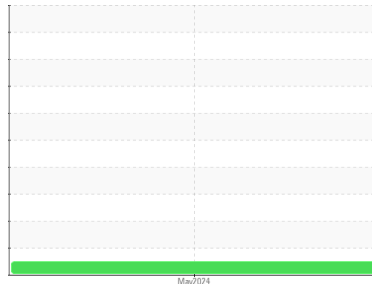




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TOYOTA 2012 Toyota Yaris Sedan Base
 Component
Gasoline Engine
 Fluid
HPL PC 5W30-Q (--- LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All 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		HPL0005092	---	---
Sample Date	Client Info		01 May 2024	---	---
Machine Age	Client Info		148263	---	---
Oil Age	Client Info		5603	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			NORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>150	5	---	---
Chromium	ppm ASTM D5185m	>20	<1	---	---
Nickel	ppm ASTM D5185m	>5	<1	---	---
Titanium	ppm ASTM D5185m		2	---	---
Silver	ppm ASTM D5185m	>2	<1	---	---
Aluminum	ppm ASTM D5185m	>40	7	---	---
Lead	ppm ASTM D5185m	>50	<1	---	---
Copper	ppm ASTM D5185m	>155	2	---	---
Tin	ppm ASTM D5185m	>10	<1	---	---
Vanadium	ppm ASTM D5185m		<1	---	---
Cadmium	ppm ASTM D5185m		<1	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m		7	---	---
Barium	ppm ASTM D5185m		<1	---	---
Molybdenum	ppm ASTM D5185m		510	---	---
Manganese	ppm ASTM D5185m		<1	---	---
Magnesium	ppm ASTM D5185m		1793	---	---
Calcium	ppm ASTM D5185m		1226	---	---
Phosphorus	ppm ASTM D5185m		786	---	---
Zinc	ppm ASTM D5185m		883	---	---
Sulfur	ppm ASTM D5185m		7205	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>30	20	---	---
Sodium	ppm ASTM D5185m	>400	17	---	---
Potassium	ppm ASTM D5185m	>20	2	---	---

INFRA-RED

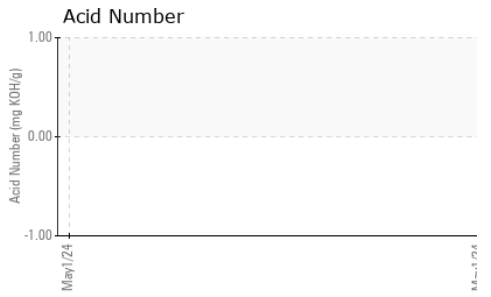
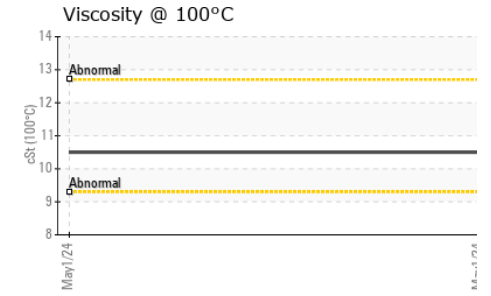
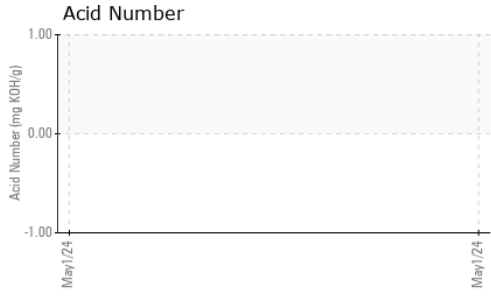
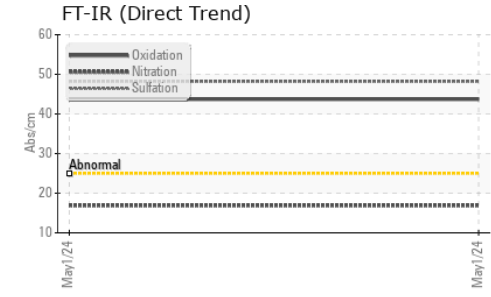
	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844		0.1	---	---
Nitration	Abs/cm *ASTM D7624	>20	16.9	---	---
Sulfation	Abs/.1mm *ASTM D7415	>30	48.2	---	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	43.7	---	---
Base Number (BN)	mg KOH/g ASTM D2896		12.74	---	---



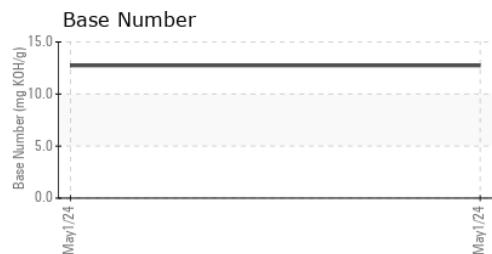
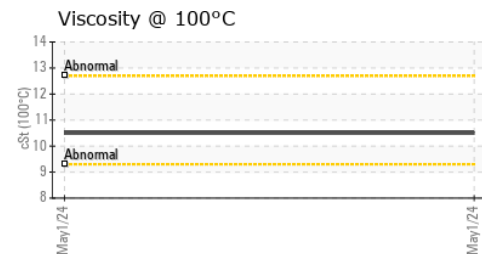
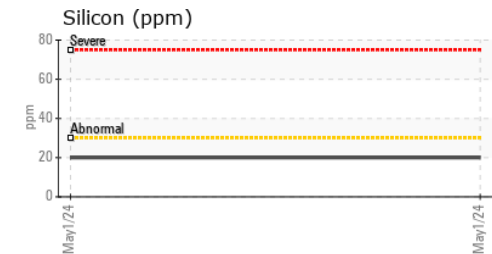
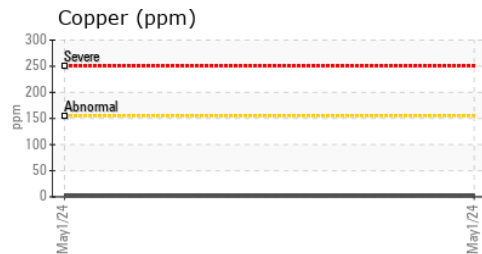
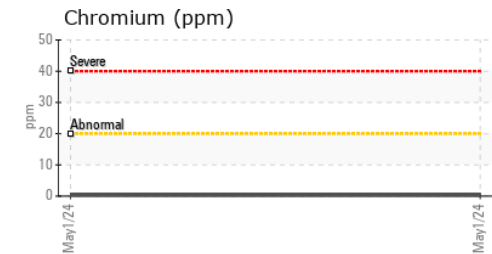
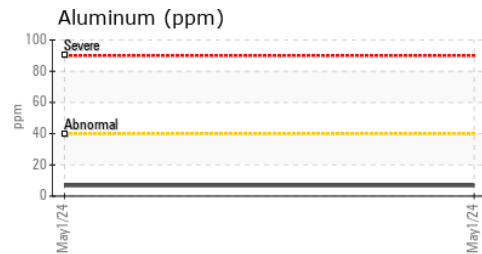
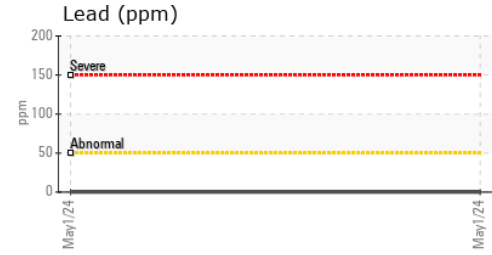
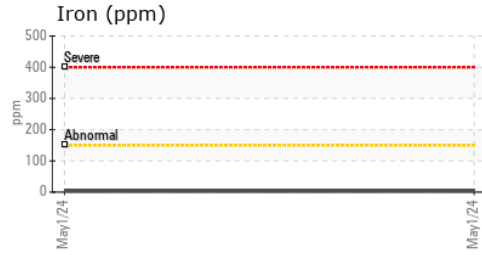
OIL ANALYSIS REPORT



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	10.5	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0005092 **Received** : 15 May 2024
Lab Number : **06180734** **Tested** : 18 May 2024
Unique Number : 11032060 **Diagnosed** : 18 May 2024 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: TBN)

WARREN BUT
 16970 MARYGOLD AVE 64
 FONTANA, CA
 US 92335
 Contact: WARREN BUT
 WARRENBUT@GMAIL.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)