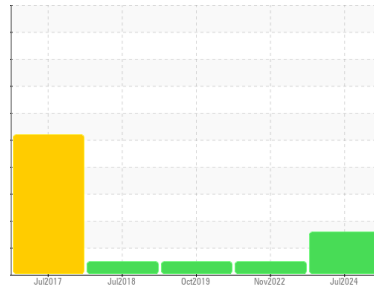




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER SM 10 4439607 (S/N 1270)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and 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

Insufficient sample was received to conduct all the routine laboratory tests. There is a high amount of particulates present in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KC132470	KCP47968D	KCP20870
Sample Date	Client Info		02 Jul 2024	17 Nov 2022	14 Oct 2019
Machine Age	hrs	Client Info	15363	11288	8448
Oil Age	hrs	Client Info	3575	2487	2110
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	<1	2
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	<1	<1	<1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	4	7	2
Tin	ppm	ASTM D5185m >10	<1	<1	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	<1
Barium	ppm	ASTM D5185m 90	0	0	0
Molybdenum	ppm	ASTM D5185m 0	0	0	<1
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 100	23	29	43
Calcium	ppm	ASTM D5185m 0	0	0	0
Phosphorus	ppm	ASTM D5185m 0	0	9	0
Zinc	ppm	ASTM D5185m 0	31	37	14

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	2	2
Sodium	ppm	ASTM D5185m	9	8	12
Potassium	ppm	ASTM D5185m >20	2	1	1
Water	%	ASTM D6304 >0.05	0.022	0.014	0.019
ppm Water	ppm	ASTM D6304 >500	226	143.2	190.6

FLUID CLEANLINESS

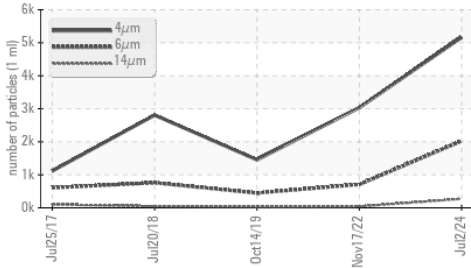
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		5162	3032	1453
Particles >6µm	ASTM D7647	>1300	▲ 2026	708	447
Particles >14µm	ASTM D7647	>80	▲ 270	41	31
Particles >21µm	ASTM D7647	>20	▲ 65	13	14
Particles >38µm	ASTM D7647	>4	3	2	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/15	19/17/13	16/12

FLUID DEGRADATION

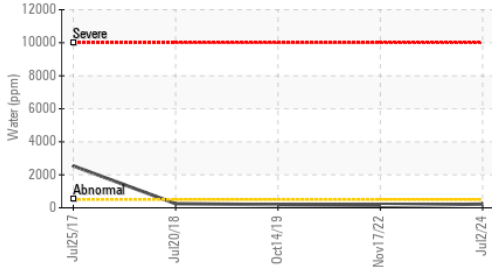
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	---	0.37	0.359

OIL ANALYSIS REPORT

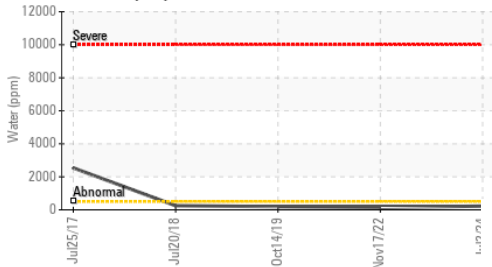
▲ Particle Trend



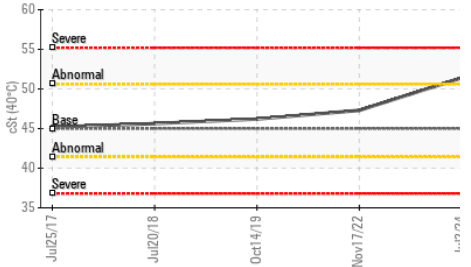
Water (KF)



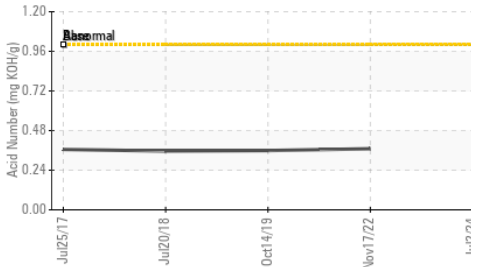
Water (KF)



Viscosity @ 40°C



Acid Number

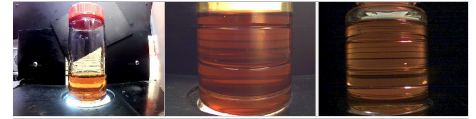


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

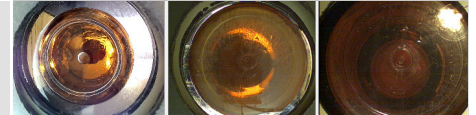
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	51.4	47.3	46.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

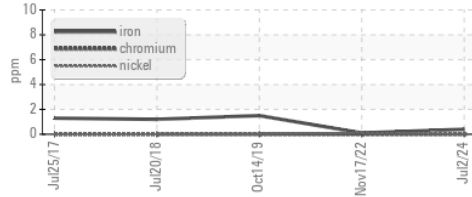


Bottom

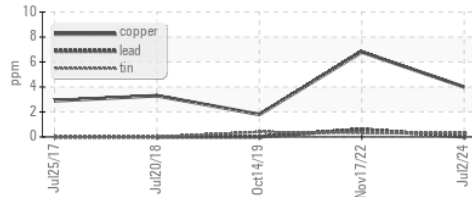


GRAPHS

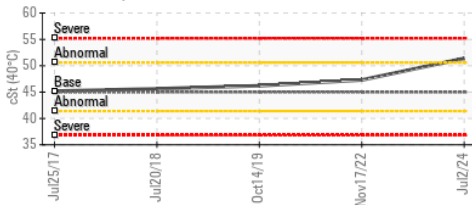
Ferrous Alloys



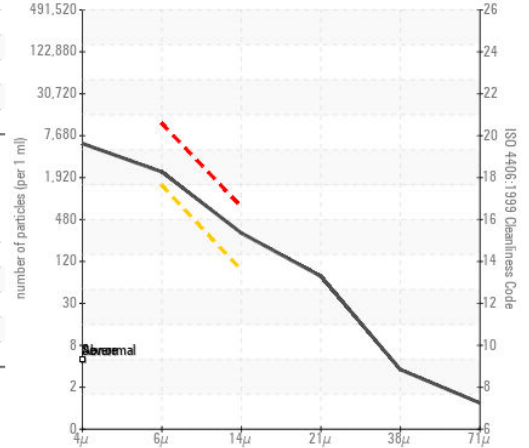
Non-ferrous Metals



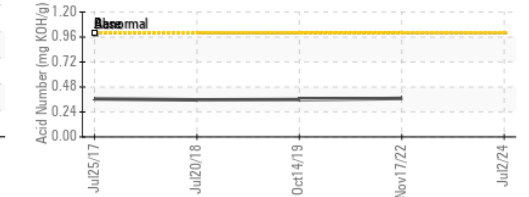
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : KC132470

Lab Number : 06234965

Unique Number : 11123799

Test Package : IND 2

Received : 12 Jul 2024

Tested : 18 Jul 2024

Diagnosed : 18 Jul 2024 - Jonathan Hester

D'ADDARIO NISSAN

409 BRIDGEPORT AVE

SHELTON, CT

US 06484

Contact: R. GAF

rgaf@mariodaddario.com

T:

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)