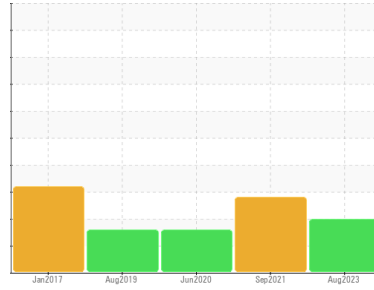




PROBLEM SUMMARY

Sample Rating Trend



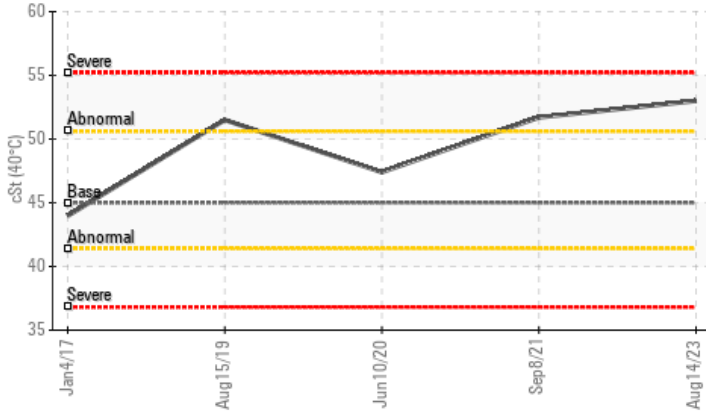
VISCOSITY



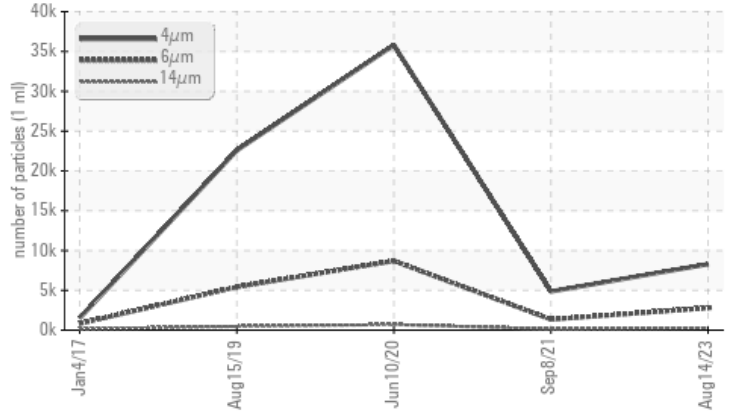
Machine Id
KAESER SK26 1424219 (S/N 0269456)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 40°C



▲ Particle Trend



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ASTM D7647	>	ABNORMAL	ABNORMAL	ABNORMAL	
Particles >6µm	ASTM D7647	>1300	▲ 2784	▲ 1348	▲ 8693	
Particles >14µm	ASTM D7647	>80	▲ 285	▲ 136	▲ 703	
Particles >21µm	ASTM D7647	>20	▲ 62	▲ 26	▲ 164	
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	▲ 18/14	▲ 20/17	
Visc @ 40°C	cSt	ASTM D445	45	▲ 53.0	51.7	47.4

Customer Id: HARJEF
 Sample No.: KCPA005316
 Lab Number: 05930390
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

08 Sep 2021 Diag: Jonathan Hester

DIRT



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



10 Jun 2020 Diag: Don Baldrige

ISO



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. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



15 Aug 2019 Diag: Doug Bogart

ISO



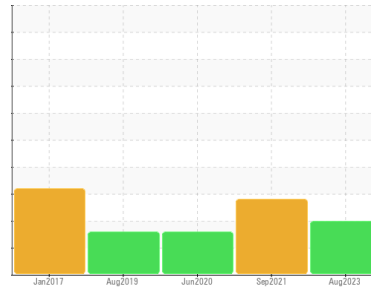
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

[view report](#)



OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
KAESER SK26 1424219 (S/N 0269456)

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

There is a high amount of particulates present in the oil.

▲ Fluid Condition

The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA005316	KCP11924	KCP22788
Sample Date	Client Info		14 Aug 2023	08 Sep 2021	10 Jun 2020
Machine Age	hrs	Client Info	60462	47192	36472
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	1	1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	<1	<1
Aluminum	ppm	ASTM D5185m >10	0	<1	<1
Lead	ppm	ASTM D5185m >10	<1	<1	<1
Copper	ppm	ASTM D5185m >50	14	11	4
Tin	ppm	ASTM D5185m >10	0	0	<1
Antimony	ppm	ASTM D5185m	---	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	<1	2
Barium	ppm	ASTM D5185m 90	3	17	20
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 100	27	42	55
Calcium	ppm	ASTM D5185m 0	0	1	3
Phosphorus	ppm	ASTM D5185m 0	0	4	3
Zinc	ppm	ASTM D5185m 0	127	47	25
Sulfur	ppm	ASTM D5185m 23500	24272	18361	16141

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	▲ 27	6
Sodium	ppm	ASTM D5185m	44	104	33
Potassium	ppm	ASTM D5185m >20	11	18	4
Water	%	ASTM D6304 >0.05	0.018	0.020	0.030
ppm Water	ppm	ASTM D6304 >500	185.1	207.7	304.7

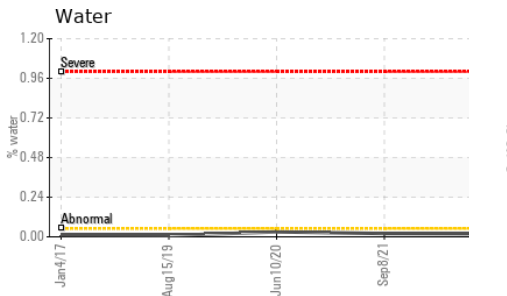
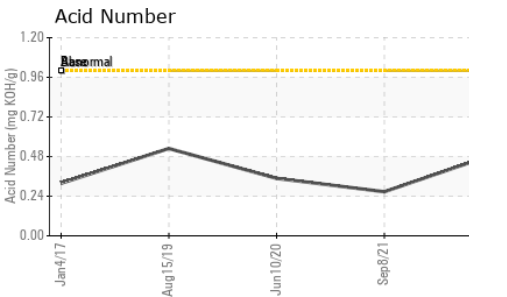
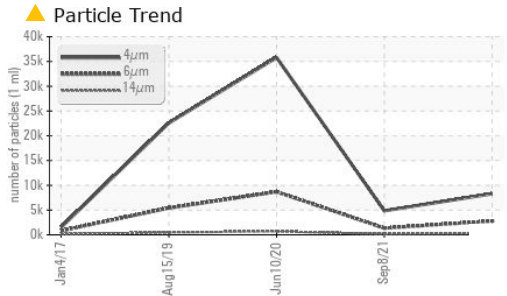
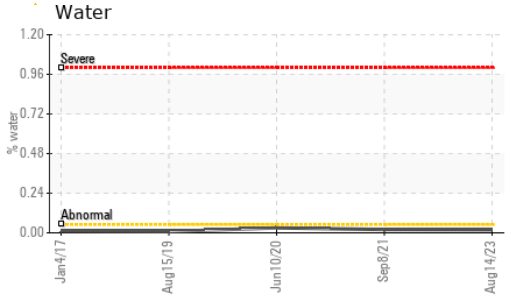
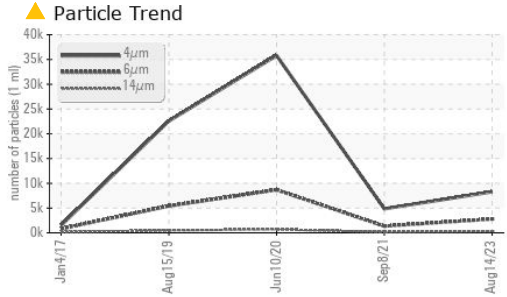
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		8291	4854	35800
Particles >6µm	ASTM D7647	>1300	▲ 2784	▲ 1348	▲ 8693
Particles >14µm	ASTM D7647	>80	▲ 285	▲ 136	▲ 703
Particles >21µm	ASTM D7647	>20	▲ 62	▲ 26	▲ 164
Particles >38µm	ASTM D7647	>4	1	2	▲ 12
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	▲ 18/14	▲ 20/17

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.49	0.267	0.348

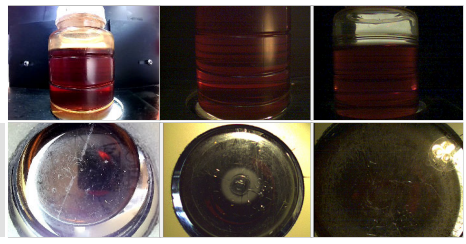
OIL ANALYSIS REPORT



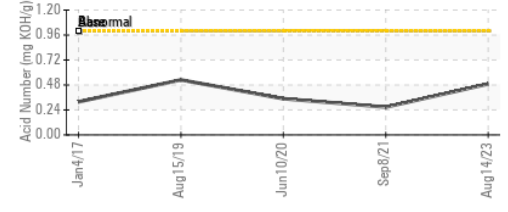
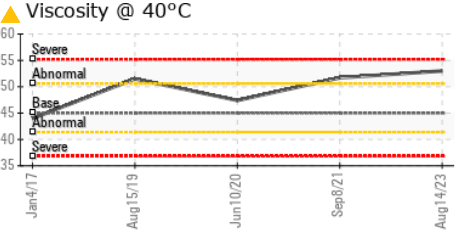
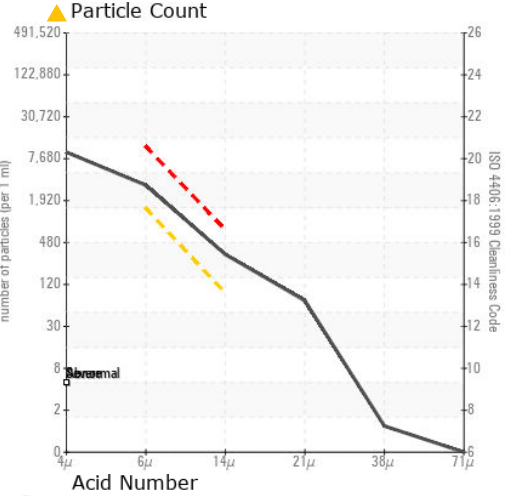
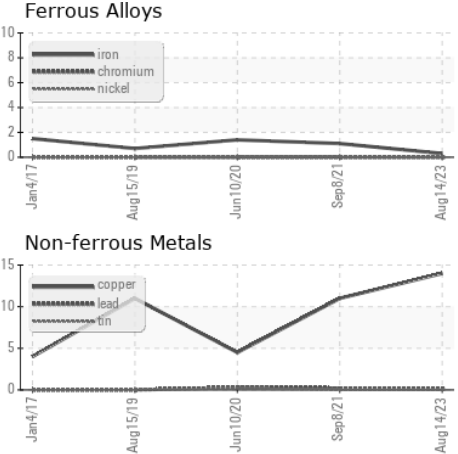
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	▲ 53.0	51.7	47.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA005316 **Received** : 21 Aug 2023
Lab Number : 05930390 **Diagnosed** : 23 Aug 2023
Unique Number : 10615661 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

HARLAND CLARKE
 240 AMERICAN PL
 JEFFERSONVILLE, IN
 US 47130
 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: