



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
19007
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0954603	---	---
Sample Date		Client Info		26 Jun 2024	---	---
Machine Age	mls	Client Info		0	---	---
Oil Age	mls	Client Info		28000	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>100	57	---	---
Chromium	ppm	ASTM D5185m	>20	4	---	---
Nickel	ppm	ASTM D5185m	>4	3	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	35	---	---
Lead	ppm	ASTM D5185m	>40	4	---	---
Copper	ppm	ASTM D5185m	>330	▲ 451	---	---
Tin	ppm	ASTM D5185m	>15	▲ 25	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

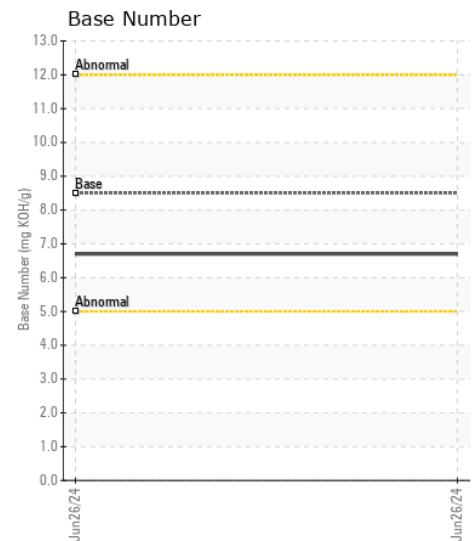
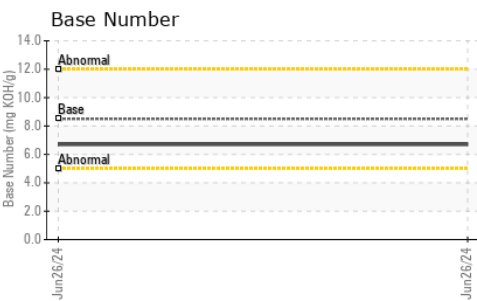
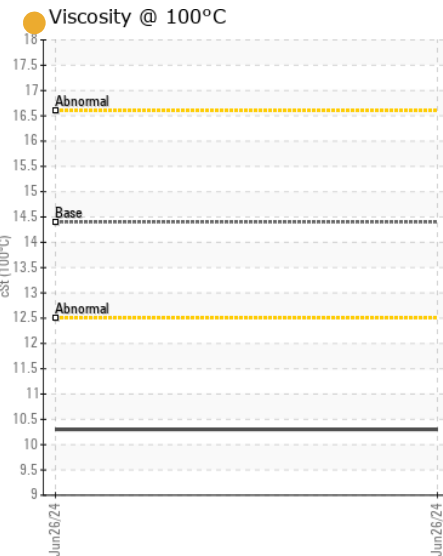
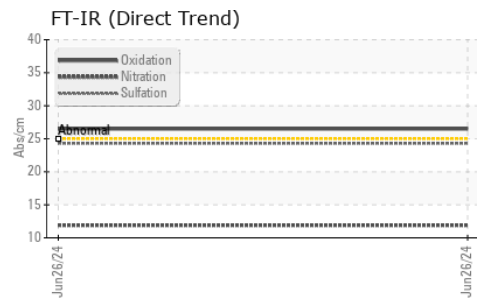
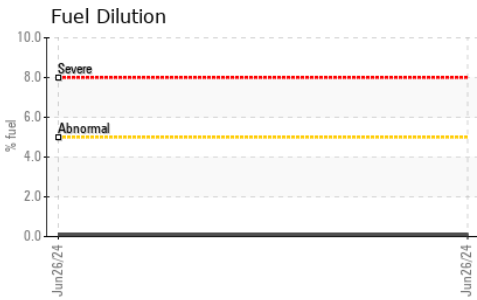
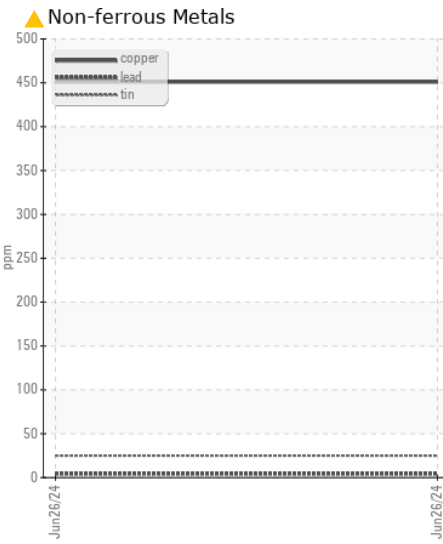
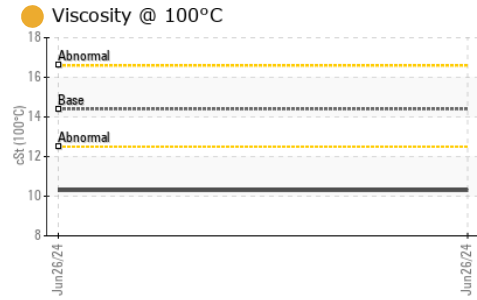
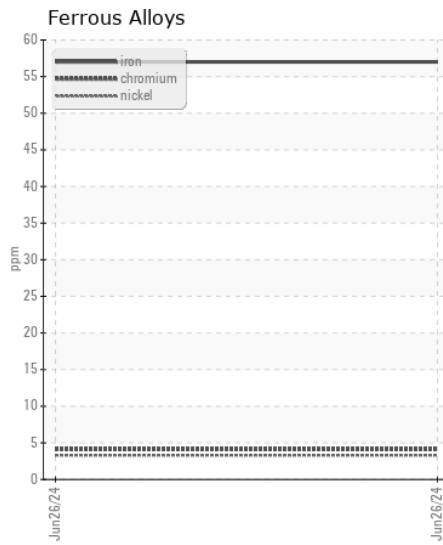
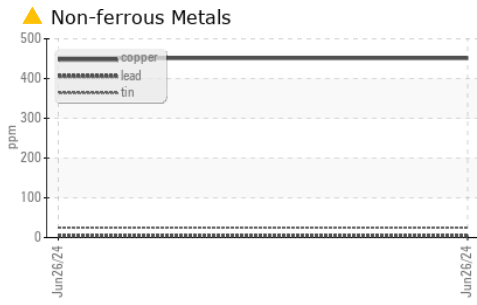
Fuel content negligible. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	---	---
Potassium	ppm	ASTM D5185m	>20	94	---	---
Fuel	%	ASTM D3524	>5	0.1	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.7	---	---
Nitration	Abs/cm	*ASTM D7624	>20	11.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.3	---	---
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	5	---	---
Boron	ppm	ASTM D5185m	250	26	---	---
Barium	ppm	ASTM D5185m	10	<1	---	---
Molybdenum	ppm	ASTM D5185m	100	42	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m	450	529	---	---
Calcium	ppm	ASTM D5185m	3000	1846	---	---
Phosphorus	ppm	ASTM D5185m	1150	755	---	---
Zinc	ppm	ASTM D5185m	1350	904	---	---
Sulfur	ppm	ASTM D5185m	4250	2014	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	26.5	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.7	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	● 10.3	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0954603

Lab Number : 06229579

Unique Number : 11113072

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 05 Jul 2024

Tested : 10 Jul 2024

Diagnosed : 10 Jul 2024 - Jonathan Hester

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE

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US 27105

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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)