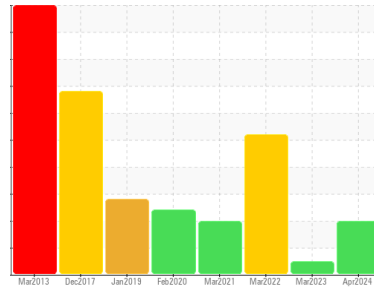




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER SM 10 3041647 (S/N 1163)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation
 We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear
 All component wear rates are normal.

Contamination
 There is a high 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	KCPA017189	KCPA001539	KCP35330
Sample Date	Client Info	11 Apr 2024	23 Mar 2023	01 Mar 2022
Machine Age	hrs	40152	32429	34795
Oil Age	hrs	2723	0	3000
Oil Changed	Client Info	N/A	N/A	Changed
Sample Status		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	<1	0	6
Chromium	ppm	ASTM D5185m >10	<1	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	<1	<1	0
Silver	ppm	ASTM D5185m >2	<1	0	<1
Aluminum	ppm	ASTM D5185m >10	3	<1	2
Lead	ppm	ASTM D5185m >10	<1	0	0
Copper	ppm	ASTM D5185m >50	6	6	9
Tin	ppm	ASTM D5185m >10	<1	0	0
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	0	2
Barium	ppm	ASTM D5185m 90	2	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	<1
Magnesium	ppm	ASTM D5185m 90	63	42	48
Calcium	ppm	ASTM D5185m 2	0	<1	0
Phosphorus	ppm	ASTM D5185m	0	0	1
Zinc	ppm	ASTM D5185m	4	0	15
Sulfur	ppm	ASTM D5185m	19818	22196	16472

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	23	17	20
Sodium	ppm	ASTM D5185m	20	18	9
Potassium	ppm	ASTM D5185m >20	5	<1	2
Water	%	ASTM D6304 >0.05	0.016	0.026	▲ 0.491
ppm Water	ppm	ASTM D6304 >500	163	265.5	▲ 4910

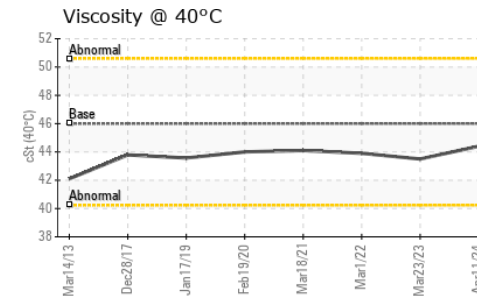
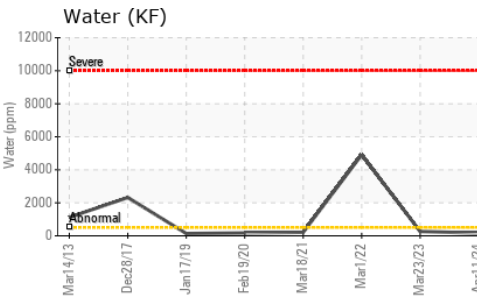
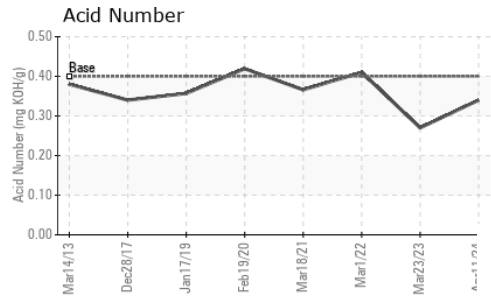
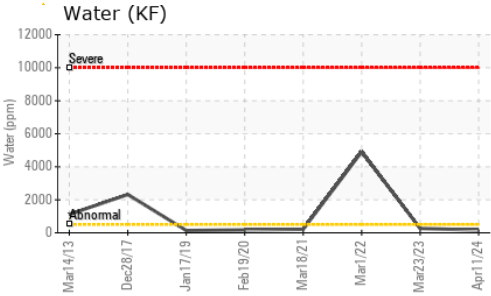
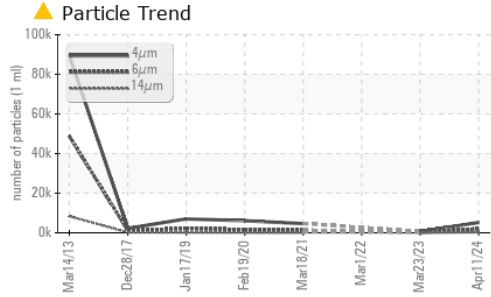
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	5219	683	---
Particles >6µm	ASTM D7647 >1300	▲ 1973	220	---
Particles >14µm	ASTM D7647 >80	▲ 271	29	---
Particles >21µm	ASTM D7647 >20	▲ 94	8	---
Particles >38µm	ASTM D7647 >4	▲ 6	0	---
Particles >71µm	ASTM D7647 >3	1	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 20/18/15	17/15/12	---

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.34	0.27	0.41

OIL ANALYSIS REPORT



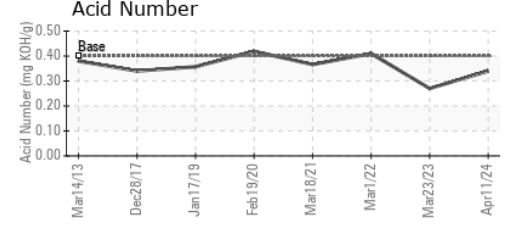
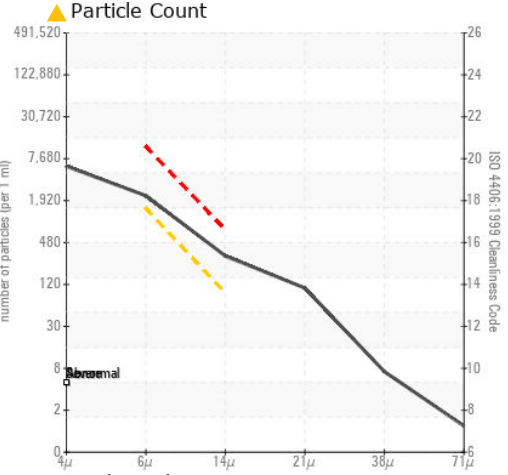
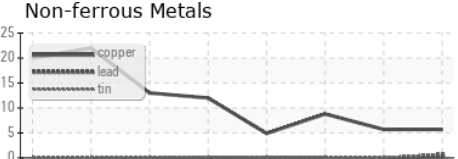
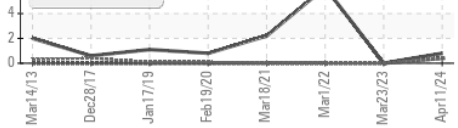
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	▲ MODER
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	▲ 1.0

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.4	43.5	43.9

SAMPLE IMAGES

method	limit/base	current	history1	history2
Color				
Bottom				

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017189
Lab Number : 06156956
Unique Number : 10992379
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 25 Apr 2024 - Jonathan Hester

TIDE DRY CLEANERS
 13420 ROE AVE
 LEAWOOD, KS
 US 66209
 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)