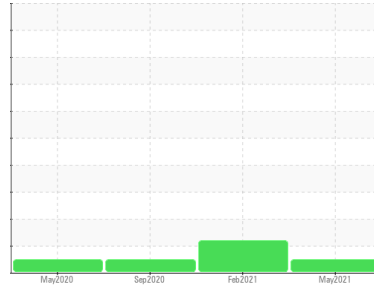




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**6825553 (S/N 2082)**

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 a moderate 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>KC86390</b>	KC93875	KC85191
Sample Date	Client Info			<b>05 May 2021</b>	04 Feb 2021	22 Sep 2020
Machine Age	hrs	Client Info		<b>3637</b>	2521	1946
Oil Age	hrs	Client Info		<b>1700</b>	575	1946
Oil Changed	Client Info			<b>Not Chngd</b>	Not Chngd	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	2
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>3	<b>&lt;1</b>	0	0
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	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>6</b>	3	12
Tin	ppm	ASTM D5185m	>10	<b>0</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

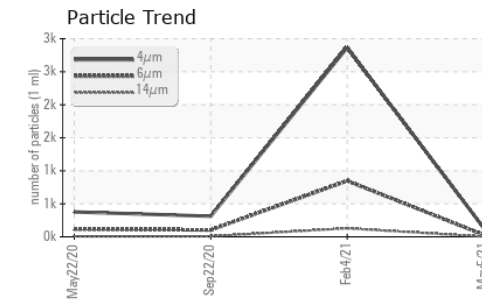
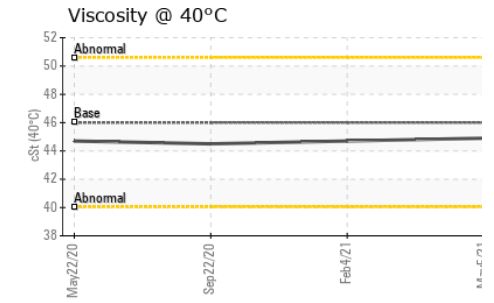
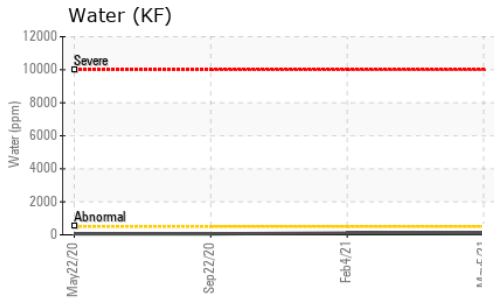
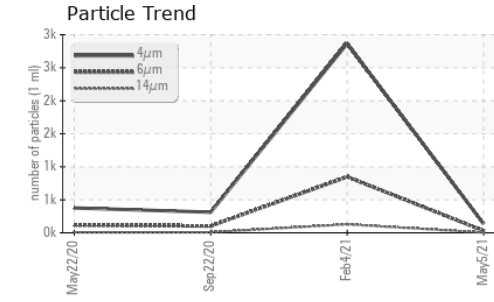
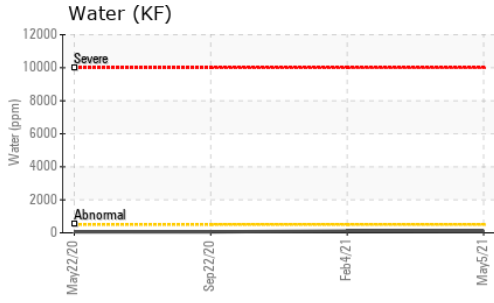
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>1</b>	<1	13
Barium	ppm	ASTM D5185m	90	<b>2</b>	21	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m	90	<b>2</b>	55	1
Calcium	ppm	ASTM D5185m	2	<b>0</b>	<1	4
Phosphorus	ppm	ASTM D5185m		<b>1</b>	1	7
Zinc	ppm	ASTM D5185m		<b>0</b>	0	26

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>4</b>	3	<1
Sodium	ppm	ASTM D5185m		<b>0</b>	8	0
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	8	<1
Water	%	ASTM D6304	>0.05	<b>0.009</b>	0.010	0.005
ppm Water	ppm	ASTM D6304	>500	<b>90.5</b>	108.8	58.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>136</b>	2866	312
Particles >6µm		ASTM D7647	>1300	<b>31</b>	848	103
Particles >14µm		ASTM D7647	>80	<b>3</b>	▲ 128	8
Particles >21µm		ASTM D7647	>20	<b>0</b>	▲ 47	3
Particles >38µm		ASTM D7647	>4	<b>0</b>	▲ 5	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	<b>12/9</b>	▲ 17/14	14/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	<b>0.396</b>	0.451	0.448

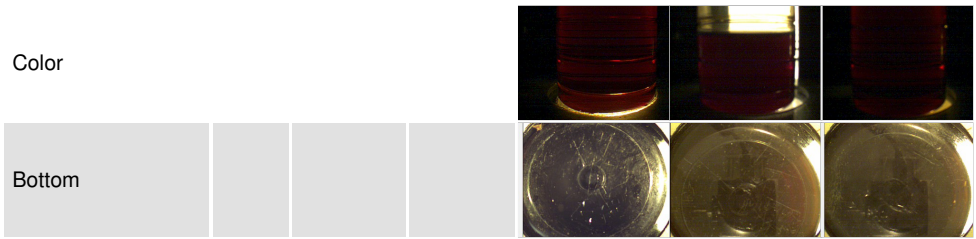
# OIL ANALYSIS REPORT



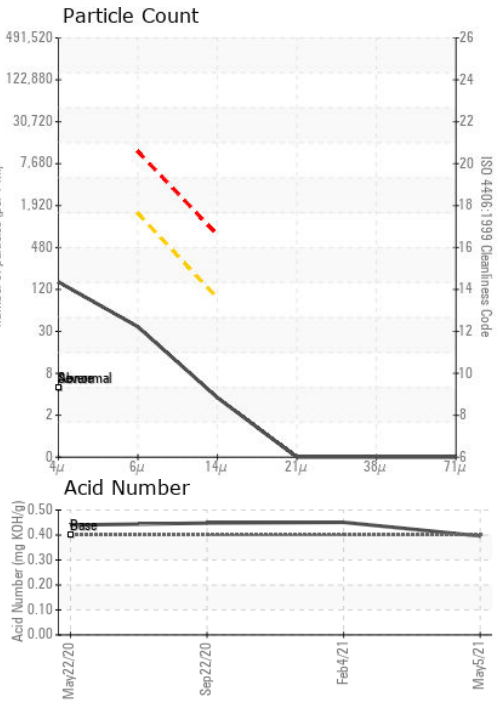
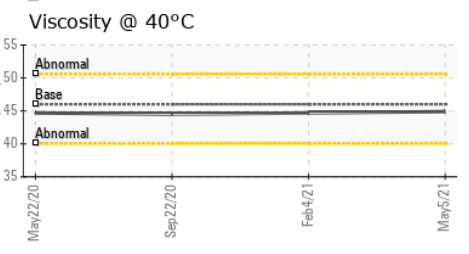
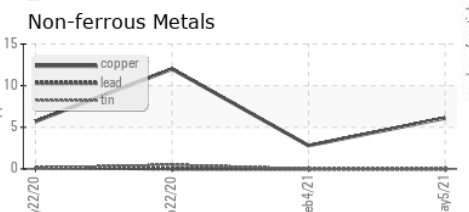
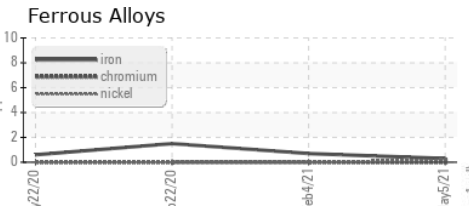
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.9	44.7	44.5

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KC86390  
**Lab Number** : 05270503  
**Unique Number** : 9529435  
**Test Package** : IND 2  
**Received** : 03 Jun 2021  
**Tested** : 07 Jun 2021  
**Diagnosed** : 08 Jun 2021 - Angela Borella

**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)