



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
TOYOTA HALEIGH

Component
Gasoline Engine

Fluid
TRC PRO-SPEC SYNTHETIC 0W20 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06174070	TR05897585	---
Sample Date		Client Info		04 May 2024	30 Mar 2023	---
Machine Age	mls	Client Info		93900	86983	---
Oil Age	mls	Client Info		7000	2245	---
Filter Age	mls	Client Info		7000	2245	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	8	4	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>40	5	2	---
Lead	ppm	ASTM D5185m	>50	<1	<1	---
Copper	ppm	ASTM D5185m	>155	1	1	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

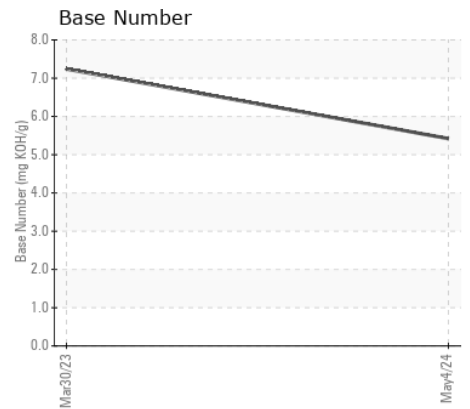
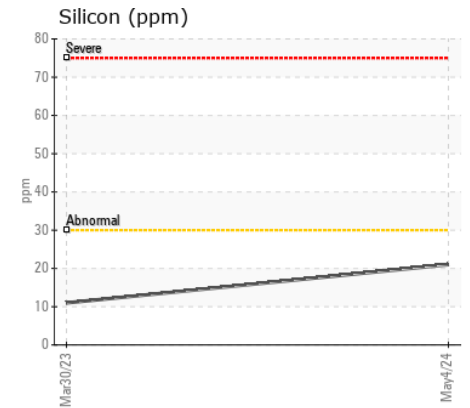
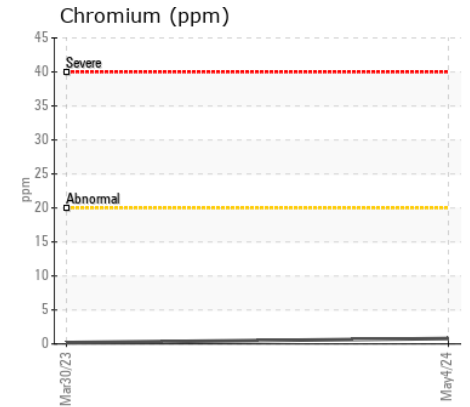
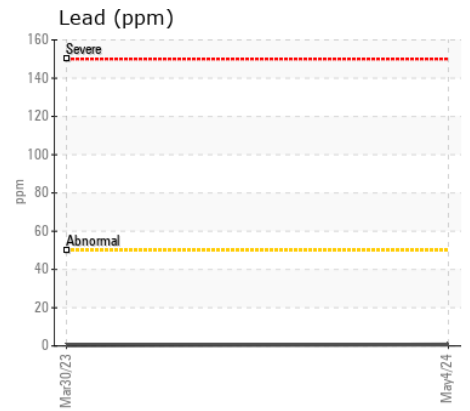
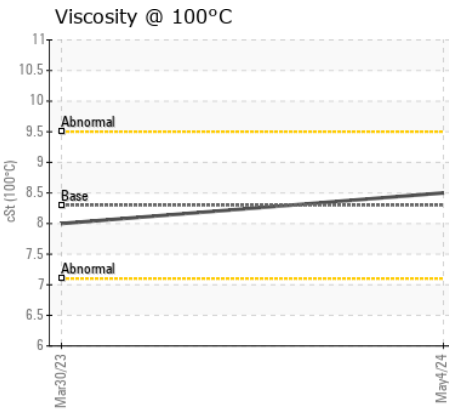
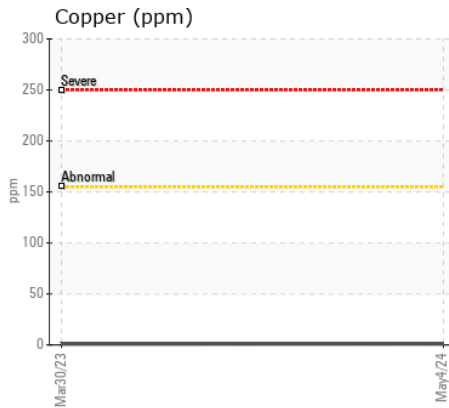
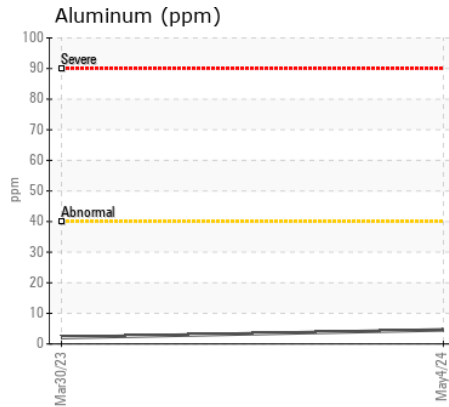
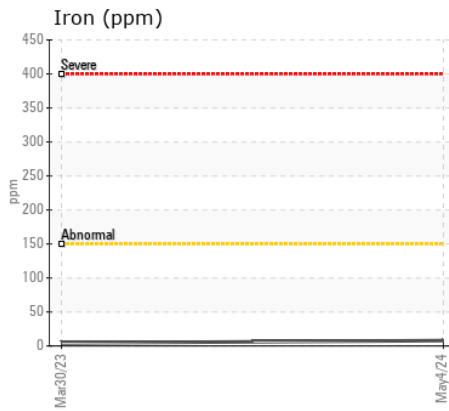
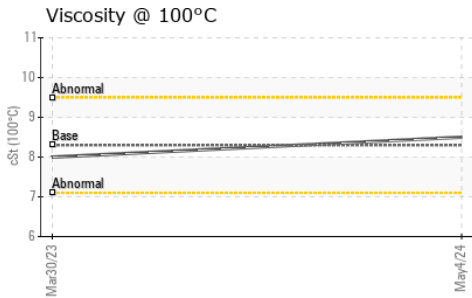
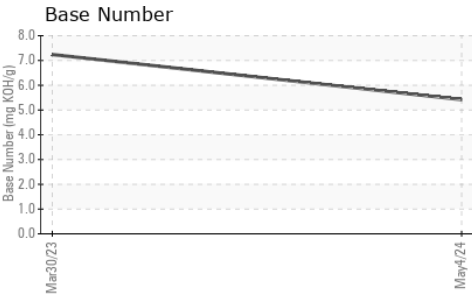
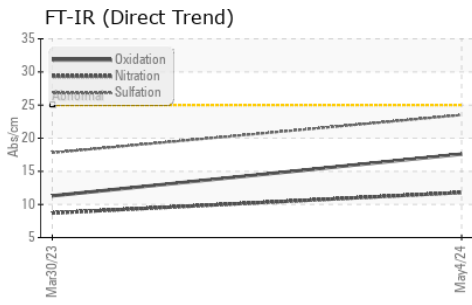
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	21	11	---
Potassium	ppm	ASTM D5185m	>20	4	2	---
Fuel		WC Method	>4.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	11.8	8.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5	17.8	---
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	>400	0	<1	---
Boron	ppm	ASTM D5185m		19	77	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		270	269	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		448	508	---
Calcium	ppm	ASTM D5185m	2100	1390	1370	---
Phosphorus	ppm	ASTM D5185m		686	702	---
Zinc	ppm	ASTM D5185m	870	810	853	---
Sulfur	ppm	ASTM D5185m		2348	2518	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.6	11.3	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.42	7.24	---
Visc @ 100°C	cSt	ASTM D445	8.3	8.5	8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06174070
Lab Number : 06174070
Unique Number : 11020123
Test Package : MOB 2

Received : 09 May 2024
Tested : 10 May 2024
Diagnosed : 10 May 2024 - Wes Davis

COFFMAN INDUSTRIES
 10800 CEMETERY RD
 CANYON, TX
 US 79015
 Contact: MIKE LEWIS

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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)

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