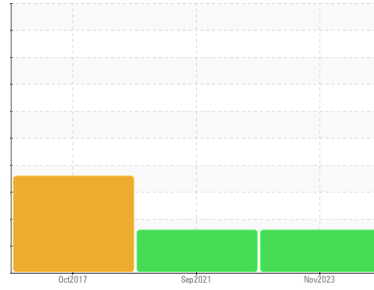




# PROBLEM SUMMARY

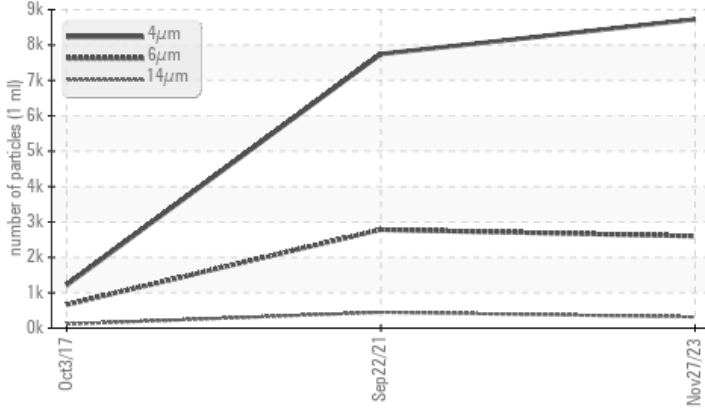
Sample Rating Trend



Machine Id  
**KAESER SX 7.5 3732914 (S/N 1053)**  
 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	ABNORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ <b>2600</b>	▲ 2783	663
Particles >14µm	ASTM D7647	>80	▲ <b>316</b>	▲ 448	▲ 113
Particles >21µm	ASTM D7647	>20	▲ <b>100</b>	▲ 138	▲ 38
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ <b>20/19/15</b>	▲ 19/16	▲ 17/14

Customer Id: TFBIL  
 Sample No.: KCP46807  
 Lab Number: 06029403  
 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  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

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

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 22 Sep 2021 Diag: Don Baldrige

ISO



No corrective action is recommended at this time. 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.

view report



### 03 Oct 2017 Diag: Don Baldrige

WATER



No corrective action is recommended at this time. 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. 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.

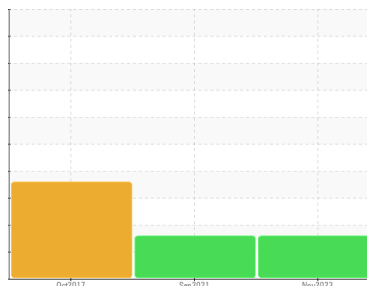
view report



Machine Id  
**KAESER SX 7.5 3732914 (S/N 1053)**

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			<b>KCP46807</b>	KCP37131	KCP04555
Sample Date	Client Info			<b>27 Nov 2023</b>	22 Sep 2021	03 Oct 2017
Machine Age	hrs	Client Info		<b>10817</b>	8300	5100
Oil Age	hrs	Client Info		<b>9085</b>	3200	3691
Oil Changed	Client Info			<b>Changed</b>	Changed	Changed
Sample Status				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	2
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>50	<b>8</b>	15	19
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m		<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

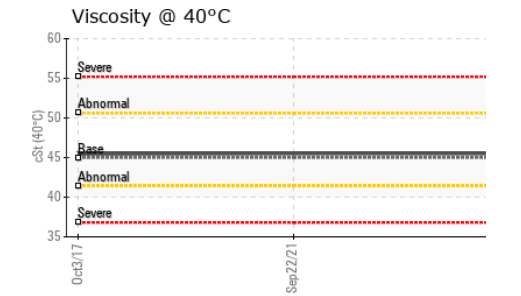
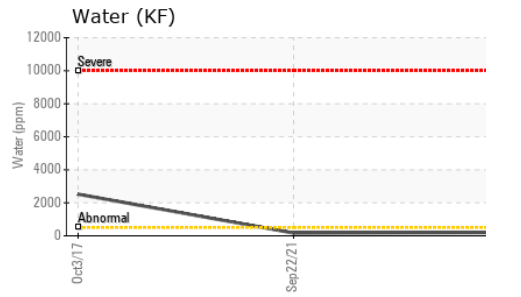
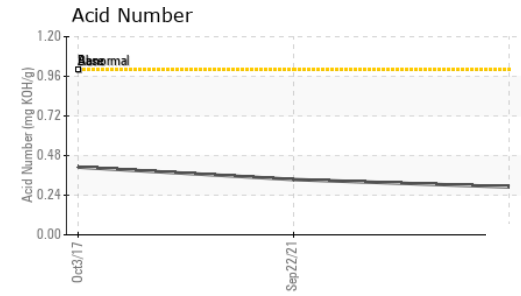
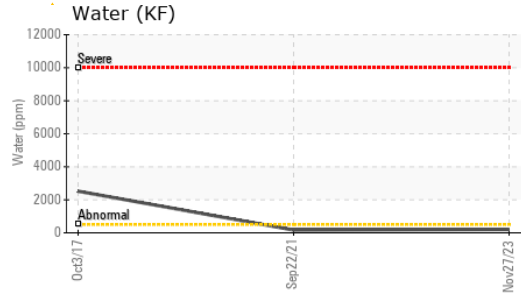
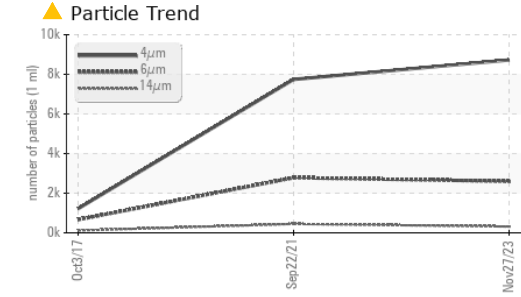
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	<b>0</b>	12	<1
Barium	ppm	ASTM D5185m	90	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	2
Magnesium	ppm	ASTM D5185m	100	<b>18</b>	10	15
Calcium	ppm	ASTM D5185m	0	<b>&lt;1</b>	0	<1
Phosphorus	ppm	ASTM D5185m	0	<b>0</b>	3	3
Zinc	ppm	ASTM D5185m	0	<b>78</b>	97	78
Sulfur	ppm	ASTM D5185m	23500	<b>20283</b>	16538	8221

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>&lt;1</b>	<1	2
Sodium	ppm	ASTM D5185m		<b>9</b>	6	4
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	1
Water	%	ASTM D6304	>0.05	<b>0.020</b>	0.016	▲ 0.252
ppm Water	ppm	ASTM D6304	>500	<b>203</b>	169.7	▲ 2520

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>8724</b>	7744	1217
Particles >6µm		ASTM D7647	>1300	▲ <b>2600</b>	▲ 2783	663
Particles >14µm		ASTM D7647	>80	▲ <b>316</b>	▲ 448	▲ 113
Particles >21µm		ASTM D7647	>20	▲ <b>100</b>	▲ 138	▲ 38
Particles >38µm		ASTM D7647	>4	<b>4</b>	▲ 11	▲ 5
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ <b>20/19/15</b>	▲ 19/16	▲ 17/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	<b>0.29</b>	0.335	0.410

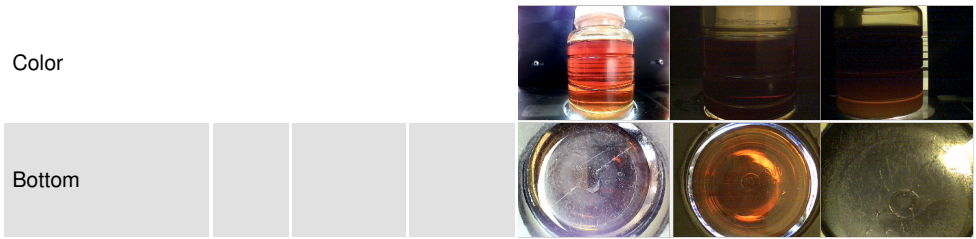
# OIL ANALYSIS REPORT



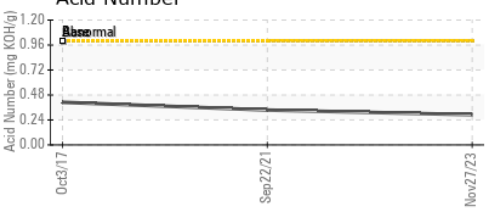
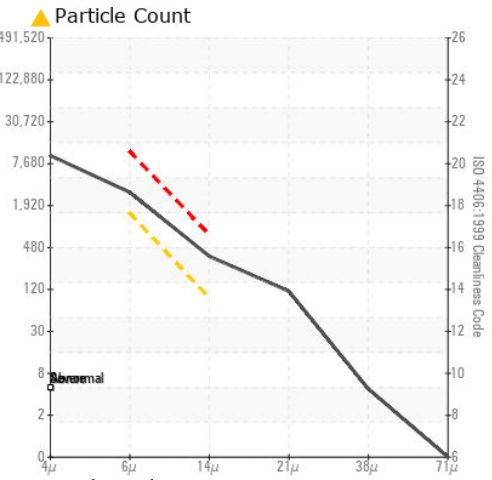
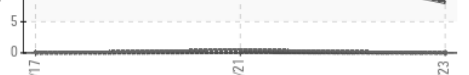
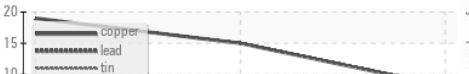
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	<b>45.5</b>	45.5	45.46

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCP46807 **Received** : 08 Dec 2023  
**Lab Number** : 06029403 **Diagnosed** : 11 Dec 2023  
**Unique Number** : 10779194 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**TF BOYLE TRANSPORTATION INC**  
 15 RIVERHURST RD  
 BILLERICA, MA  
 US 01821  
 Contact: MAINTENANCE  
 maintenance@boyletransport.com

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)