



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
927113
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0116522	GFL0084840	---
Sample Date		Client Info		02 Apr 2024	03 Aug 2023	---
Machine Age	hrs	Client Info		46573	19874	---
Oil Age	hrs	Client Info		19874	200	---
Filter Age	hrs	Client Info		0	200	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	27	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	<1	0	---
Aluminum	ppm	ASTM D5185m	>20	2	3	---
Lead	ppm	ASTM D5185m	>40	<1	2	---
Copper	ppm	ASTM D5185m	>330	0	2	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

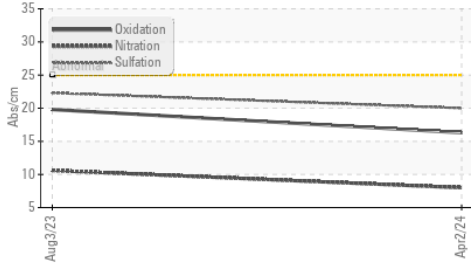
Silicon	ppm	ASTM D5185m	>25	5	9	---
Potassium	ppm	ASTM D5185m	>20	27	16	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.3	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.0	10.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	22.3	---
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	---

FLUID CONDITION

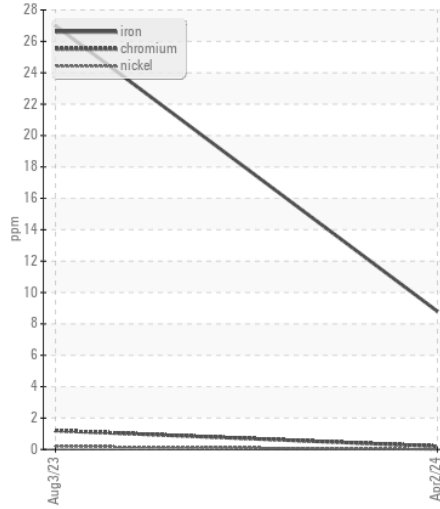
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		70	▲ 161	---
Boron	ppm	ASTM D5185m	0	11	8	---
Barium	ppm	ASTM D5185m	0	0	0	---
Molybdenum	ppm	ASTM D5185m	60	63	63	---
Manganese	ppm	ASTM D5185m	0	<1	<1	---
Magnesium	ppm	ASTM D5185m	1010	955	1069	---
Calcium	ppm	ASTM D5185m	1070	1068	1291	---
Phosphorus	ppm	ASTM D5185m	1150	1020	1036	---
Zinc	ppm	ASTM D5185m	1270	1238	1385	---
Sulfur	ppm	ASTM D5185m	2060	3426	3662	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.3	19.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	9.0	7.2	---
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	15.0	---

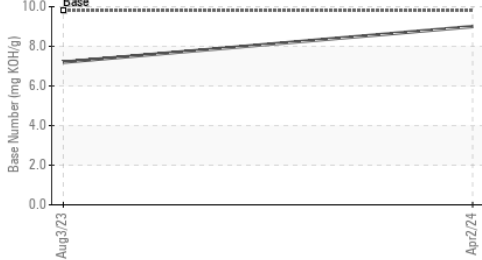
FT-IR (Direct Trend)



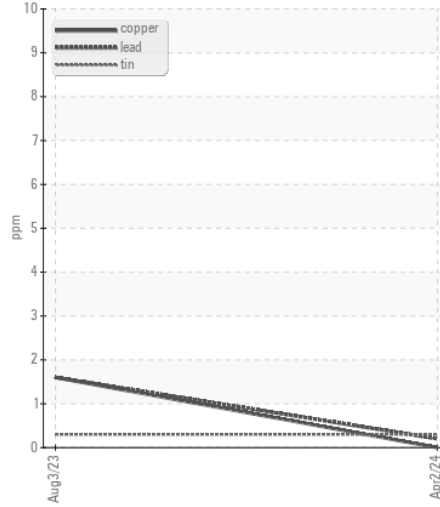
Ferrous Alloys



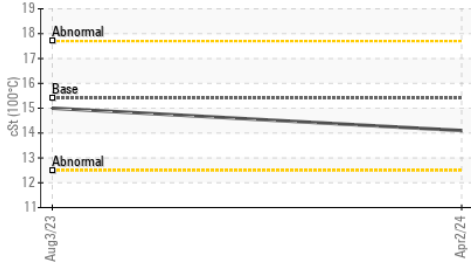
Base Number



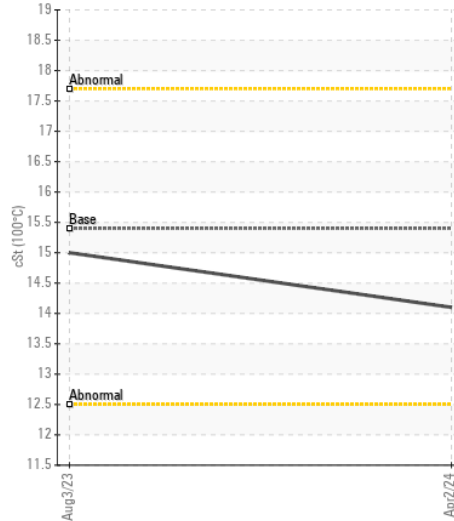
Non-ferrous Metals



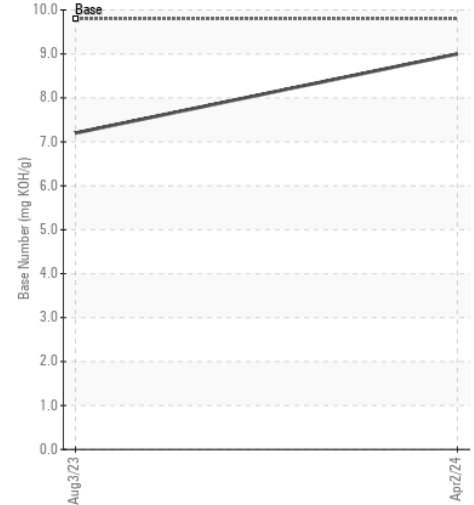
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : GFL0116522
 Lab Number : 06151436
 Unique Number : 10981514
 Test Package : FLEET

Received : 17 Apr 2024
 Tested : 18 Apr 2024
 Diagnosed : 18 Apr 2024 - Wes Davis

GFL Environmental - 959A - Urbana HC
 4808 Cunningham Rd
 Urbana, IL
 US 61802

Contact: Kristine Tryon
 Ktryon@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: