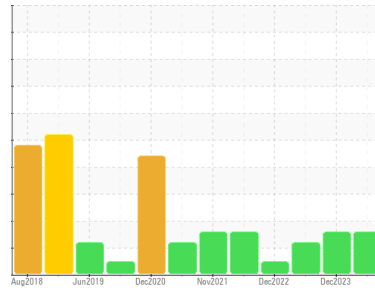




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id

KAESER 6010321

Component

Compressor

Fluid

KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. 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

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	KCPA012269	KCPA010197	KCPA005170
Sample Date	Client Info	06 Jun 2024	21 Dec 2023	27 Jun 2023
Machine Age	hrs	19710	19619	19509
Oil Age	hrs	91	0	0
Oil Changed	Client Info	Changed	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	<1	<1
Chromium	ppm	ASTM D5185m >10	0	<1	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	<1	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	0	1	0
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	<1	3	3
Tin	ppm	ASTM D5185m >10	0	0	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	0
Barium	ppm	ASTM D5185m 90	<1	2	0
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m 100	68	41	34
Calcium	ppm	ASTM D5185m 0	0	3	0
Phosphorus	ppm	ASTM D5185m 0	1	21	4
Zinc	ppm	ASTM D5185m 0	14	14	6
Sulfur	ppm	ASTM D5185m 23500	21328	21356	23860

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	18	2	14
Potassium	ppm	ASTM D5185m >20	2	2	3
Water	%	ASTM D6304 >0.05	0.029	▲ 0.838	0.018
ppm Water	ppm	ASTM D6304 >500	293	▲ 8380	180.2

FLUID CLEANLINESS

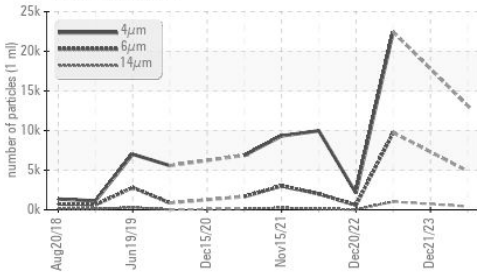
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	13147	---	22459
Particles >6µm	ASTM D7647 >1300	▲ 4886	---	9746
Particles >14µm	ASTM D7647 >80	▲ 422	---	▲ 1030
Particles >21µm	ASTM D7647 >20	▲ 97	---	▲ 206
Particles >38µm	ASTM D7647 >4	4	---	1
Particles >71µm	ASTM D7647 >3	0	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 21/19/16	---	▲ 22/20/17

FLUID DEGRADATION

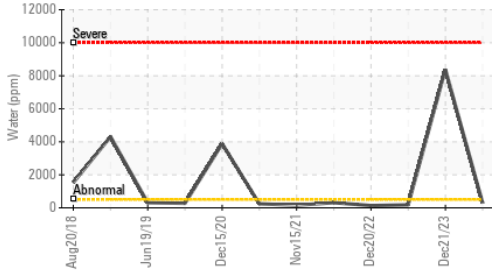
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.39	0.34	0.36

OIL ANALYSIS REPORT

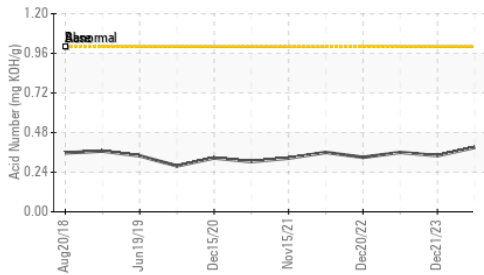
▲ Particle Trend



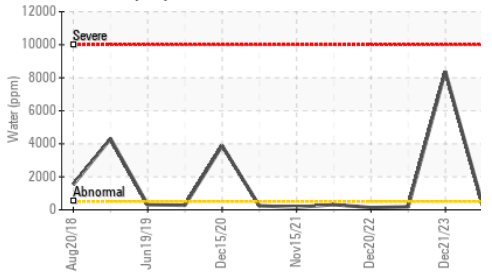
Water (KF)



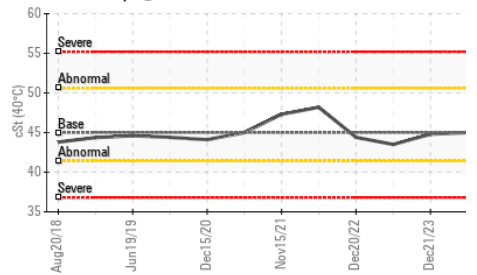
Acid Number



Water (KF)



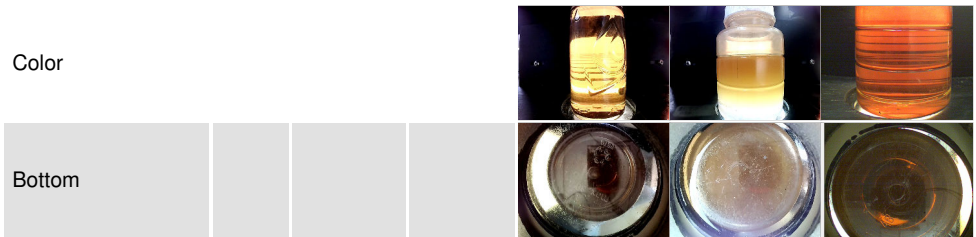
Viscosity @ 40°C



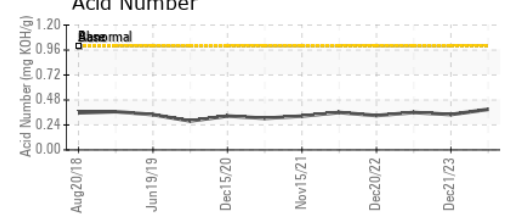
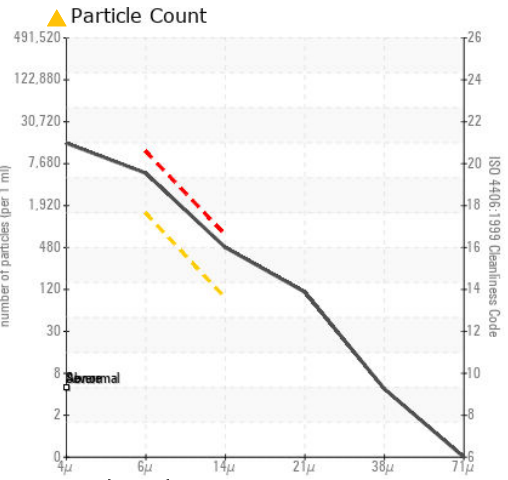
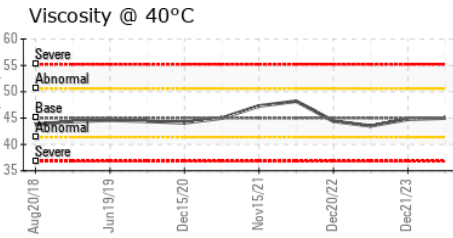
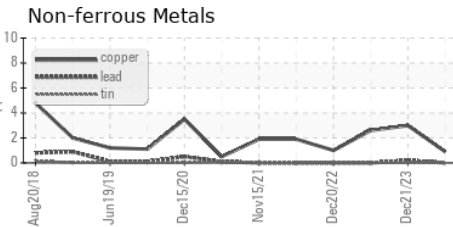
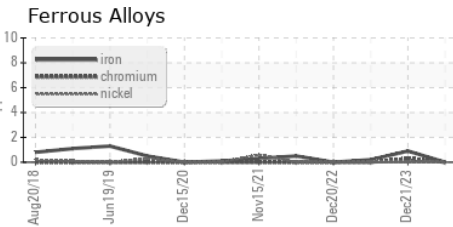
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	MODER	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	45.0	44.8	43.5

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. : KCPA012269
Lab Number : 06207106
Unique Number : 11074567
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 11 Jun 2024
Tested : 13 Jun 2024
Diagnosed : 13 Jun 2024 - Angela Borella

POMPS TIRE
 5440 W 125TH ST
 SAVAGE, MN
 US 55378
 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)

T:
F: