



PROBLEM SUMMARY

Sample Rating Trend



WEAR



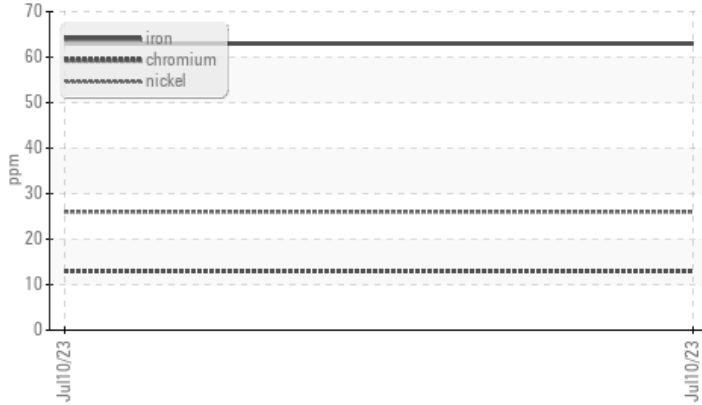
Machine Id
425104

Component
Diesel Engine

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

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

No corrective action is recommended at this time.
Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ABNORMAL		---	---
Chromium	ppm	ASTM D5185m >4	▲ 13	---
Nickel	ppm	ASTM D5185m >2	▲ 26	---

Customer Id: GFL958A
Sample No.: GFL0085360
Lab Number: 05899533
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



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
425104

Component
Diesel Engine

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

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The chromium level is abnormal. The nickel level is severe.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

Additive levels do not indicate the addition of a different brand, or type of oil. 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	GFL0085360	---	---
Sample Date	Client Info	10 Jul 2023	---	---
Machine Age	hrs Client Info	27776	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	Not 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 >110	63	---	---
Chromium	ppm ASTM D5185m >4	▲ 13	---	---
Nickel	ppm ASTM D5185m >2	▲ 26	---	---
Titanium	ppm ASTM D5185m	<1	---	---
Silver	ppm ASTM D5185m >2	<1	---	---
Aluminum	ppm ASTM D5185m >25	8	---	---
Lead	ppm ASTM D5185m >45	<1	---	---
Copper	ppm ASTM D5185m >85	7	---	---
Tin	ppm ASTM D5185m >4	<1	---	---
Vanadium	ppm ASTM D5185m	0	---	---
Cadmium	ppm ASTM D5185m	0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	6	---	---
Barium	ppm ASTM D5185m 0	0	---	---
Molybdenum	ppm ASTM D5185m 60	65	---	---
Manganese	ppm ASTM D5185m 0	1	---	---
Magnesium	ppm ASTM D5185m 1010	1043	---	---
Calcium	ppm ASTM D5185m 1070	1176	---	---
Phosphorus	ppm ASTM D5185m 1150	1140	---	---
Zinc	ppm ASTM D5185m 1270	1365	---	---
Sulfur	ppm ASTM D5185m 2060	4086	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >30	10	---	---
Sodium	ppm ASTM D5185m	3	---	---
Potassium	ppm ASTM D5185m >20	3	---	---

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.3	---	---
Nitration	Abs/cm *ASTM D7624 >20	9.7	---	---
Sulfation	Abs/.1mm *ASTM D7415 >30	22.6	---	---

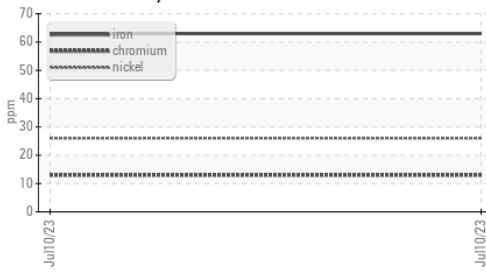
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	22.0	---	---
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.6	---	---

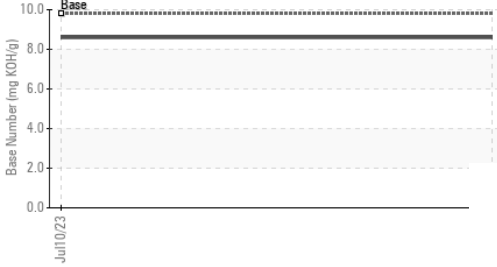


OIL ANALYSIS REPORT

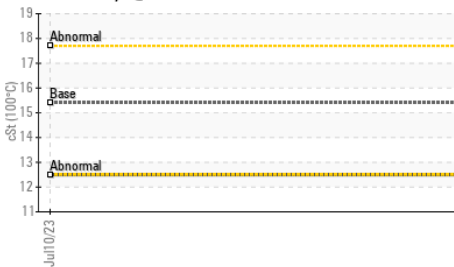
▲ Ferrous Alloys



Base Number



Viscosity @ 100°C

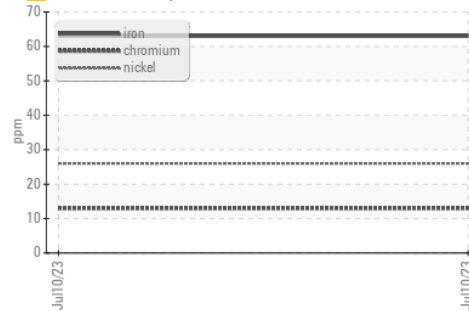


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

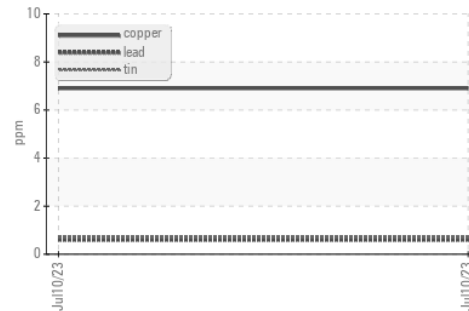
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	12.5	---

GRAPHS

▲ Ferrous Alloys



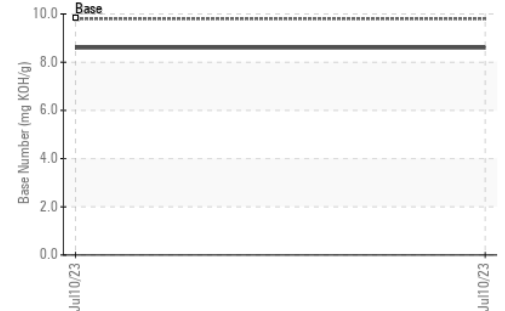
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0085360 **Received** : 17 Jul 2023
Lab Number : 05899533 **Diagnosed** : 18 Jul 2023
Unique Number : 10560889 **Diagnostician** : Jonathan Hester
Test Package : FLEET

GFL Environmental - 958A - Chillicothe Wigand
 19908 N. State Rd 29
 Chillicothe, IL
 US 61523
 Contact: Bryan Link
 blink@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: