



PROBLEM SUMMARY

Sample Rating Trend



DEGRADATION



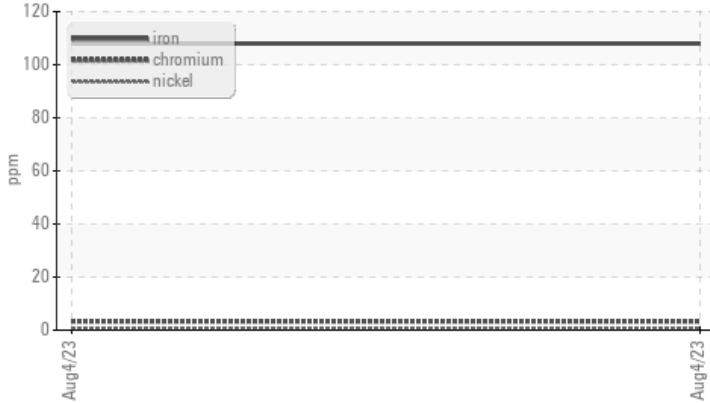
Machine Id
929119

Component
Diesel Engine

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

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	---	---
Iron	ppm	ASTM D5185m	>100	▲ 108	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	▲ 3.9	---	---

Customer Id: GFL959A
Sample No.: GFL0084849
Lab Number: 05921055
Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +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



OIL ANALYSIS REPORT

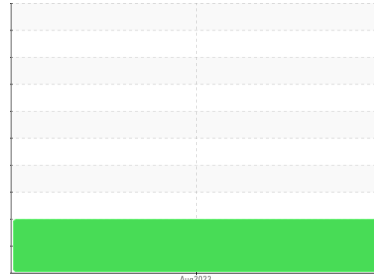
Sample Rating Trend

DEGRADATION

Machine Id
929119

Component
Diesel Engine

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



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

Cylinder, crank, or cam shaft wear is indicated. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0084849	---	---
Sample Date	Client Info	04 Aug 2023	---	---
Machine Age	hrs	Client Info	12217	---
Oil Age	hrs	Client Info	200	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	▲ 108	---
Chromium	ppm	ASTM D5185m	>20	3	---
Nickel	ppm	ASTM D5185m	>4	<1	---
Titanium	ppm	ASTM D5185m		<1	---
Silver	ppm	ASTM D5185m	>3	0	---
Aluminum	ppm	ASTM D5185m	>20	9	---
Lead	ppm	ASTM D5185m	>40	0	---
Copper	ppm	ASTM D5185m	>330	4	---
Tin	ppm	ASTM D5185m	>15	<1	---
Vanadium	ppm	ASTM D5185m		<1	---
Cadmium	ppm	ASTM D5185m		0	---

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	19	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	60	25	---
Manganese	ppm	ASTM D5185m	0	1	---
Magnesium	ppm	ASTM D5185m	1010	828	---
Calcium	ppm	ASTM D5185m	1070	1557	---
Phosphorus	ppm	ASTM D5185m	1150	832	---
Zinc	ppm	ASTM D5185m	1270	1088	---
Sulfur	ppm	ASTM D5185m	2060	3366	---

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	12	---
Sodium	ppm	ASTM D5185m		4	---
Potassium	ppm	ASTM D5185m	>20	3	---

INFRA-RED

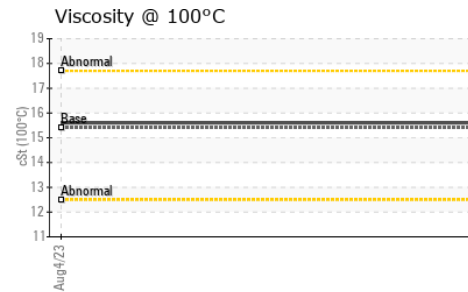
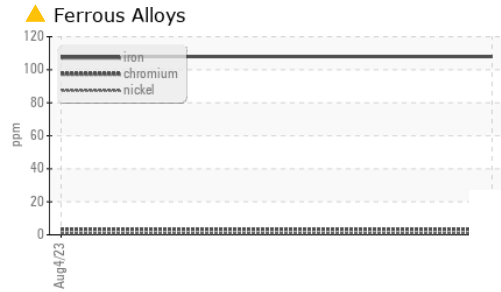
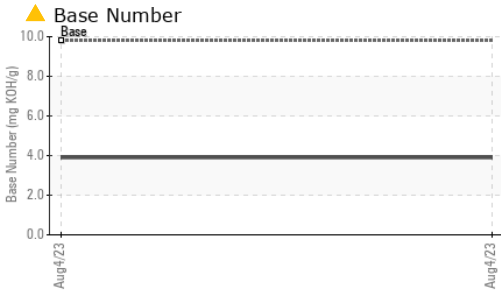
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	1	---
Nitration	Abs/cm	*ASTM D7624	>20	17.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	33.2	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	38.5	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	▲ 3.9	---



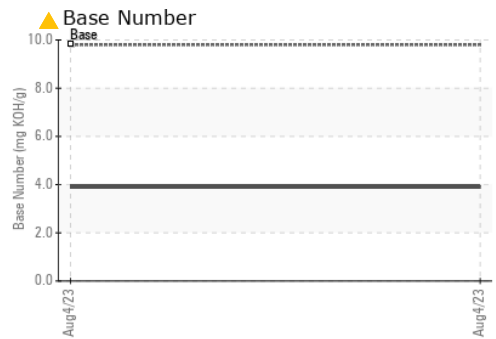
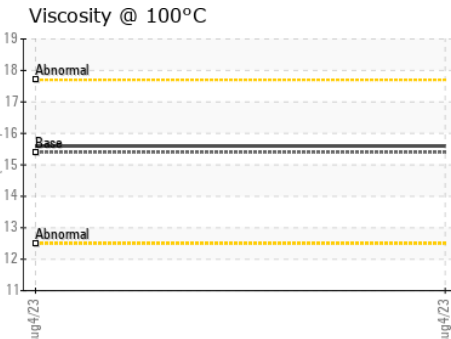
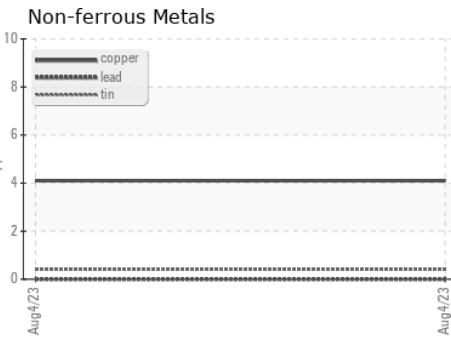
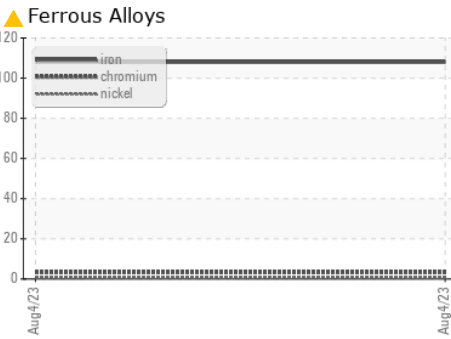
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	15.6	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0084849 **Received** : 10 Aug 2023
Lab Number : 05921055 **Diagnosed** : 11 Aug 2023
Unique Number : 10592969 **Diagnostician** : Don Baldrige
Test Package : FLEET

GFL Environmental - 959A - Urbana HC
 4808 cunningham Rd
 Urbana, IL
 US 61802
 Contact: Kristine Tyrone
 ktyrone@gflenv.com

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)

T:
F: