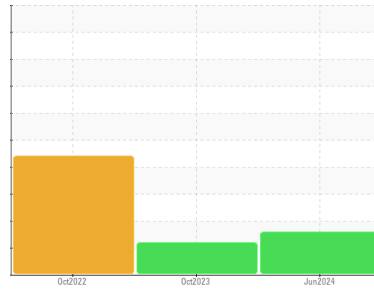




# OIL ANALYSIS REPORT

## Sample Rating Trend



Area  
**[73628640]**  
 Machine Id  
**KAESER 3096233**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

**Recommendation**  
 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.

**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>KCPA018460</b>	KCPA007140	KCP46477
Sample Date	Client Info	<b>07 Jun 2024</b>	30 Oct 2023	14 Oct 2022
Machine Age	hrs	<b>42263</b>	40783	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>Changed</b>	N/A	Changed
Sample Status		<b>ABNORMAL</b>	ATTENTION	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	3	0
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>3</b>	2	6
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	<1	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>	0	0
Barium	ppm	ASTM D5185m 90	<b>5</b>	20	7
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m 100	<b>21</b>	47	21
Calcium	ppm	ASTM D5185m 0	<b>0</b>	2	0
Phosphorus	ppm	ASTM D5185m 0	<b>11</b>	10	11
Zinc	ppm	ASTM D5185m 0	<b>19</b>	6	15
Sulfur	ppm	ASTM D5185m 23500	<b>18416</b>	23687	20381

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>1</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>7</b>	13	4
Potassium	ppm	ASTM D5185m >20	<b>3</b>	6	5
Water	%	ASTM D6304 >0.05	<b>0.009</b>	0.017	▲ 0.255
ppm Water	ppm	ASTM D6304 >500	<b>93</b>	170.0	▲ 2550

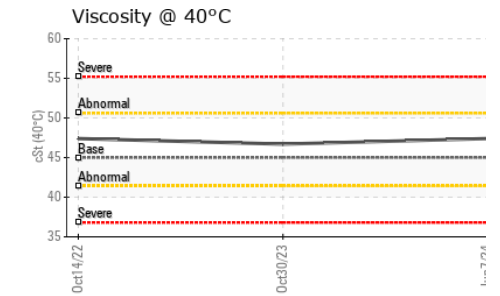
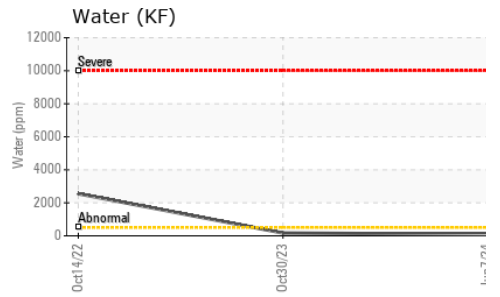
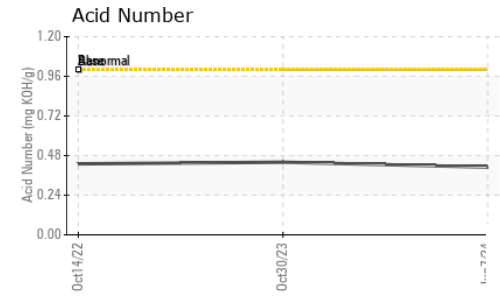
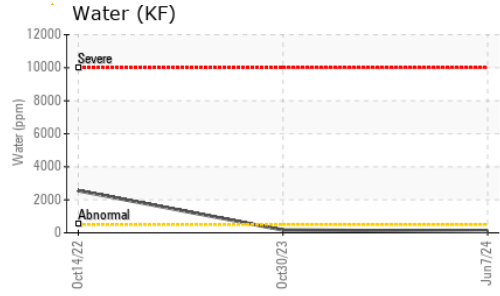
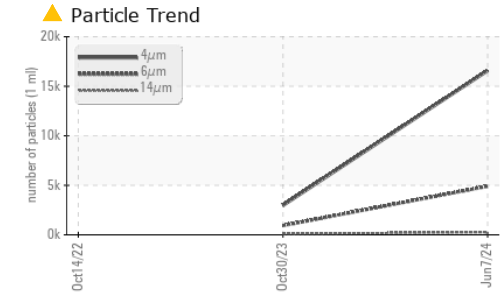
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>16574</b>	2965	---
Particles >6µm	ASTM D7647 >1300	▲ <b>4905</b>	931	---
Particles >14µm	ASTM D7647 >80	▲ <b>253</b>	● 96	---
Particles >21µm	ASTM D7647 >20	▲ <b>42</b>	● 22	---
Particles >38µm	ASTM D7647 >4	<b>1</b>	0	---
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ <b>21/19/15</b>	● 19/17/14	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.41</b>	0.44	0.43

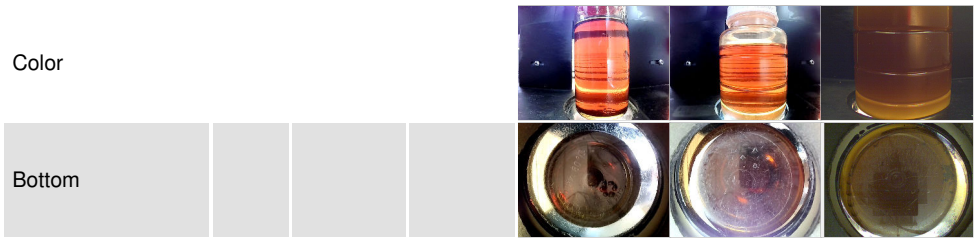
# OIL ANALYSIS REPORT



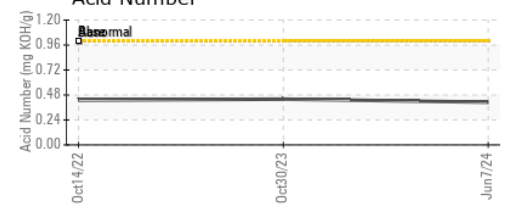
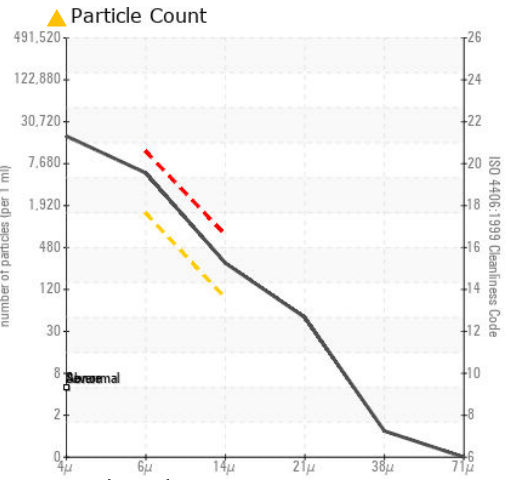
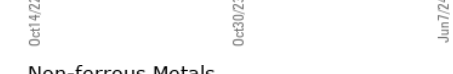
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	NONE	▲ MODER
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	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 45	<b>47.4</b>	46.7	47.4

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA018460 **Received** : 14 Jun 2024  
**Lab Number** : 06210795 **Tested** : 18 Jun 2024  
**Unique Number** : 11083659 **Diagnosed** : 18 Jun 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**SHERWIN WILLIAMS**  
 1033 MONTAGUE AVE  
 SAN LEANDRO, CA  
 US 94577  
 Contact: LUIS RAMOS LEYVA  
 luis.r.ramos.leyva@sherwin.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)