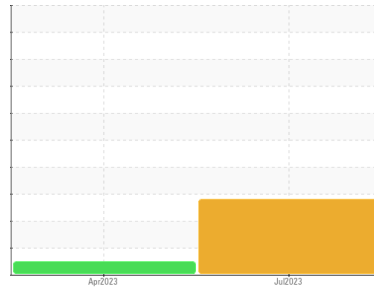


PROBLEM SUMMARY

Sample Rating Trend



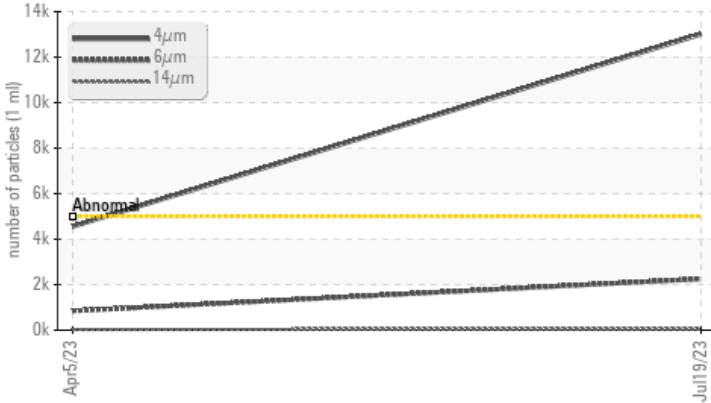
WEAR



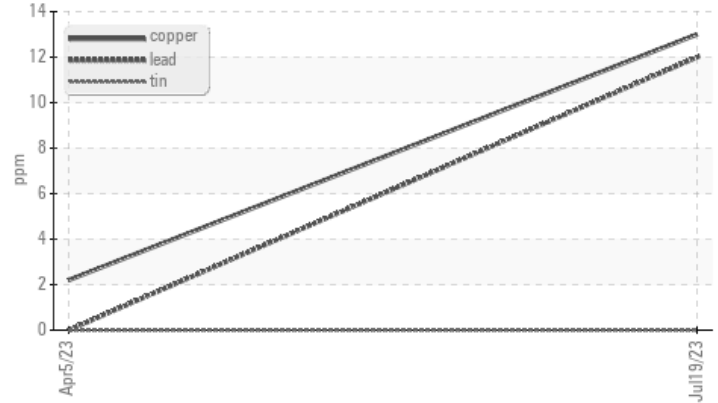
Area
BOILER
 Machine Id
[BOILER] STEA-Z-U0001 - ROYAL PURPLE 100 NO DYE
 Component
New (Unused) Oil
 Fluid
ROYAL PURPLE SYNFILM GT 100 (--- QTS)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Non-ferrous Metals



RECOMMENDATION

This is a baseline read-out on the submitted sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	NORMAL	---
Lead	ppm	ASTM D5185m	>5	▲ 12	0	---
Copper	ppm	ASTM D5185m	>5	▲ 13	2	---
Particles >4µm		ASTM D7647	>5000	▲ 13005	4552	---
Particles >6µm		ASTM D7647	>1300	▲ 2252	843	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 21/18/13	19/17/12	---

Customer Id: CALSHR
 Sample No.: RP0034777
 Lab Number: 05904423
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

05 Apr 2023 Diag: Jonathan Hester

NORMAL



This is a baseline read-out on the submitted sample.

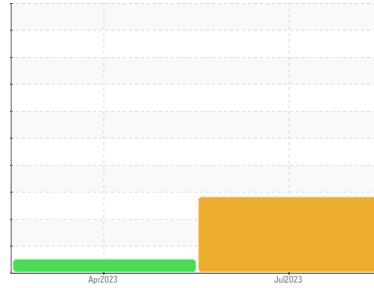
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area
BOILER
 Machine Id
[BOILER] STEA-Z-U0001 - ROYAL PURPLE 100 NO DYE
 Component
New (Unused) Oil
 Fluid
ROYAL PURPLE SYNFILM GT 100 (--- QTS)

DIAGNOSIS

▲ Recommendation

This is a baseline read-out on the submitted sample.

