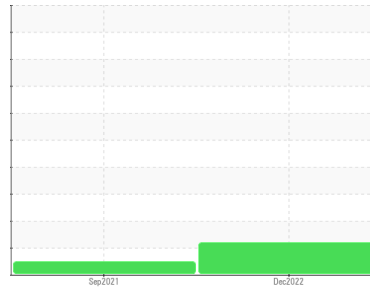


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
5547597 (S/N 1962)

Component
Compressor

Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a moderate 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	KCP52766	KCP37960	---
Sample Date	Client Info	19 Dec 2022	07 Sep 2021	---
Machine Age	hrs	20378	16584	---
Oil Age	hrs	0	900	---
Oil Changed	Client Info	Changed	Changed	---
Sample Status		ATTENTION	NORMAL	---

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>50	<1	<1	---
Chromium	ppm	ASTM D5185m	>10	0	0	---
Nickel	ppm	ASTM D5185m	>3	0	0	---
Titanium	ppm	ASTM D5185m	>3	0	0	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>10	0	0	---
Lead	ppm	ASTM D5185m	>10	0	0	---
Copper	ppm	ASTM D5185m	>50	5	3	---
Tin	ppm	ASTM D5185m	>10	0	<1	---
Antimony	ppm	ASTM D5185m		---	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	90	0	0	---
Molybdenum	ppm	ASTM D5185m	0	0	0	---
Manganese	ppm	ASTM D5185m		0	<1	---
Magnesium	ppm	ASTM D5185m	100	12	11	---
Calcium	ppm	ASTM D5185m	0	0	0	---
Phosphorus	ppm	ASTM D5185m	0	2	24	---
Zinc	ppm	ASTM D5185m	0	18	2	---
Sulfur	ppm	ASTM D5185m	23500	21750	19410	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	8	2	---
Sodium	ppm	ASTM D5185m		2	2	---
Potassium	ppm	ASTM D5185m	>20	0	<1	---
Water	%	ASTM D6304	>0.05	0.012	0.010	---
ppm Water	ppm	ASTM D6304	>500	124.9	101.4	---

FLUID CLEANLINESS method limit/base current history1 history2

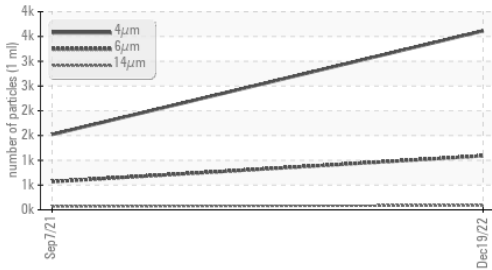
Particles >4µm	ASTM D7647		3614	1521	---
Particles >6µm	ASTM D7647	>1300	1089	568	---
Particles >14µm	ASTM D7647	>80	▲ 87	68	---
Particles >21µm	ASTM D7647	>20	▲ 23	11	---
Particles >38µm	ASTM D7647	>4	2	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 19/17/14	16/13	---

FLUID DEGRADATION method limit/base current history1 history2

Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.40	0.363	---
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OIL ANALYSIS REPORT

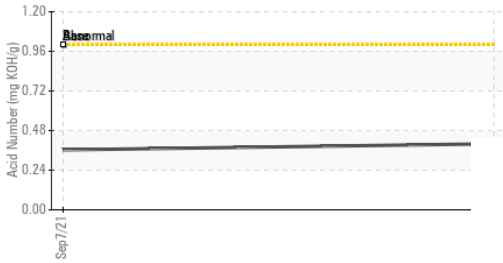
▲ Particle Trend



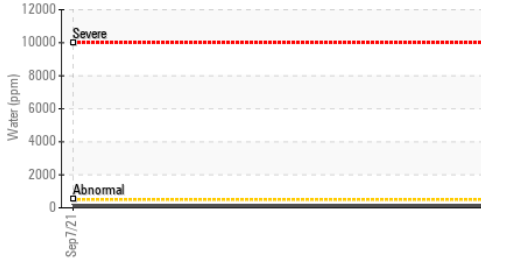
Water (KF)



Acid Number



Water (KF)



Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
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	---

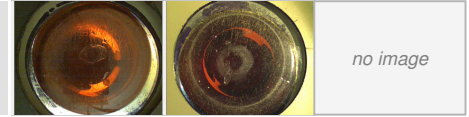
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	49.9	48.0

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color



Bottom

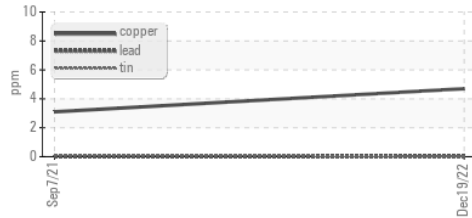


GRAPHS

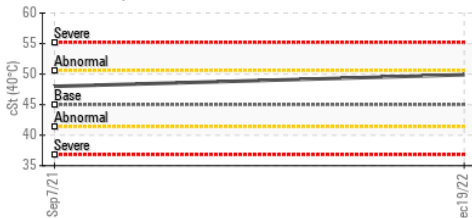
Ferrous Alloys



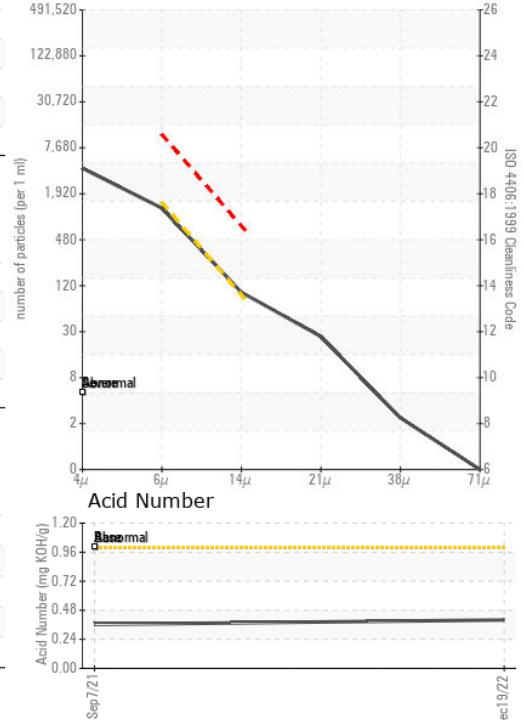
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP52766 **Received** : 18 Jan 2023
Lab Number : 05742619 **Diagnosed** : 19 Jan 2023
Unique Number : 10297218 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ELLIS AND ELLIS SIGN SYSTEMS - ILLUMINATED CREATIONS
 1111 JOELLIS WAY
 SACRAMENTO, CA
 US 95815
 Contact: K. NEW
 knew@ellissigns.com

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: