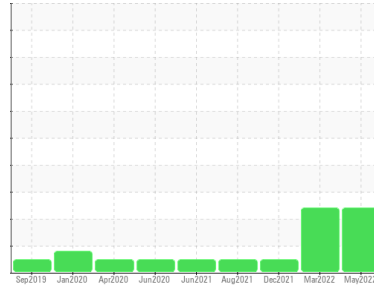




PROBLEM SUMMARY

Sample Rating Trend



GLYCOL



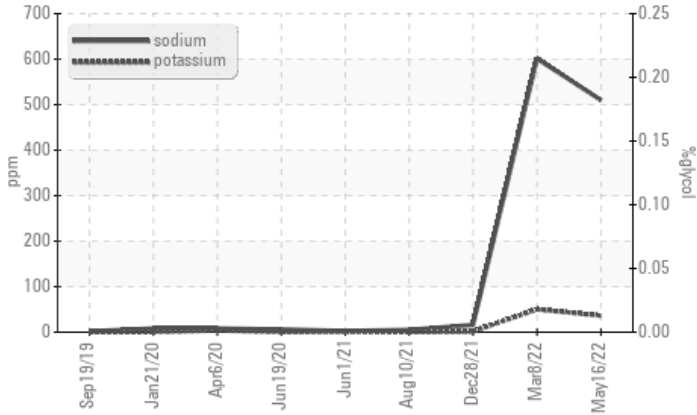
Machine Id
AUTOCAR 929094-260367

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

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	NORMAL
Sodium	ppm	ASTM D5185m	▲ 510	▲ 601	16
Potassium	ppm	ASTM D5185m >20	▲ 36	▲ 50	2

Customer Id: GFL842
Sample No.: GFL0052956
Lab Number: 05550895
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

08 Mar 2022 Diag: Jonathan Hester

GLYCOL



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



28 Dec 2021 Diag: Wes Davis

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



10 Aug 2021 Diag: Wes Davis

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.

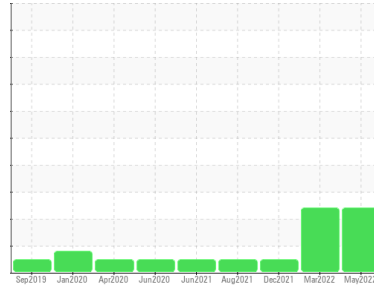
view report





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
AUTOCAR 929094-260367

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

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	GFL0052956	GFL0028595	GFL0042153
Sample Date	Client Info	16 May 2022	08 Mar 2022	28 Dec 2021
Machine Age	hrs	450	0	0
Oil Age	hrs	450	450	450
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Water	WC Method >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	24	38	28
Chromium	ppm ASTM D5185m >20	1	3	2
Nickel	ppm ASTM D5185m >4	0	0	1
Titanium	ppm ASTM D5185m	0	<1	<1
Silver	ppm ASTM D5185m >3	<1	0	<1
Aluminum	ppm ASTM D5185m >20	4	6	6
Lead	ppm ASTM D5185m >40	0	0	<1
Copper	ppm ASTM D5185m >330	1	1	2
Tin	ppm ASTM D5185m >15	<1	<1	<1
Antimony	ppm ASTM D5185m	---	---	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 0	12	11	4
Barium	ppm ASTM D5185m 0	0	0	<1
Molybdenum	ppm ASTM D5185m 60	69	76	60
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 1010	832	909	929
Calcium	ppm ASTM D5185m 1070	1258	1326	1330
Phosphorus	ppm ASTM D5185m 1150	979	1072	1097
Zinc	ppm ASTM D5185m 1270	1134	1309	1318
Sulfur	ppm ASTM D5185m 2060	2599	2777	2768

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	13	15	6
Sodium	ppm ASTM D5185m	▲ 510	▲ 601	16
Potassium	ppm ASTM D5185m >20	▲ 36	▲ 50	2
Glycol	% *ASTM D2982	NEG	NEG	NEG

INFRA-RED

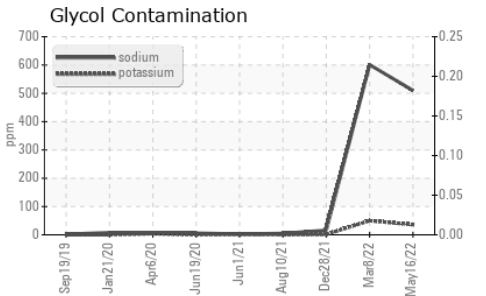
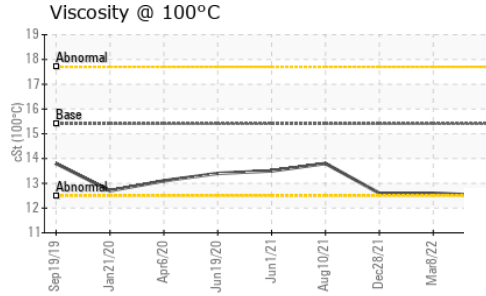
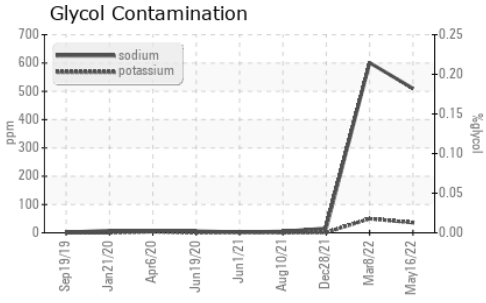
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	1.1	0.9	0.8
Nitration	Abs/cm *ASTM D7624 >20	11.1	11.5	10.2
Sulfation	Abs/.1mm *ASTM D7415 >30	23.5	23.0	22.4

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.1	17.9	17.2
Base Number (BN)	mg KOH/g ASTM D2896 9.8	10.2	9.9	8.8



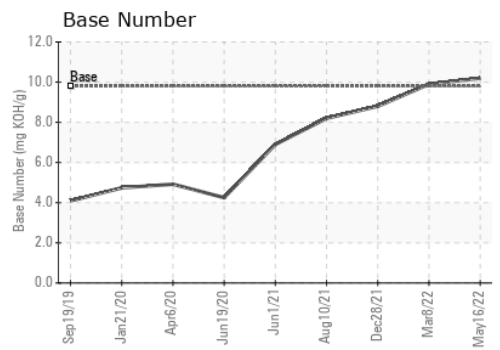
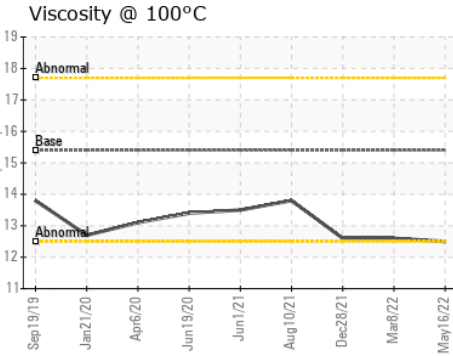
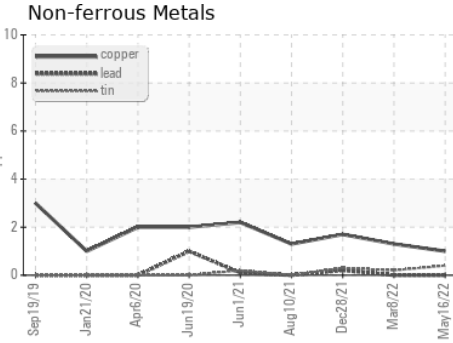
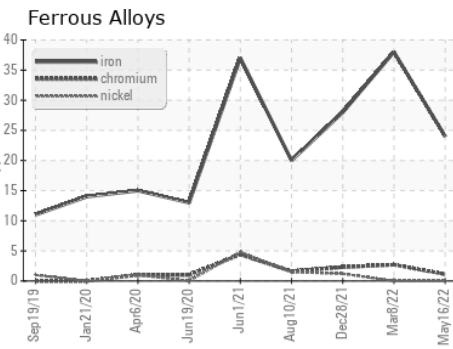
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	12.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0052956 **Received** : 23 May 2022
Lab Number : 05550895 **Diagnosed** : 24 May 2022
Unique Number : 9985262 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 842 - Lewisport Hauling
 4995 US Highway 60 West
 Lewisport, KY
 US 42351
 Contact: Robert Thibault
 robert.thibault@gflenv.com
 T: (193)123-7604
 F:

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)