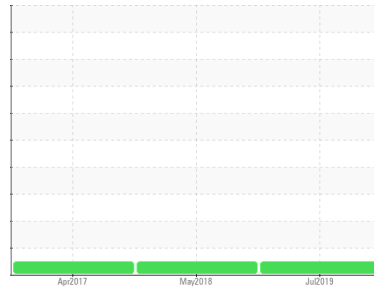


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER COMPRESSOR 3
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 component. The amount and size of particulates present in the system is acceptable.

Fluid Condition
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

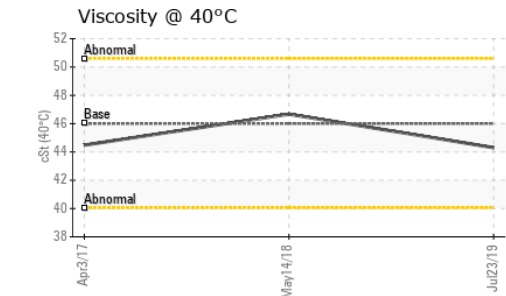
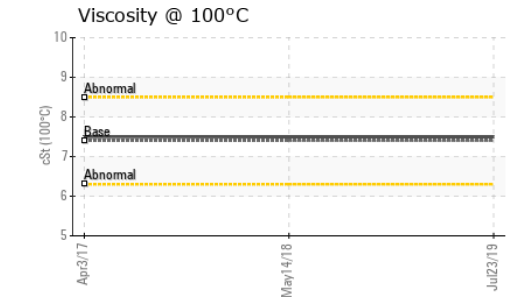
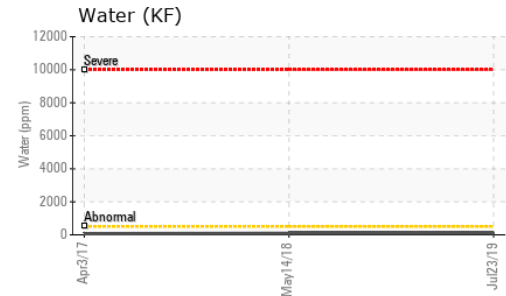
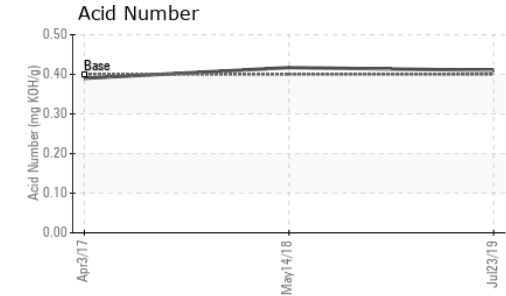
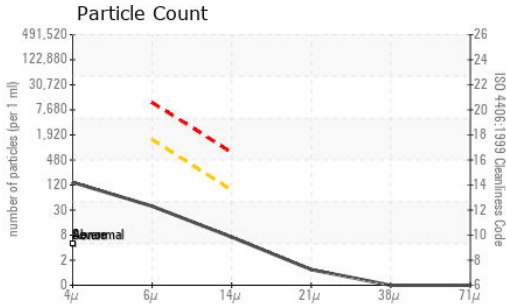
SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			TO5000386	TO5010096	TO5007959
Sample Date	Client Info			23 Jul 2019	14 May 2018	03 Apr 2017
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1	<1
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>50	7	6	8
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Antimony	ppm	ASTM D5185m		<1	0	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		0	0	0
Barium	ppm	ASTM D5185m	90	<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	90	0	<1	0
Calcium	ppm	ASTM D5185m	2	0	0	0
Phosphorus	ppm	ASTM D5185m		0	0	31
Zinc	ppm	ASTM D5185m		0	<1	5
Sulfur	ppm	ASTM D5185m		17168	11266	16610

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Sodium	ppm	ASTM D5185m		0	0	<1
Potassium	ppm	ASTM D5185m	>20	<1	0	0
Water	%	ASTM D6304	>0.05	0.010	0.009	0.007
ppm Water	ppm	ASTM D6304	>500	100	90	70

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		123	908	517
Particles >6µm	ASTM D7647	>1300	33	211	166
Particles >14µm	ASTM D7647	>80	6	16	28
Particles >21µm	ASTM D7647	>20	1	6	15
Particles >38µm	ASTM D7647	>4	0	2	4
Particles >71µm	ASTM D7647	>3	0	0	2
Oil Cleanliness	ISO 4406 (c)	>--/17/13	13/10/7	17/15/11	16/15/12
Particles 5-15µm	count	*NAS 1638 >1300	2587	---	11003
Particles 15-25µm	count	*NAS 1638 >80	475	---	58
Particles 25-50µm	count	*NAS 1638 >20	140	---	215
Particles 50-100µm	count	*NAS 1638 >4	0	---	171
Particles >100µm	count	*NAS 1638 >3	0	---	548
NAS Code	*NAS 1638	>--/17/13	5	---	12

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.410	0.417	0.390

VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.05	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.3	46.67	44.48
Visc @ 100°C	cSt	ASTM D445 7.4	7.5	7.5	7.49
Viscosity Index (VI)	Scale	ASTM D2270	135	125	134

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TO5000386 **Received** : 24 Jul 2019
Lab Number : **04761344** **Tested** : 26 Jul 2019
Unique Number : 8674070 **Diagnosed** : 26 Jul 2019 - Doug Bogart
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, PrtCountNAS, VI)

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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)