OIL ANALYSIS REPORT
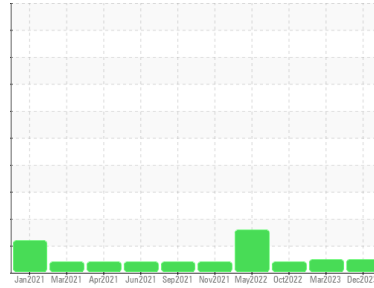
KAESER COMPRESSORS — Built for a lifetime.™

Sample Rating Trend

NORMAL ✓

Machine Id
KAESER DSD 250 7450579 (S/N 1134)
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 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		**KC121149**	KCP54563	KC106993
Sample Date	Client Info		**29 Dec 2023**	30 Mar 2023	18 Oct 2022
Machine Age	hrs Client Info		**29975**	23446	19595
Oil Age	hrs Client Info		**0**	8455	2731
Oil Changed	Client Info		**N/A**	Changed	Not Changd
Sample Status			**NORMAL**	NORMAL	ABNORMAL

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**	0	0
Titanium	ppm	ASTM D5185m	>3	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>10	**2**	0	0
Lead	ppm	ASTM D5185m	>10	**0**	0	0
Copper	ppm	ASTM D5185m	>50	**12**	7	16
Tin	ppm	ASTM D5185m	>10	**2**	3	2
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	**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	0	0
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m	90	**<1**	<1	<1
Calcium	ppm	ASTM D5185m	2	**0**	0	0
Phosphorus	ppm	ASTM D5185m		**27**	1	1
Zinc	ppm	ASTM D5185m		**0**	0	0

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**0**	0	0
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**1**	0	1
Water	%	ASTM D6304	>0.05	**0.008**	0.004	0.007
ppm Water	ppm	ASTM D6304	>500	**84**	48.2	74.1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**968**	1261	---
Particles >6µm		ASTM D7647	>1300	**119**	240	---
Particles >14µm		ASTM D7647	>80	**6**	14	---
Particles >21µm		ASTM D7647	>20	**2**	5	---
Particles >38µm		ASTM D7647	>4	**0**	1	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**17/14/10**	17/15/11	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.44**	0.46	0.47

OIL ANALYSIS REPORT

Charts (left column)

Water (KF) — Water (ppm) vs dates (Jan20/21 – Dec29/23), Severe (red) ~10000, Abnormal (yellow)

Particle Trend — number of particles (1 ml): 4µm, 6µm, 14µm

Water (KF) — Water (ppm), Severe ~10000, Abnormal

Viscosity @ 40°C — cSt (40°C): Abnormal ~51, Base ~46, Abnormal ~40

Particle Trend — number of particles (1 ml): 4µm, 6µm, 14µm
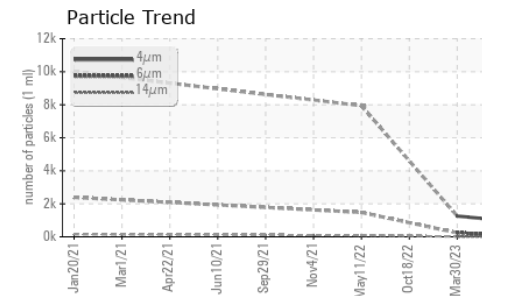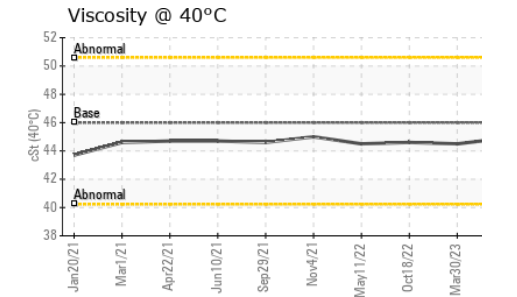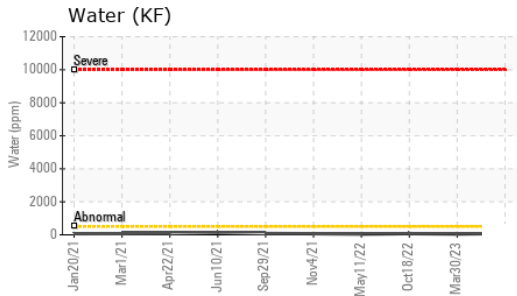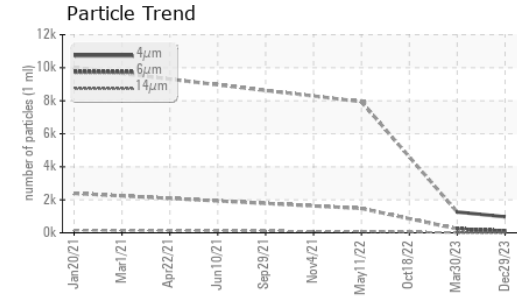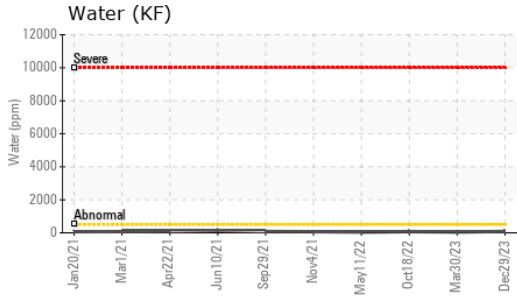
VISUAL

VISUAL	method		limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**LIGHT**	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	⚠ MODER
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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**44.9**	44.5	44.6

SAMPLE IMAGES

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					
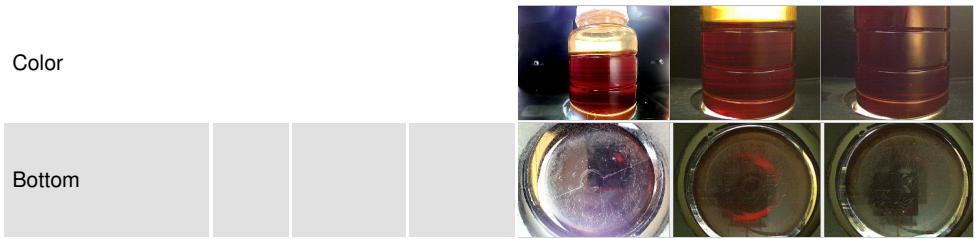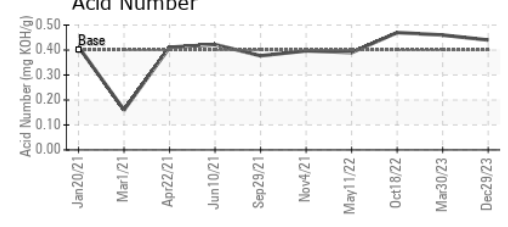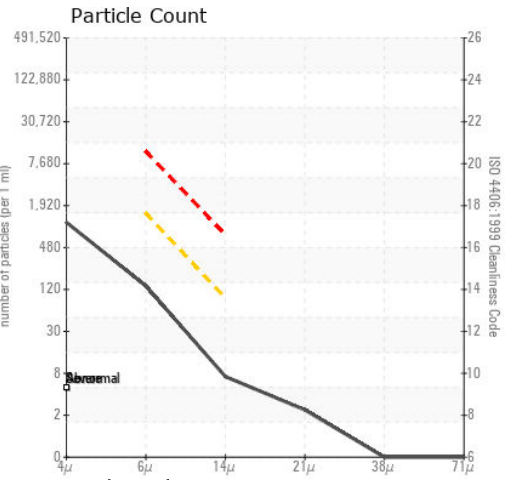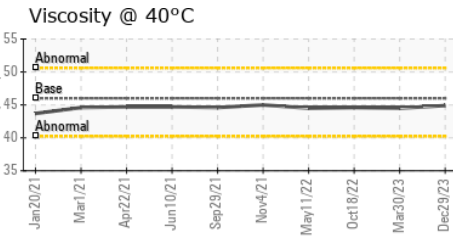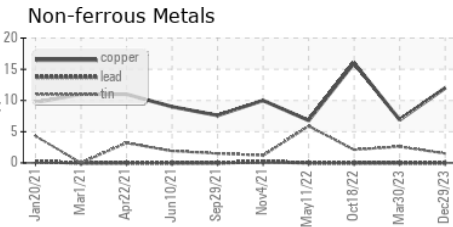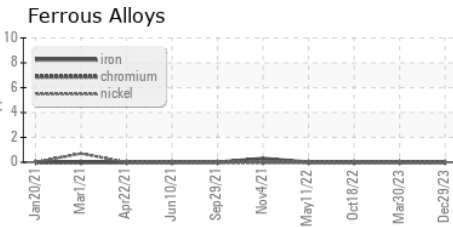
GRAPHS

Ferrous Alloys — ppm: iron, chromium, nickel

Non-ferrous Metals — ppm: copper, lead, tin

Viscosity @ 40°C — cSt (40°C): Abnormal ~51, Base ~45, Abnormal ~40

Particle Count — number of particles (per 1 ml) vs 4µ, 6µ, 14µ, 21µ, 38µ, 71µ; ISO 4406:1999 Cleanliness Code

Acid Number — Acid Number (mg KOH/g): Base ~0.40

CHARLOTTE PIPE & FOUNDRY COMPANY
4210 OLD CHARLOTTE HWY
MONROE, NC
US 28110
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)

T:
F: