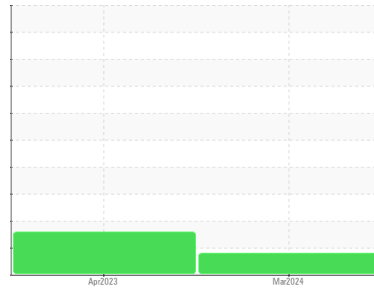




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id

8515545 (S/N 1038)

Component

Compressor

Fluid

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

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

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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			KC129365	KC111359	---
Sample Date	Client Info			27 Mar 2024	05 Apr 2023	---
Machine Age	hrs	Client Info		14854	6348	---
Oil Age	hrs	Client Info		1360	2020	---
Oil Changed	Client Info			Not Chngd	Not Chngd	---
Sample Status				ATTENTION	ATTENTION	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	5	5	---
Chromium	ppm	ASTM D5185m	>10	<1	0	---
Nickel	ppm	ASTM D5185m	>3	<1	0	---
Titanium	ppm	ASTM D5185m	>3	<1	0	---
Silver	ppm	ASTM D5185m	>2	<1	0	---
Aluminum	ppm	ASTM D5185m	>10	13	13	---
Lead	ppm	ASTM D5185m	>10	<1	0	---
Copper	ppm	ASTM D5185m	>50	2	<1	---
Tin	ppm	ASTM D5185m	>10	1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

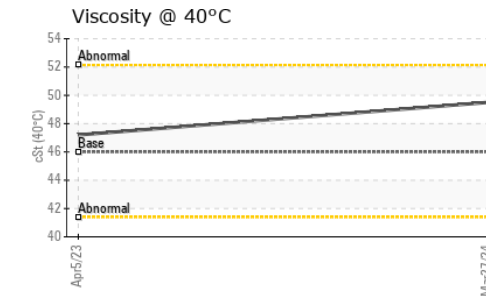
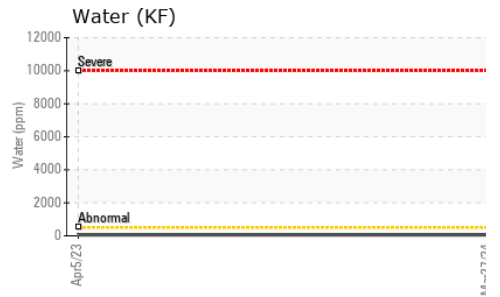
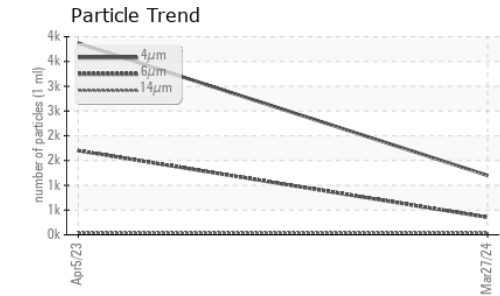
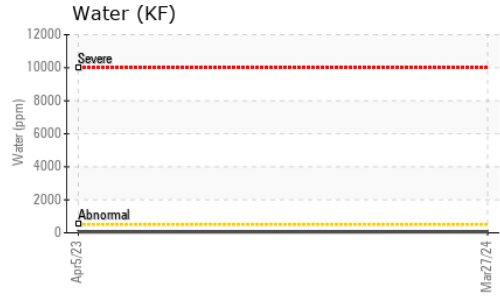
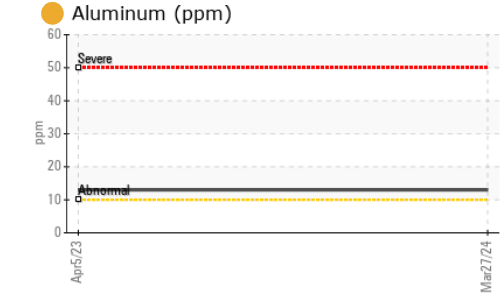
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		1	0	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		2	2	---
Calcium	ppm	ASTM D5185m		4	0	---
Phosphorus	ppm	ASTM D5185m	500	236	294	---
Zinc	ppm	ASTM D5185m		75	83	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	---
Sodium	ppm	ASTM D5185m		<1	2	---
Potassium	ppm	ASTM D5185m	>20	2	1	---
Water	%	ASTM D6304	>0.05	0.005	0.005	---
ppm Water	ppm	ASTM D6304	>500	56	54.3	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1199	3866	---
Particles >6µm		ASTM D7647	>1300	353	1700	---
Particles >14µm		ASTM D7647	>80	38	37	---
Particles >21µm		ASTM D7647	>20	9	6	---
Particles >38µm		ASTM D7647	>4	0	1	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	17/16/12	19/18/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	1.29	1.25	---

