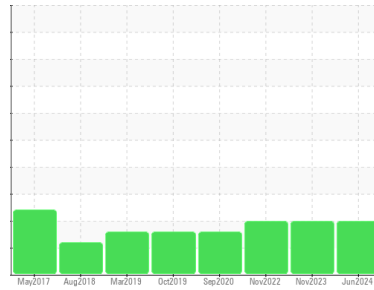




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SM 11 2242832 (S/N 1046)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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>KCPA019292</b>	KCPA011492	KCP47083
Sample Date	Client Info	<b>17 Jun 2024</b>	29 Nov 2023	07 Nov 2022
Machine Age	hrs	<b>52854</b>	50699	46698
Oil Age	hrs	<b>3000</b>	0	3000
Oil Changed	Client Info	<b>Changed</b>	N/A	Changed
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>2</b>	0	3
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>3</b>	0	0
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>2</b>	5	8
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	<1	0
Cadmium	ppm	ASTM D5185m	<b>&lt;1</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>28</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>67</b>	0	<1
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	<1
Zinc	ppm	ASTM D5185m 0	<b>15</b>	0	0
Sulfur	ppm	ASTM D5185m 23500	<b>21028</b>	17724	24160

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>1</b>	0	<1
Sodium	ppm	ASTM D5185m	<b>2</b>	<1	0
Potassium	ppm	ASTM D5185m >20	<b>2</b>	0	<1
Water	%	ASTM D6304 >0.05	<b>0.028</b>	0.004	0.009
ppm Water	ppm	ASTM D6304 >500	<b>287</b>	49	99.1

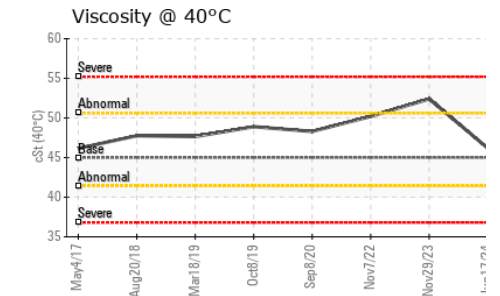
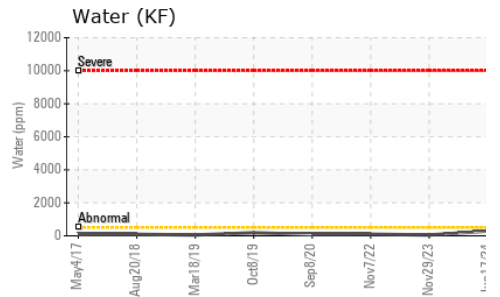
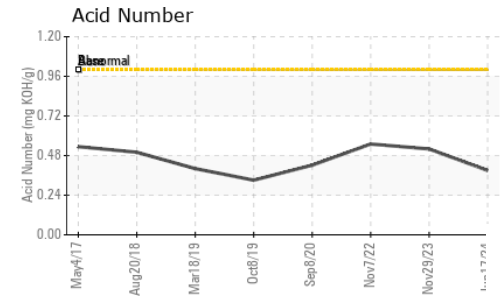
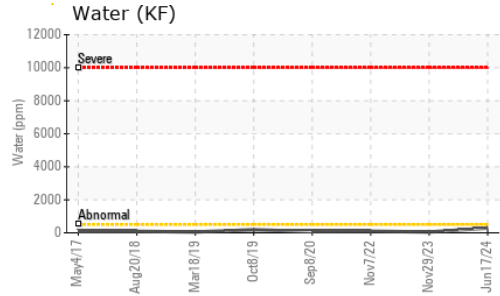
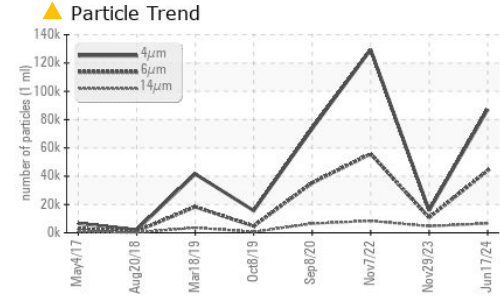
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>87073</b>	15766	129355
Particles >6µm	ASTM D7647 >1300	<b>▲ 43823</b>	▲ 10703	▲ 55845
Particles >14µm	ASTM D7647 >80	<b>▲ 6643</b>	▲ 4655	▲ 8404
Particles >21µm	ASTM D7647 >20	<b>▲ 1518</b>	▲ 2120	▲ 1132
Particles >38µm	ASTM D7647 >4	<b>▲ 28</b>	▲ 86	▲ 8
Particles >71µm	ASTM D7647 >3	<b>1</b>	2	0
Oil Cleanliness	ISO 4406 (c) >17/13	<b>▲ 23/20</b>	▲ 21/19	▲ 23/20

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.39</b>	0.52	0.55

# OIL ANALYSIS REPORT

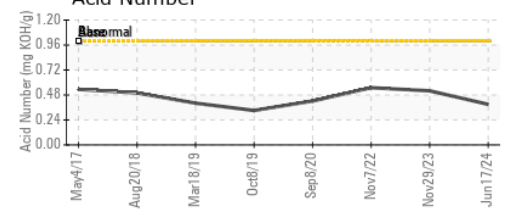
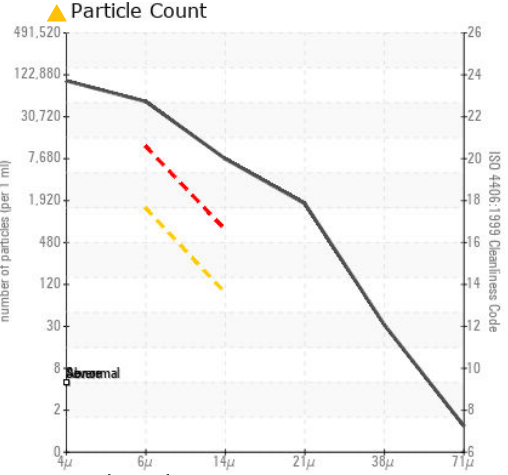
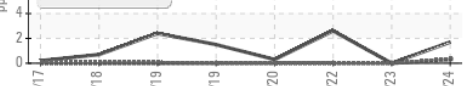


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.2	52.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA019292  
**Lab Number** : 06217302  
**Unique Number** : 11090166  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )  
**Received** : 21 Jun 2024  
**Tested** : 25 Jun 2024  
**Diagnosed** : 25 Jun 2024 - Don Baldrige

**ANDREW CHEVROLET dba ANDREW AUTO BODY**  
 1621 W LA SALLE AVE  
 GLENDALE, WI  
 US 53209  
 Contact: T. WHITE  
 twhite@andrewmotors.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)