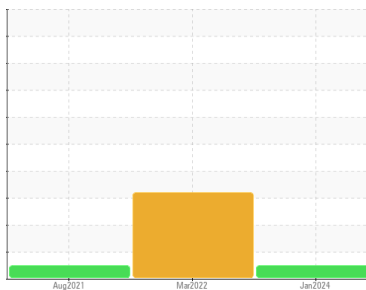


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

KAESER 7453651

Component

Compressor

Fluid

KAESER SIGMA (OEM) S-460 (--- QTS)

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 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			KC126771	KC104149	KC93065
Sample Date	Client Info			12 Jan 2024	23 Mar 2022	30 Aug 2021
Machine Age	hrs	Client Info		2162	964	508
Oil Age	hrs	Client Info		0	456	508
Oil Changed	Client Info			N/A	Not Changd	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

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	0	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
Lead	ppm	ASTM D5185m	>10	0	1	1
Copper	ppm	ASTM D5185m	>50	7	2	2
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

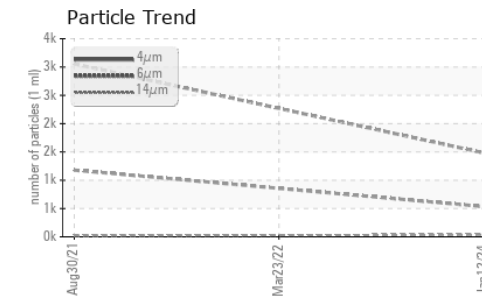
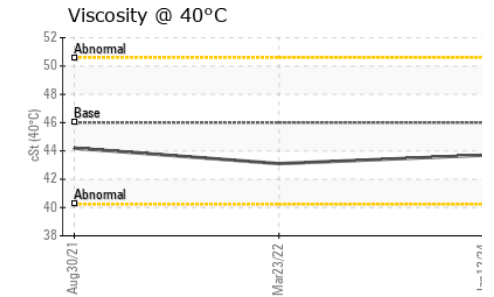
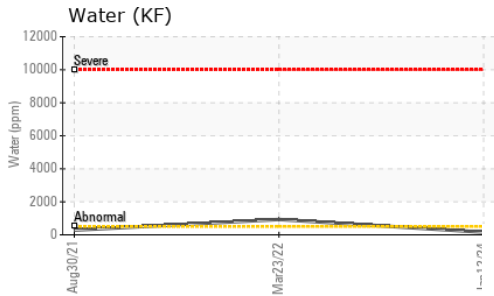
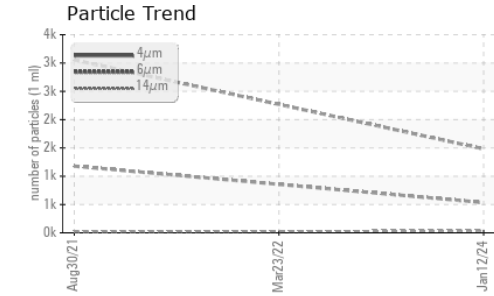
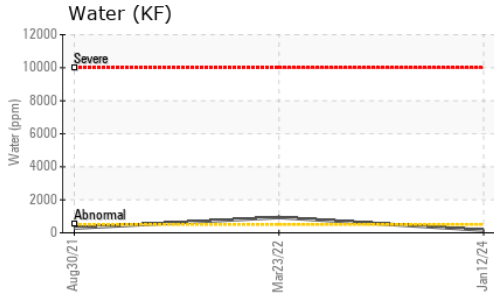
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	<1	0
Barium	ppm	ASTM D5185m	90	<1	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	90	29	46	52
Calcium	ppm	ASTM D5185m	2	4	0	0
Phosphorus	ppm	ASTM D5185m		2	9	6
Zinc	ppm	ASTM D5185m		25	3	17

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	1	<1
Sodium	ppm	ASTM D5185m		15	<1	12
Potassium	ppm	ASTM D5185m	>20	4	2	2
Water	%	ASTM D6304	>0.05	0.015	▲ 0.093	0.028
ppm Water	ppm	ASTM D6304	>500	158	▲ 930	285.5

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		1483	---	3055
Particles >6µm		ASTM D7647	>1300	534	---	1178
Particles >14µm		ASTM D7647	>80	35	---	20
Particles >21µm		ASTM D7647	>20	5	---	6
Particles >38µm		ASTM D7647	>4	0	---	0
Particles >71µm		ASTM D7647	>3	0	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	18/16/12	---	17/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.26	0.32	0.291

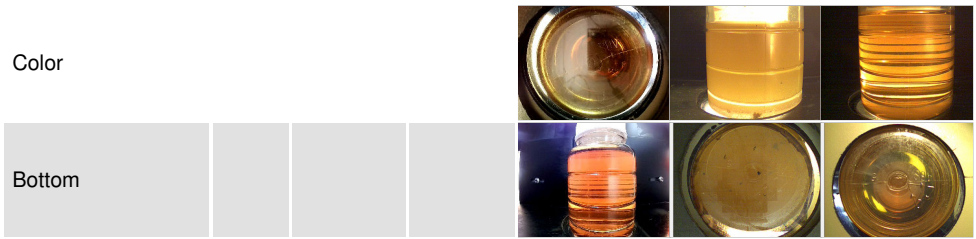
OIL ANALYSIS REPORT



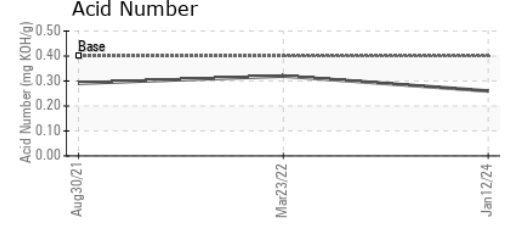
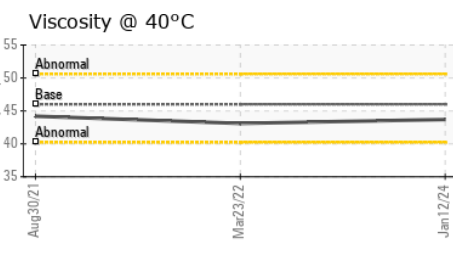
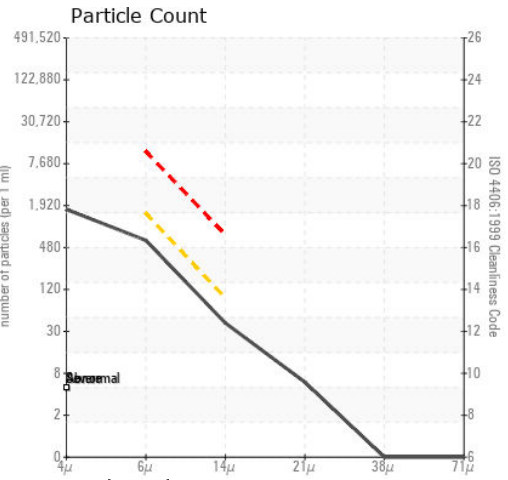
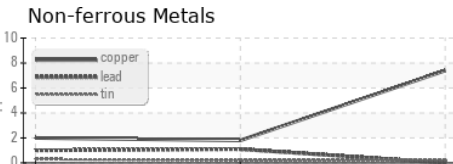
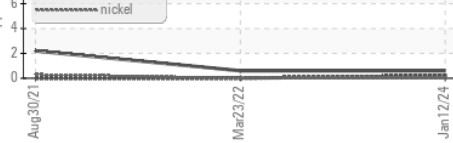
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	43.7	43.1	44.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
---------------	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC126771
Lab Number : 06142222
Unique Number : 10967030
Test Package : IND 2
Received : 08 Apr 2024
Tested : 11 Apr 2024
Diagnosed : 11 Apr 2024 - Don Baldrige

FEDEX GROUND
 3120 ANVIL BLOCK RD
 ELLENWOOD, GA
 US 30294
 Contact: AARON LABOUR
 aaron.labour@fedex.com

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)