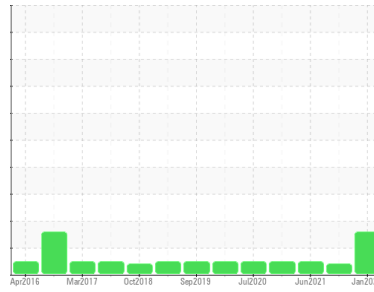




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
KAESER DSD 200 5314778 (S/N 1164)
 Component
Compressor
 Fluid
ULTRA CSL8000-5 (--- GAL)

DIAGNOSIS

Recommendation
 The oil is near the end of its useful service life, recommend schedule an oil change. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
 All component wear rates are normal.

Contamination
 High concentration of visible dirt/debris present in the oil.

Fluid Condition
 The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA011906	KCP35350	KCP32878
Sample Date	Client Info		05 Jan 2024	21 Feb 2022	11 Jun 2021
Machine Age	hrs	Client Info	52740	42120	39532
Oil Age	hrs	Client Info	0	2588	9800
Oil Changed	Client Info		N/A	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	3	<1	0
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	<1	<1	<1
Aluminum	ppm	ASTM D5185m >10	2	<1	0
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	29	18	4
Tin	ppm	ASTM D5185m >10	<1	<1	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m	<1	0	<1
Calcium	ppm	ASTM D5185m	3	0	0
Phosphorus	ppm	ASTM D5185m	<1	9	6
Zinc	ppm	ASTM D5185m	145	0	0
Sulfur	ppm	ASTM D5185m	879	15508	10999

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	3	0
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	2	0	0
Water	%	ASTM D6304 >0.05	0.008	0.007	0.010
ppm Water	ppm	ASTM D6304 >500	85	71.0	106.5

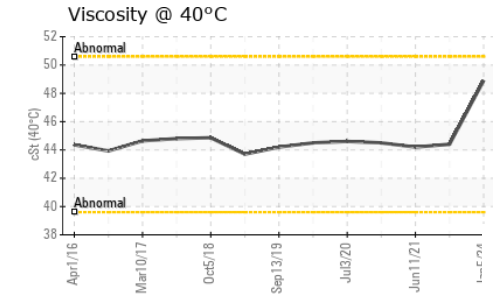
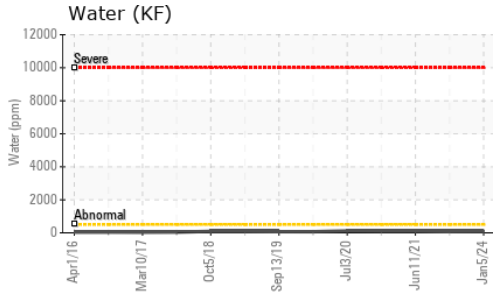
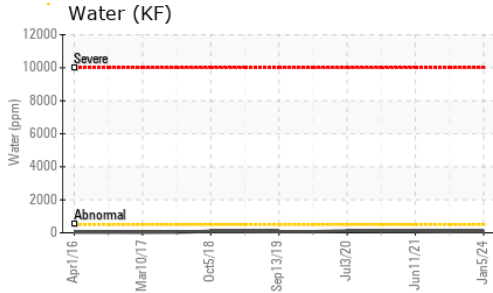
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	---	109
Particles >6µm	ASTM D7647	>1300	---	---	37
Particles >14µm	ASTM D7647	>80	---	---	5
Particles >21µm	ASTM D7647	>20	---	---	2
Particles >38µm	ASTM D7647	>4	---	---	0
Particles >71µm	ASTM D7647	>3	---	---	0
Oil Cleanliness	ISO 4406 (c)	>17/13	---	---	12/10

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	▲ 1.21	0.41	0.440

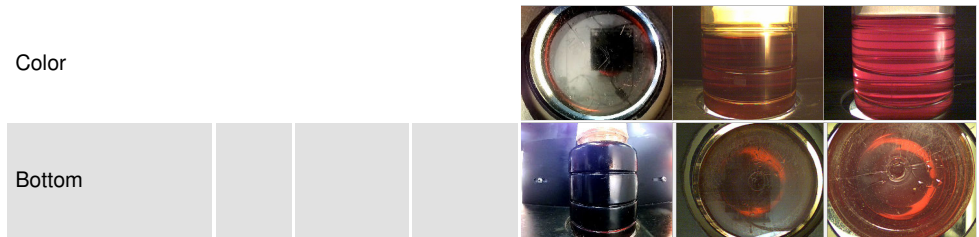
OIL ANALYSIS REPORT



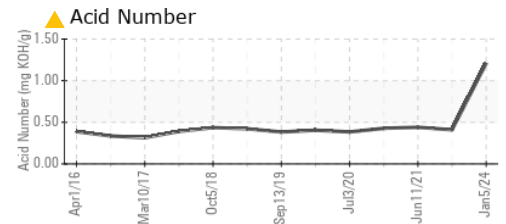
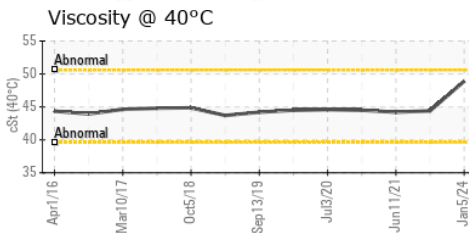
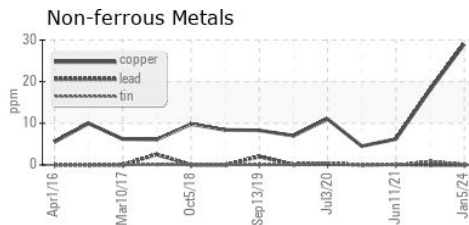
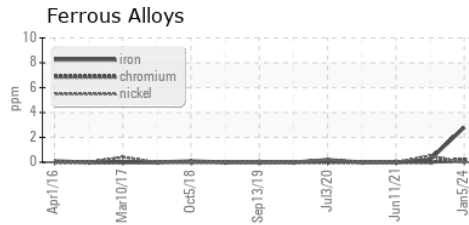
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ HEAVY	▲ HEAVY	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	48.9	44.4	44.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA011906 **Received** : 08 Apr 2024
Lab Number : 06142261 **Tested** : 11 Apr 2024
Unique Number : 10967069 **Diagnosed** : 11 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

TOPPAN INTERAMERICA INC
 1131 HWY 155 SOUTH
 MCDONOUGH, GA
 US 30253
 Contact: BARRY KEEN
 bkeen@tia.toppan.com
 T: (770)957-5060
 F:

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)