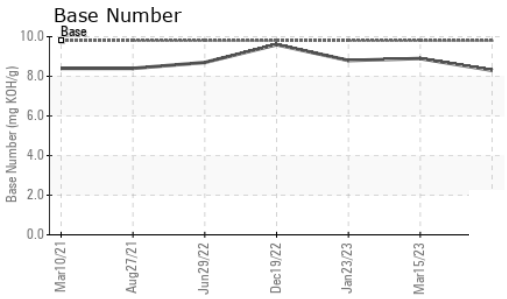
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>25	**5**	5	5
Sodium	ppm	ASTM D5185m		**56**	16	16
Potassium	ppm	ASTM D5185m	>20	**1**	1	2

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844	>3	**0.7**	1	1.1
Nitration	Abs/cm	*ASTM D7624	>20	**7.2**	7.9	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**20.1**	19.7	19.8

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.9**	15.0	15.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**8.3**	8.9	8.8

OIL ANALYSIS REPORT



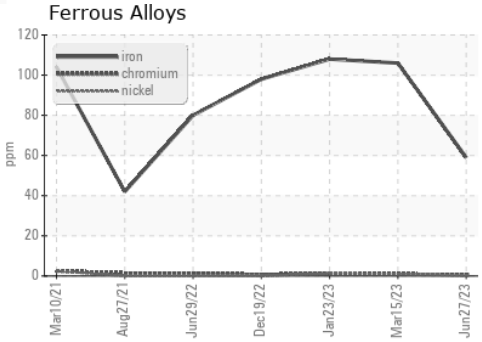


VISUAL		method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

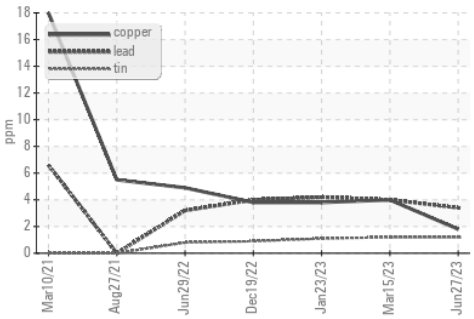
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ **12.1**	▲ 12.2	12.5

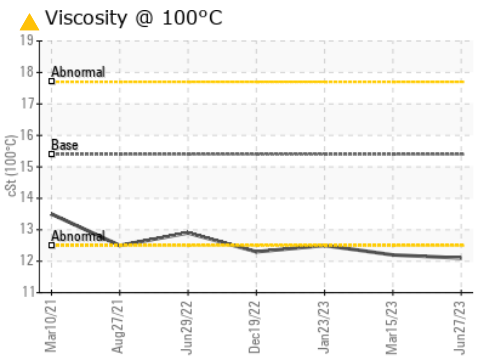
GRAPHS

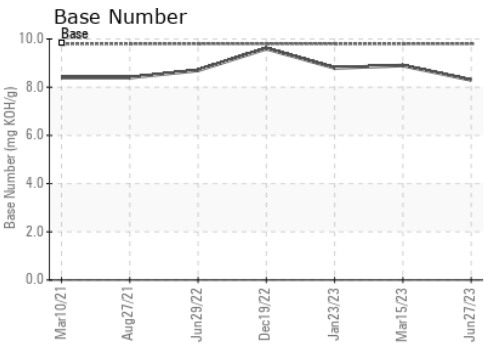
Ferrous Alloys



Non-ferrous Metals







Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0062194
Lab Number : 05887720
Unique Number : 10538203
Test Package : FLEET

Received : 30 Jun 2023
Diagnosed : 04 Jul 2023
Diagnostician : Don Baldridge

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 - 626 - Cadillac Hauling
1501 Ron Wilson St
Cadillac, MI
US 49601
Contact: GARY BREWER
gbrewerjr@gflenv.com
T:
F: