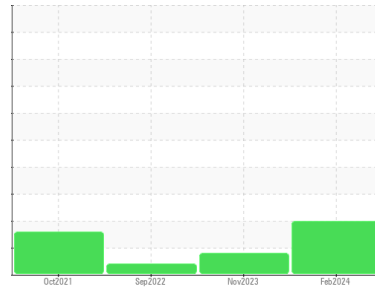




# OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id  
**6807371 (S/N 2063)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- QTS)**

## 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>KCPA015406</b>	KCPA005766	KCP51462
Sample Date	Client Info	<b>20 Feb 2024</b>	15 Nov 2023	22 Sep 2022
Machine Age	hrs	<b>0</b>	20370	18658
Oil Age	hrs	<b>188</b>	0	2054
Oil Changed	Client Info	<b>Not Chngd</b>	N/A	Not Chngd
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<b>0</b>	6	32
Chromium	ppm	ASTM D5185m >10	<b>0</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>0</b>	0	7
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>8</b>	8	14
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	---
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>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 100	<b>0</b>	0	6
Calcium	ppm	ASTM D5185m 0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m 0	<b>0</b>	0	31
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	24
Sulfur	ppm	ASTM D5185m 23500	<b>18856</b>	19848	18214

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>0</b>	0	2
Sodium	ppm	ASTM D5185m	<b>&lt;1</b>	1	8
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	8
Water	%	ASTM D6304 >0.05	<b>0.003</b>	0.007	0.034
ppm Water	ppm	ASTM D6304 >500	<b>38</b>	78	340.8

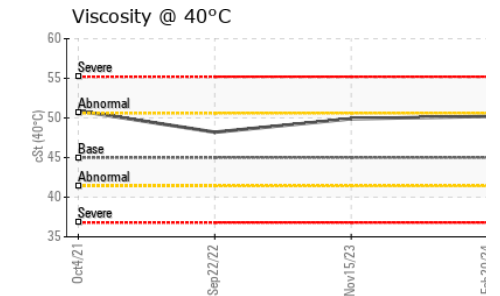
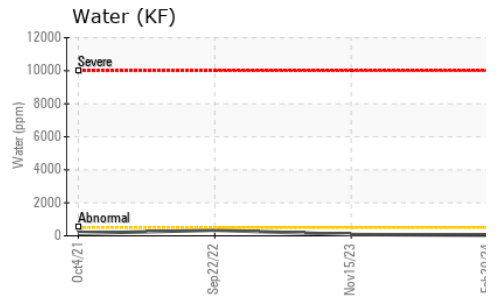
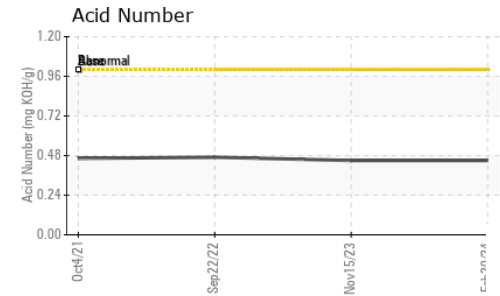
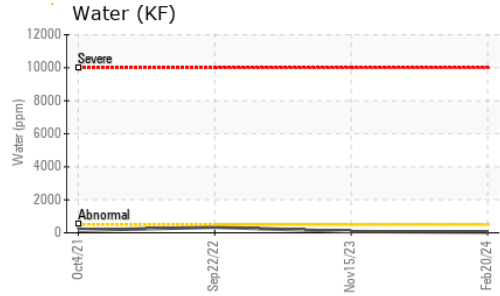
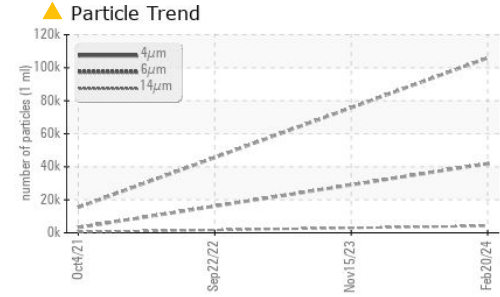
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>105950</b>	---	---
Particles >6µm	ASTM D7647 >1300	<b>▲ 41927</b>	---	---
Particles >14µm	ASTM D7647 >80	<b>▲ 4160</b>	---	---
Particles >21µm	ASTM D7647 >20	<b>▲ 1077</b>	---	---
Particles >38µm	ASTM D7647 >4	<b>▲ 34</b>	---	---
Particles >71µm	ASTM D7647 >3	<b>1</b>	---	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	<b>▲ 24/23/19</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.45</b>	0.45	0.47

# OIL ANALYSIS REPORT

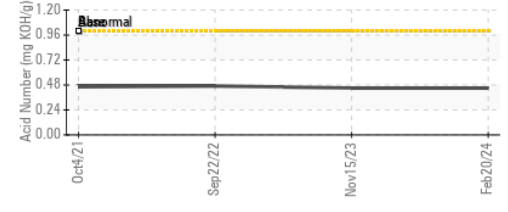
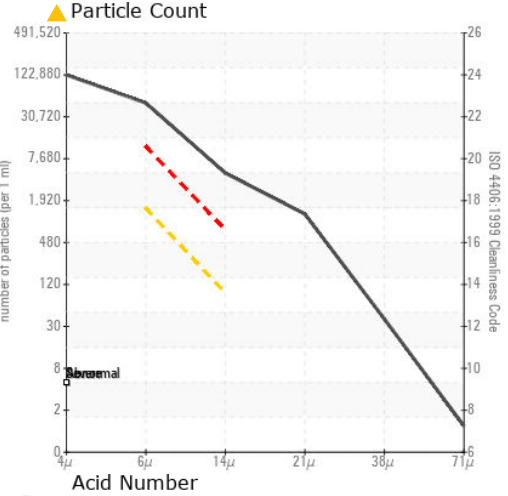
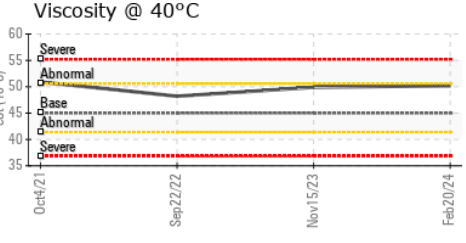
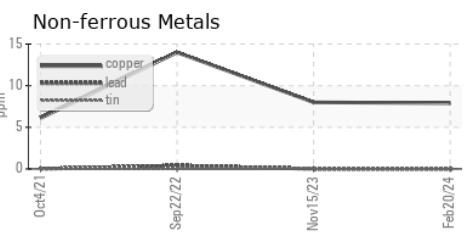
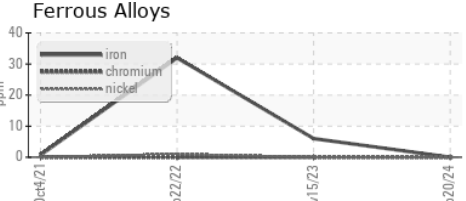


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	<b>LIGHT</b>	▲ MODER
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	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	<b>50.2</b>	49.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA015406 **Received** : 26 Apr 2024  
**Lab Number** : 06161451 **Tested** : 29 Apr 2024  
**Unique Number** : 10996874 **Diagnosed** : 30 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**HEXION**  
 333 NEILS EDDY RD  
 RIEGELWOOD, NC  
 US 28456  
 Contact: Service Manager

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)