



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Machine Id
714024
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		GFL0116046	---	---
Sample Date		Client Info		12 Jun 2024	---	---
Machine Age	hrs	Client Info		38	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	31	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>5	8	---	---
Titanium	ppm	ASTM D5185m	>2	0	---	---
Silver	ppm	ASTM D5185m	>2	1	---	---
Aluminum	ppm	ASTM D5185m	>20	9	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	137	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

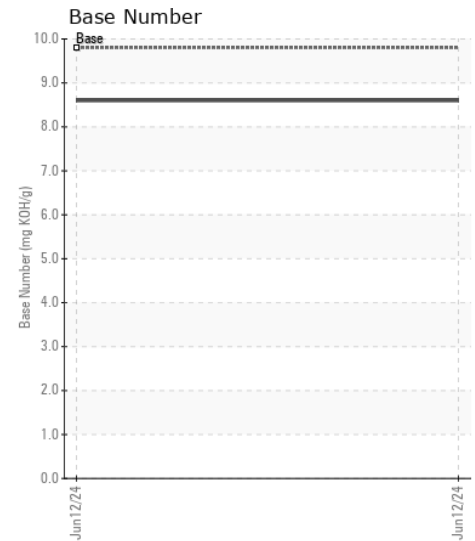
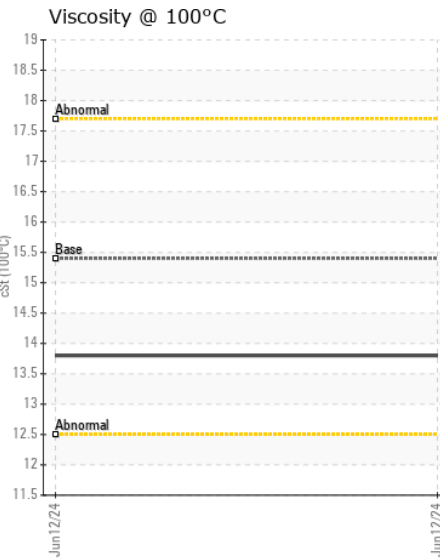
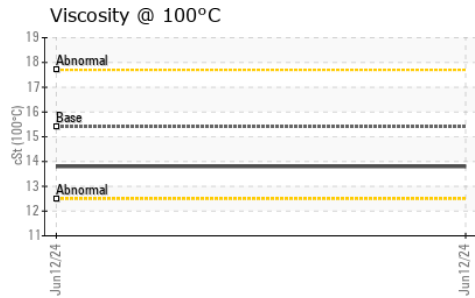
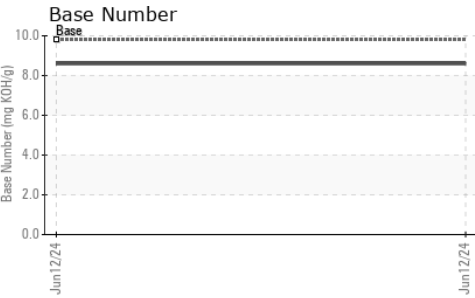
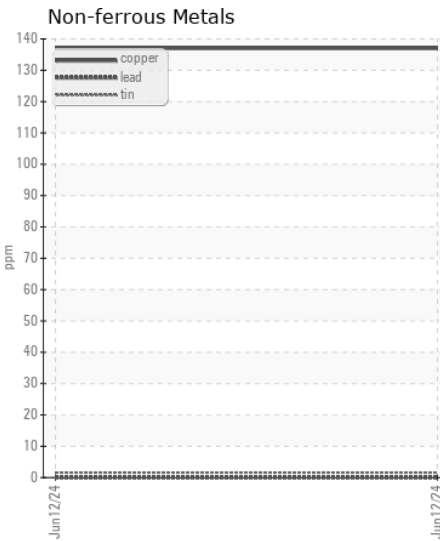
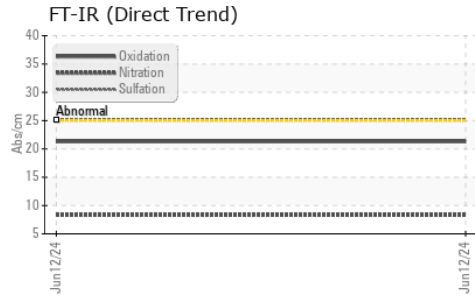
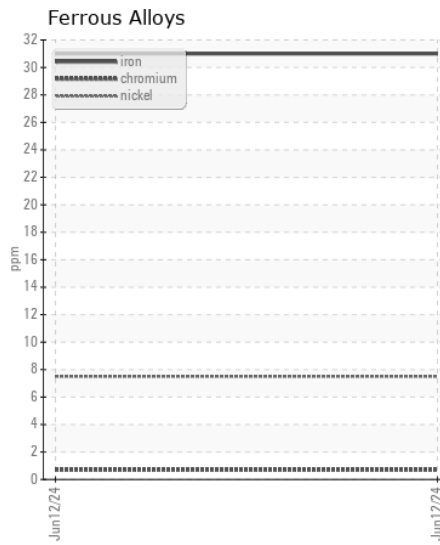
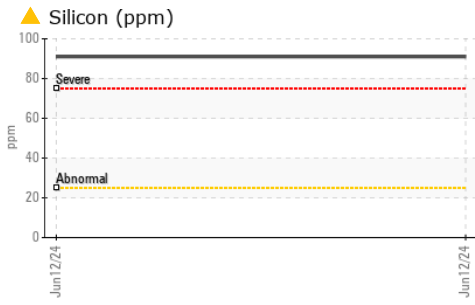
Elemental level of silicon (Si) above normal.

Silicon	ppm	ASTM D5185m	>25	▲ 91	---	---
Potassium	ppm	ASTM D5185m	>20	25	---	---
Fuel		WC Method	>3.0	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>4	0.3	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.1	---	---
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	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	0	286	---	---
Barium	ppm	ASTM D5185m	0	0	---	---
Molybdenum	ppm	ASTM D5185m	60	106	---	---
Manganese	ppm	ASTM D5185m	0	4	---	---
Magnesium	ppm	ASTM D5185m	1010	619	---	---
Calcium	ppm	ASTM D5185m	1070	1442	---	---
Phosphorus	ppm	ASTM D5185m	1150	732	---	---
Zinc	ppm	ASTM D5185m	1270	810	---	---
Sulfur	ppm	ASTM D5185m	2060	2732	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.6	---	---
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0116046
Lab Number : 06211261
Unique Number : 11084125
Test Package : FLEET

Received : 17 Jun 2024
Tested : 18 Jun 2024
Diagnosed : 18 Jun 2024 - Angela Borella

GFL Environmental - 641 - Alpena
 1241 KING SETTLEMENT RD
 ALPENA, MI
 US 49707

Contact: DYLAN TOLAN
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 T: (989)854-7203

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)

F: