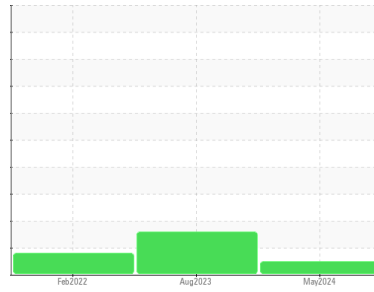




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
KAESER 4225540
 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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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		KCPA013369	KCPA002874	KCP40997
Sample Date	Client Info		08 May 2024	23 Aug 2023	14 Feb 2022
Machine Age	hrs	Client Info	47250	44196	37640
Oil Age	hrs	Client Info	6054	0	3205
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			NORMAL	ABNORMAL	ATTENTION

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	7	0	2
Barium	ppm	ASTM D5185m 90	33	4	22
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 100	62	6	46
Calcium	ppm	ASTM D5185m 0	2	<1	<1
Phosphorus	ppm	ASTM D5185m 0	26	2	4
Zinc	ppm	ASTM D5185m 0	17	21	1
Sulfur	ppm	ASTM D5185m 23500	25496	22505	18083

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	4	11	3
Sodium	ppm	ASTM D5185m	20	0	13
Potassium	ppm	ASTM D5185m >20	4	<1	1
Water	%	ASTM D6304 >0.05	0.024	0.006	0.012
ppm Water	ppm	ASTM D6304 >500	246	67.4	122.1

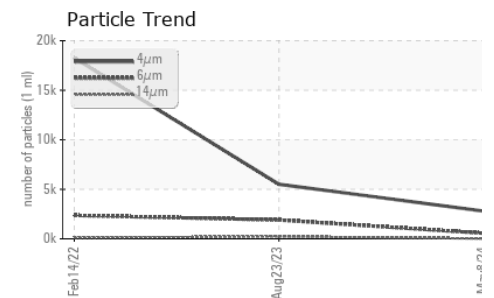
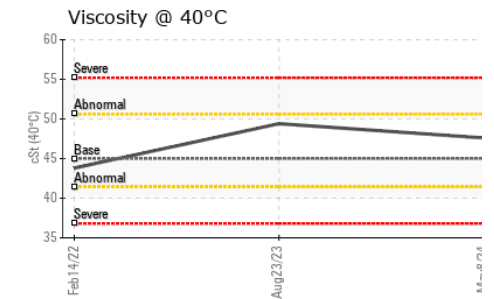
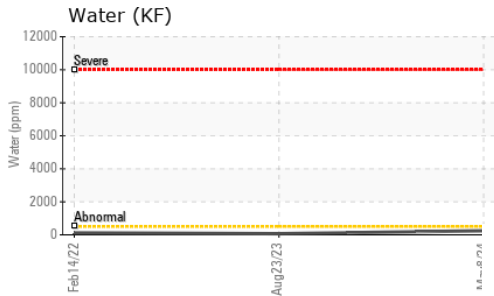
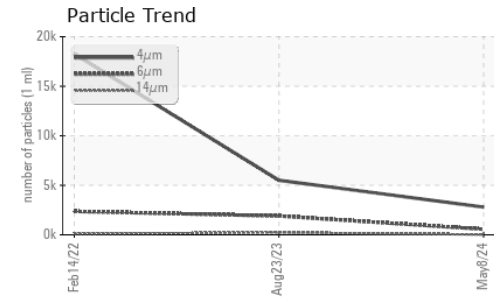
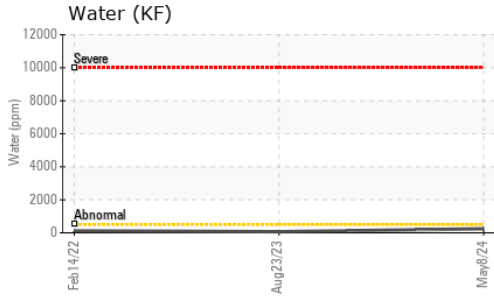
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		2795	5505	18253
Particles >6µm	ASTM D7647 >1300		565	▲ 1902	● 2364
Particles >14µm	ASTM D7647 >80		25	▲ 229	● 106
Particles >21µm	ASTM D7647 >20		4	▲ 74	● 28
Particles >38µm	ASTM D7647 >4		0	3	2
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		19/16/12	▲ 20/18/15	● 18/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.35	0.43	0.44

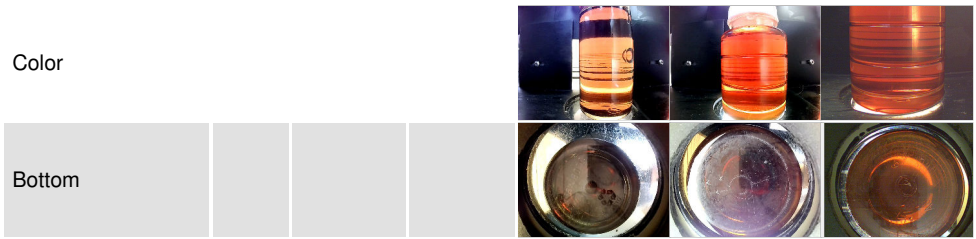
OIL ANALYSIS REPORT



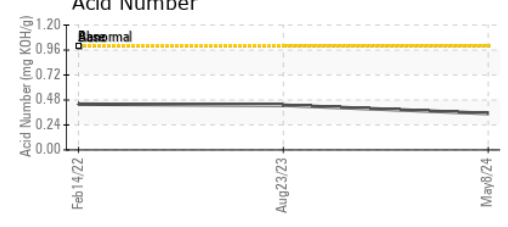
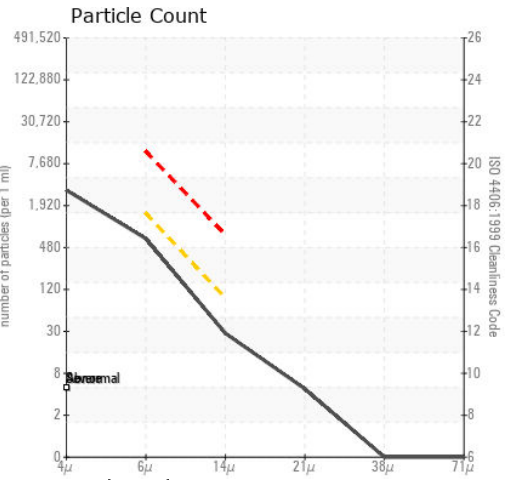
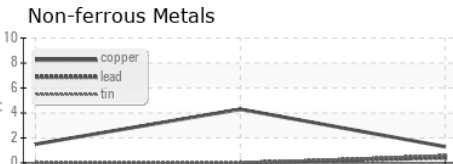
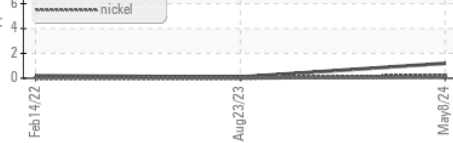
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	47.6	49.4	43.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013369
Lab Number : 06180665
Unique Number : 11031991
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 15 May 2024
Tested : 18 May 2024
Diagnosed : 18 May 2024 - Jonathan Hester

JACKSON LABORATORY
 1650 SANTA ANA AVE
 SACRAMENTO, CA
 US 95838
 Contact: SILVIA MEJIA
 silvia.mejia@jax.org

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)