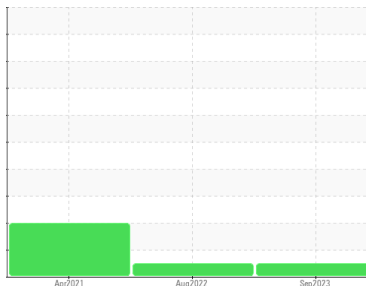


# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**7344369 (S/N 1535)**

Component  
**Compressor**  
Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

**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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

**Fluid Condition**

The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>KCPA000990</b>	KCP48283	KCP31177
Sample Date	Client Info			<b>20 Sep 2023</b>	08 Aug 2022	22 Apr 2021
Machine Age	hrs	Client Info		<b>4247</b>	2363	635
Oil Age	hrs	Client Info		<b>0</b>	1706	635
Oil Changed	Client Info			<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	1	<1
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	1	<1
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>2</b>	2	<1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

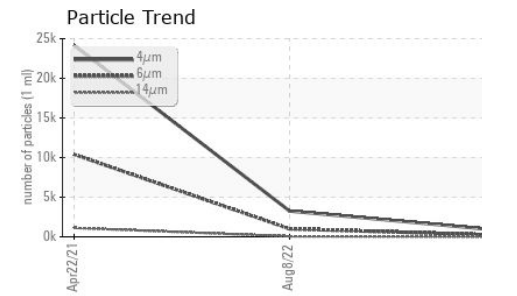
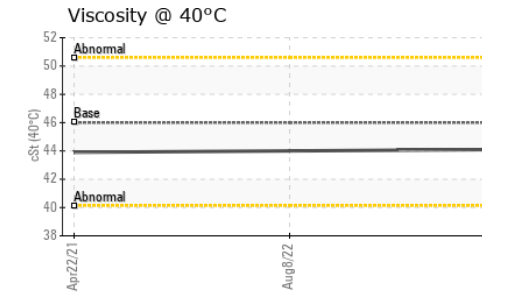
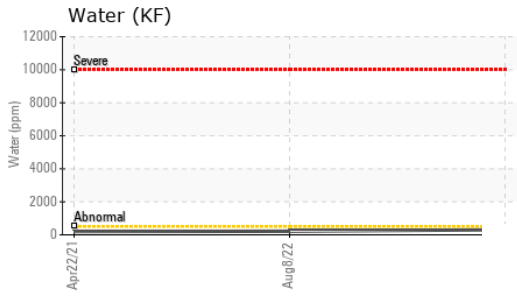
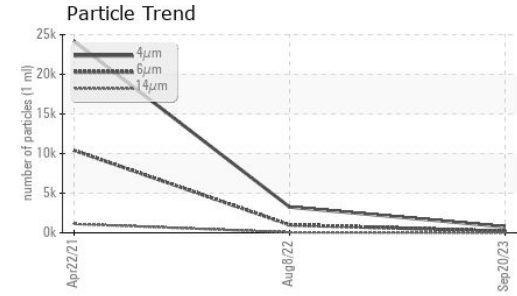
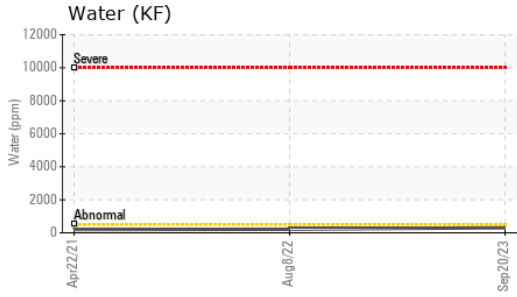
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	<1	8
Barium	ppm	ASTM D5185m	90	<b>0</b>	6	62
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	90	<b>76</b>	72	68
Calcium	ppm	ASTM D5185m	2	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>2</b>	0	0
Zinc	ppm	ASTM D5185m		<b>2</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>20732</b>	18182	17332

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>0</b>	<1	0
Sodium	ppm	ASTM D5185m		<b>14</b>	9	9
Potassium	ppm	ASTM D5185m	>20	<b>9</b>	2	4
Water	%	ASTM D6304	>0.05	<b>0.031</b>	0.021	0.019
ppm Water	ppm	ASTM D6304	>500	<b>310.3</b>	217.8	196.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>759</b>	3257	24149
Particles >6µm		ASTM D7647	>1300	<b>184</b>	1006	▲ 10397
Particles >14µm		ASTM D7647	>80	<b>9</b>	57	▲ 1124
Particles >21µm		ASTM D7647	>20	<b>2</b>	15	▲ 346
Particles >38µm		ASTM D7647	>4	<b>0</b>	1	▲ 17
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>17/15/10</b>	19/17/13	▲ 21/17

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.33</b>	0.32	0.364

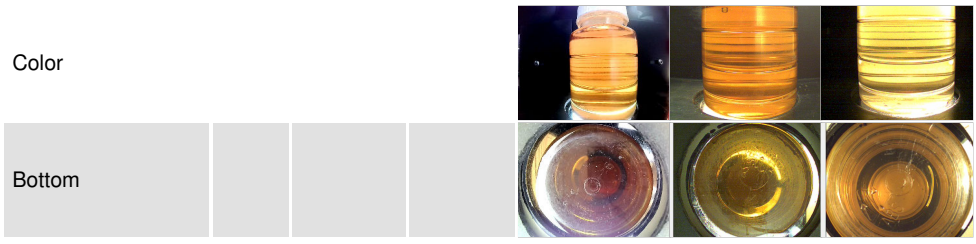
# OIL ANALYSIS REPORT



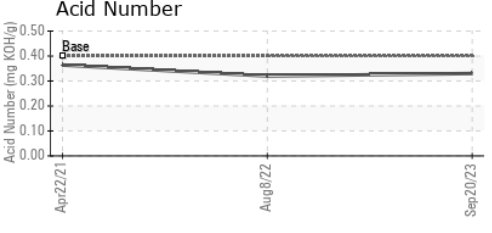
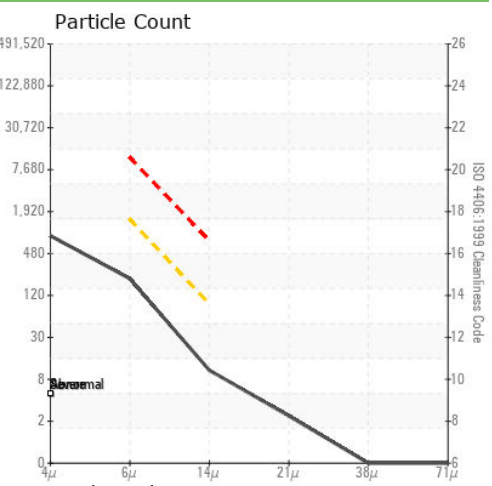
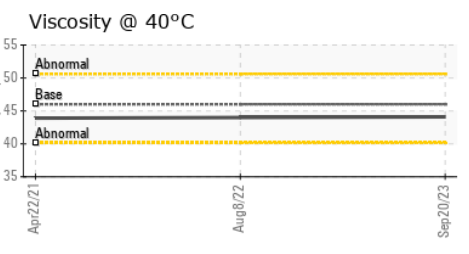
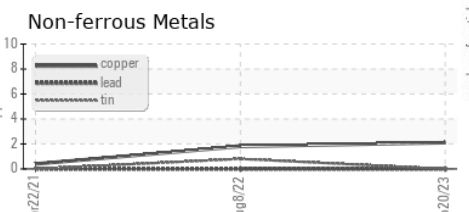
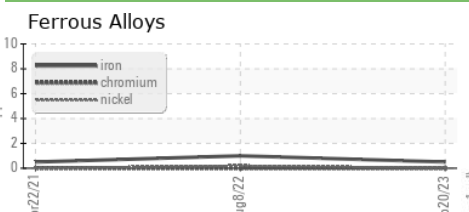
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	44.1	44.0	43.9

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA000990 **Received** : 02 Oct 2023  
**Lab Number** : 05967036 **Diagnosed** : 04 Oct 2023  
**Unique Number** : 10673587 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**NORTHWEST DESIGNS INK**  
 9241 BALTIMORE ST NE  
 BLAINE, MN  
 US 55449  
 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)

T:  
F: