



PROBLEM SUMMARY

Sample Rating Trend



ISO



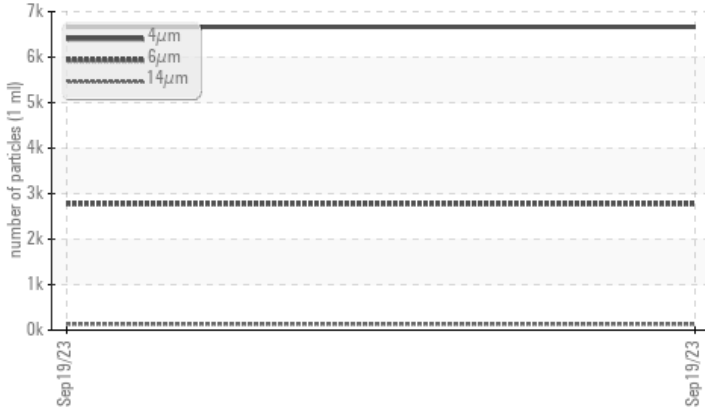
Machine Id
8803302 (S/N 1758)

Component
Compressor

Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	---	---
Particles >6µm	ASTM D7647	>1300	▲ 2776	---	---
Particles >14µm	ASTM D7647	>80	▲ 134	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/14	---	---

Customer Id: THUSAVGA
Sample No.: KCPA003076
Lab Number: 05978939
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

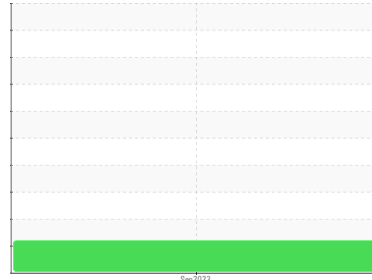
RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
8803302 (S/N 1758)

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KCPA003076	---	---
Sample Date	Client Info	19 Sep 2023	---	---
Machine Age	hrs	Client Info	517	---
Oil Age	hrs	Client Info	0	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	---
Chromium	ppm	ASTM D5185m >10	0	---
Nickel	ppm	ASTM D5185m >3	0	---
Titanium	ppm	ASTM D5185m >3	0	---
Silver	ppm	ASTM D5185m >2	0	---
Aluminum	ppm	ASTM D5185m >10	0	---
Lead	ppm	ASTM D5185m >10	0	---
Copper	ppm	ASTM D5185m >50	4	---
Tin	ppm	ASTM D5185m >10	0	---
Vanadium	ppm	ASTM D5185m	0	---
Cadmium	ppm	ASTM D5185m	0	---

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	---
Barium	ppm	ASTM D5185m 90	8	---
Molybdenum	ppm	ASTM D5185m 0	0	---
Manganese	ppm	ASTM D5185m	<1	---
Magnesium	ppm	ASTM D5185m 100	61	---
Calcium	ppm	ASTM D5185m 0	5	---
Phosphorus	ppm	ASTM D5185m 0	<1	---
Zinc	ppm	ASTM D5185m 0	0	---
Sulfur	ppm	ASTM D5185m 23500	17556	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	---
Sodium	ppm	ASTM D5185m	13	---
Potassium	ppm	ASTM D5185m >20	19	---
Water	%	ASTM D6304 >0.05	0.026	---
ppm Water	ppm	ASTM D6304 >500	260.8	---

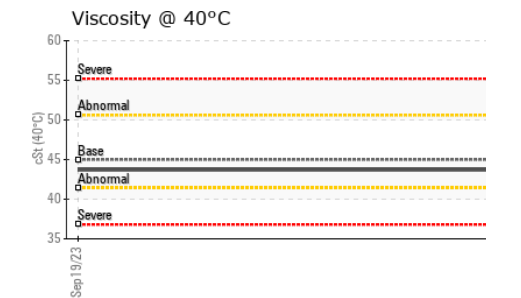
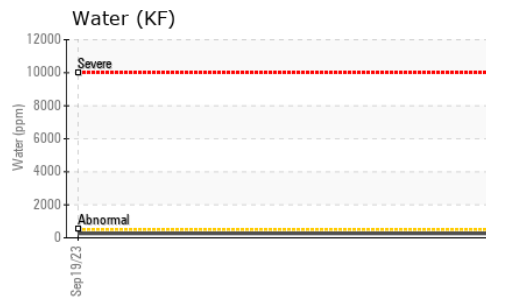
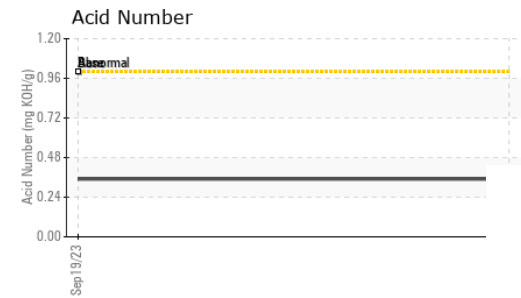
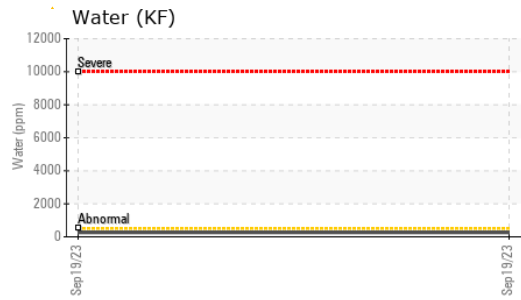
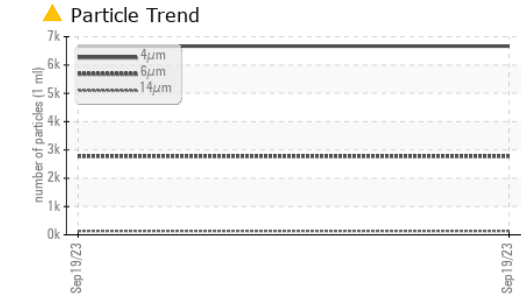
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	6666	---	---
Particles >6µm	ASTM D7647 >1300	▲ 2776	---	---
Particles >14µm	ASTM D7647 >80	▲ 134	---	---
Particles >21µm	ASTM D7647 >20	11	---	---
Particles >38µm	ASTM D7647 >4	1	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 20/19/14	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.35	---

OIL ANALYSIS REPORT



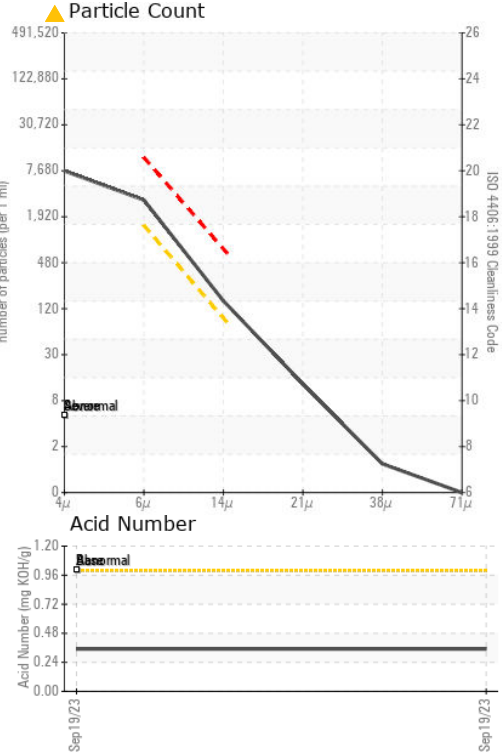
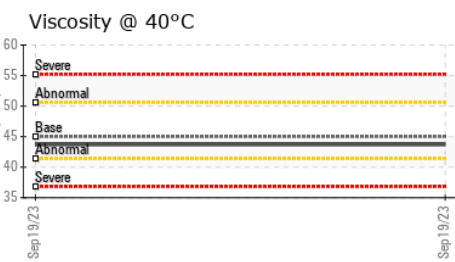
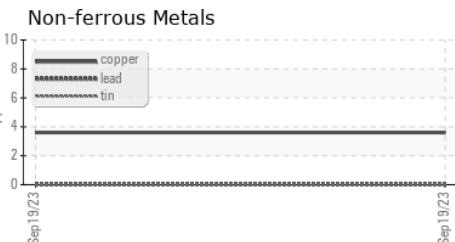
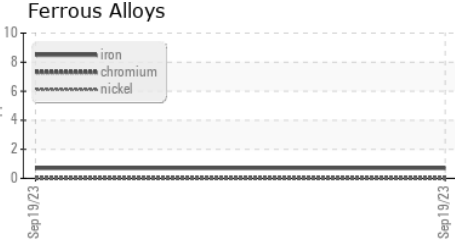
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	43.7	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA003076 **Received** : 13 Oct 2023
Lab Number : 05978939 **Diagnosed** : 17 Oct 2023
Unique Number : 10696234 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

THUNDERBOLT MARINE INC
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 SAVANNAH, GA
 US 31404
 Contact: A/P
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 T:
 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)