

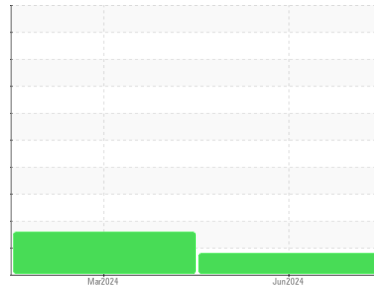


OIL ANALYSIS REPORT



Area
(C0852977)
 Machine Id
934032
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

Sample Rating Trend



WEAR



DIAGNOSIS

Recommendation

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

Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0122647	GFL0103425	---
Sample Date	Client Info		11 Jun 2024	05 Mar 2024	---
Machine Age	hrs	Client Info	1819	1130	---
Oil Age	hrs	Client Info	0	1130	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	26	▲ 63	---
Chromium	ppm	ASTM D5185m >4	1	1	---
Nickel	ppm	ASTM D5185m >2	1	1	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >3	<1	0	---
Aluminum	ppm	ASTM D5185m >9	▲ 14	▲ 15	---
Lead	ppm	ASTM D5185m >30	2	2	---
Copper	ppm	ASTM D5185m >35	4	15	---
Tin	ppm	ASTM D5185m >4	2	2	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	6	7	---
Barium	ppm	ASTM D5185m 0	0	2	---
Molybdenum	ppm	ASTM D5185m 60	73	67	---
Manganese	ppm	ASTM D5185m 0	2	8	---
Magnesium	ppm	ASTM D5185m 1010	974	850	---
Calcium	ppm	ASTM D5185m 1070	1197	1114	---
Phosphorus	ppm	ASTM D5185m 1150	1038	800	---
Zinc	ppm	ASTM D5185m 1270	1318	1021	---
Sulfur	ppm	ASTM D5185m 2060	3166	2110	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >+100	11	20	---
Sodium	ppm	ASTM D5185m	7	4	---
Potassium	ppm	ASTM D5185m >20	22	31	---

INFRA-RED

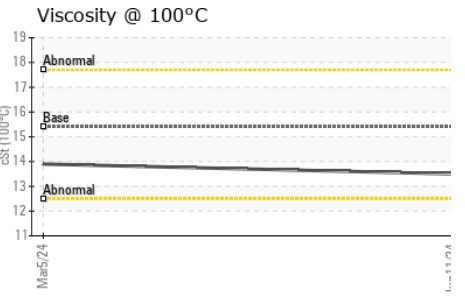
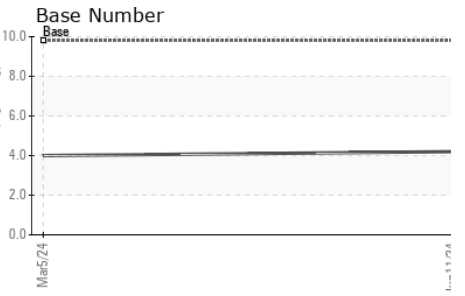
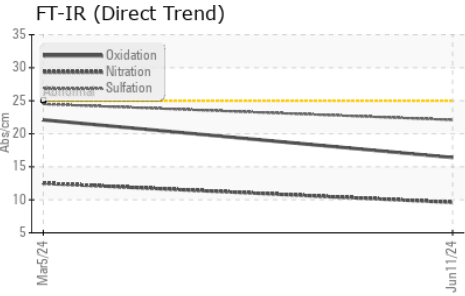
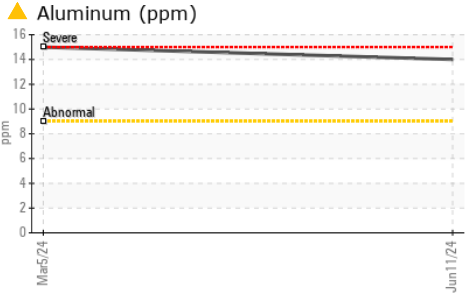
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	0	0	---
Nitration	Abs/cm	*ASTM D7624 >20	9.6	12.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.1	24.5	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.4	22.1	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	4.2	4.0	---



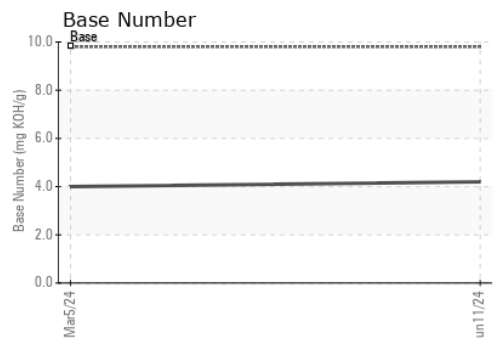
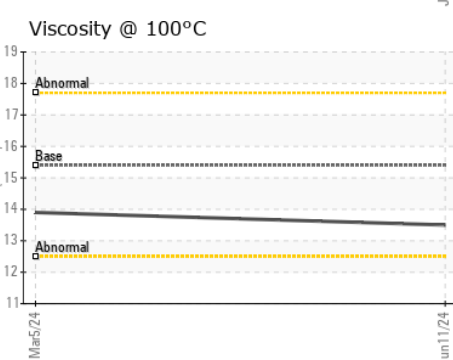
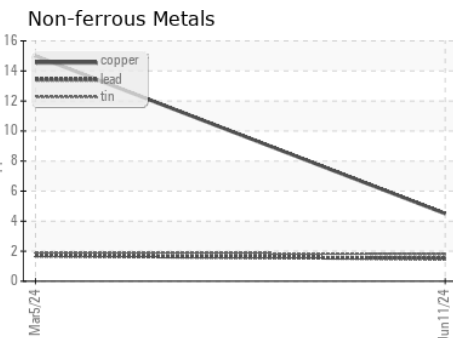
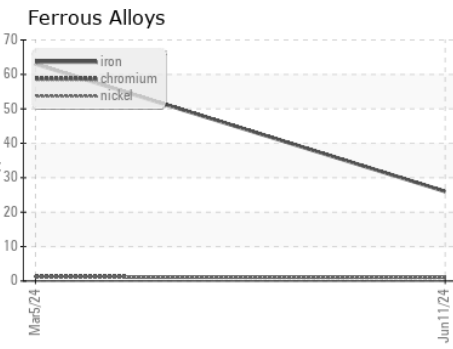
OIL ANALYSIS REPORT



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	>0.1	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.9

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0122647
Lab Number : 06213281
Unique Number : 11086145
Test Package : FLEET

Received : 18 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 20 Jun 2024 - Sean Felton

GFL Environmental - 095 - Atlanta West
 2699 Cochran Industrial Blvd
 Douglasville, GA
 US 30127-1332
 Contact: Darrell Welch
 darrell.welch@gflenv.com
 T: (800)207-6618
 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)