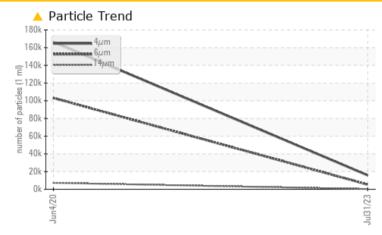


KAESER COMPRESSORS Built for a lifetime."

KAESER 5447835

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

COMPONENT CONDITION SUMMARY



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					
Particles >6µm	ASTM D7647	>1300	<u> </u>	e 103154					
Particles >14µm	ASTM D7647	>80	A 253	7206					
Particles >21µm	ASTM D7647	>20	<u> </u>	• 191					
Oil Cleanliness	ISO 4406 (c)	>/17/13	A 21/20/15	24/20					

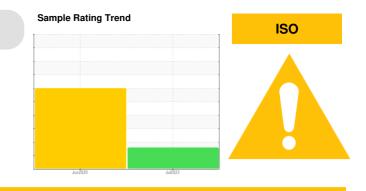
Customer Id: GREWALMA Sample No.: KCPA005660 Lab Number: 05927866 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Doug Bogart +1 (800)237-1369 x4016 <u>dougb@wearcheckusa.com</u>

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



There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

04 Jun 2020 Diag: Angela Borella



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.





OIL ANALYSIS REPORT



ISO

KAESER 5447835

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 INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA005660	KCP10656	
Sample Date		Client Info		31 Jul 2023	04 Jun 2020	
Machine Age	hrs	Client Info		6826	4585	
Oil Age	hrs	Client Info		0	4585	
Oil Changed		Client Info		N/A	Changed	
Sample Status				ABNORMAL	SEVERE	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	1	2	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	<1	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>10	0	0	
Lead	ppm	ASTM D5185m	>10	0	<1	
Copper	ppm	ASTM D5185m	>50	8	5	
Tin	ppm	ASTM D5185m	>10	0	0	
Antimony		ASTM D5185m	210		0	
•	ppm			 <1	0	
Vanadium	ppm	ASTM D5185m				
Cadmium	ppm	ASTM D5185m		0	<1	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	
Barium	ppm	ASTM D5185m	90	0	<1	
Molybdenum	ppm	ASTM D5185m	0	0	<1	
Manganese	ppm	ASTM D5185m		0	<1	
Magnesium	ppm	ASTM D5185m	100	13	20	
Calcium	ppm	ASTM D5185m	0	0	<1	
Phosphorus	ppm	ASTM D5185m	0	3	5	
Zinc	ppm	ASTM D5185m	0	23	5	
Sulfur	ppm	ASTM D5185m	23500	22487	16910	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	1	
Sodium	ppm	ASTM D5185m	-	4	2	
Potassium	ppm	ASTM D5185m	>20	1	<1	
Water	%	ASTM D6304	>0.05	0.011	0.003	
ppm Water	ppm	ASTM D6304	>500	117.4	38.2	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		15720	166378	
Particles >6µm		ASTM D7647	>1300	<u> </u>	• 103154	
Particles >14µm		ASTM D7647	>80	<u> </u>	7206	
Particles >21µm		ASTM D7647	>20	<u> </u>	• 191	
Particles >38µm		ASTM D7647	>4	4	3	
Particles >71µm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>/17/13	<u> </u>	24/20	
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)		ASTM D8045	1.0	0.30	0.379	
8:09:09) Rev: 1	Contact/Location: Service Manager - GREWALMA					

Report Id: GREWALMA [WUSCAR] 05927866 (Generated: 08/18/2023 18:09:09) Rev: 1

Contact/Location: Service Manager - GREWALMA



(B/H0) E0.72

Ê 0.4

P 0.2

0.00

1.20

0.9

_늘0.72

a²0.48 0.24

0.00

60

55

ှ 50

-73 45 Base

40

35

Abnorma

Se

Water

Viscosity @ 40°C

OIL ANALYSIS REPORT

method

*Visual

*Visual

scalar

scalar

limit/base

NONE

NONE

current

NONE

NONE

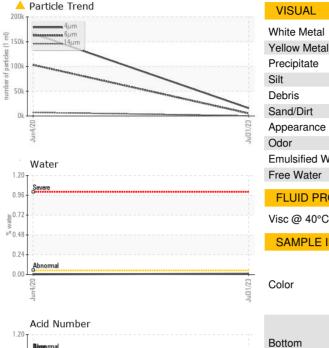
history1

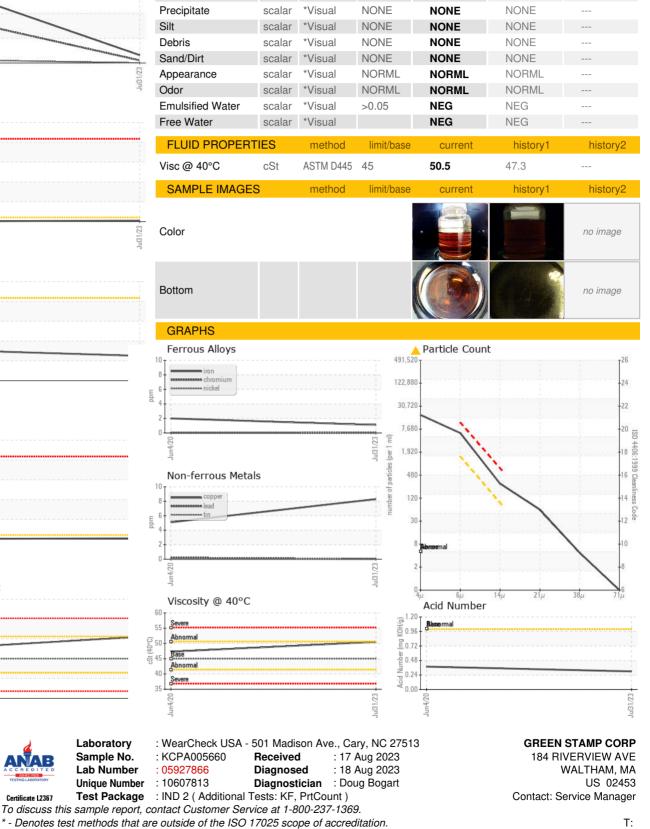
NONE

NONE

history2

VISUAL





Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Certificate L2367