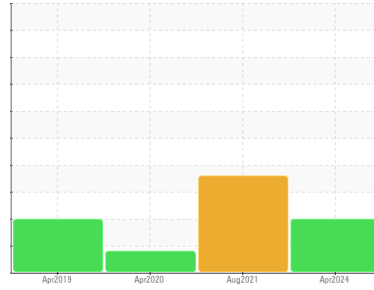




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**KAESER SX 6 2679512 (S/N 1568)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) M-460 (--- GAL)**

## DIAGNOSIS

### Recommendation

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 acceptable for the time in service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KCPA015046</b>	KCP36002	KCP26048
Sample Date	Client Info	<b>02 Apr 2024</b>	31 Aug 2021	16 Apr 2020
Machine Age	hrs	<b>6508</b>	2407	2407
Oil Age	hrs	<b>0</b>	0	0
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>0</b>	0	<1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	3	<1
Lead	ppm	ASTM D5185m >10	<b>7</b>	▲ 11	▲ 13
Copper	ppm	ASTM D5185m >50	<b>1</b>	2	2
Tin	ppm	ASTM D5185m >10	<b>0</b>	4	0
Antimony	ppm	ASTM D5185m	<b>---</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>&lt;1</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>	<1	0
Barium	ppm	ASTM D5185m 90	<b>1</b>	0	<1
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m 100	<b>63</b>	39	59
Calcium	ppm	ASTM D5185m 0	<b>2</b>	0	2
Phosphorus	ppm	ASTM D5185m 0	<b>1</b>	2	3
Zinc	ppm	ASTM D5185m 0	<b>7</b>	14	13
Sulfur	ppm	ASTM D5185m 23500	<b>21399</b>	16950	21134

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	<b>9</b>	<1	2
Sodium	ppm	ASTM D5185m	<b>11</b>	5	11
Potassium	ppm	ASTM D5185m >20	<b>&lt;1</b>	0	3
Water	%	ASTM D6304 >0.05	<b>0.024</b>	▲ 0.238	0.019
ppm Water	ppm	ASTM D6304 >500	<b>245</b>	▲ 2380	194.2

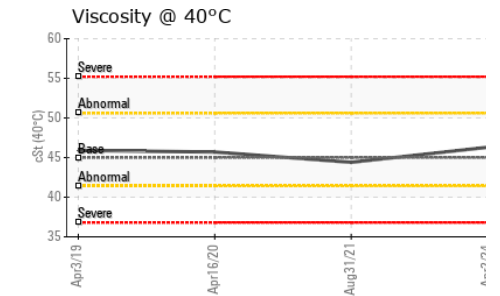
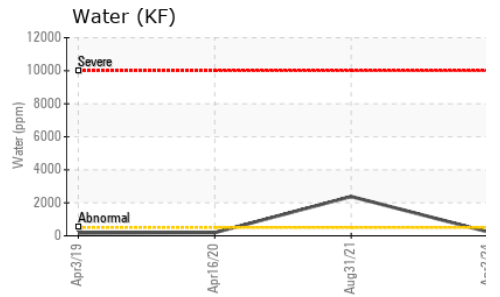
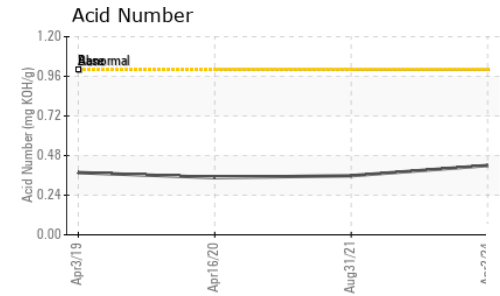
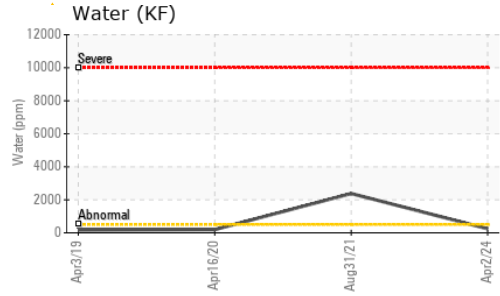
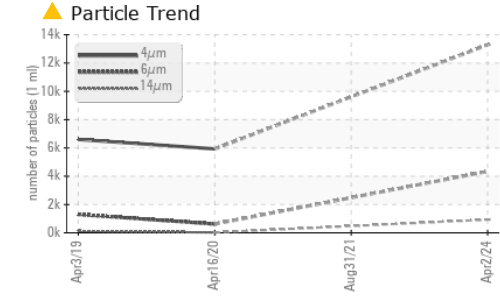
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	<b>13282</b>	---	5928
Particles >6µm	ASTM D7647 >1300	▲ <b>4344</b>	---	620
Particles >14µm	ASTM D7647 >80	▲ <b>930</b>	---	20
Particles >21µm	ASTM D7647 >20	▲ <b>460</b>	---	8
Particles >38µm	ASTM D7647 >4	▲ <b>58</b>	---	0
Particles >71µm	ASTM D7647 >3	<b>4</b>	---	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ <b>21/19/17</b>	---	16/11

## FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	<b>0.42</b>	0.358	0.347

# OIL ANALYSIS REPORT

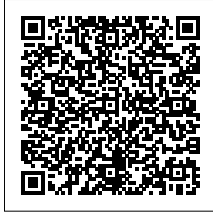
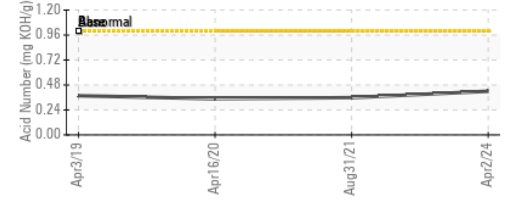
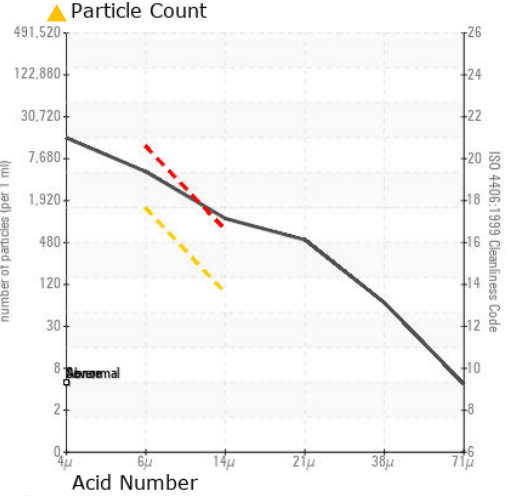
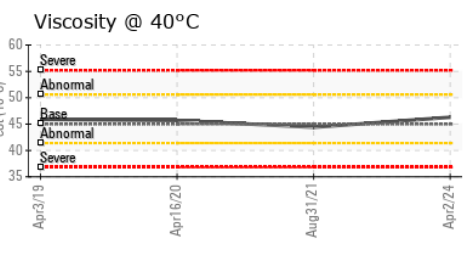
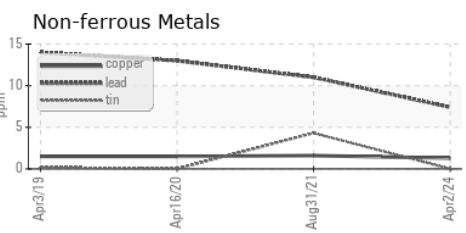
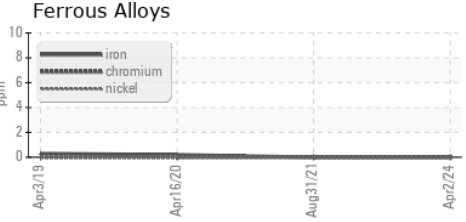


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.3	44.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA015046 **Received** : 09 Apr 2024  
**Lab Number** : 06143084 **Tested** : 10 Apr 2024  
**Unique Number** : 10967892 **Diagnosed** : 11 Apr 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**OLD DOMINION FREIGHTWAYS**  
 208 S EASON BLVD  
 TUPELO, MS  
 US 38804  
 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)