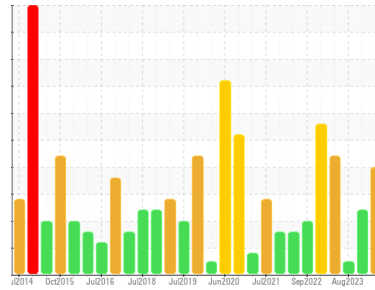




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER SM 10T 4781781 (S/N 1202)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Appearance is havy. There is a high amount of particulates present in the oil. There is a light concentration of water 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	KC06216869	KC06032346	KC05933572
Sample Date	Client Info	20 May 2024	21 Nov 2023	08 Aug 2023
Machine Age	hrs	15759	14603	13918
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	0	0
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	3	0	0
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	20	7	9
Tin	ppm	ASTM D5185m >10	<1	0	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	0	0
Barium	ppm	ASTM D5185m 90	2	<1	2
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 90	1	32	8
Calcium	ppm	ASTM D5185m 2	0	<1	0
Phosphorus	ppm	ASTM D5185m	3	1	0
Zinc	ppm	ASTM D5185m	<1	<1	8

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	1	0	0
Sodium	ppm	ASTM D5185m	0	8	0
Potassium	ppm	ASTM D5185m >20	2	<1	2
Water	%	ASTM D6304 >0.05	▲ 0.127	▲ 0.090	0.017
ppm Water	ppm	ASTM D6304 >500	▲ 1270	▲ 896	174.1

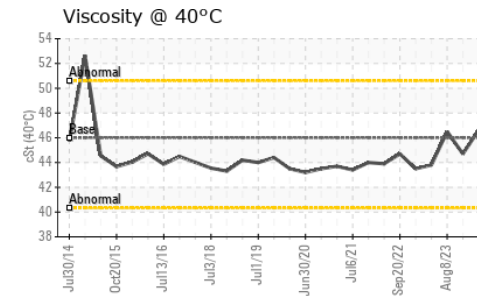
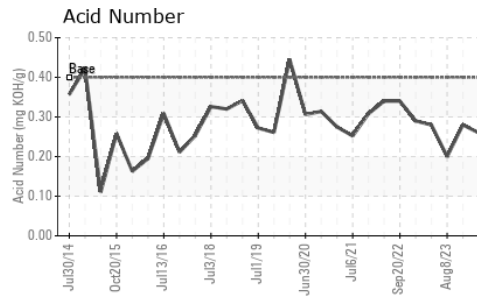
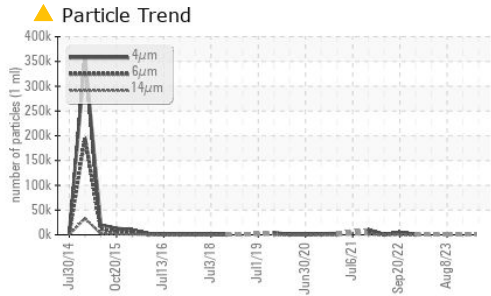
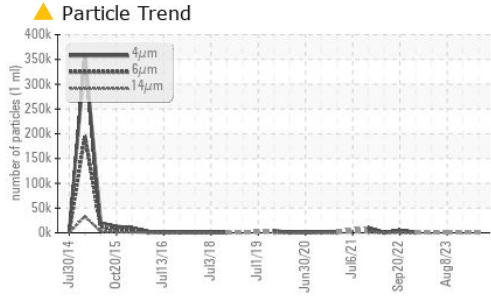
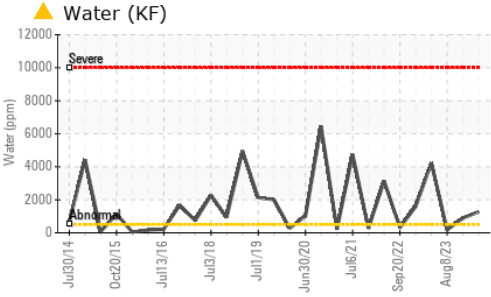
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	1801	---	1312
Particles >6µm	ASTM D7647 >1300	981	---	380
Particles >14µm	ASTM D7647 >80	▲ 167	---	29
Particles >21µm	ASTM D7647 >20	▲ 56	---	9
Particles >38µm	ASTM D7647 >4	▲ 9	---	0
Particles >71µm	ASTM D7647 >3	1	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 18/17/15	---	18/16/12

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.26	0.28	0.20

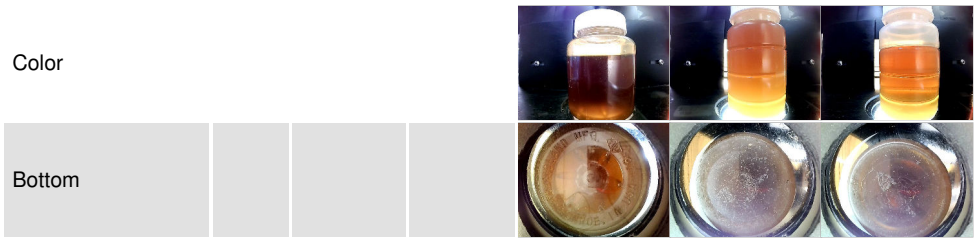
OIL ANALYSIS REPORT



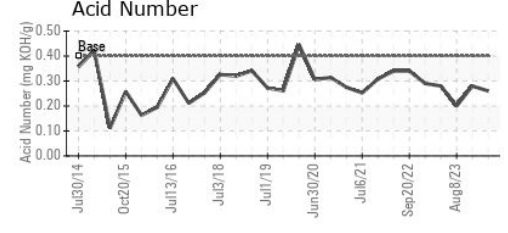
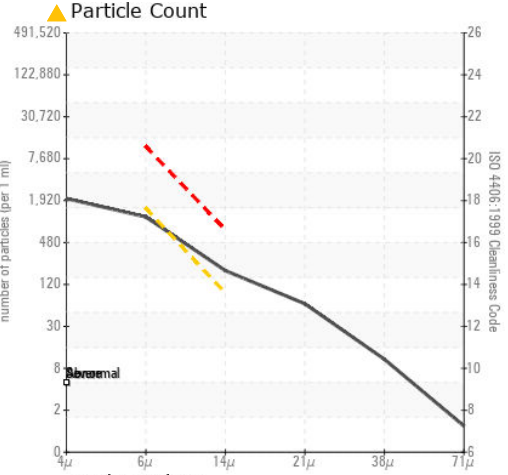
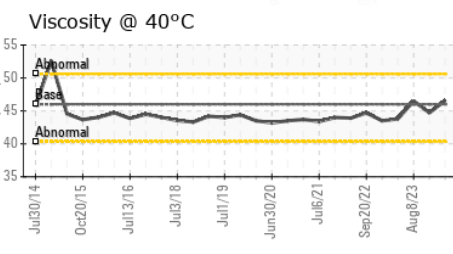
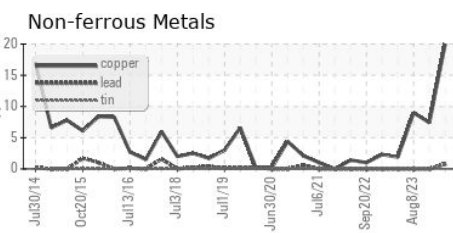
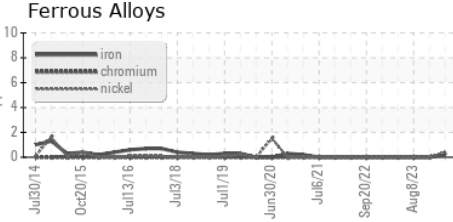
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ HEAVY	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	46.6	44.7

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC06216869
Lab Number : 06216869
Unique Number : 11089733
Test Package : IND 2
Received : 21 Jun 2024
Tested : 26 Jun 2024
Diagnosed : 26 Jun 2024 - Jonathan Hester

FIVE STAR ARCHITECTURE
 68 GROGAN
 DAWSONVILLE, GA
 US 30534
 Contact:

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)