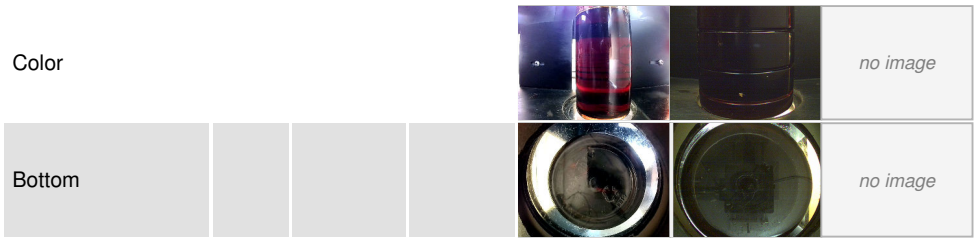
OIL ANALYSIS REPORT



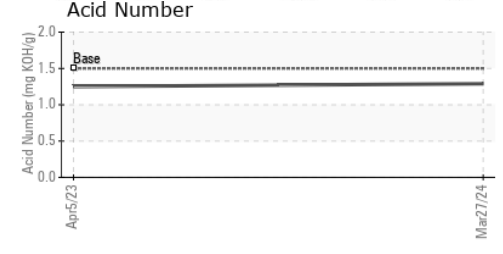
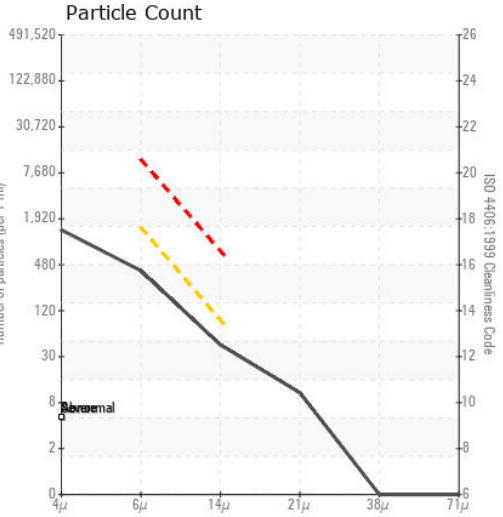
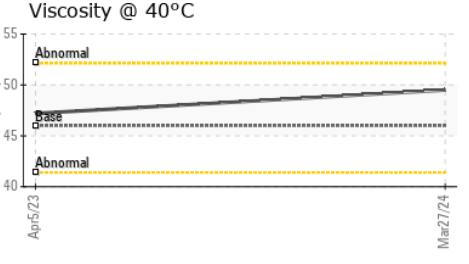
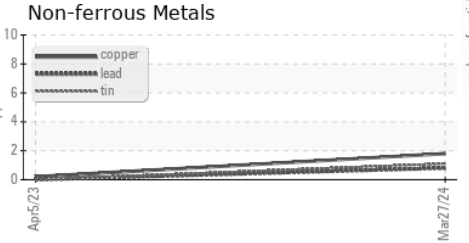
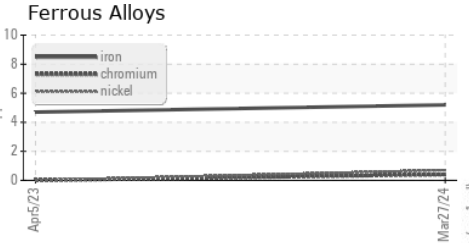
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	49.5	47.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC129365
Lab Number : 06135651
Unique Number : 10955116
Test Package : IND 2
Received : 01 Apr 2024
Tested : 03 Apr 2024
Diagnosed : 04 Apr 2024 - Don Baldrige

HEARTHSIDE FOODS
 3061 SHAFFER RD
 GRAND RAPIDS, MI
 US 49512
 Contact: SCOTT PERRY

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)