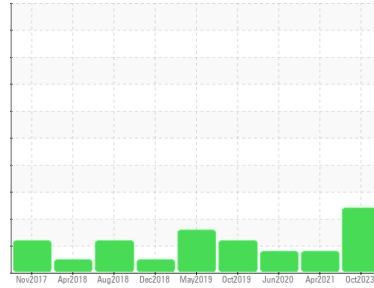




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER CSD 100ST 5712151 (S/N 1074)

Component
Compressor

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

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. Moderate concentration of visible dirt/debris 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		KC108279	KC90115	KC83600
Sample Date	Client Info		28 Oct 2023	28 Apr 2021	25 Jun 2020
Machine Age	hrs	Client Info	26086	23789	19663
Oil Age	hrs	Client Info	2500	4000	2000
Oil Changed	Client Info		Not Chngd	Changed	Changed
Sample Status			ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	26	2	3
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	10	0	▲ 13
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	2	2	3
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m	---	0	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	<1

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<1	<1
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	<1
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m	0	<1	4
Calcium	ppm	ASTM D5185m	0	<1	2
Phosphorus	ppm	ASTM D5185m 500	315	89	298
Zinc	ppm	ASTM D5185m	218	0	99

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	<1	3
Sodium	ppm	ASTM D5185m	<1	0	<1
Potassium	ppm	ASTM D5185m >20	0	<1	<1
Water	%	ASTM D6304 >0.05	0.007	0.004	0.006
ppm Water	ppm	ASTM D6304 >500	73	46.1	63.4

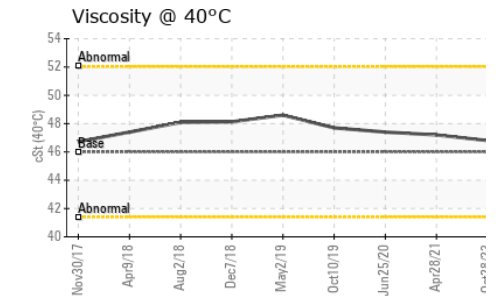
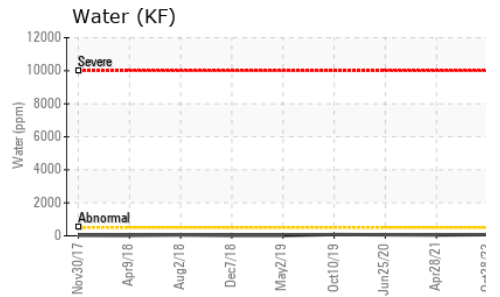
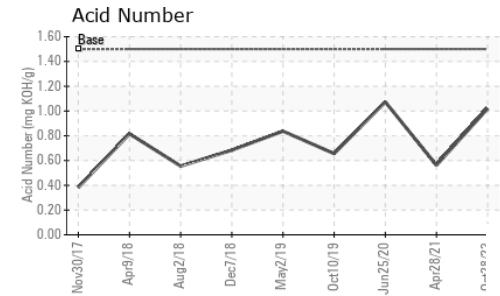
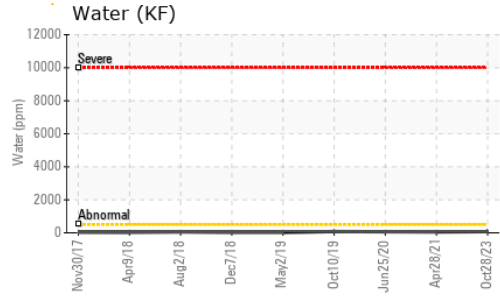
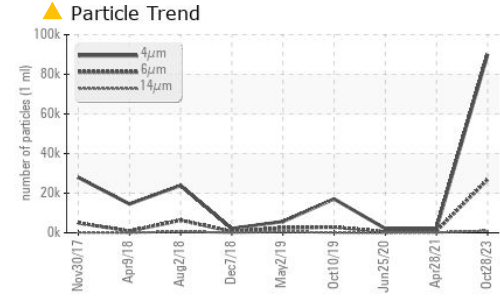
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		90053	2000	2086
Particles >6µm	ASTM D7647	>1300	▲ 26862	905	480
Particles >14µm	ASTM D7647	>80	▲ 1038	▲ 107	35
Particles >21µm	ASTM D7647	>20	▲ 225	▲ 25	6
Particles >38µm	ASTM D7647	>4	▲ 9	2	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 24/22/17	▲ 17/14	16/12

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.5	1.02	0.562	1.073

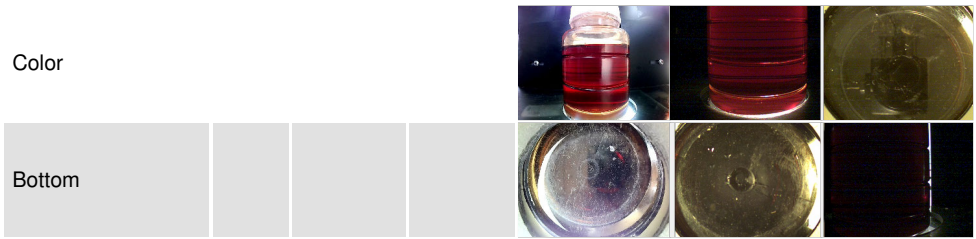
OIL ANALYSIS REPORT



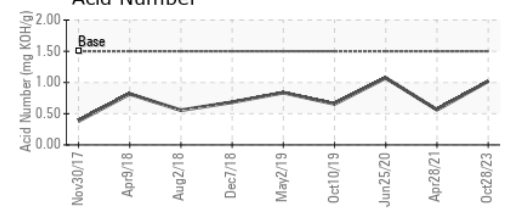
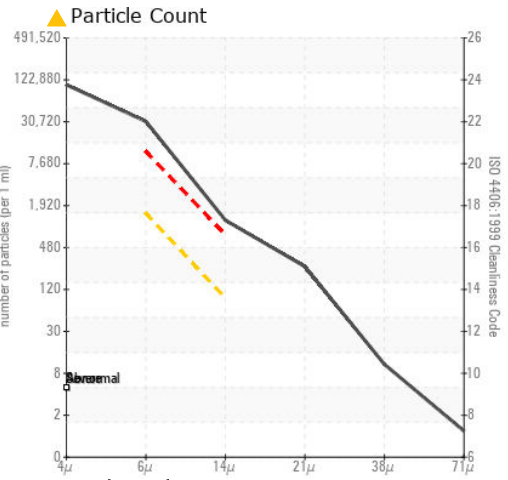
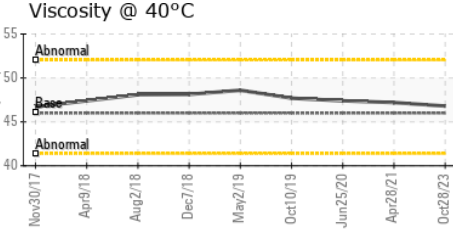
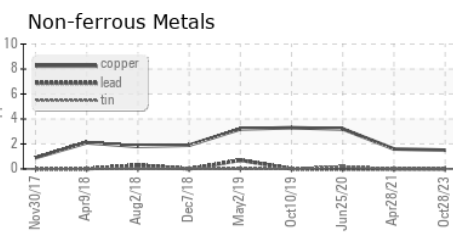
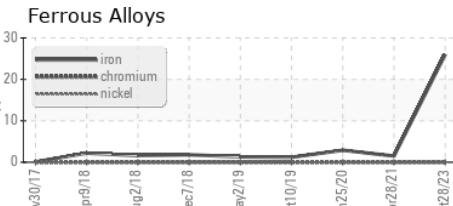
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	46.8	47.2	47.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC108279
Lab Number : 06073926
Unique Number : 10856017
Test Package : IND 2
Received : 30 Jan 2024
Tested : 31 Jan 2024
Diagnosed : 31 Jan 2024 - Don Baldrige

MASTERS GALLERY FOODS
 411 HWY PP
 PLYMOUTH, WI
 US 53073
 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)