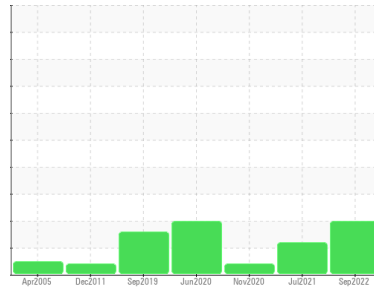


PROBLEM SUMMARY

Sample Rating Trend



VISCOSITY



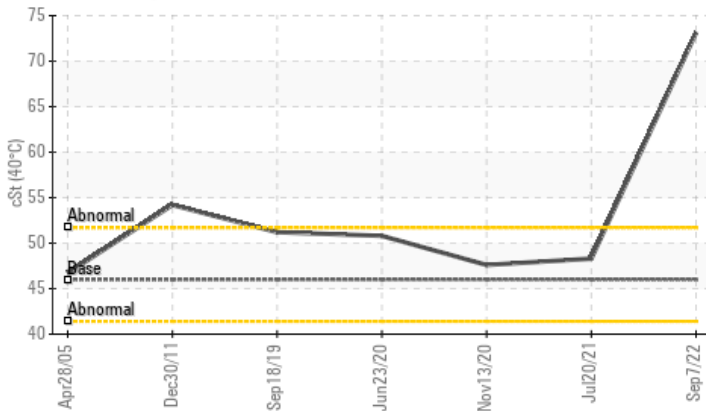
Machine Id
KAESER FS 360 145478 (S/N 1009)

Component
Compressor

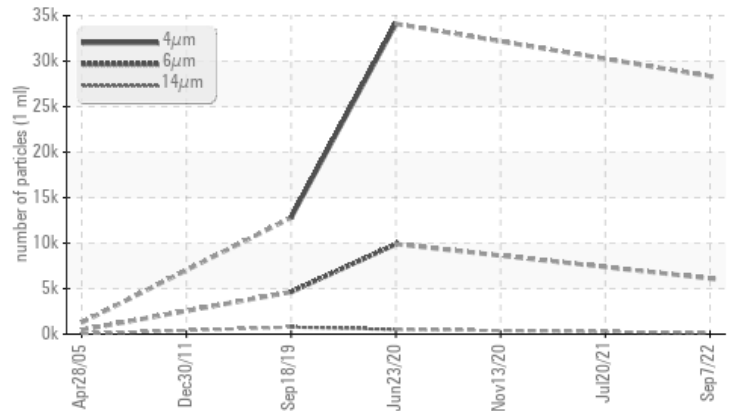
Fluid
KAESER SIGMA (OEM) FG-460 (60 GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ 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	▲ 6117	---	---
Particles >14µm	ASTM D7647	>80	▲ 144	---	---
Particles >21µm	ASTM D7647	>20	▲ 23	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 22/20/14	---	---
Visc @ 40°C	cSt	ASTM D445	46	▲ 73.11	48.3
					47.6

Customer Id: DARLEO
Sample No.: KCP43956
Lab Number: 05645532
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

20 Jul 2021 Diag: Angela Borella

VISUAL METAL



Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. Moderate concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



13 Nov 2020 Diag: Angela Borella

VIS DEBRIS



Oil and filter change at the time of sampling has been noted. 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](#)



23 Jun 2020 Diag: Angela Borella

ISO

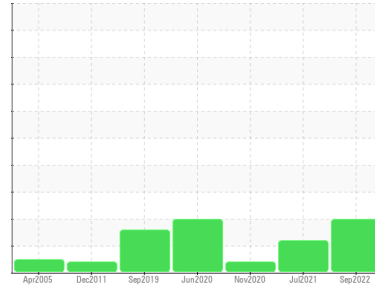


Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



Machine Id
KAESER FS 360 145478 (S/N 1009)
Component
Compressor
Fluid
KAESER SIGMA (OEM) FG-460 (60 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 oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history 1	history 2
Sample Number			KCP43956	KCP42050	KCP31727
Sample Date			07 Sep 2022	20 Jul 2021	13 Nov 2020
Machine Age	hrs		143142	136976	132067
Oil Age	hrs		4142	0	0
Oil Changed			Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m		0	0	<1
Barium	ppm ASTM D5185m		0	0	0
Molybdenum	ppm ASTM D5185m		0	0	0
Manganese	ppm ASTM D5185m		0	0	0
Magnesium	ppm ASTM D5185m		0	2	0
Calcium	ppm ASTM D5185m		0	0	0
Phosphorus	ppm ASTM D5185m	500	94	96	221
Zinc	ppm ASTM D5185m		26	19	58
Sulfur	ppm ASTM D5185m		408	532	965

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m	>25	0	0	0
Sodium	ppm ASTM D5185m		<1	0	<1
Potassium	ppm ASTM D5185m	>20	0	<1	0
Water	% ASTM D6304	>0.05	0.005	0.003	0.003
ppm Water	ppm ASTM D6304	>500	54.4	38.6	28.5

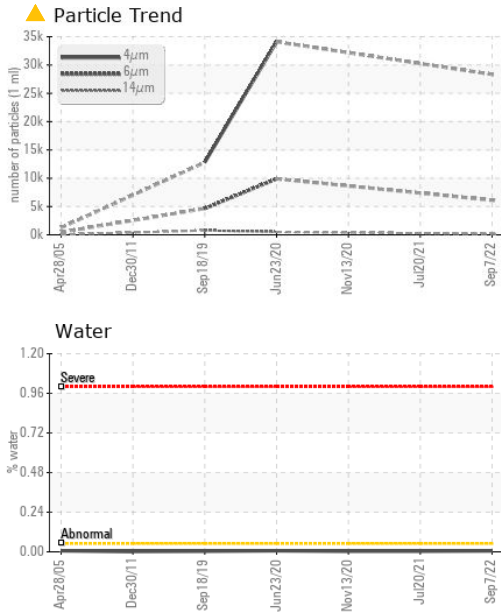
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		28337	---	---
Particles >6µm	ASTM D7647	>1300	▲ 6117	---	---
Particles >14µm	ASTM D7647	>80	▲ 144	---	---
Particles >21µm	ASTM D7647	>20	▲ 23	---	---
Particles >38µm	ASTM D7647	>4	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 22/20/14	---	---

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g ASTM D8045	1.5	0.79	0.648	0.732

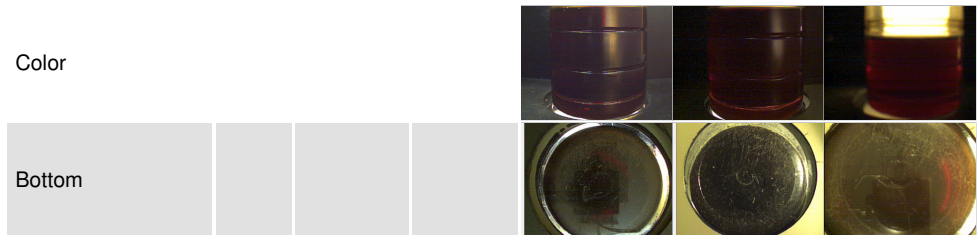
OIL ANALYSIS REPORT



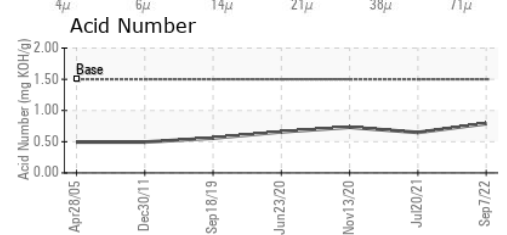
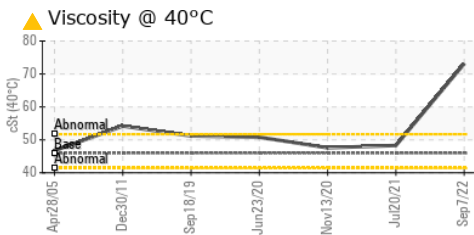
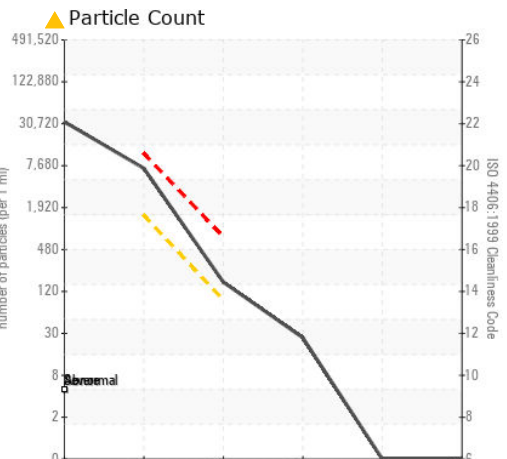
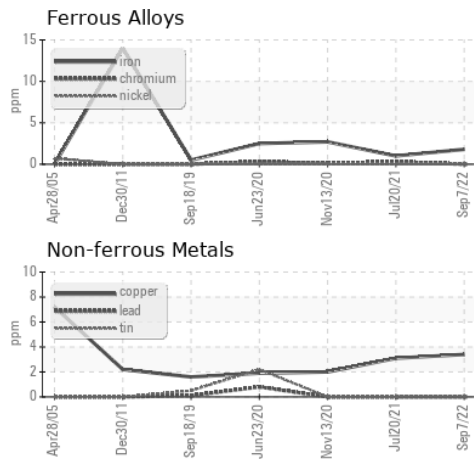
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	46	▲ 73.11	48.3

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



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP43956 **Received** : 19 Sep 2022
Lab Number : 05645532 **Diagnosed** : 22 Sep 2022
Unique Number : 10140071 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

DART CONTAINER CORP
 60 E. MAIN ST.
 LEOLA, PA
 USA 17540
 Contact: THOMAS CASEY
 thomas.casey@dart.biz

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)