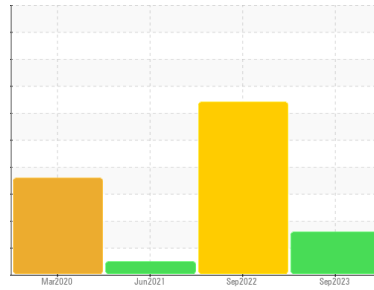




PROBLEM SUMMARY

Sample Rating Trend



ISO



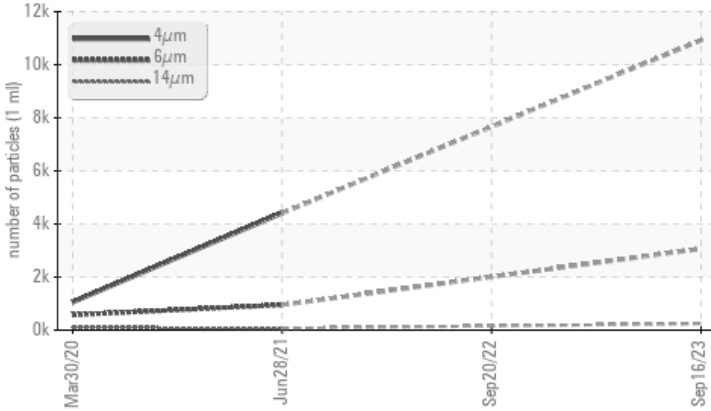
Machine Id
4576397 (S/N 1224)

Component
Compressor

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

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	SEVERE	NORMAL
Particles >6µm	ASTM D7647	>1300	▲ 3067	---	949
Particles >14µm	ASTM D7647	>80	▲ 243	---	70
Particles >21µm	ASTM D7647	>20	▲ 57	---	21
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/15	---	17/13

Customer Id: DYNCLA
Sample No.: KCPA003518
Lab Number: 05961757
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldrige +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

20 Sep 2022 Diag: Don Baldrige

WATER



There is too much water present in this sample to perform a particle count. 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. All component wear rates are normal. There is a moderate concentration of water present in the oil. Excessive free water present. The AN level is acceptable for this fluid.

view report



28 Jun 2021 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



30 Mar 2020 Diag: Jonathan Hester

WATER



Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition. All component wear rates are normal. Appearance is hazy. There is a moderate amount of particulates present in the oil. There is a light concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

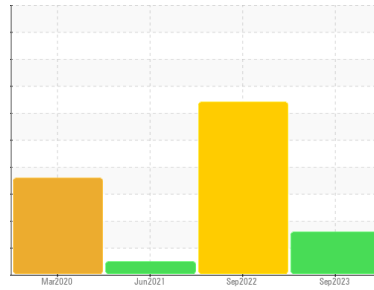
view report





OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
4576397 (S/N 1224)

Component
Compressor

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The 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	KCPA003518	KCP46260	KCP33018
Sample Date	Client Info	16 Sep 2023	20 Sep 2022	28 Jun 2021
Machine Age	hrs	18244	16169	13300
Oil Age	hrs	0	2000	3000
Oil Changed	Client Info	N/A	Not Changd	Not Changd
Sample Status		ABNORMAL	SEVERE	NORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	<1	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	3	0	<1
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	11	7	6
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	<1	0	<1

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	0	0	12
Barium	ppm	ASTM D5185m 90	0	0	23
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 100	2	0	36
Calcium	ppm	ASTM D5185m 0	<1	0	<1
Phosphorus	ppm	ASTM D5185m 0	2	6	2
Zinc	ppm	ASTM D5185m 0	71	58	25
Sulfur	ppm	ASTM D5185m 23500	20563	12698	19237

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	2	2
Sodium	ppm	ASTM D5185m	2	0	3
Potassium	ppm	ASTM D5185m >20	2	0	0
Water	%	ASTM D6304 >0.05	0.007	▲ 0.407	0.018
ppm Water	ppm	ASTM D6304 >500	70.8	▲ 4070	181.7

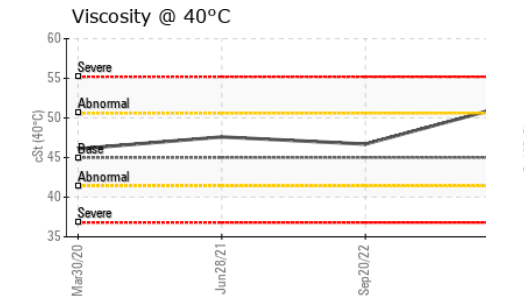
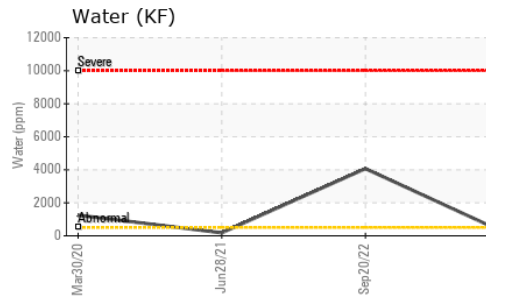
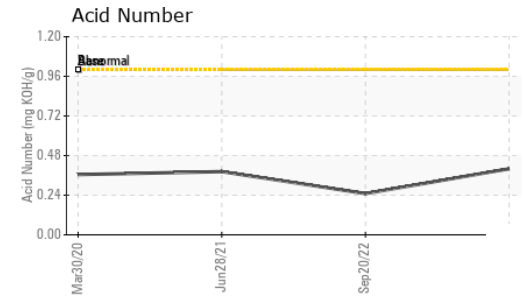
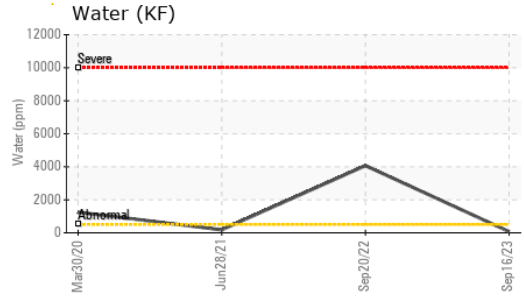
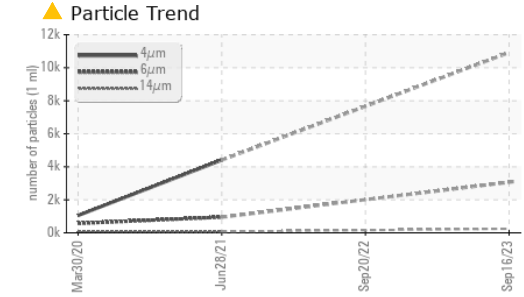
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	10921	---	4409
Particles >6µm	ASTM D7647 >1300	▲ 3067	---	949
Particles >14µm	ASTM D7647 >80	▲ 243	---	70
Particles >21µm	ASTM D7647 >20	▲ 57	---	21
Particles >38µm	ASTM D7647 >4	4	---	2
Particles >71µm	ASTM D7647 >3	1	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 21/19/15	---	17/13

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.40	0.25	0.383

OIL ANALYSIS REPORT

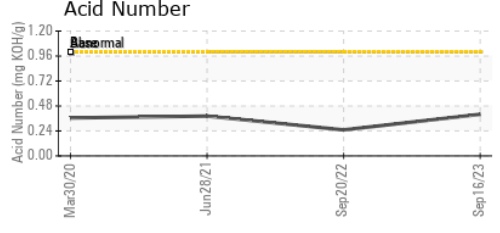
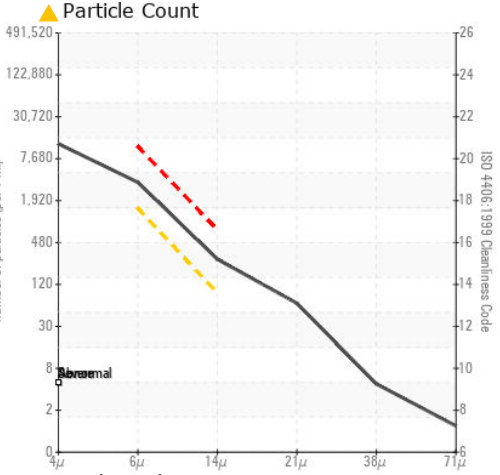
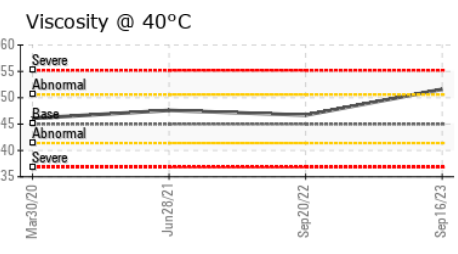
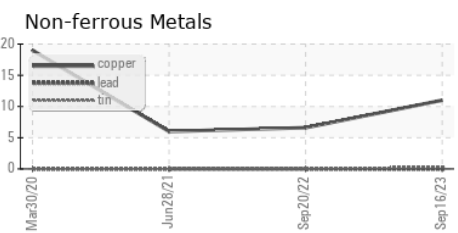
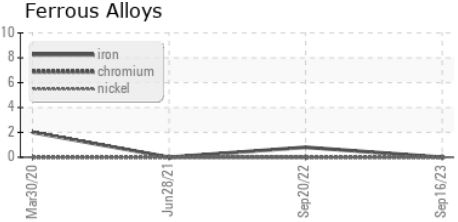


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	● 5.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	51.6	46.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA003518 **Received** : 26 Sep 2023
Lab Number : 05961757 **Diagnosed** : 28 Sep 2023
Unique Number : 10668308 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

DYNAMIC AIR ENGINEERING
 2421 BGA DR
 CLAREMONT, NC
 US 28610
 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: