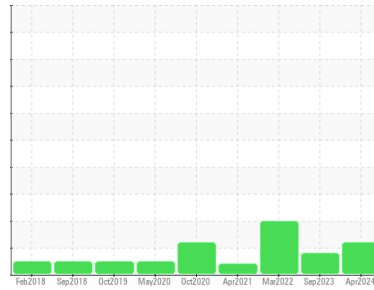




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER ASV40 4658950 (S/N 1014)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- QTS)

DIAGNOSIS

Recommendation

Oil and 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 acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		KCPA016809	KCPA000944	KCP38179
Sample Date	Client Info		15 Apr 2024	21 Sep 2023	11 Mar 2022
Machine Age	hrs	Client Info	32699	28964	18027
Oil Age	hrs	Client Info	6462	0	6194
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS

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

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1
Barium	ppm	ASTM D5185m 90	115	85	121
Molybdenum	ppm	ASTM D5185m	<1	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m 90	112	90	121
Calcium	ppm	ASTM D5185m 2	0	0	7
Phosphorus	ppm	ASTM D5185m	0	0	12
Zinc	ppm	ASTM D5185m	0	0	<1
Sulfur	ppm	ASTM D5185m	15228	16139	14209

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	<1
Sodium	ppm	ASTM D5185m	18	7	21
Potassium	ppm	ASTM D5185m >20	4	0	2
Water	%	ASTM D6304 >0.05	0.027	0.022	▲ 0.061
ppm Water	ppm	ASTM D6304 >500	278	220.5	▲ 612.9

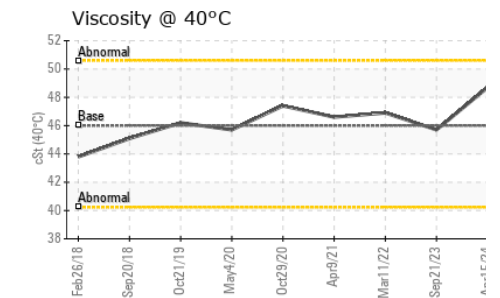
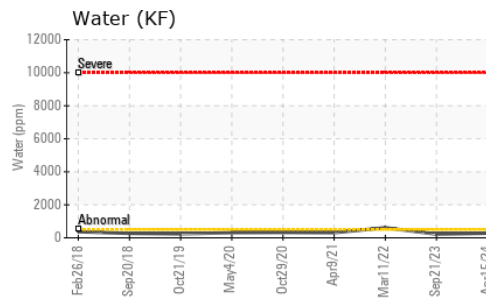
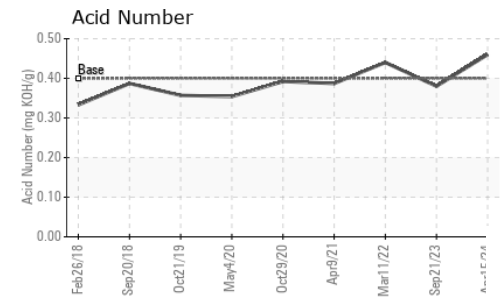
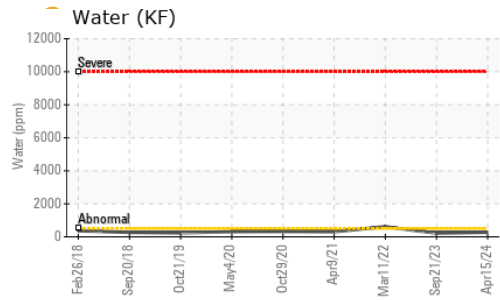
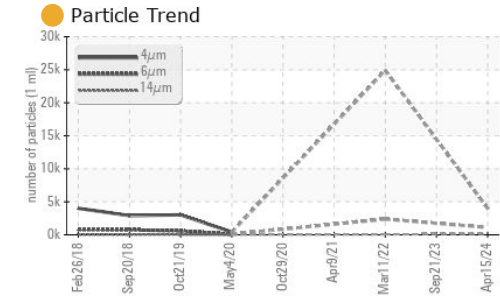
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		4024	---	24916
Particles >6µm	ASTM D7647 >1300		1106	---	● 2380
Particles >14µm	ASTM D7647 >80		● 125	---	69
Particles >21µm	ASTM D7647 >20		● 39	---	14
Particles >38µm	ASTM D7647 >4		2	---	0
Particles >71µm	ASTM D7647 >3		0	---	0
Oil Cleanliness	ISO 4406 (c) >17/13		● 17/14	---	● 18/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.46	0.38	0.44

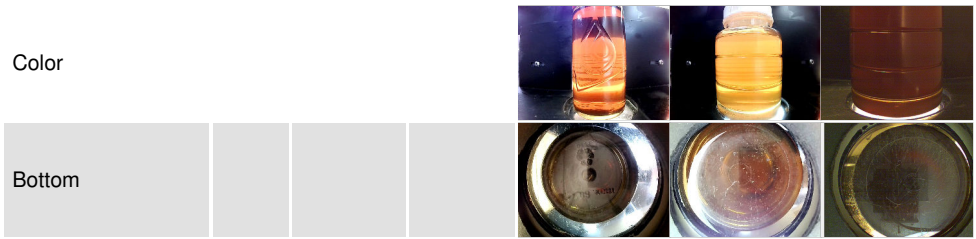
OIL ANALYSIS REPORT



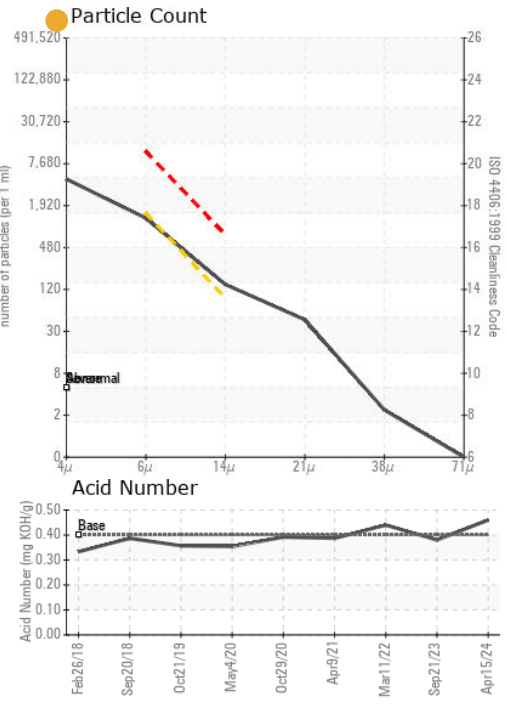
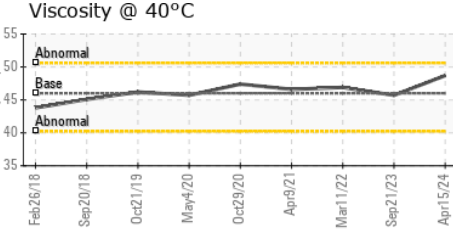
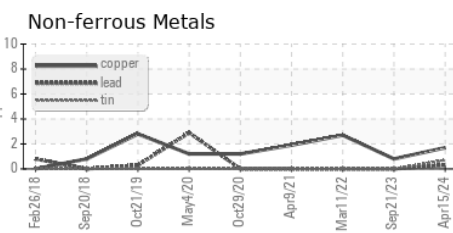
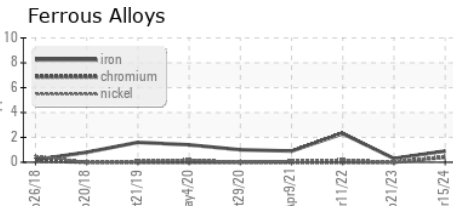
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	48.7	45.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016809
Lab Number : 06156930
Unique Number : 10992353
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 22 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Angela Borella

CBRE GWS LLC
 1834 SH 71 W
 CEDAR CREEK, TX
 US 78612
 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)