

PROBLEM SUMMARY

Sample Rating Trend

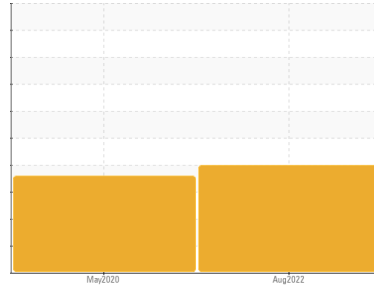
DEGRADATION



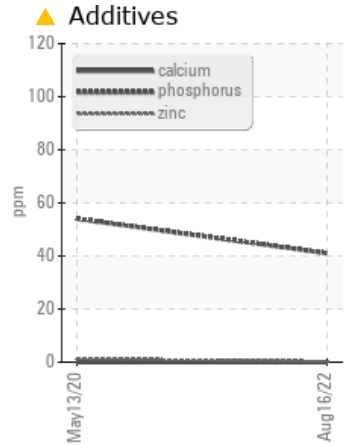
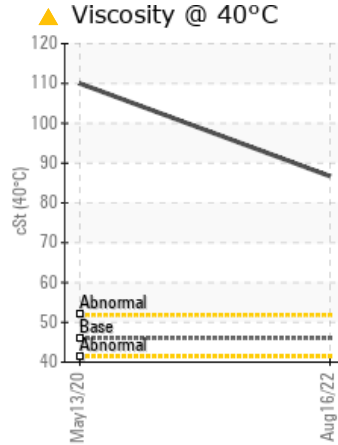
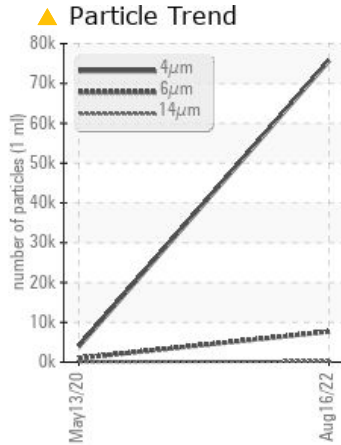
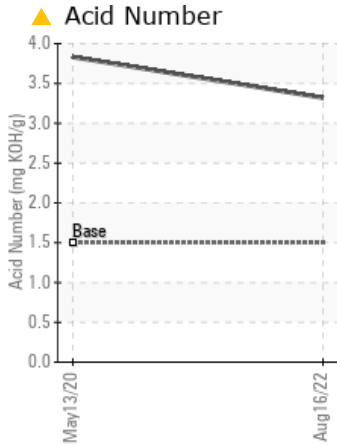
Machine Id
KAESER ESD 250 2587682 (S/N 1047)

Component
Compressor

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



COMPONENT CONDITION SUMMARY



RECOMMENDATION

No corrective action is recommended at this time. 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	---
Phosphorus	ppm	ASTM D5185m	500	▲ 41	▲ 54	---
Zinc	ppm	ASTM D5185m		▲ <1	▲ 1	---
Sulfur	ppm	ASTM D5185m		▲ 360	▲ 220	---
Particles >6µm		ASTM D7647	>1300	▲ 7684	986	---
Particles >14µm		ASTM D7647	>80	▲ 215	▲ 83	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 23/20/15	▲ 17/14	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	▲ 3.32	▲ 3.832	---
Visc @ 40°C	cSt	ASTM D445	46	▲ 86.7	▲ 110	---

Customer Id: DARLANKC
Sample No.: KCP50020
Lab Number: 05635086
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

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

13 May 2020 Diag: Doug Bogart

DEGRADATION



No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The oil viscosity is higher than normal. The AN level is above the recommended limit. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

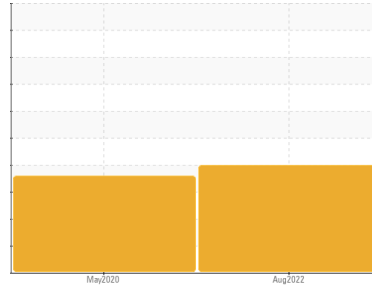
view report



Machine Id
KAESER ESD 250 2587682 (S/N 1047)

Component
Compressor

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



DIAGNOSIS

▲ **Recommendation**

No corrective action is recommended at this time. 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 oil viscosity is higher than normal. The AN level is above the recommended limit. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			KCP50020	KCP26726	---
Sample Date			16 Aug 2022	13 May 2020	---
Machine Age	hrs		42909	30363	---
Oil Age	hrs		12603	0	---
Oil Changed			Changed	Changed	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	<1	<1	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	---
Manganese	ppm	ASTM D5185m	0	0	---
Magnesium	ppm	ASTM D5185m	<1	<1	---
Calcium	ppm	ASTM D5185m	0	0	---
Phosphorus	ppm	ASTM D5185m 500	▲ 41	▲ 54	---
Zinc	ppm	ASTM D5185m	▲ <1	▲ 1	---
Sulfur	ppm	ASTM D5185m	▲ 360	▲ 220	---

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	0	3	---
Sodium	ppm	ASTM D5185m	3	3	---
Potassium	ppm	ASTM D5185m >20	0	<1	---
Water	%	ASTM D6304 >0.05	0.016	0.013	---
ppm Water	ppm	ASTM D6304 >500	166.5	136.4	---

FLUID CLEANLINESS

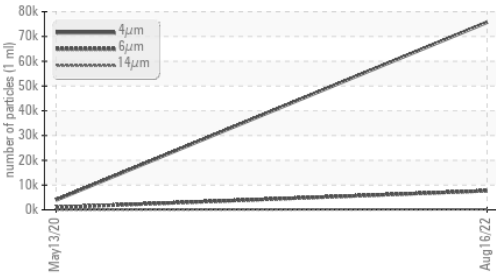
	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		75735	3945	---
Particles >6µm	ASTM D7647	>1300	▲ 7684	986	---
Particles >14µm	ASTM D7647	>80	▲ 215	▲ 83	---
Particles >21µm	ASTM D7647	>20	18	▲ 24	---
Particles >38µm	ASTM D7647	>4	1	2	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 23/20/15	▲ 17/14	---

FLUID DEGRADATION

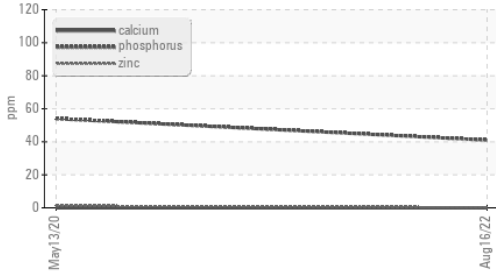
	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	▲ 3.32	▲ 3.832	---

OIL ANALYSIS REPORT

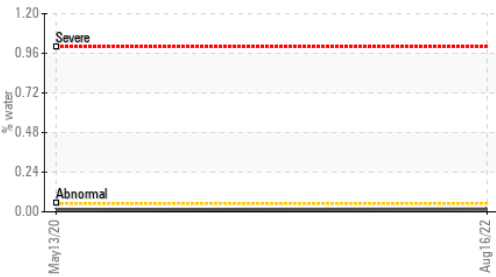
▲ Particle Trend



▲ Additives



Water



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 40°C	cSt	ASTM D445 46	▲ 86.7	▲ 110	---

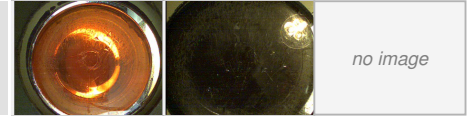
SAMPLE IMAGES	method	limit/base	current	history 1	history 2
---------------	--------	------------	---------	-----------	-----------

Color



no image

Bottom



no image

GRAPHS

Ferrous Alloys



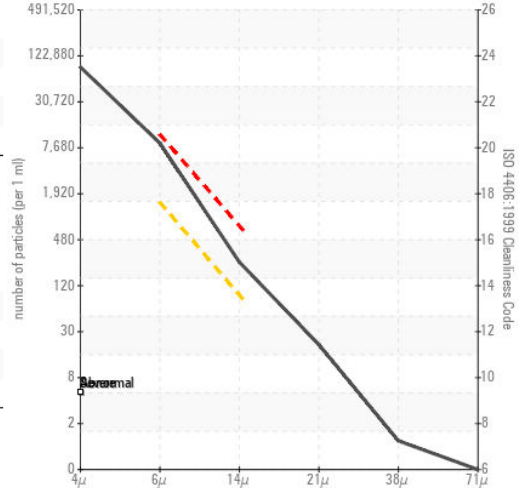
Non-ferrous Metals



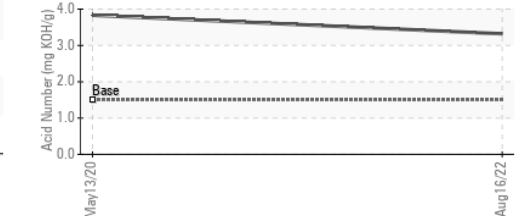
Viscosity @ 40°C



▲ Particle Count



▲ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP50020 **Received** : 06 Sep 2022
Lab Number : 05635086 **Diagnosed** : 08 Sep 2022
Unique Number : 10124616 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

DART CONTAINER
 110 PITNEY RD
 LANCASTER, PA
 USA 17602
 Contact:

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)

T:
F: