

PROBLEM SUMMARY

Sample Rating Trend

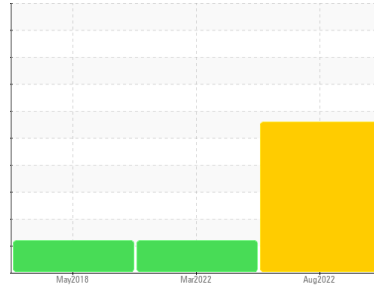
WATER



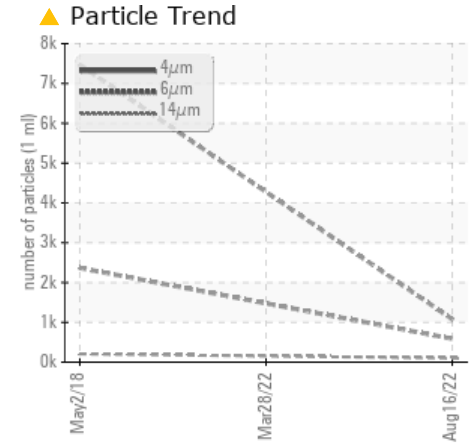
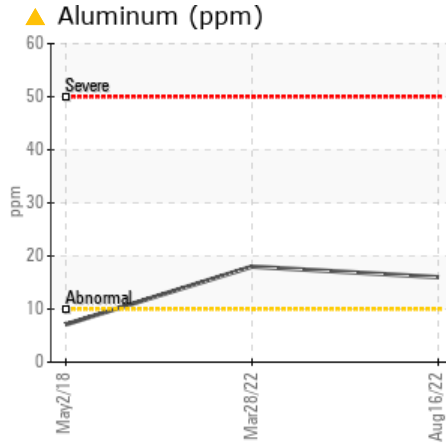
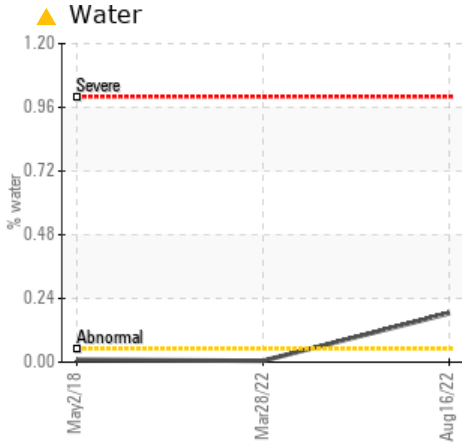
Machine Id
KAESER CSD 75 4779264 (S/N 1225)

Component
Compressor

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



COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>10	▲ 16	▲ 18	7
Water	%	ASTM D6304	>0.05	▲ 0.184	0.005	0.009
ppm Water	ppm	ASTM D6304	>500	▲ 1840	58.0	90
Particles >14µm		ASTM D7647	>80	▲ 100	---	▲ 205
Particles >21µm		ASTM D7647	>20	▲ 34	---	▲ 51
Particles >38µm		ASTM D7647	>4	▲ 5	---	2
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 17/16/14	---	▲ 18/15
Free Water	scalar	*Visual		▲ 1.0	NEG	NEG

Customer Id: GREWILVT
Sample No.: KCP48402
Lab Number: 05627492
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

28 Mar 2022 Diag: Angela Borella

WEAR



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. The aluminum level is abnormal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

[view report](#)



02 May 2018 Diag: Doug Bogart

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.

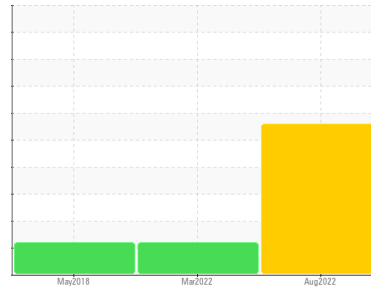
[view report](#)



Machine Id
KAESER CSD 75 4779264 (S/N 1225)

Component
Compressor

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



DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

▲ Wear

The aluminum level is abnormal. All other component wear rates are normal.

▲ Contamination

There is a moderate amount of particulates present in the oil. Free water present. There is a light concentration of water 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	history 1	history 2
Sample Number			KCP48402	KCP44318	KCP07999
Sample Date			16 Aug 2022	28 Mar 2022	02 May 2018
Machine Age	hrs		36513	35721	23477
Oil Age	hrs		1992	1283	6303
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	6	1	<1
Chromium	ppm	ASTM D5185m >10	<1	0	<1
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	<1	0	<1
Aluminum	ppm	ASTM D5185m >10	▲ 16	▲ 18	7
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	1	3	6
Tin	ppm	ASTM D5185m >10	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m	0	0	2
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m	2	0	3
Calcium	ppm	ASTM D5185m	0	0	22
Phosphorus	ppm	ASTM D5185m 500	390	248	269
Zinc	ppm	ASTM D5185m	103	119	51
Sulfur	ppm	ASTM D5185m	1586	1303	437

CONTAMINANTS

	method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m >25	<1	0	2
Sodium	ppm	ASTM D5185m	<1	4	14
Potassium	ppm	ASTM D5185m >20	<1	0	4
Water	%	ASTM D6304 >0.05	▲ 0.184	0.005	0.009
ppm Water	ppm	ASTM D6304 >500	▲ 1840	58.0	90

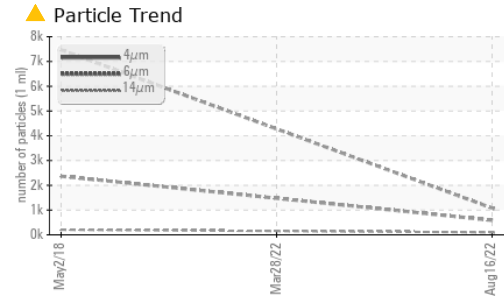
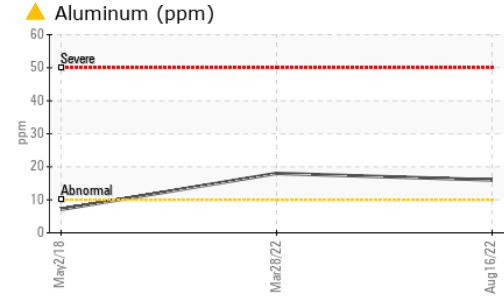
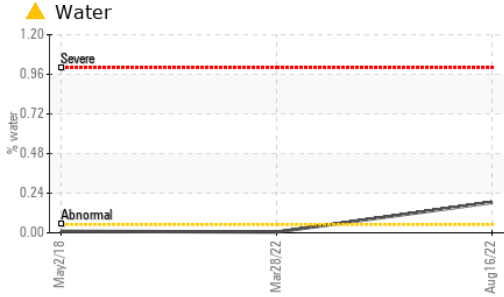
FLUID CLEANLINESS

	method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647		1079	---	7471
Particles >6µm	ASTM D7647	>1300	588	---	▲ 2366
Particles >14µm	ASTM D7647	>80	▲ 100	---	▲ 205
Particles >21µm	ASTM D7647	>20	▲ 34	---	▲ 51
Particles >38µm	ASTM D7647	>4	▲ 5	---	2
Particles >71µm	ASTM D7647	>3	1	---	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 17/16/14	---	▲ 18/15

FLUID DEGRADATION

	method	limit/base	current	history 1	history 2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	1.26	0.96	0.657

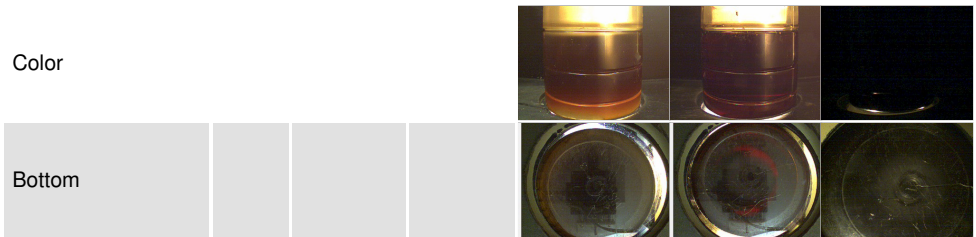
OIL ANALYSIS REPORT



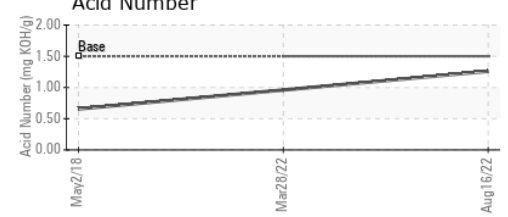
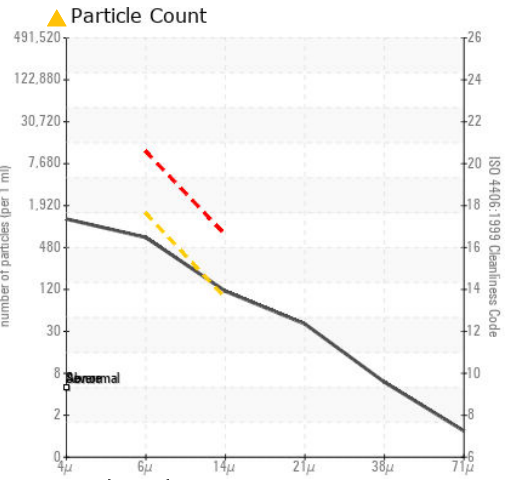
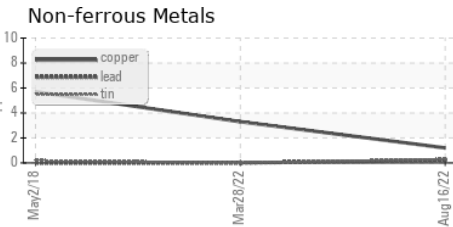
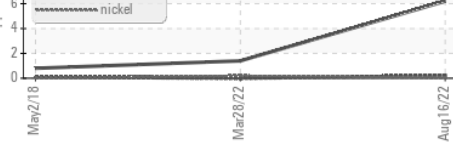
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.2%	NEG
Free Water	scalar	*Visual		▲ 1.0	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2	
Visc @ 40°C	cSt	ASTM D445	46	47.6	50.8	52.33

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



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP48402 **Received** : 25 Aug 2022
Lab Number : 05627492 **Diagnosed** : 30 Aug 2022
Unique Number : 10112013 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

GREEN MOUNTAIN COFFEE ROASTERS
 687 MARSHALL AVE
 WILLISTON, VT
 USA 05495
 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)

T:
F: