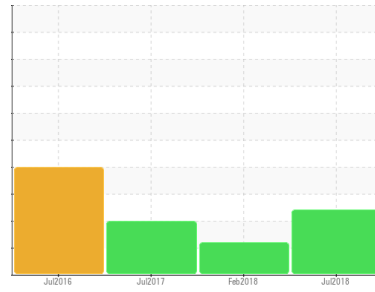




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER ASD 40S 5031175 (S/N 1032)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you stop the unit and follow the water drain-off procedure for this component. The filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a trace of moisture present 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			KC78371	KC80092	KC35319
Sample Date	Client Info			18 Jul 2018	19 Feb 2018	13 Jul 2017
Machine Age	hrs	Client Info		17320	15422	12678
Oil Age	hrs	Client Info		1898	2744	4581
Oil Changed	Client Info			Not Chngd	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	<1	0
Lead	ppm	ASTM D5185m	>10	0	1	0
Copper	ppm	ASTM D5185m	>50	16	9	9
Tin	ppm	ASTM D5185m	>10	0	0	<1
Antimony	ppm	ASTM D5185m		0	5	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0

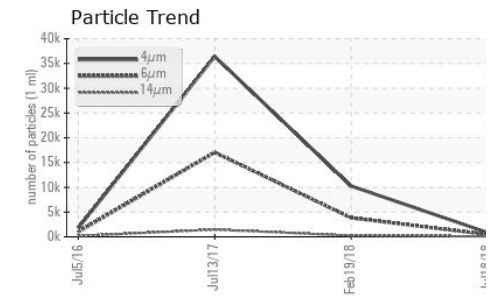
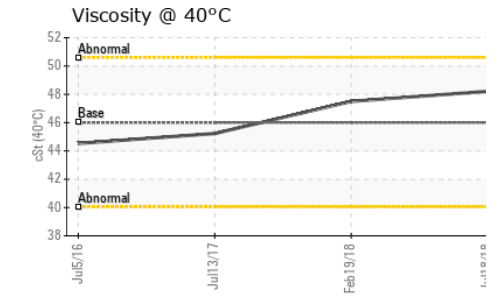
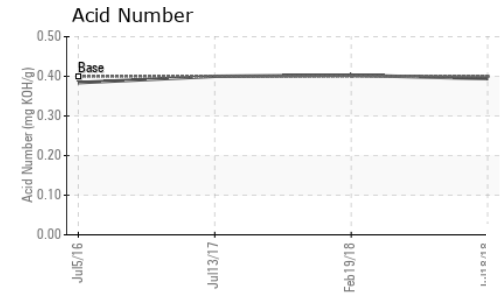
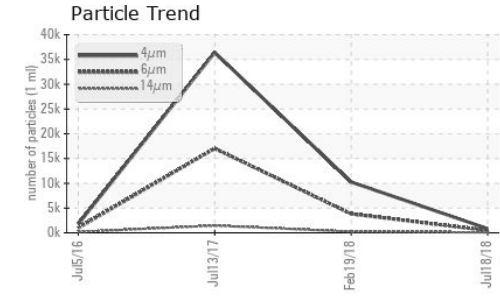
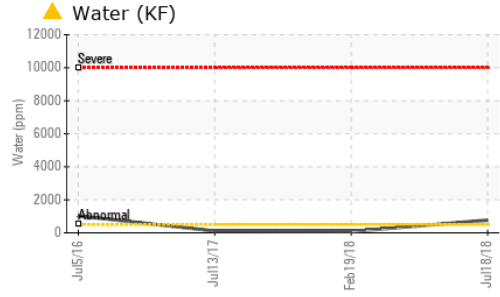
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	90	<1	0	0
Calcium	ppm	ASTM D5185m	2	1	0	0
Phosphorus	ppm	ASTM D5185m		2	4	1
Zinc	ppm	ASTM D5185m		42	<1	0

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	1
Sodium	ppm	ASTM D5185m		1	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	6	<1
Water	%	ASTM D6304	>0.05	▲ 0.077	0.008	0.011
ppm Water	ppm	ASTM D6304	>500	▲ 770	80	110

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		833	10253	36405
Particles >6µm		ASTM D7647	>1300	453	▲ 3825	▲ 17037
Particles >14µm		ASTM D7647	>80	77	▲ 235	▲ 1456
Particles >21µm		ASTM D7647	>20	26	▲ 69	▲ 133
Particles >38µm		ASTM D7647	>4	4	6	▲ 6
Particles >71µm		ASTM D7647	>3	0	1	▲ 5
Oil Cleanliness		ISO 4406 (c)	>17/13	16/13	▲ 19/15	▲ 21/18

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.394	0.403	0.400

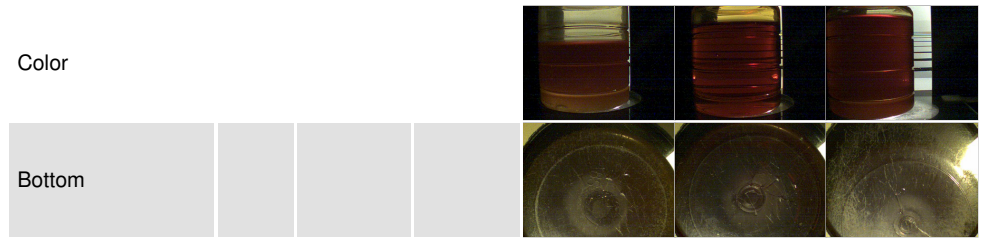
OIL ANALYSIS REPORT



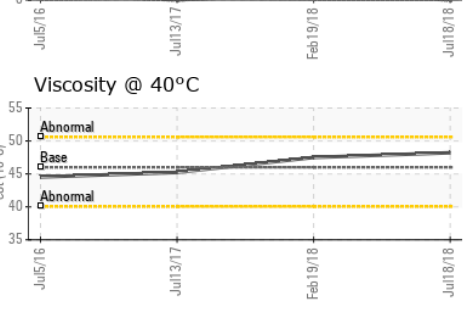
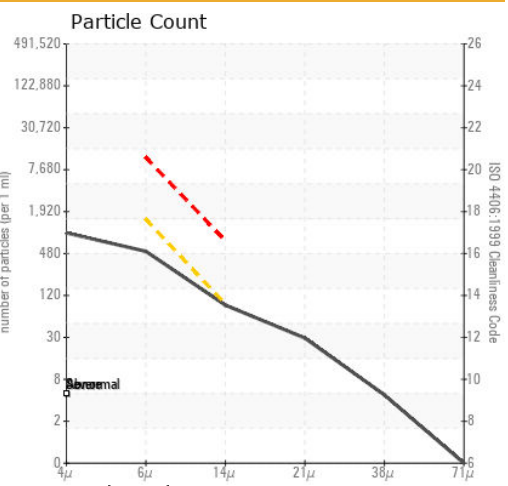
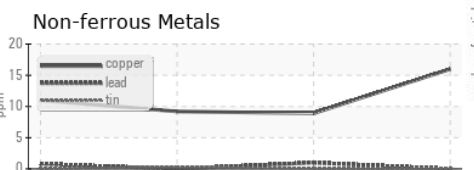
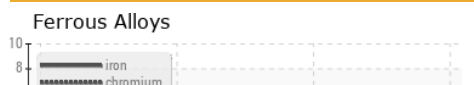
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	VLITE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	HAZY	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	0.1%	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	48.21	47.5	45.23

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC78371
Lab Number : 04524705
Unique Number : 8288535
Test Package : IND 2
Received : 06 Aug 2018
Tested : 07 Aug 2018
Diagnosed : 07 Aug 2018 - Jonathan Hester

CINTAS
 625 ELMWOOD PKWY
 HARAHAN, LA
 US 70123
 Contact:

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)