

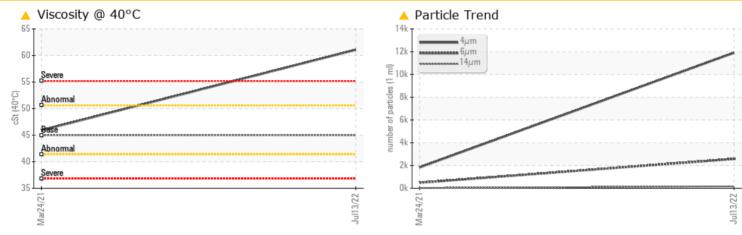
## **PROBLEM SUMMARY**

### Machine Id 4235751 (S/N 1130) Component

Compressor Fluic

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

### COMPONENT CONDITION SUMMARY



### RECOMMENDATION

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

### **PROBLEMATIC TEST RESULTS**

THOBEEN THO T		00210				
Sample Status				ABNORMAL	NORMAL	
Particles >6µm		ASTM D7647	>1300	<u> </u>	487	
Particles >14µm		ASTM D7647	>80	🔺 164	22	
Particles >21µm		ASTM D7647	>20	<b>A</b> 31	7	
Oil Cleanliness		ISO 4406 (c)	>/17/13	<b>A</b> 21/19/15	16/12	
Visc @ 40°C	cSt	ASTM D445	45	<b>61.08</b>	45.9	

Sample Rating Trend

Customer Id: LBLSAN Sample No.: KCP51089 Lab Number: 05594289 Test Package: IND 2



To manage this report scan the QR code

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



VISCOSITY

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



24 Mar 2021 Diag: Jonathan Hester

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





### **OIL ANALYSIS REPORT**

### Sample Rating Trend

VISCOSITY

# 4235751 (S/N 1130)

Compressor

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

### DIAGNOSIS

### A 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.

	<b>JATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KCP51089	KCP11023	
Sample Date		Client Info		13 Jul 2022	24 Mar 2021	
Machine Age	hrs	Client Info		0	35642	
Oil Age	hrs	Client Info		0	3650	
Oil Changed		Client Info		Changed	Changed	
Sample Status				ABNORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	
Chromium	ppm	ASTM D5185m	>10	0	0	
Nickel	ppm	ASTM D5185m	>3	0	0	
Titanium	ppm	ASTM D5185m	>3	0	0	
Silver	ppm	ASTM D5185m	>2	0	<1	
Aluminum	ppm	ASTM D5185m	>10	0	<1	
Lead	ppm	ASTM D5185m	>10	<1	0	
Copper	ppm		>50	17	22	
Tin	ppm	ASTM D5185m	>10	<1	<1	
Antimony	ppm	ASTM D5185m			0	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	<1	
	ppiii			-		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	9	
Barium	ppm	ASTM D5185m	90	0	0	
Molybdenum	ppm	ASTM D5185m	0	0	<1	
Manganese	ppm	ASTM D5185m		0	0	
Magnesium	ppm	ASTM D5185m	100	0	3	
Calcium	ppm	ASTM D5185m	0	0	0	
Phosphorus	ppm	ASTM D5185m	0	7	4	
Zinc	ppm	ASTM D5185m	0	0	46	
Sulfur	ppm	ASTM D5185m	23500	20512	13443	
Sulfur CONTAMINANTS		ASTM D5185m method	23500 limit/base	20512 current	13443 history1	 history2
CONTAMINANTS			limit/base			
CONTAMINANTS Silicon	6	method	limit/base	current	history1	history2
CONTAMINANTS Silicon Sodium	ppm ppm	method ASTM D5185m	limit/base >25	current 1	history1 0	history2
CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base >25 >20	current 1 0	history1 0 3 0	history2 
CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base >25 >20 >0.05	current 1 0 1	history1 0 3	history2  
CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304	limit/base >25 >20 >0.05	current 1 0 1 0.008	history1 0 3 0 0.010	history2   
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304	limit/base >25 >20 >0.05 >500	Current 1 0 1 0 0 1 0.008 83.3	history1 0 3 0 0.010 100.8	history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D6304 ASTM D6304 method	limit/base >25 >20 >0.05 >500 limit/base	current 1 0 1 0.008 83.3 current	history1 0 3 0 0.010 100.8 history1	history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >6µm	ppm ppm ppm % ppm	method ASTM D5185m ASTM D5185m ASTM D53054 ASTM D6304 ASTM D6304 Method ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base	current           1           0           1           0.008           83.3           current           11905	history1           0           3           0           0.010           100.8           history1           1835	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D5185mASTM D6304ASTM D6304methodASTM D7647ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80	current         1         0         1         0.008         83.3         current         11905         ≥ 2577         164	history1           0           3           0           0.010           100.8           history1           1835           487	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D6304ASTM D6304ASTM D6304ASTM D6304ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80	current         1         0         1         0.008         83.3         current         11905         2577	history1           0           3           0           0.010           100.8           history1           1835           487           22	history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D5185mASTM D6304ASTM D6304ASTM D6304ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	current         1         0         1         0.008         83.3         current         11905         ▲ 2577         ▲ 164         ▲ 31	history1           0           3           0           0.010           100.8           history1           1835           487           22           7	history2 history2 history2
Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm % ppm	methodASTM D5185mASTM D5185mASTM D6304ASTM D6304ASTM D6304ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4	current         1         0         1         0.008         83.3         current         11905         2577         164         31         1	history1           0           3           0           0.010           100.8           history1           1835           487           22           7           0	history2 history2 history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm Oil Cleanliness	ppm ppm % ppm JESS	method           ASTM D5185m           ASTM D5185m           ASTM D5185m           ASTM D6304           ASTM D7647           ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3 >/17/13	current         1         0         1         0.008         83.3         current         11905         2577         164         31         1         0         21/19/15	history1           0           3           0           0.010           100.8           history1           1835           487           22           7           0           0           0           16/12	history2                  history2
CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm Particles >71µm	ppm ppm % ppm JESS	method           ASTM D5185m           ASTM D6304           ASTM D6304           ASTM D7647	limit/base >25 >20 >0.05 >500 limit/base >1300 >80 >20 >4 >3 >/17/13 limit/base	current         1         0         1         0.008         83.3         current         11905         2577         164         31         1         0	history1           0           3           0           0.010           100.8           history1           1835           487           22           7           0           0           0	history2                  history2 </td

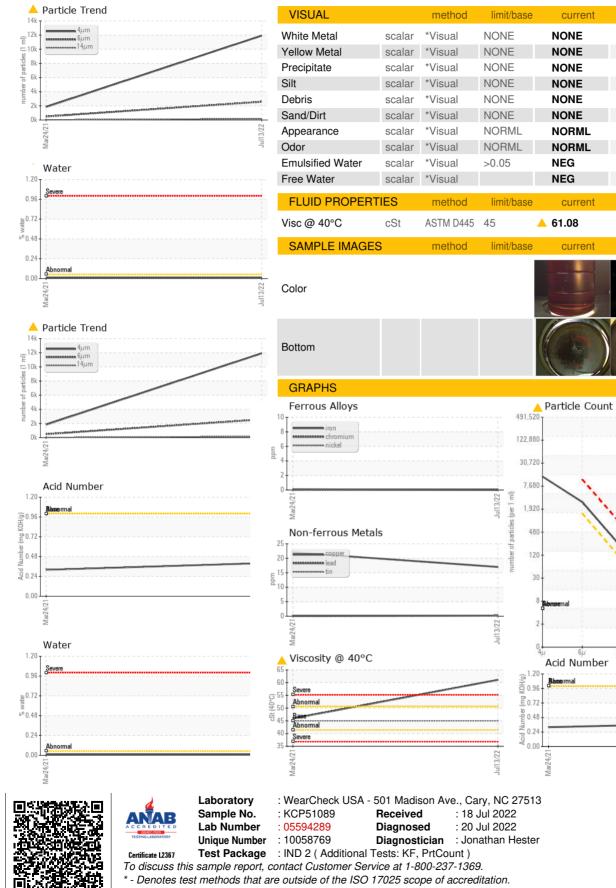
Report Id: LBLSAN [WUSCAR] 05594289 (Generated: 08/11/2023 09:00:02) Rev: 1

Contact/Location: A. BONNEAU - LBLSAN



Built for a lifetime

## **OIL ANALYSIS REPORT**



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

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**L & B LABORATORIES** 

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T:

F:

history1

NONE

NONE

NONE

NONE

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history

history1

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history2

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