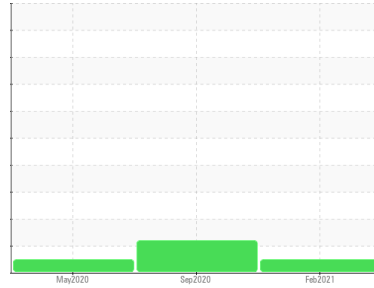




OIL ANALYSIS REPORT

Sample Rating Trend



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
 The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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		KC93997	KC84475	KC83606
Sample Date	Client Info		04 Feb 2021	22 Sep 2020	22 May 2020
Machine Age	hrs	Client Info	2693	1944	1437
Oil Age	hrs	Client Info	749	1944	1437
Oil Changed	Client Info		Not Changed	Changed	Not Changed
Sample Status			NORMAL	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	2	2
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	<1	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	<1	0	<1
Aluminum	ppm	ASTM D5185m >10	0	3	12
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	2	12	5
Tin	ppm	ASTM D5185m >10	0	<1	0
Antimony	ppm	ASTM D5185m	0	<1	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	12	<1
Barium	ppm	ASTM D5185m 90	47	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 90	73	<1	3
Calcium	ppm	ASTM D5185m 2	2	0	<1
Phosphorus	ppm	ASTM D5185m	<1	2	3
Zinc	ppm	ASTM D5185m	0	21	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	3	<1	<1
Sodium	ppm	ASTM D5185m	9	<1	0
Potassium	ppm	ASTM D5185m >20	10	<1	2
Water	%	ASTM D6304 >0.05	0.015	0.006	0.007
ppm Water	ppm	ASTM D6304 >500	153.3	67.7	75.5

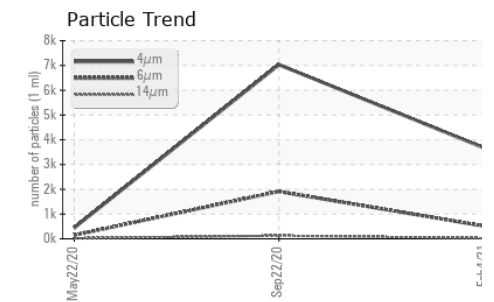
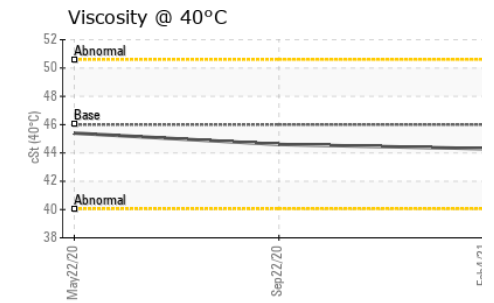
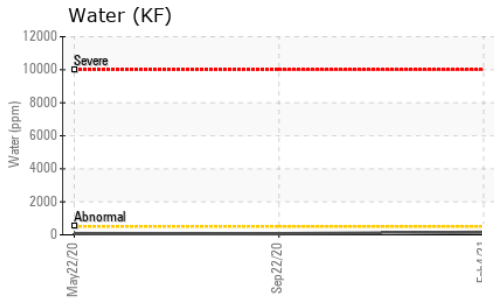
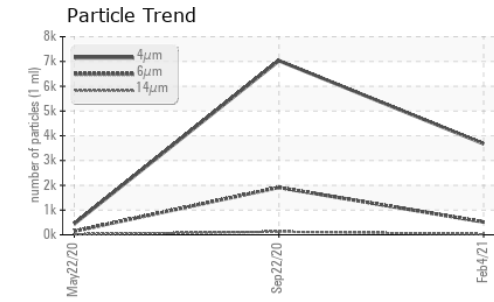
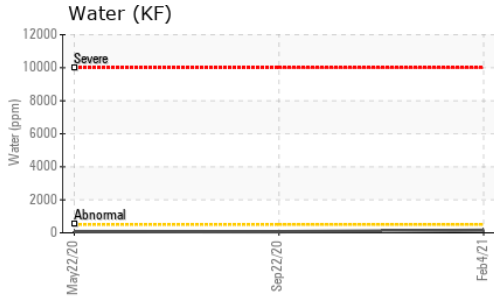
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		3676	7030	445
Particles >6µm	ASTM D7647 >1300		518	▲ 1912	143
Particles >14µm	ASTM D7647 >80		21	▲ 126	18
Particles >21µm	ASTM D7647 >20		5	▲ 32	4
Particles >38µm	ASTM D7647 >4		0	4	0
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	16/12	▲ 18/14	14/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.376	0.427	0.412

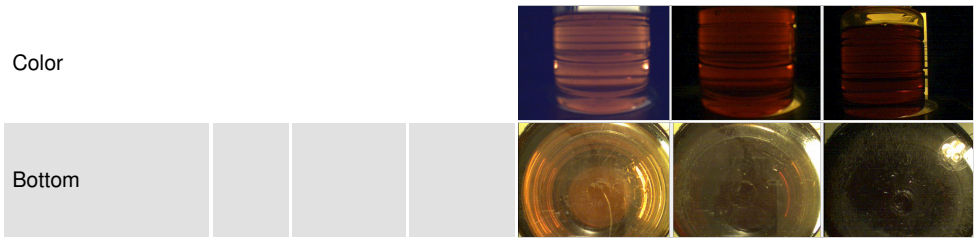
OIL ANALYSIS REPORT



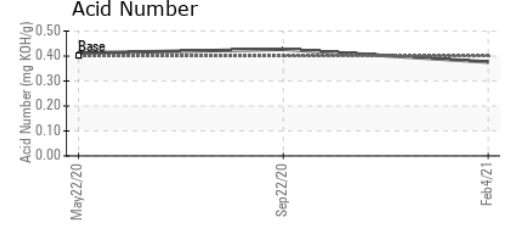
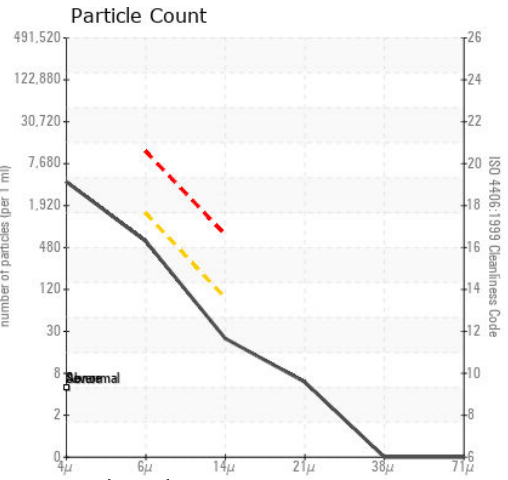
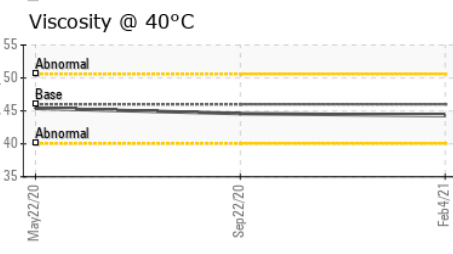
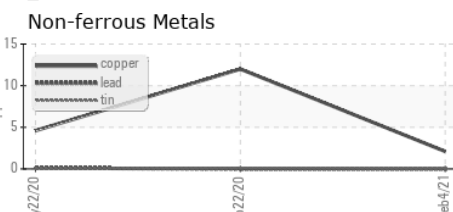
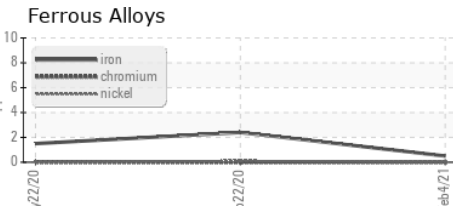
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	44.3	44.6	45.4

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC93997
Lab Number : 05181698
Unique Number : 9366987
Test Package : IND 2
Received : 12 Feb 2021
Tested : 15 Feb 2021
Diagnosed : 15 Feb 2021 - Don Baldrige

BETTCHEr INDUSTRIES
 6801 ST RT 60
 BIRMINGHAM, OH
 US 44889
 Contact: Service Manager

Certificate L2367
 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)

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