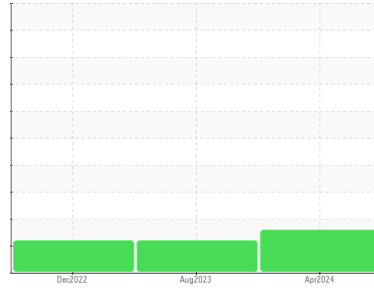




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SFC 18 8396125 (S/N 1011)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

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.

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			KCPA013712	KC05949067	KCP40363D
Sample Date	Client Info			15 Apr 2024	29 Aug 2023	22 Dec 2022
Machine Age	hrs	Client Info		9196	6400	3748
Oil Age	hrs	Client Info		5500	0	3748
Oil Changed	Client Info			Not Chngd	N/A	Changed
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2	<1	2
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	1	7
Lead	ppm	ASTM D5185m	>10	1	0	0
Copper	ppm	ASTM D5185m	>50	9	4	3
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	2	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	90	6	20	0
Calcium	ppm	ASTM D5185m	2	8	0	0
Phosphorus	ppm	ASTM D5185m		24	21	149
Zinc	ppm	ASTM D5185m		111	41	137
Sulfur	ppm	ASTM D5185m		17238	18885	7094

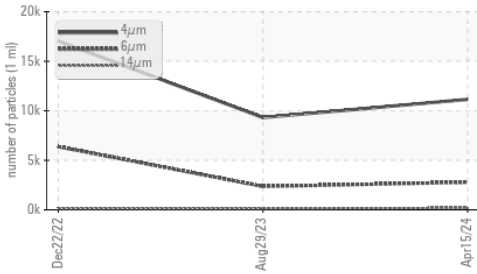
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	2	<1	<1
Sodium	ppm	ASTM D5185m		5	9	2
Potassium	ppm	ASTM D5185m	>20	4	5	<1
Water	%	ASTM D6304	>0.05	0.043	0.015	0.007
ppm Water	ppm	ASTM D6304	>500	435	151.0	70.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		11147	9315	17036
Particles >6µm		ASTM D7647	>1300	▲ 2784	● 2358	▲ 6384
Particles >14µm		ASTM D7647	>80	▲ 188	● 130	▲ 113
Particles >21µm		ASTM D7647	>20	▲ 42	19	16
Particles >38µm		ASTM D7647	>4	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 21/19/15	● 20/18/14	▲ 21/20/14

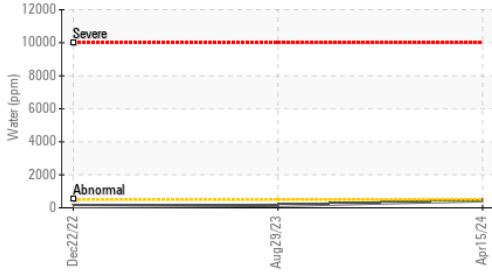
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.47	0.38	0.61

OIL ANALYSIS REPORT

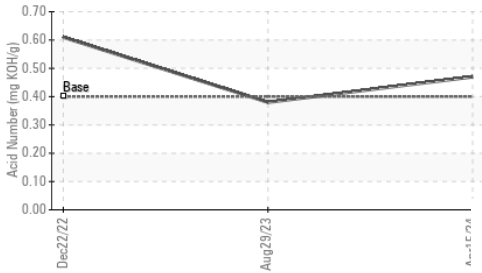
▲ Particle Trend



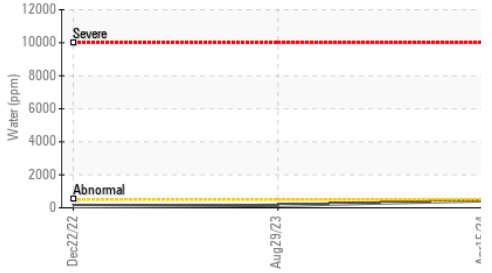
Water (KF)



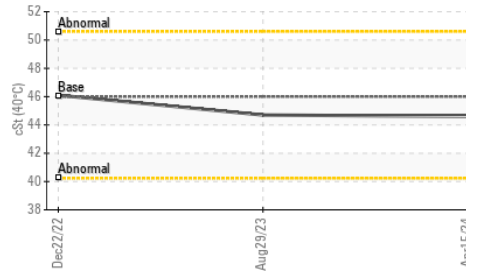
Acid Number



Water (KF)



Viscosity @ 40°C



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	NONE	NONE
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	44.6	44.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------

Color

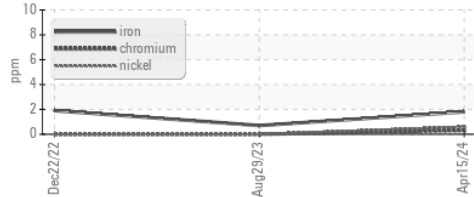


Bottom

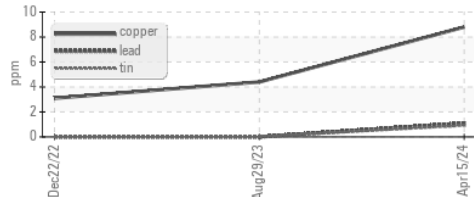


GRAPHS

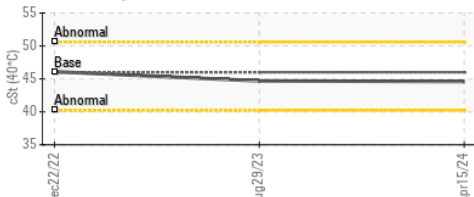
Ferrous Alloys



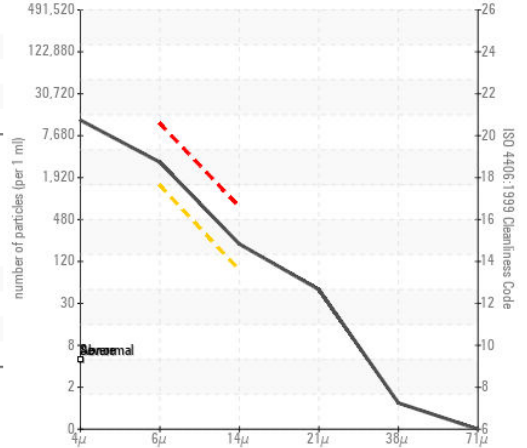
Non-ferrous Metals



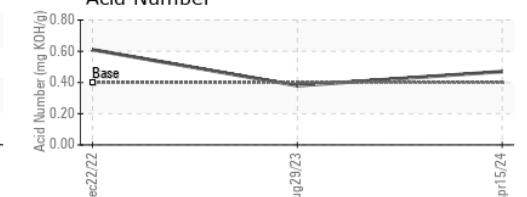
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KCPA013712

Lab Number : 06153773

Unique Number : 10989196

Test Package : IND 2 (Additional Tests: KF, PrtCount)

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)

Received : 18 Apr 2024

Tested : 19 Apr 2024

Diagnosed : 23 Apr 2024 - Don Baldrige

BERGIN GLASS

451 TECHNOLOGY WAY

NAPA, CA

US 94558

Contact: JOHN CLARK

johnclark@berginglass.com

T:

F: