

#### Machine Id KAESER 4294550 Component Compressor Fluid KAESER SIGMA (OEM) M-460 (--- GAL)

## 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**

Moderate concentration of visible dirt/debris present in the oil. There is a moderate concentration of water present in the oil.

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# FLUID CONDITION

The AN level is acceptable for this fluid.

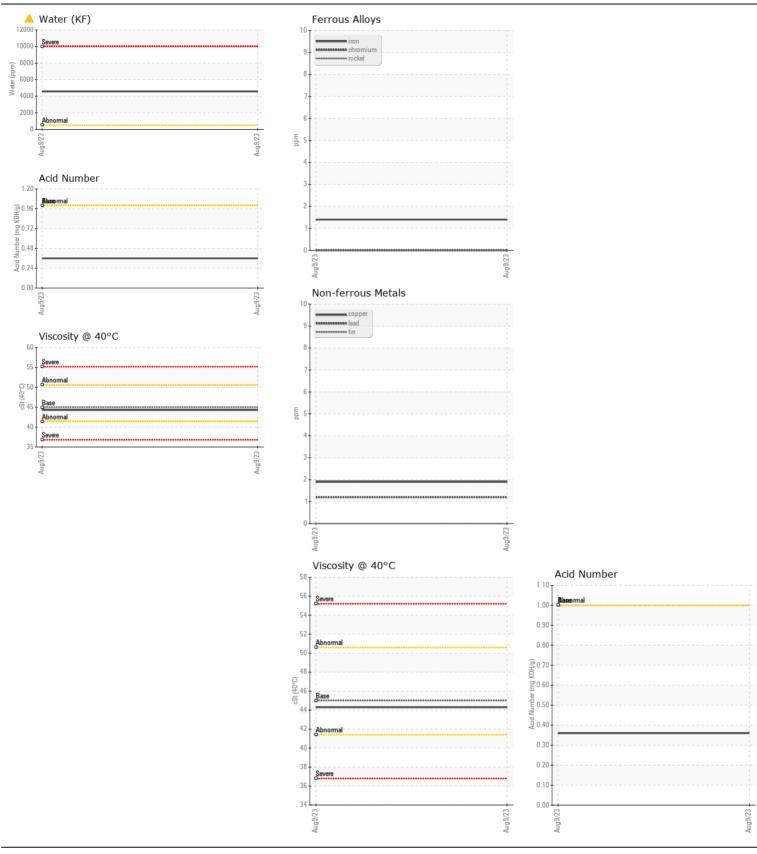
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

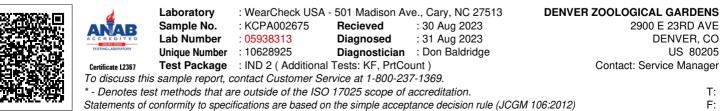
WEAR

NORMAL

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		KCPA002675		
Sample Date		Client Info		09 Aug 2023		
Machine Age	hrs	Client Info		574		
Oil Age	hrs	Client Info		0		
Filter Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron		ASTM D5185m	>50	4		
Chromium	ppm	ASTM D5185m		1 0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m	>3 >3	0		
Silver	ppm	ASTM D5185m	>3 >2	0		
Aluminum	ppm ppm	ASTM D5185m	>2	0 <1		
Lead	ppm	ASTM D5185m	>10	<1 1		
Copper	ppm	ASTM D5185m	>50	2		
Tin		ASTM D5185m	>10	2		
Vanadium	ppm ppm	ASTM D5185m	>10	0		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
		vioual		····		
Silicon	ppm	ASTM D5185m	>25	<1		
Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>25 >20	<1 2		
Potassium	ppm	ASTM D5185m	>20	2	  	
Potassium Water	ppm %	ASTM D5185m ASTM D6304	>20 >0.05	2 ▲ 0.457	  	
Potassium Water ppm Water	ppm % ppm	ASTM D5185m ASTM D6304 ASTM D6304	>20 >0.05 >500	2		
Potassium Water ppm Water Silt	ppm % ppm scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual	>20 >0.05 >500 NONE	2		
Potassium Water ppm Water Silt Debris	ppm % ppm scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual	>20 >0.05 >500 NONE NONE	2		
Potassium Water ppm Water Silt Debris Sand/Dirt	ppm % ppm scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance	ppm % ppm scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE	2 0.457 4570 NONE MODER NONE NORML	  	   
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm % ppm scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NONE NORML	2	    	
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm % ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >0.05 >500 NONE NONE NONE NORML	2	   	    
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm % ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual	>20 >0.05 >500 NONE NONE NORML NORML >0.05	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> </ul>	2 0.457 A570 NONE NONE NORML NORML 0.2% 7 0		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> <li>90</li> </ul>	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>20 >0.05 >500 NONE NONE NORML NORML >0.05	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> <li>90</li> </ul>	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> <li>90</li> <li>0</li> <li>100</li> </ul>	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> <li>0</li> <li>100</li> <li>0</li> <li>0</li> </ul>	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> <li>0</li></ul>	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> </ul>	2		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	<ul> <li>&gt;20</li> <li>&gt;20</li> <li>&gt;0.05</li> <li>&gt;500</li> <li>NONE</li> <li>NONE</li> <li>NORML</li> <li>&gt;0.05</li> <li>0</li> <li>0</li> <li>100</li> <li>0</li> <li>0</li> <li>0</li> <li>23500</li> </ul>	2 A 0.457 A 4570 NONE NORE NORML NORML A 0.2% 7 0 <1 0 <1 0 <1 48 0 2 63 20318		

Contact/Location: Service Manager - DENDENKCP





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