▲ Wear

Copper and lead ppm levels are marginal.

▲ Contamination

There is a high amount of silt (particulates < 14 microns in size) present in the oil.

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		RP0034777	RP0031663	---
Sample Date	Client Info		19 Jul 2023	05 Apr 2023	---
Machine Age	hrs	Client Info	0	0	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Not Chngd	N/A	---
Sample Status			ABNORMAL	NORMAL	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >5	0	0	---
Chromium	ppm	ASTM D5185m >5	0	0	---
Nickel	ppm	ASTM D5185m >5	0	0	---
Titanium	ppm	ASTM D5185m	<1	0	---
Silver	ppm	ASTM D5185m >5	0	0	---
Aluminum	ppm	ASTM D5185m >5	<1	<1	---
Lead	ppm	ASTM D5185m >5	▲ 12	0	---
Copper	ppm	ASTM D5185m >5	▲ 13	2	---
Tin	ppm	ASTM D5185m >5	0	0	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

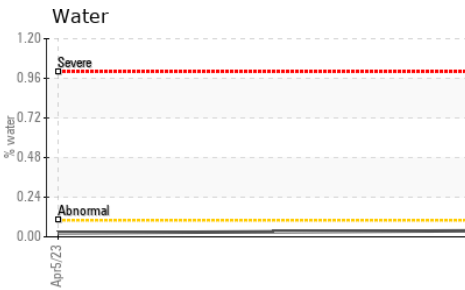
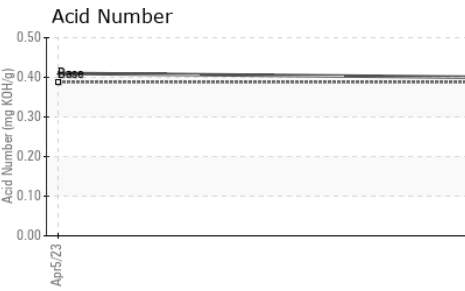
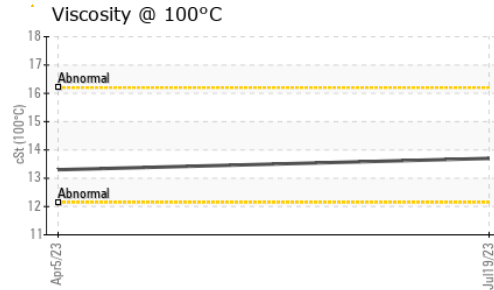
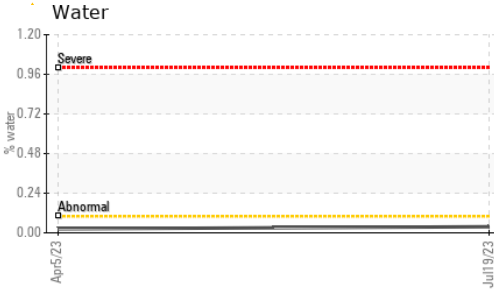
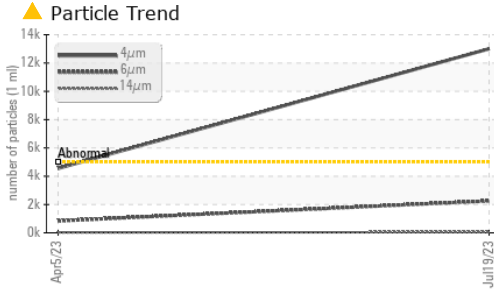
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	3	0	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m 90	91	94	---
Calcium	ppm	ASTM D5185m	16	<1	---
Phosphorus	ppm	ASTM D5185m 35	19	1	---
Zinc	ppm	ASTM D5185m	17	2	---

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	1	2	---
Sodium	ppm	ASTM D5185m	1	<1	---
Potassium	ppm	ASTM D5185m >20	0	0	---
Water	%	ASTM D6304	0.037	0.024	---
ppm Water	ppm	ASTM D6304	371.7	247.9	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 13005	4552	---
Particles >6µm	ASTM D7647	>1300	▲ 2252	843	---
Particles >14µm	ASTM D7647	>160	47	26	---
Particles >21µm	ASTM D7647	>40	7	6	---
Particles >38µm	ASTM D7647	>10	1	1	---
Particles >71µm	ASTM D7647	>3	0	1	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/18/13	19/17/12	---

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.388	0.40	0.41	---

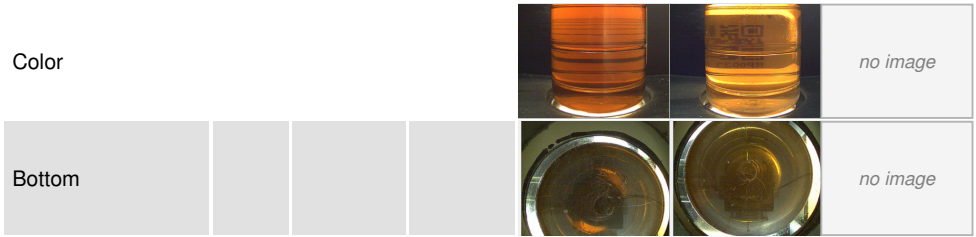
OIL ANALYSIS REPORT



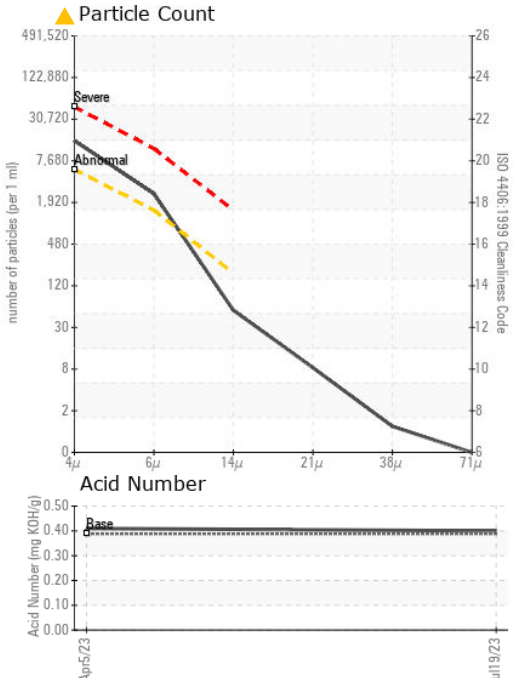
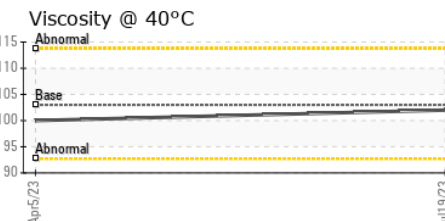
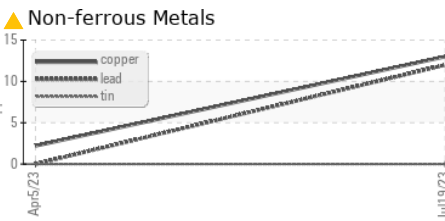
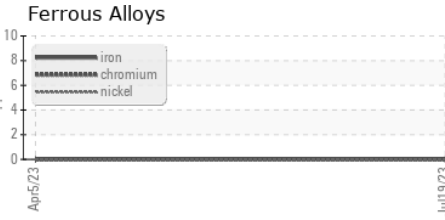
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 103	102	100.0	---
Visc @ 100°C	cSt	ASTM D445	13.7	13.3	---
Viscosity Index (VI)	Scale	ASTM D2270	134	131	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034777 **Received** : 21 Jul 2023
Lab Number : 05904423 **Diagnosed** : 02 Aug 2023
Unique Number : 10565779 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: FT-IR, KV100, PrtCount, VI)

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)

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 SHREVEPORT, LA
 US 71109
 Contact: NICHOLAS LESAGE
 nicholas.lesage@clmt.com

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