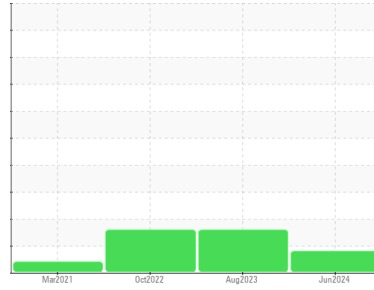




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**6673813 (S/N 1162)**  
 Component  
**Compressor**  
 Fluid  
**KAESER SIGMA (OEM) S-460 (--- QTS)**

## DIAGNOSIS

### Recommendation

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 silt (particulates < 14 microns in size) 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>KCPA012352</b>	KCPA003622	KCP49960
Sample Date	Client Info			<b>11 Jun 2024</b>	25 Aug 2023	26 Oct 2022
Machine Age	hrs	Client Info		<b>22002</b>	16891	12114
Oil Age	hrs	Client Info		<b>8000</b>	0	7374
Oil Changed	Client Info			<b>N/A</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>3</b>	<1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	1
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>	8	22
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m		<b>---</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	<1

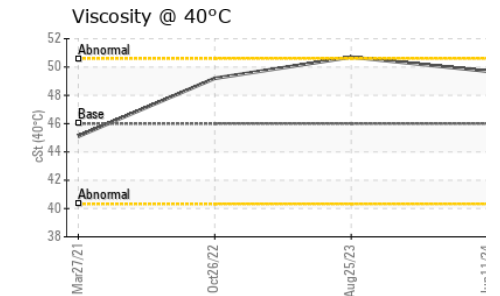
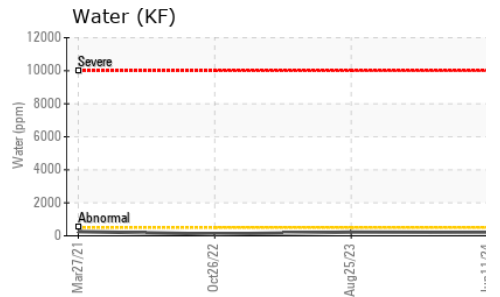
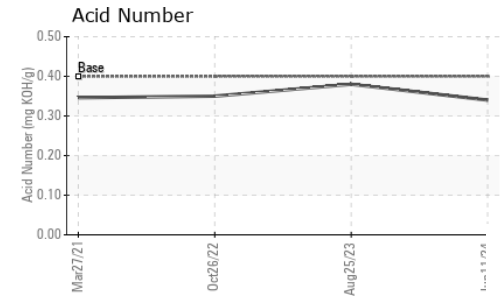
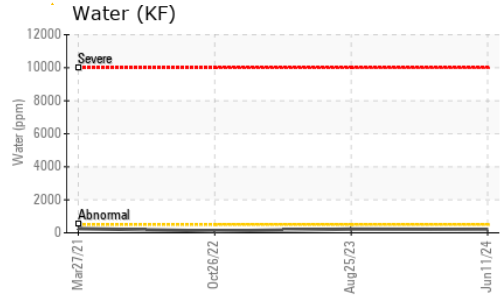
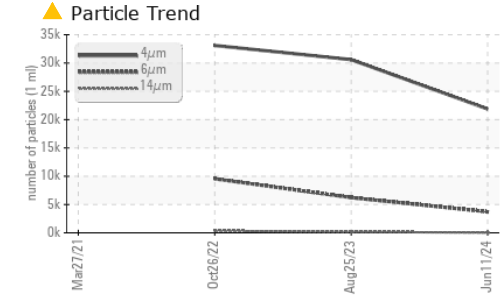
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m	90	<b>&lt;1</b>	27	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>4</b>	<1	2
Magnesium	ppm	ASTM D5185m	90	<b>32</b>	62	30
Calcium	ppm	ASTM D5185m	2	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>6</b>	<1	1
Zinc	ppm	ASTM D5185m		<b>29</b>	23	31
Sulfur	ppm	ASTM D5185m		<b>21231</b>	22498	21870

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>	33	21
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	4	2
Water	%	ASTM D6304	>0.05	<b>0.020</b>	0.022	0.011
ppm Water	ppm	ASTM D6304	>500	<b>202</b>	224.8	112.2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>21882</b>	30599	33097
Particles >6µm		ASTM D7647	>1300	<b>▲ 3716</b>	▲ 6224	▲ 9547
Particles >14µm		ASTM D7647	>80	<b>39</b>	▲ 161	▲ 353
Particles >21µm		ASTM D7647	>20	<b>6</b>	▲ 38	▲ 38
Particles >38µm		ASTM D7647	>4	<b>0</b>	2	2
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>17/13	<b>▲ 19/12</b>	▲ 20/15	▲ 20/16

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.34</b>	0.38	0.35

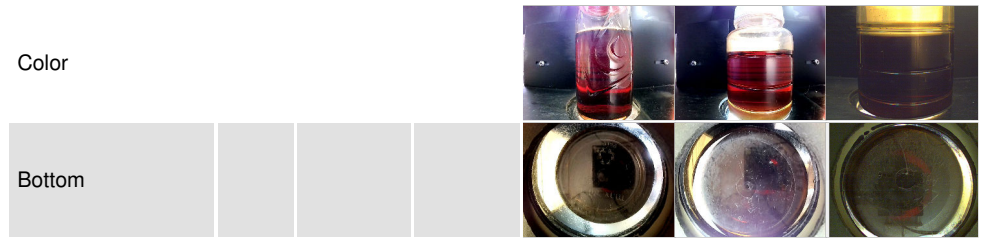
# OIL ANALYSIS REPORT



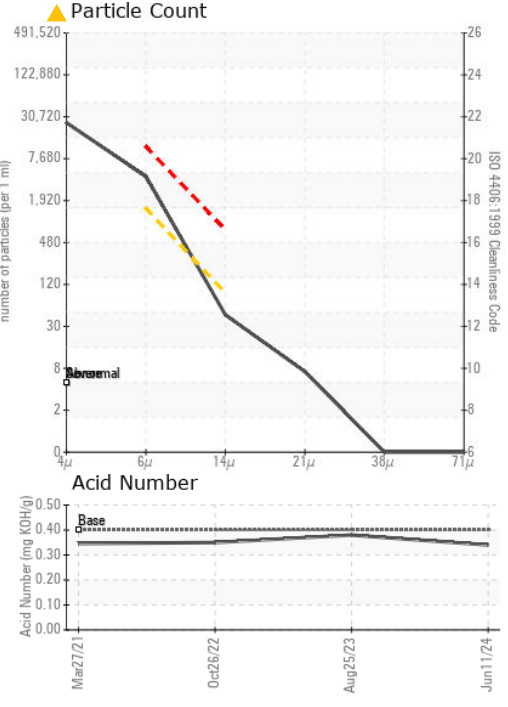
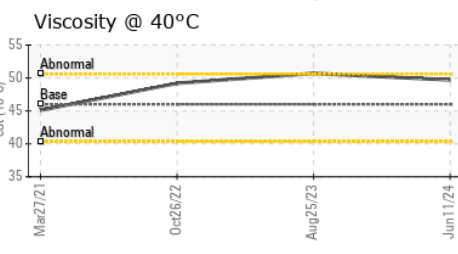
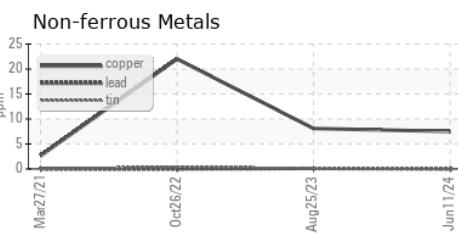
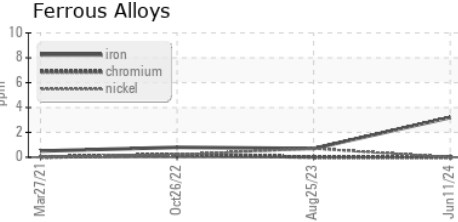
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	49.7	50.7

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA012352 **Received** : 17 Jun 2024  
**Lab Number** : 06212434 **Tested** : 19 Jun 2024  
**Unique Number** : 11085298 **Diagnosed** : 19 Jun 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**UNIPRES**  
 990 DUNCAN FARMS RD  
 STEELE, AL 35987  
 Contact: BRETT SHIELDS  
 brett.shields@unipres.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)