



OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER 3256920
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation
 Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a high amount of silt (particulates < 14 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KCPA012772	---	---
Sample Date	Client Info	16 Apr 2024	---	---
Machine Age	hrs Client Info	11630	---	---
Oil Age	hrs Client Info	0	---	---
Oil Changed	Client Info	N/A	---	---
Sample Status		ABNORMAL	---	---

WEAR METALS

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

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m	0	0	---	---
Barium ppm ASTM D5185m	90	20	---	---
Molybdenum ppm ASTM D5185m	0	<1	---	---
Manganese ppm ASTM D5185m		<1	---	---
Magnesium ppm ASTM D5185m	100	53	---	---
Calcium ppm ASTM D5185m	0	0	---	---
Phosphorus ppm ASTM D5185m	0	0	---	---
Zinc ppm ASTM D5185m	0	13	---	---
Sulfur ppm ASTM D5185m	23500	21688	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>25	▲ 28	---	---
Sodium ppm ASTM D5185m		10	---	---
Potassium ppm ASTM D5185m	>20	3	---	---
Water % ASTM D6304	>0.05	0.014	---	---
ppm Water ppm ASTM D6304	>500	150	---	---

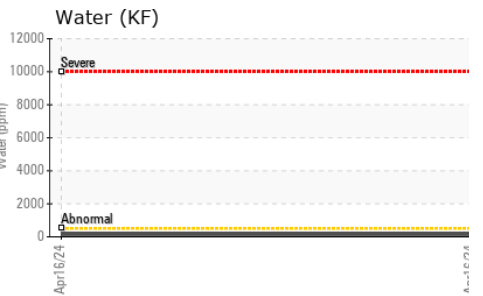
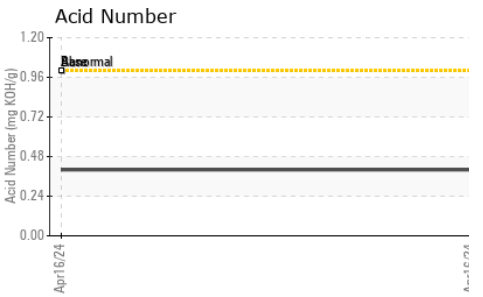
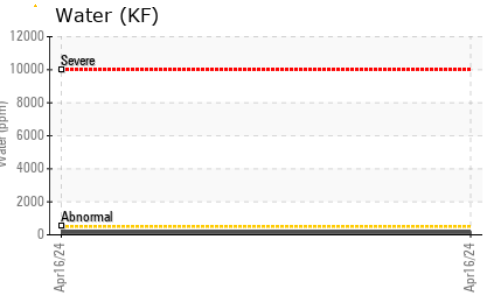
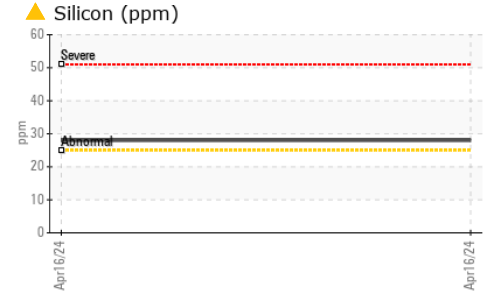
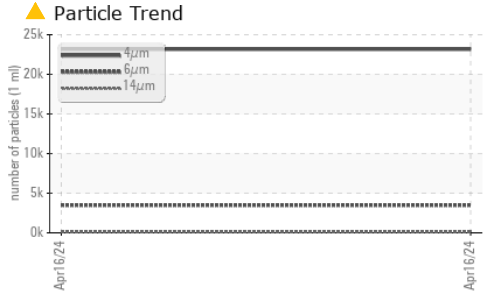
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm ASTM D7647		23164	---	---
Particles >6µm ASTM D7647	>1300	▲ 3485	---	---
Particles >14µm ASTM D7647	>80	79	---	---
Particles >21µm ASTM D7647	>20	21	---	---
Particles >38µm ASTM D7647	>4	1	---	---
Particles >71µm ASTM D7647	>3	0	---	---
Oil Cleanliness ISO 4406 (c)	>--/17/13	▲ 22/19/13	---	---

FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045	1.0	0.40	---	---

OIL ANALYSIS REPORT



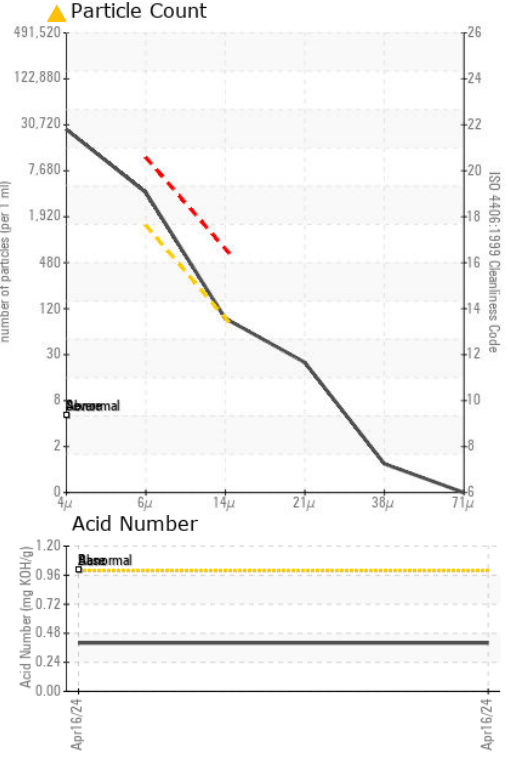
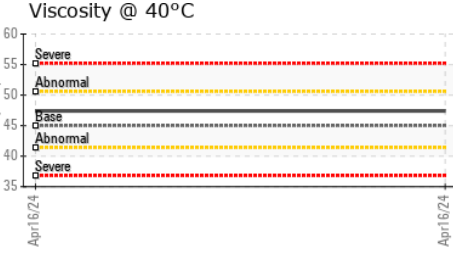
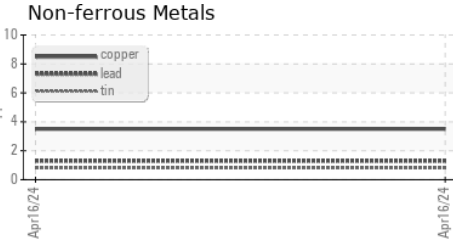
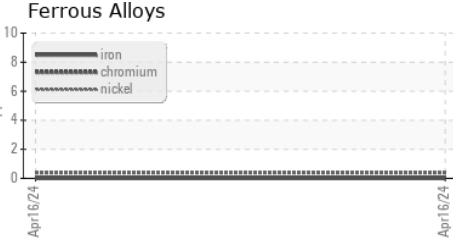
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	45	47.4	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color		no image	no image
Bottom		no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA012772 **Received** : 22 Apr 2024
Lab Number : 06156953 **Tested** : 23 Apr 2024
Unique Number : 10992376 **Diagnosed** : 24 Apr 2024 - Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OLD DOMINION FREIGHT LINES
 8300 PARDEE LN
 OAKLAND, CA
 US 94621
 Contact: SFC MGMT
 SFCMANAGEMENT@ODFL.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)