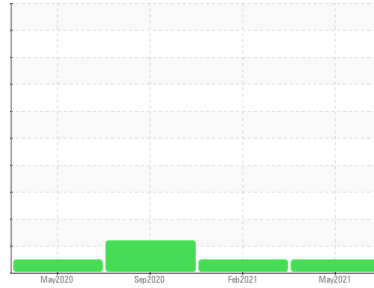




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**6821939 (S/N 2071)**

Component  
**Compressor**

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

## DIAGNOSIS

### Recommendation

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 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>KC86393</b>	KC93997	KC84475
Sample Date	Client Info			<b>05 May 2021</b>	04 Feb 2021	22 Sep 2020
Machine Age	hrs	Client Info		<b>3637</b>	2693	1944
Oil Age	hrs	Client Info		<b>1700</b>	749	1944
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>1</b>	<1	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185m	>10	<b>1</b>	0	3
Lead	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>4</b>	2	12
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Antimony	ppm	ASTM D5185m		<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

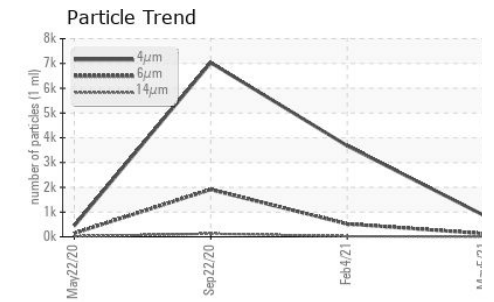
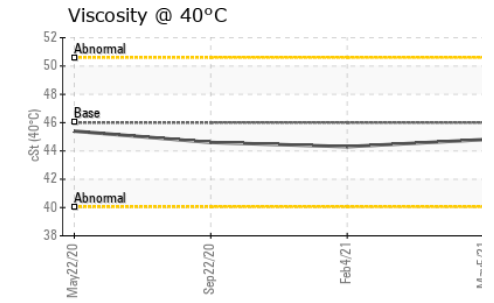
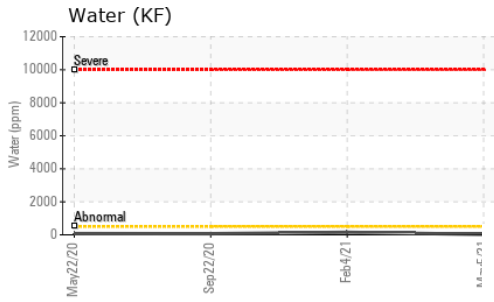
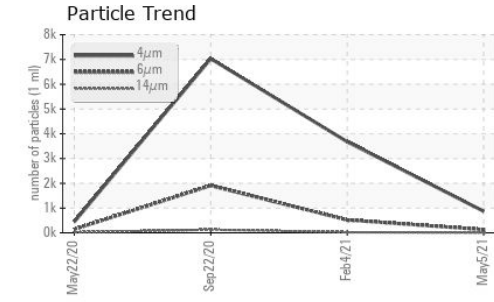
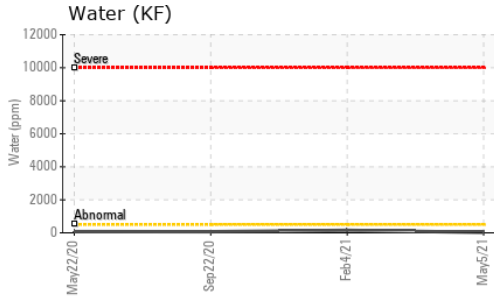
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>14</b>	<1	12
Barium	ppm	ASTM D5185m	90	<b>0</b>	47	0
Molybdenum	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Magnesium	ppm	ASTM D5185m	90	<b>8</b>	73	<1
Calcium	ppm	ASTM D5185m	2	<b>0</b>	2	0
Phosphorus	ppm	ASTM D5185m		<b>6</b>	<1	2
Zinc	ppm	ASTM D5185m		<b>10</b>	0	21

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	<1
Sodium	ppm	ASTM D5185m		<b>2</b>	9	<1
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	10	<1
Water	%	ASTM D6304	>0.05	<b>0.002</b>	0.015	0.006
ppm Water	ppm	ASTM D6304	>500	<b>24.8</b>	153.3	67.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>870</b>	3676	7030
Particles >6µm		ASTM D7647	>1300	<b>130</b>	518	▲ 1912
Particles >14µm		ASTM D7647	>80	<b>8</b>	21	▲ 126
Particles >21µm		ASTM D7647	>20	<b>3</b>	5	▲ 32
Particles >38µm		ASTM D7647	>4	<b>0</b>	0	4
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>14/10</b>	16/12	▲ 18/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.350</b>	0.376	0.427

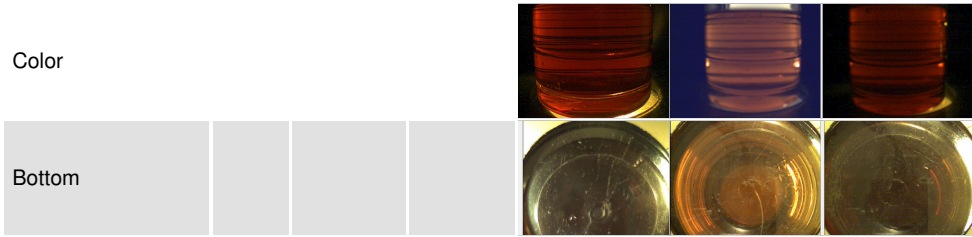
# OIL ANALYSIS REPORT



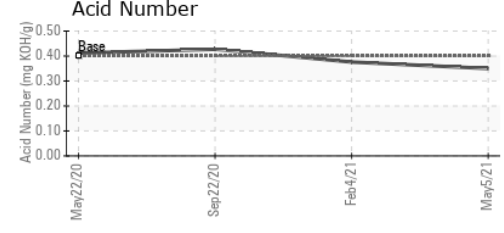
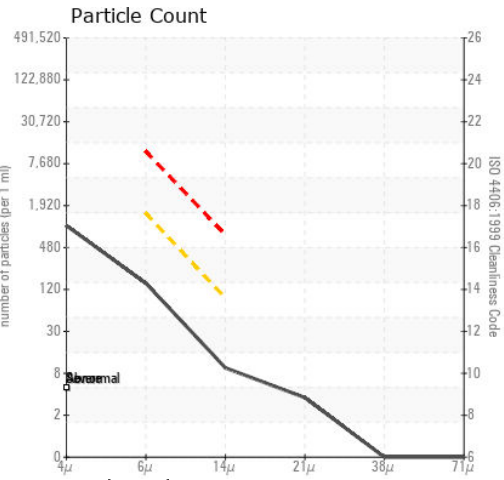
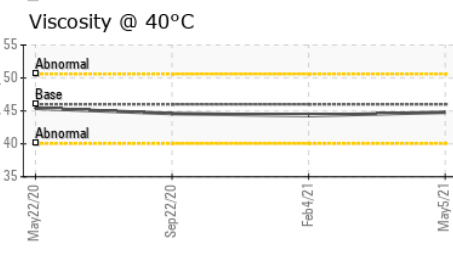
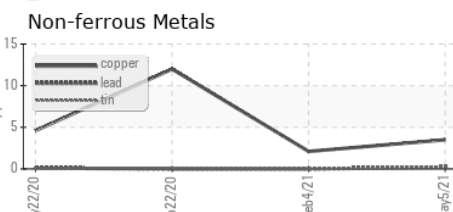
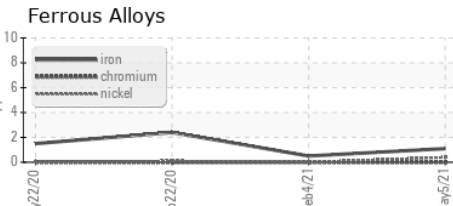
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	44.8	44.3	44.6

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC86393  
**Lab Number** : 05279773  
**Unique Number** : 9543706  
**Test Package** : IND 2  
**Received** : 15 Jun 2021  
**Tested** : 16 Jun 2021  
**Diagnosed** : 17 Jun 2021 - Jonathan Hester

**BETTCHEr INDUSTRIES**  
 6801 ST RT 60  
 BIRMINGHAM, OH  
 US 44889  
 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: