

### **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# **KAESER 9202214**

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

### DIAGNOSIS

#### Recommendation

The filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. 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

High concentration of visible dirt/debris 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 acceptable for the time in service.

SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA018784		
Sample Date		Client Info		29 May 2024		
Machine Age	hrs	Client Info		645		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				ABNORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	2		
Chromium	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>3	<1		
Titanium	ppm	ASTM D5185m	>3	<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>10	1		
Lead	ppm	ASTM D5185m	>10	<1		
Copper	ppm	ASTM D5185m	>50	2		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		<1		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1	history2
	ppm ppm					
Boron		ASTM D5185m		0		
Boron Barium	ppm	ASTM D5185m ASTM D5185m		0 <1		
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m		0 <1 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90	0 <1 0 <1		 
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 <1 0 <1 36		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 <1 0 <1 36 0	   	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 <1 0 <1 36 0 5	   	   
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90	0 <1 0 <1 36 0 5 28	    	    
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90 2	0 <1 0 <1 36 0 5 28 28 28634	     	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	90 90 2 limit/base	0 <1 0 <1 36 0 5 28 28634 current	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	90 90 2 limit/base	0 <1 0 <1 36 0 5 28 28634 28634 current 0	    history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	90 90 2 limit/base >25	0 <1 0 <1 36 0 5 28 28634 28634 current 0 2	     history1	     history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	90 90 2 limit/base >25 >20	0 <1 0 <1 36 0 5 28 28634 28634 <u>current</u> 0 2 6	     history1	    history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	90 2 2 limit/base >25 >20 >20 >0.05	0 <1 0 <1 36 0 5 28 28634 28634 current 0 2 6 6 0.132		     history2  



12000

10000

8000 Water (ppm)

6000

4000

2000

(B/HO) Base

Ê0.30

-a u 0.20

0.10 0.00

Built for a lifetime.

## **OIL ANALYSIS REPORT**

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Water (KF)	VISUAL		method	limit/ba
Severe	White Metal	scalar	*Visual	NONE
	Yellow Metal	scalar	*Visual	NONE
	Precipitate	scalar	*Visual	NONE
	Silt	scalar	*Visual	NONE
	Debris	scalar	*Visual	NONE
normal	Sand/Dirt	scalar	*Visual	NONE
	Appearance Odor	scalar	*Visual	NORMI
	Odor Odor	scalar	*Visual	NORM
id Number	Emulsified Water	scalar	*Visual	>0.05
	Free Water	scalar	*Visual	
Se	FLUID PROPE	RTIES	method	limit/b
	Visc @ 40°C	cSt	ASTM D445	46
	SAMPLE IMAC	GES	method	limit/b
	tolor			
	P3/28/24			
scosity @ 40°C				
normal	Detter			
	Bottom			
369				
ase	GRAPHS			
	Ferrous Alloys			
bnormal	<sup>10</sup>			
	o tromium			
	2			
	May29/24			May29/24
	May			Mayi
	Non-ferrous Me	etals		
	10 copper 1			
	E 6			
	2			1
				9/24
	May29/24			May29/24
	Viscosity @ 40°	с		
	55			
	50 Abnormal			
	Co of 45 4 Abnormal			
	40 Abnormal			
	35 4			24 +

no image no image no image no image

history1

history1

history1

history2

history2

history2

current

NONE

NONE

NONE

NONE

HEAVY

NONE

NORML

NORML

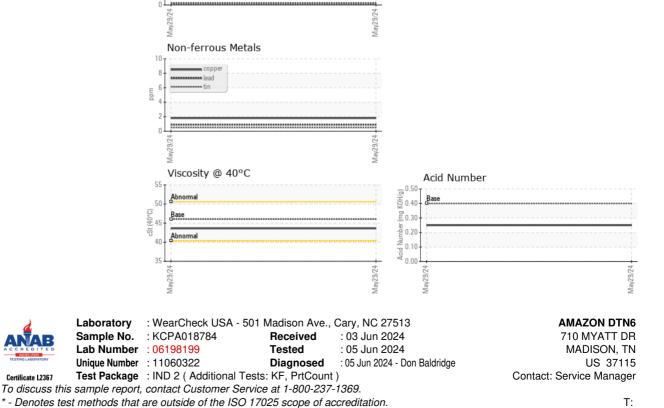
current

current

NEG

43.6

0.2%



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

Contact/Location: Service Manager - AMAMADTN

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