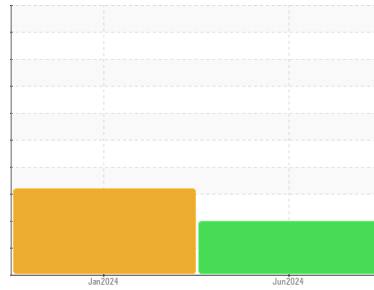




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
4403387 (S/N 1004)
 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 high 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		KCPA012971	KCPA006547	---
Sample Date	Client Info		05 Jun 2024	16 Jan 2024	---
Machine Age	hrs	Client Info	80458	77515	---
Oil Age	hrs	Client Info	0	0	---
Oil Changed	Client Info		Changed	N/A	---
Sample Status			ABNORMAL	ABNORMAL	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	<1	---
Chromium	ppm	ASTM D5185m >10	<1	<1	---
Nickel	ppm	ASTM D5185m >3	0	0	---
Titanium	ppm	ASTM D5185m >3	<1	0	---
Silver	ppm	ASTM D5185m >2	0	0	---
Aluminum	ppm	ASTM D5185m >10	2	2	---
Lead	ppm	ASTM D5185m >10	<1	0	---
Copper	ppm	ASTM D5185m >50	30	▲ 82	---
Tin	ppm	ASTM D5185m >10	<1	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	0	---
Magnesium	ppm	ASTM D5185m 100	<1	<1	---
Calcium	ppm	ASTM D5185m 0	0	0	---
Phosphorus	ppm	ASTM D5185m 0	0	0	---
Zinc	ppm	ASTM D5185m 0	0	0	---
Sulfur	ppm	ASTM D5185m 23500	11503	16757	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	---
Sodium	ppm	ASTM D5185m	0	0	---
Potassium	ppm	ASTM D5185m >20	<1	0	---
Water	%	ASTM D6304 >0.05	0.007	▲ 0.088	---
ppm Water	ppm	ASTM D6304 >500	79	▲ 880	---

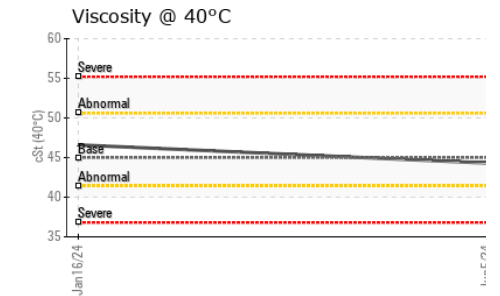
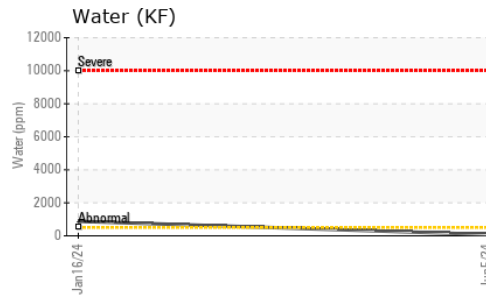
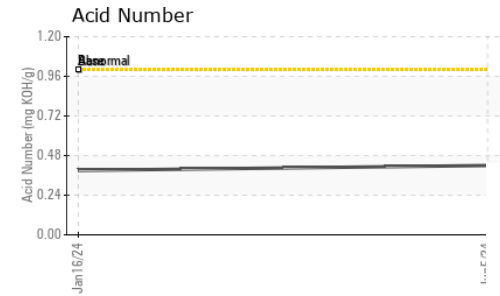
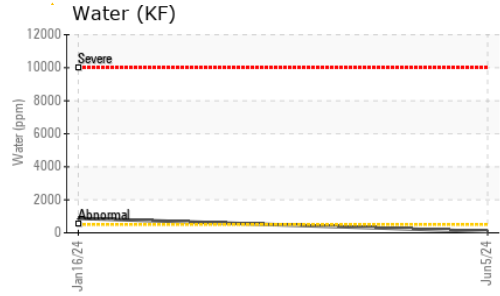
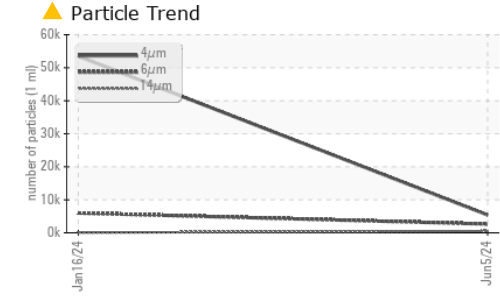
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		5402	53487	---
Particles >6µm	ASTM D7647	>1300	▲ 2643	▲ 5997	---
Particles >14µm	ASTM D7647	>80	▲ 536	57	---
Particles >21µm	ASTM D7647	>20	▲ 156	11	---
Particles >38µm	ASTM D7647	>4	▲ 6	1	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/16	▲ 23/20/13	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.42	0.39	---

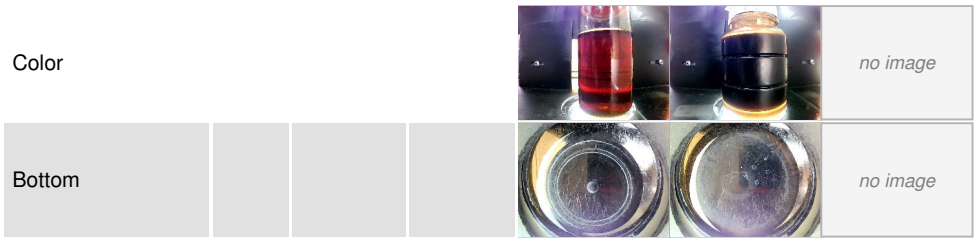
OIL ANALYSIS REPORT



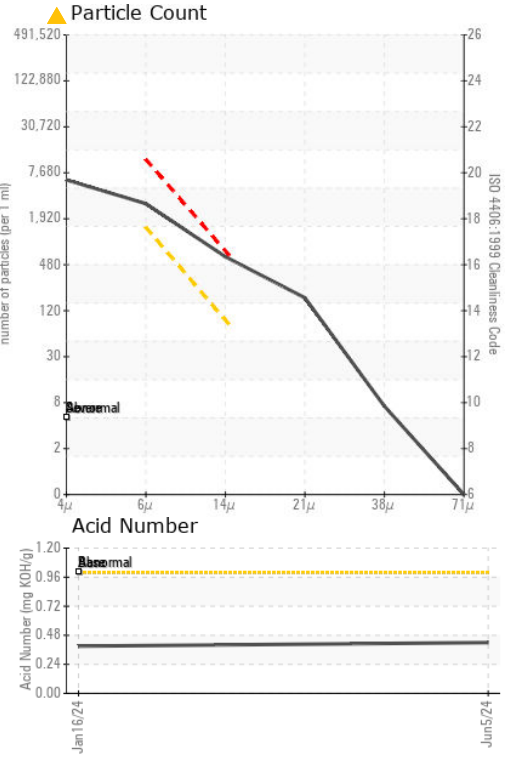
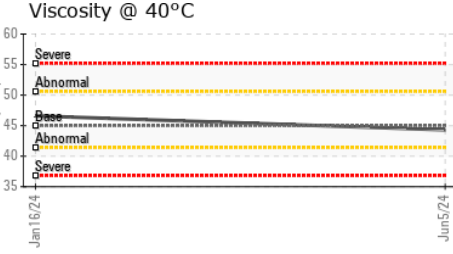
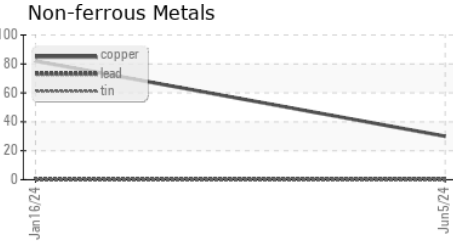
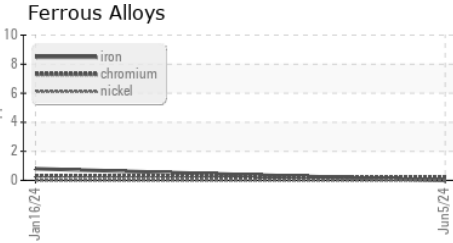
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	44.3	46.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA012971 **Received** : 12 Jun 2024
Lab Number : 06207823 **Tested** : 13 Jun 2024
Unique Number : 11075284 **Diagnosed** : 14 Jun 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

HERAEUS
 13429 ALONDRA BLVD
 SANTA FE SPRINGS, CA
 US 90670
 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)