



OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
8845122 (S/N 1388)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

▲ Recommendation

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

▲ Wear

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

● Contamination

There is a moderate amount of silt (particulates < 14 microns in size) 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		KCPA016976	---	---
Sample Date	Client Info		05 Apr 2024	---	---
Machine Age	hrs	Client Info	3130	---	---
Oil Age	hrs	Client Info	3130	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	8	---	---
Chromium	ppm	ASTM D5185m >10	0	---	---
Nickel	ppm	ASTM D5185m >3	0	---	---
Titanium	ppm	ASTM D5185m >3	0	---	---
Silver	ppm	ASTM D5185m >2	0	---	---
Aluminum	ppm	ASTM D5185m >10	▲ 14	---	---
Lead	ppm	ASTM D5185m >10	0	---	---
Copper	ppm	ASTM D5185m >50	1	---	---
Tin	ppm	ASTM D5185m >10	<1	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	---	---
Barium	ppm	ASTM D5185m 90	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m 90	0	---	---
Calcium	ppm	ASTM D5185m 2	0	---	---
Phosphorus	ppm	ASTM D5185m	58	---	---
Zinc	ppm	ASTM D5185m	3	---	---
Sulfur	ppm	ASTM D5185m	473	---	---

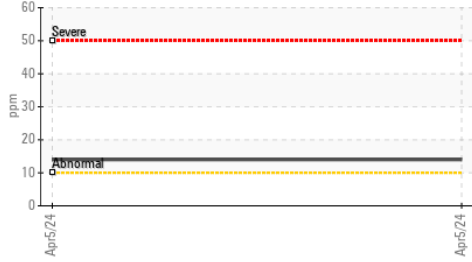
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	---	---
Sodium	ppm	ASTM D5185m	4	---	---
Potassium	ppm	ASTM D5185m >20	5	---	---
Water	%	ASTM D6304 >0.05	0.002	---	---
ppm Water	ppm	ASTM D6304 >500	24	---	---

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		24800	---	---
Particles >6µm	ASTM D7647	>1300	● 1449	---	---
Particles >14µm	ASTM D7647	>80	56	---	---
Particles >21µm	ASTM D7647	>20	14	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	● 22/18/13	---	---

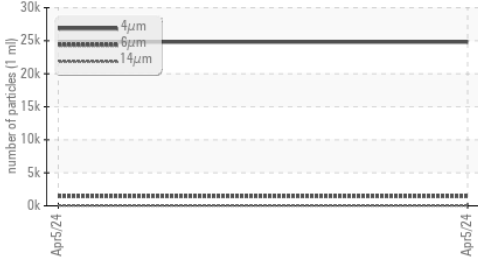
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.09	---	---

OIL ANALYSIS REPORT

▲ Aluminum (ppm)



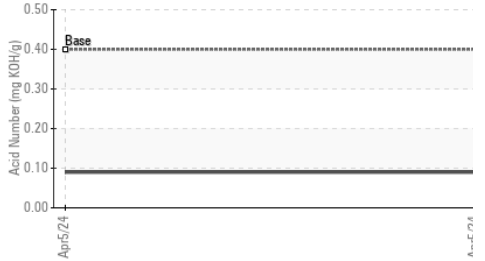
● Particle Trend



▲ Water (KF)



Acid Number



Water (KF)



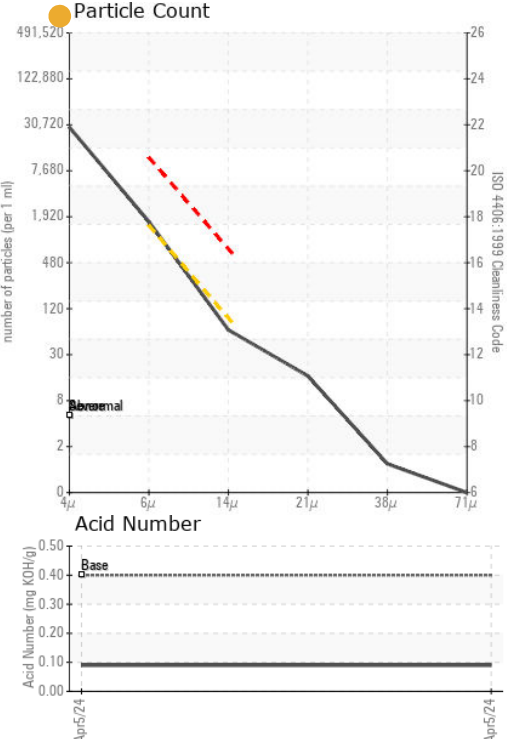
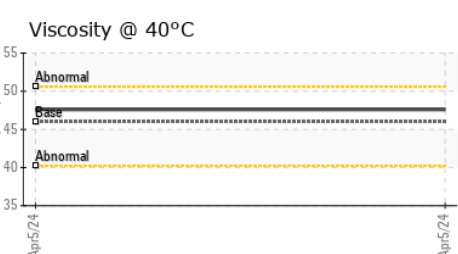
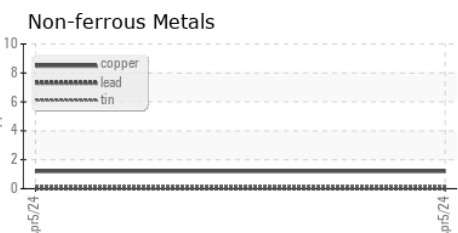
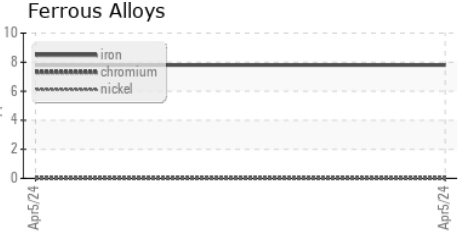
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	47.6	---

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color			<i>no image</i>	<i>no image</i>
Bottom			<i>no image</i>	<i>no image</i>

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016976 **Received** : 19 Apr 2024
Lab Number : **06154368** **Tested** : 22 Apr 2024
Unique Number : 10989791 **Diagnosed** : 22 Apr 2024 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, PrtCount)

PACKAGING CORP OF AMERICA
 701 TEXAS CENTRAL PKWY
 WACO, TX
 US 76712
 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)