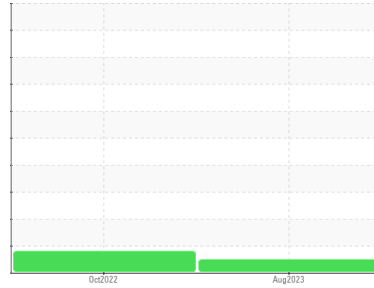




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
1643886 (S/N 1144)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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			KCPA004455	KCP46751	---
Sample Date	Client Info			17 Aug 2023	24 Oct 2022	---
Machine Age	hrs	Client Info		84717	81636	---
Oil Age	hrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	Changed	---
Sample Status				NORMAL	ATTENTION	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	10	---
Chromium	ppm	ASTM D5185m	>10	0	1	---
Nickel	ppm	ASTM D5185m	>3	0	0	---
Titanium	ppm	ASTM D5185m	>3	0	<1	---
Silver	ppm	ASTM D5185m	>2	0	<1	---
Aluminum	ppm	ASTM D5185m	>10	0	5	---
Lead	ppm	ASTM D5185m	>10	0	2	---
Copper	ppm	ASTM D5185m	>50	4	2	---
Tin	ppm	ASTM D5185m	>10	<1	1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

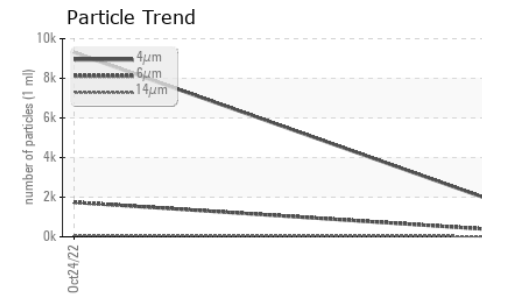
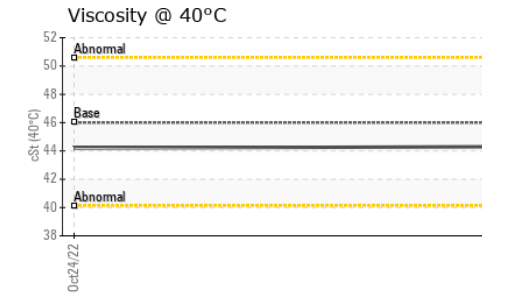
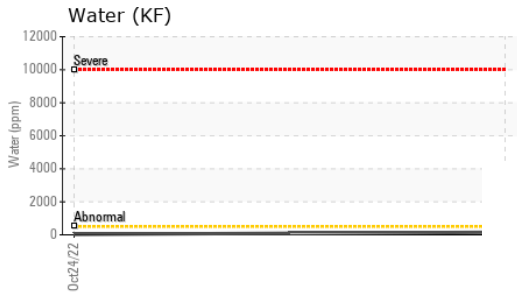
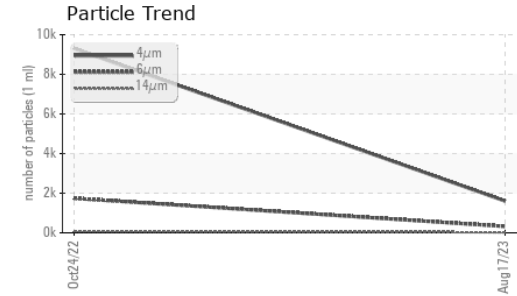
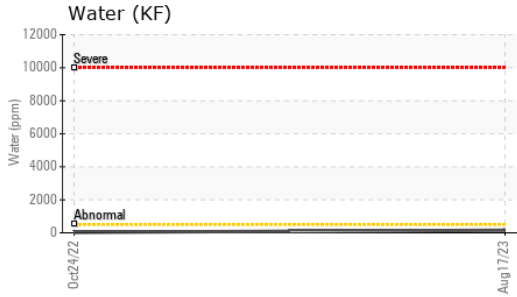
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	129	---
Barium	ppm	ASTM D5185m	90	0	0	---
Molybdenum	ppm	ASTM D5185m		<1	86	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m	90	36	62	---
Calcium	ppm	ASTM D5185m	2	<1	3342	---
Phosphorus	ppm	ASTM D5185m		3	1252	---
Zinc	ppm	ASTM D5185m		0	1599	---
Sulfur	ppm	ASTM D5185m		20496	5212	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	4	---
Sodium	ppm	ASTM D5185m		15	4	---
Potassium	ppm	ASTM D5185m	>20	2	4	---
Water	%	ASTM D6304	>0.05	0.015	0.003	---
ppm Water	ppm	ASTM D6304	>500	157.4	29.9	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1604	9304	---
Particles >6µm		ASTM D7647	>1300	325	▲ 1742	---
Particles >14µm		ASTM D7647	>80	23	79	---
Particles >21µm		ASTM D7647	>20	5	13	---
Particles >38µm		ASTM D7647	>4	1	1	---
Particles >71µm		ASTM D7647	>3	1	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	18/16/12	▲ 20/18/13	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.35	0.30	---

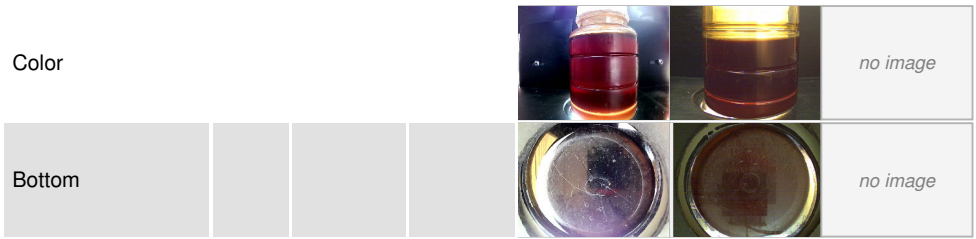
OIL ANALYSIS REPORT



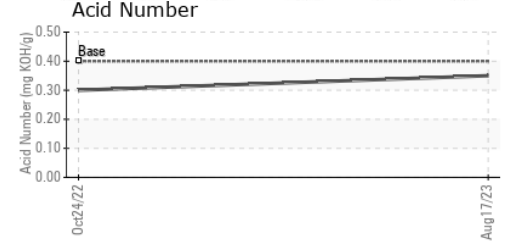
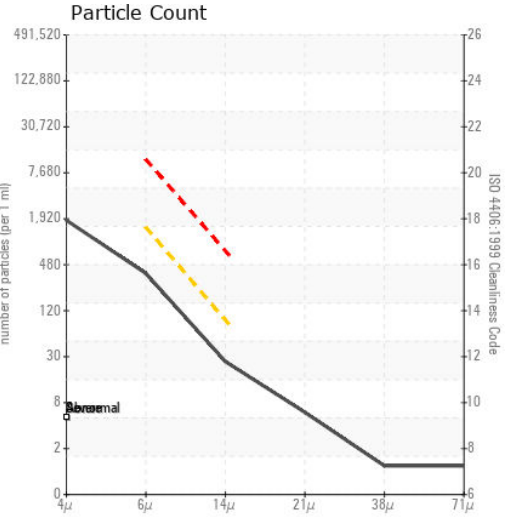
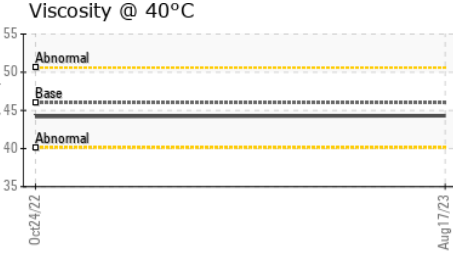
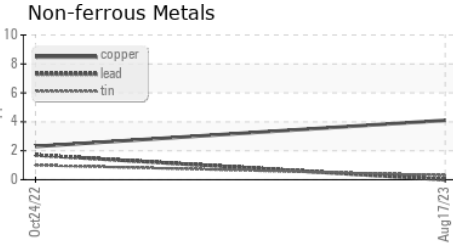
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	VLITE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	44.3	44.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004455 **Received** : 25 Sep 2023
Lab Number : 05960686 **Diagnosed** : 27 Sep 2023
Unique Number : 10661899 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

MARSHALLS DISTRIBUTION CENTER
 2760 RED LION RD
 PHILADELPHIA, PA
 US 19114
 Contact: MILAGROS TORRES
 MILAGROS_TORRES@TJX.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)

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F: