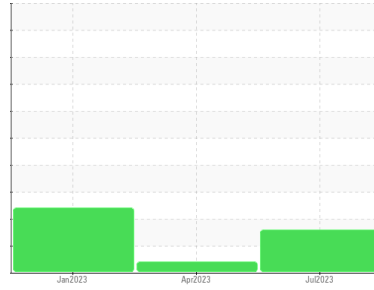




PROBLEM SUMMARY

Sample Rating Trend

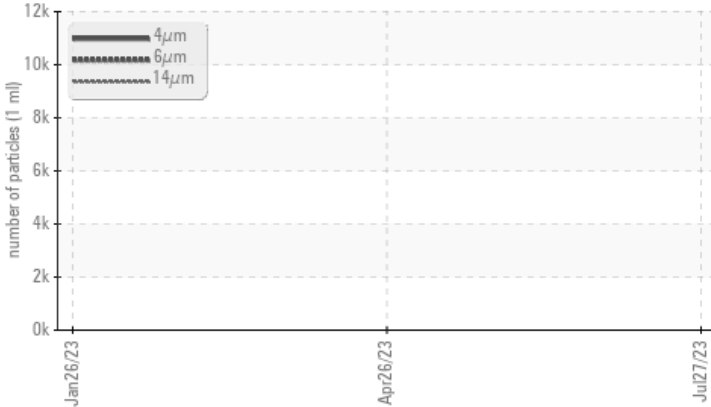


Machine Id
8109688 (S/N 1709)

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

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

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

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 2694	---	---
Particles >14µm	ASTM D7647	>80	▲ 213	---	---
Particles >21µm	ASTM D7647	>20	▲ 64	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/15	---	---

Customer Id: PACSAR
Sample No.: KC106385
Lab Number: 05930366
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

26 Apr 2023 Diag: Don Baldrige

VIS DEBRIS



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



26 Jan 2023 Diag: Don Baldrige

WATER



We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. There is a moderate amount of visible silt present in the sample. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid.

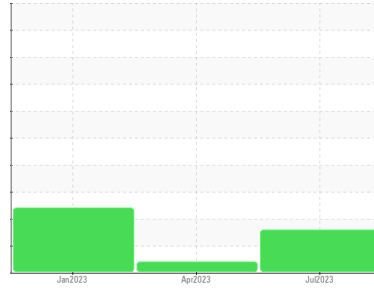
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
8109688 (S/N 1709)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and 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	KC106385	KC101071	KC99699
Sample Date	Client Info	27 Jul 2023	26 Apr 2023	26 Jan 2023
Machine Age	hrs	2436	586	64
Oil Age	hrs	2436	586	64
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm	ASTM D5185m >50	<1	0	<1
Chromium ppm	ASTM D5185m >10	0	0	0
Nickel ppm	ASTM D5185m >3	0	0	0
Titanium ppm	ASTM D5185m >3	0	0	0
Silver ppm	ASTM D5185m >2	0	0	0
Aluminum ppm	ASTM D5185m >10	0	2	<1
Lead ppm	ASTM D5185m >10	2	0	0
Copper ppm	ASTM D5185m >50	6	1	<1
Tin ppm	ASTM D5185m >10	0	0	0
Vanadium ppm	ASTM D5185m	0	0	0
Cadmium ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm	ASTM D5185m 0	0	0	0
Barium ppm	ASTM D5185m 90	22	30	69
Molybdenum ppm	ASTM D5185m 0	0	0	0
Manganese ppm	ASTM D5185m	0	0	0
Magnesium ppm	ASTM D5185m 100	85	65	72
Calcium ppm	ASTM D5185m 0	3	6	<1
Phosphorus ppm	ASTM D5185m 0	2	7	2
Zinc ppm	ASTM D5185m 0	6	<1	0

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm	ASTM D5185m >25	4	<1	<1
Sodium ppm	ASTM D5185m	37	25	13
Potassium ppm	ASTM D5185m >20	5	0	<1
Water %	ASTM D6304 >0.05	0.020	0.025	▲ 0.099
ppm Water	ASTM D6304 >500	207.3	253.7	▲ 990

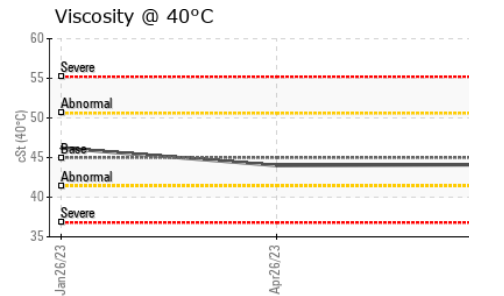
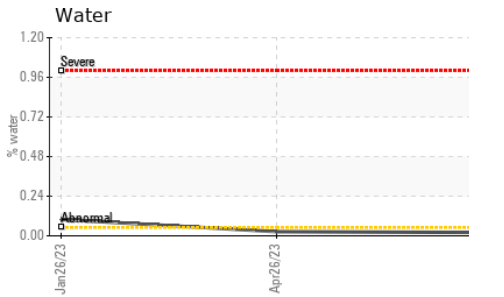
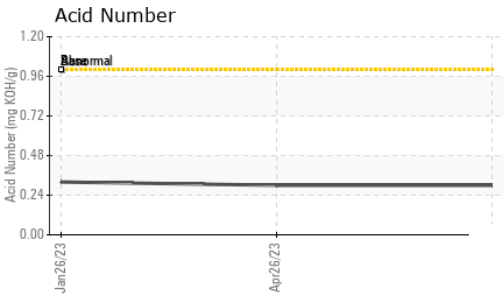
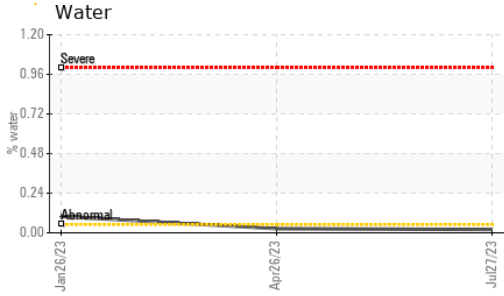
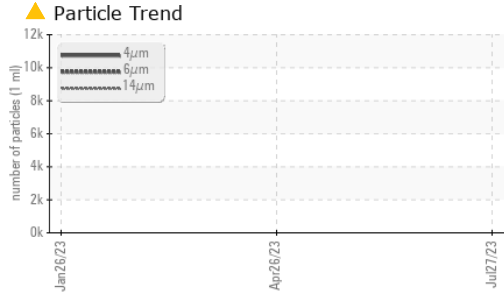
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	11303	---	---
Particles >6µm	ASTM D7647 >1300	▲ 2694	---	---
Particles >14µm	ASTM D7647 >80	▲ 213	---	---
Particles >21µm	ASTM D7647 >20	▲ 64	---	---
Particles >38µm	ASTM D7647 >4	3	---	---
Particles >71µm	ASTM D7647 >3	0	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 21/19/15	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g	ASTM D8045 1.0	0.30	0.30	0.32

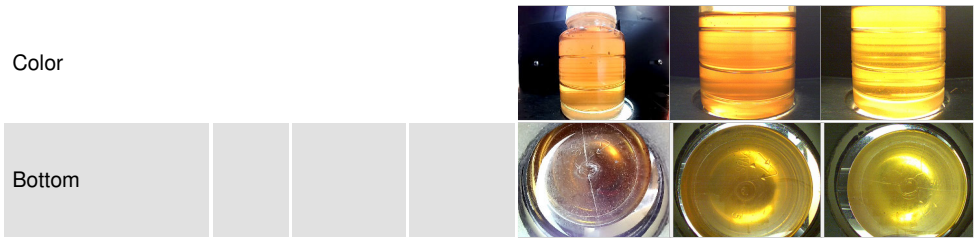
OIL ANALYSIS REPORT



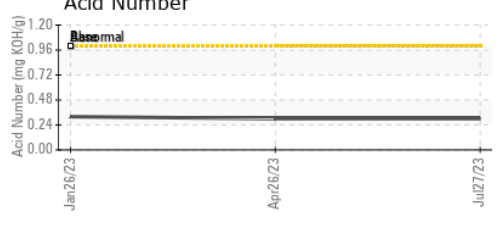
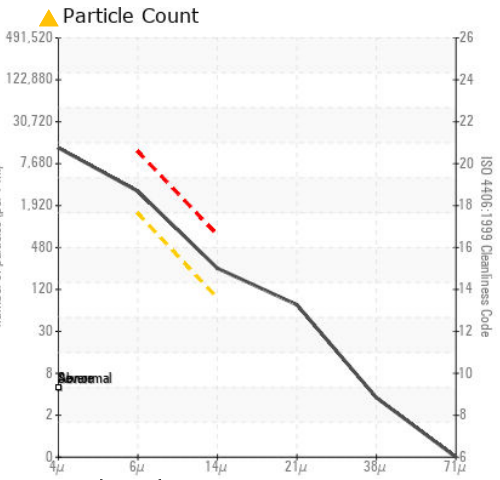
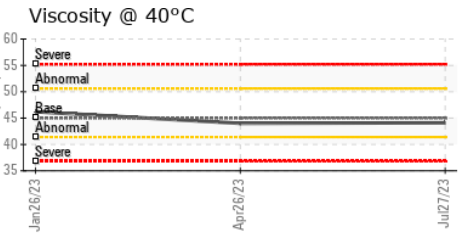
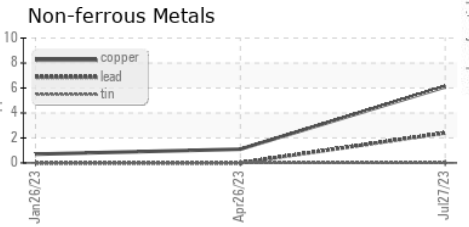
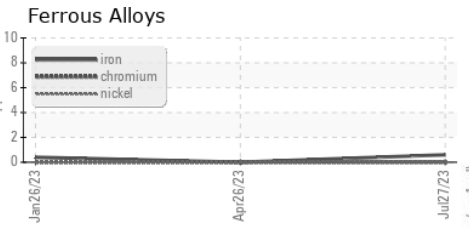
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	LIGHT	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	45	44.1	44.0	46.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC106385 **Received** : 21 Aug 2023
Lab Number : 05930366 **Diagnosed** : 23 Aug 2023
Unique Number : 10615637 **Diagnostician** : Jonathan Hester
Test Package : IND 2

PACER MARINE
 1555 APEX RD
 SARASOTA, FL
 US 34240
 Contact: Service Manager

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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