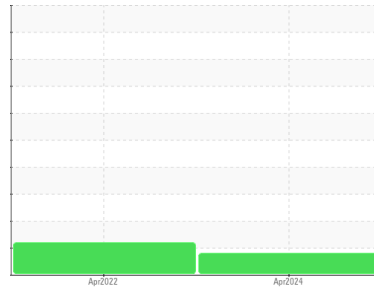




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
7133149 (S/N 1184)
 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 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			KC127392	KC96112	---
Sample Date	Client Info			05 Apr 2024	14 Apr 2022	---
Machine Age	hrs	Client Info		9071	4366	---
Oil Age	hrs	Client Info		0	3228	---
Oil Changed		Client Info		N/A	Changed	---
Sample Status				ATTENTION	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	---
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	1	<1	---
Lead	ppm	ASTM D5185m	>10	1	0	---
Copper	ppm	ASTM D5185m	>50	6	5	---
Tin	ppm	ASTM D5185m	>10	1	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		<1	0	---

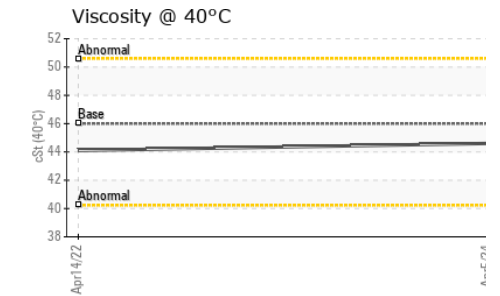
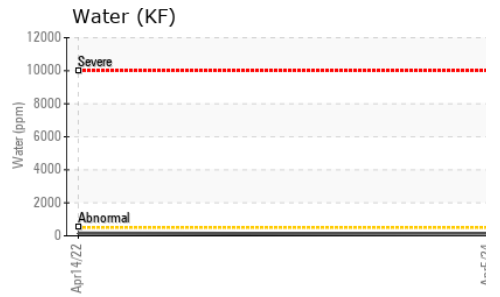
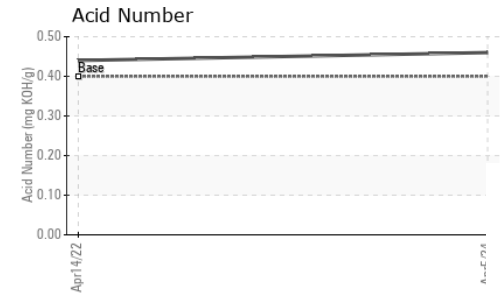
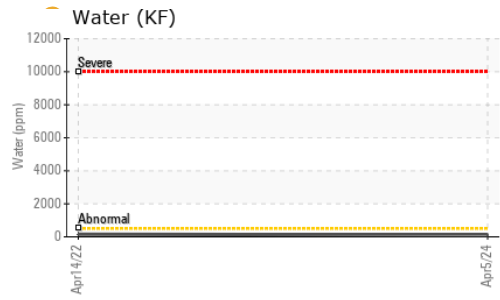
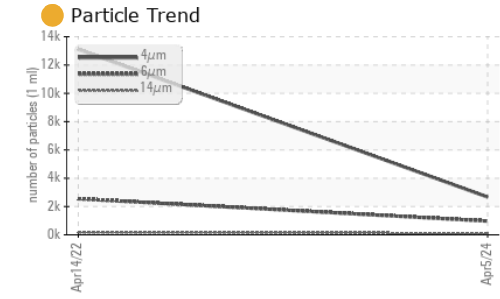
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	---
Barium	ppm	ASTM D5185m	90	0	0	---
Molybdenum	ppm	ASTM D5185m		1	0	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m	90	29	29	---
Calcium	ppm	ASTM D5185m	2	4	<1	---
Phosphorus	ppm	ASTM D5185m		4	12	---
Zinc	ppm	ASTM D5185m		31	23	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	---
Sodium	ppm	ASTM D5185m		9	10	---
Potassium	ppm	ASTM D5185m	>20	3	2	---
Water	%	ASTM D6304	>0.05	0.011	0.015	---
ppm Water	ppm	ASTM D6304	>500	115	157.6	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2670	13106	---
Particles >6µm		ASTM D7647	>1300	969	▲ 2546	---
Particles >14µm		ASTM D7647	>80	● 109	▲ 170	---
Particles >21µm		ASTM D7647	>20	28	▲ 40	---
Particles >38µm		ASTM D7647	>4	1	2	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● 19/17/14	▲ 19/15	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.46	0.44	---

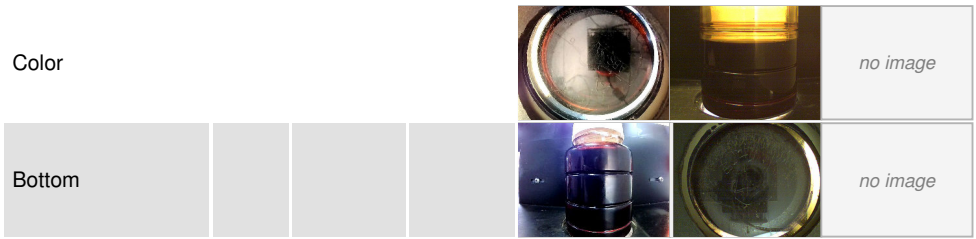
OIL ANALYSIS REPORT



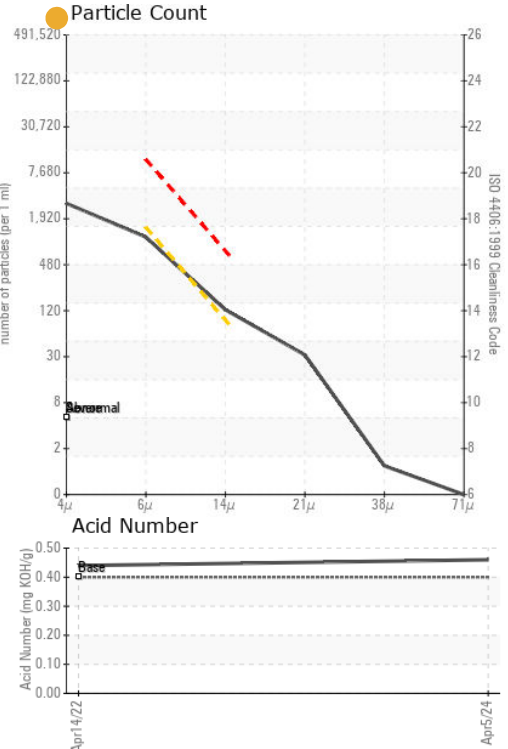
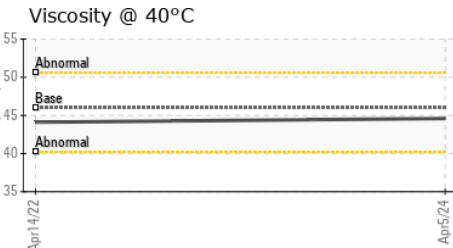
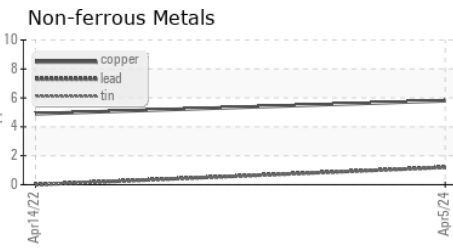
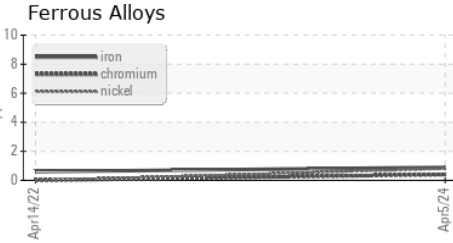
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.1	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC127392
Lab Number : 06146597
Unique Number : 10976675
Test Package : IND 2

Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 15 Apr 2024 - Angela Borella

PUMA NORTH AMERICA
 3632 PERRY BLVD
 WHITESTOWN, IN
 US 46075
 Contact: AUSTIN BECVAR
 austin.becvar@calcartage.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)