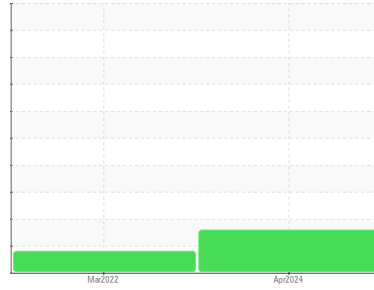




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
5100306 (S/N 1068)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The oil viscosity is higher than normal. The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KCPA013702	KCP38108	---
Sample Date	Client Info			18 Apr 2024	14 Mar 2022	---
Machine Age	hrs	Client Info		39168	31000	---
Oil Age	hrs	Client Info		0	10000	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				ABNORMAL	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	---
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	0	0	---
Aluminum	ppm	ASTM D5185m	>10	2	<1	---
Lead	ppm	ASTM D5185m	>10	<1	0	---
Copper	ppm	ASTM D5185m	>50	5	14	---
Tin	ppm	ASTM D5185m	>10	<1	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

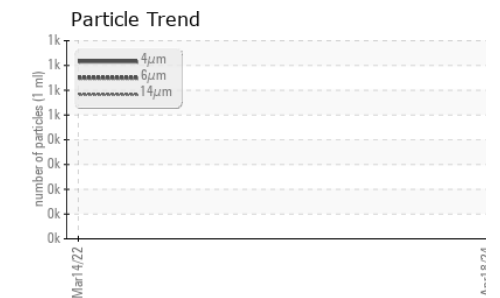
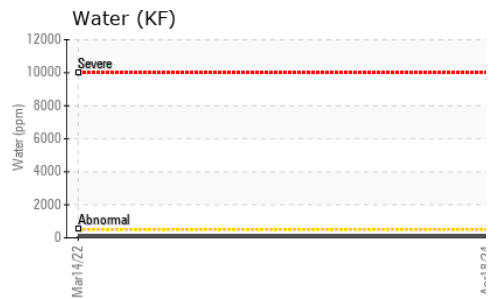
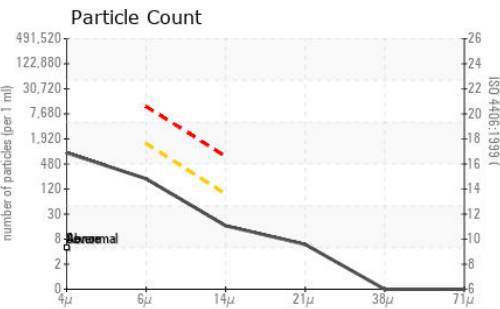
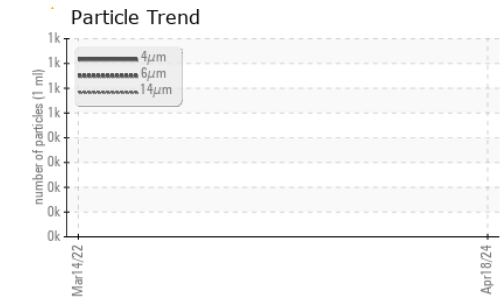
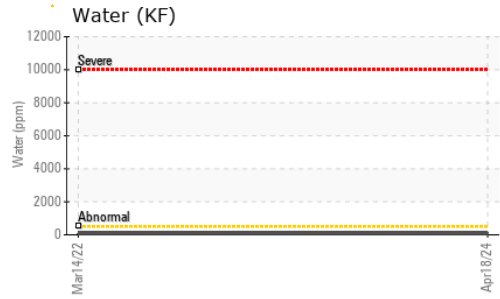
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	---
Barium	ppm	ASTM D5185m	90	0	0	---
Molybdenum	ppm	ASTM D5185m	0	<1	0	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m	100	<1	0	---
Calcium	ppm	ASTM D5185m	0	2	0	---
Phosphorus	ppm	ASTM D5185m	0	2	2	---
Zinc	ppm	ASTM D5185m	0	0	0	---
Sulfur	ppm	ASTM D5185m	23500	13995	15383	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	1	<1	---
Sodium	ppm	ASTM D5185m		0	<1	---
Potassium	ppm	ASTM D5185m	>20	<1	0	---
Water	%	ASTM D6304	>0.05	0.008	0.008	---
ppm Water	ppm	ASTM D6304	>500	83	84.9	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		779	---	---
Particles >6µm		ASTM D7647	>1300	187	---	---
Particles >14µm		ASTM D7647	>80	14	---	---
Particles >21µm		ASTM D7647	>20	5	---	---
Particles >38µm		ASTM D7647	>4	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	17/15/11	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	▲ 0.67	0.57	---

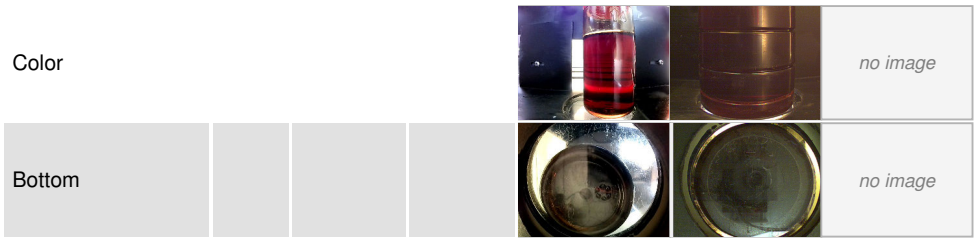
OIL ANALYSIS REPORT



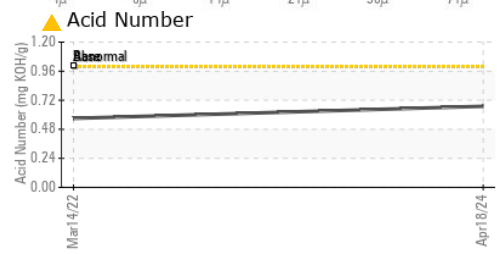
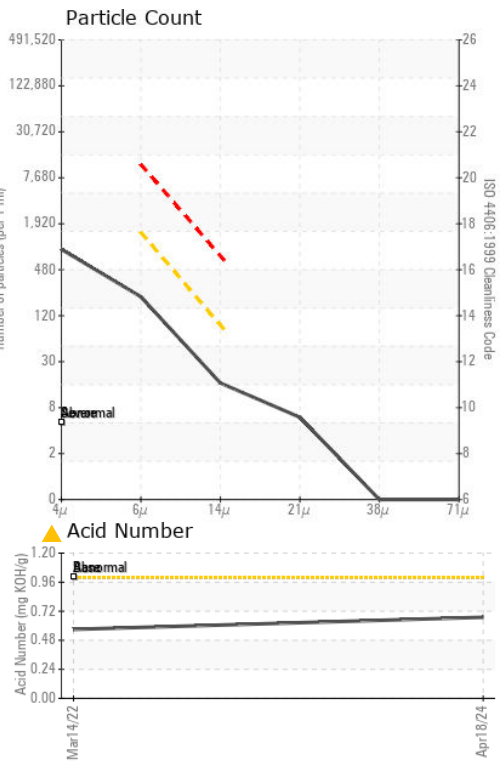
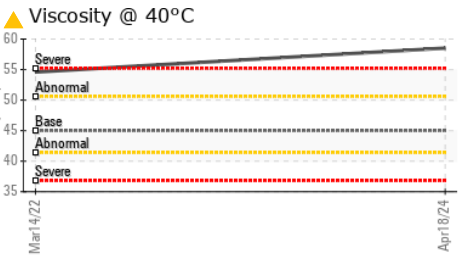
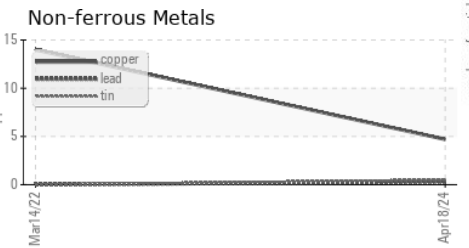
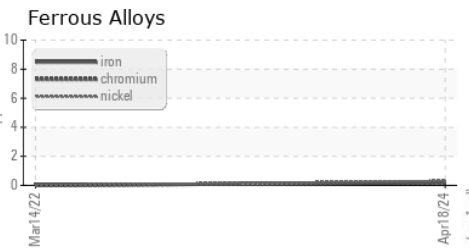
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	▲ 58.52	▲ 54.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013702 **Received** : 23 Apr 2024
Lab Number : 06158474 **Tested** : 26 Apr 2024
Unique Number : 10993897 **Diagnosed** : 29 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

KNT MANUFACTURING
 39760 EUREKA DR
 NEWARK, CA
 US 94560
 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)