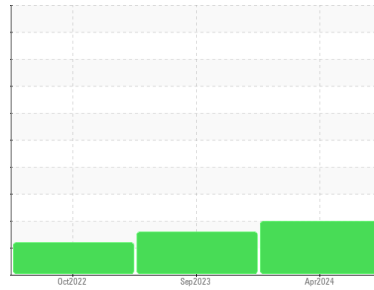




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER AS20T 8380762 (S/N 1355)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

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 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		KCPA016966	KCP40031D	KCP40958
Sample Date	Client Info		03 Apr 2024	19 Sep 2023	04 Oct 2022
Machine Age	hrs	Client Info	16047	11322	3330
Oil Age	hrs	Client Info	4725	7000	3330
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	0	<1
Chromium	ppm	ASTM D5185m >10	<1	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	0	0	<1
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	4	23	3
Tin	ppm	ASTM D5185m >10	<1	<1	0
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	0
Barium	ppm	ASTM D5185m 90	77	0	46
Molybdenum	ppm	ASTM D5185m 0	0	<1	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 100	81	3	60
Calcium	ppm	ASTM D5185m 0	1	<1	4
Phosphorus	ppm	ASTM D5185m 0	2	4	4
Zinc	ppm	ASTM D5185m 0	1	6	7
Sulfur	ppm	ASTM D5185m 23500	22239	22791	21442

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	<1	2
Sodium	ppm	ASTM D5185m	31	3	14
Potassium	ppm	ASTM D5185m >20	7	1	22
Water	%	ASTM D6304 >0.05	0.013	▲ 0.074	0.012
ppm Water	ppm	ASTM D6304 >500	136	▲ 740	124.2

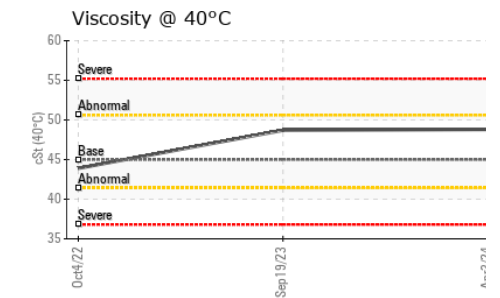
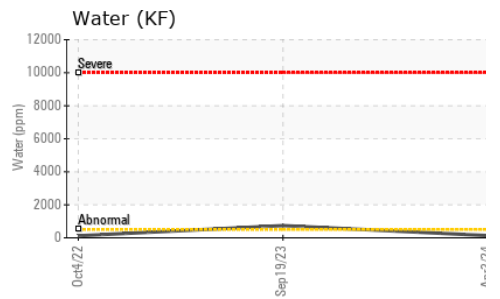
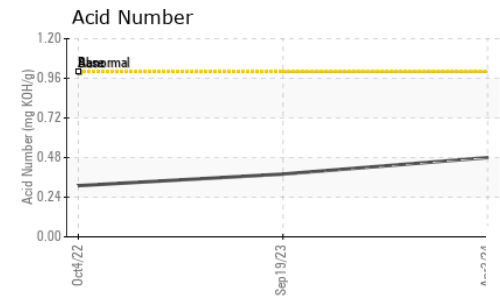
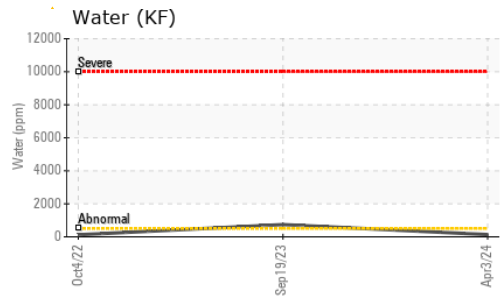
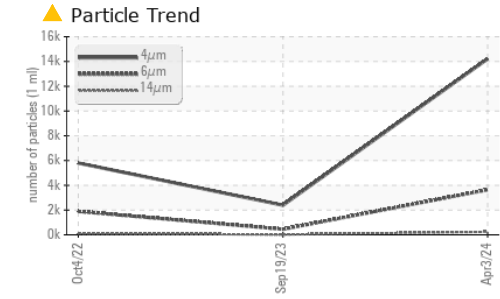
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		14214	2391	5797
Particles >6µm	ASTM D7647	>1300	▲ 3634	450	● 1894
Particles >14µm	ASTM D7647	>80	▲ 240	21	● 109
Particles >21µm	ASTM D7647	>20	▲ 65	4	12
Particles >38µm	ASTM D7647	>4	▲ 5	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 21/19/15	18/16/12	● 20/18/14

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.48	0.38	0.31

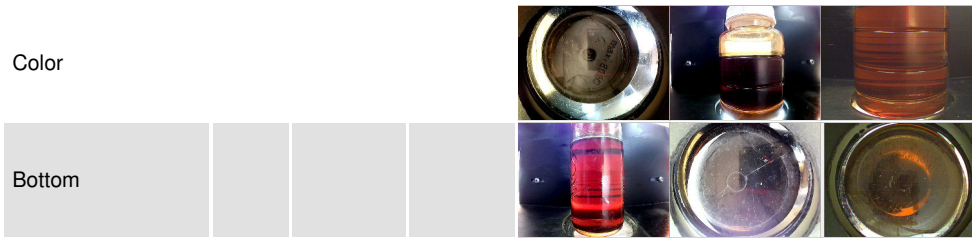
OIL ANALYSIS REPORT



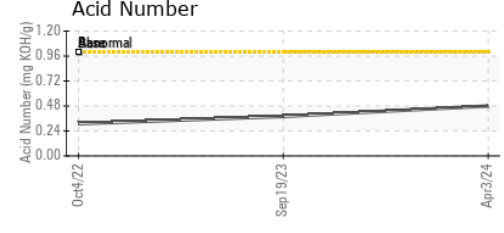
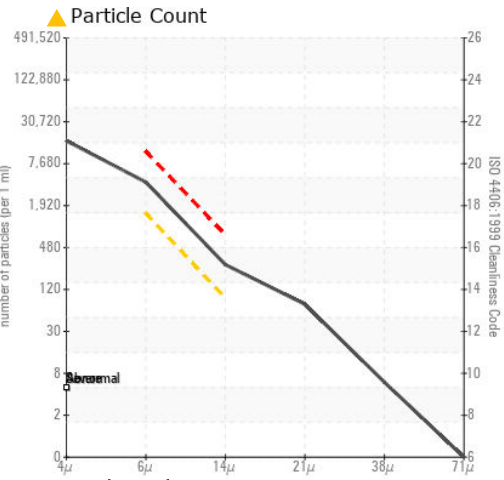
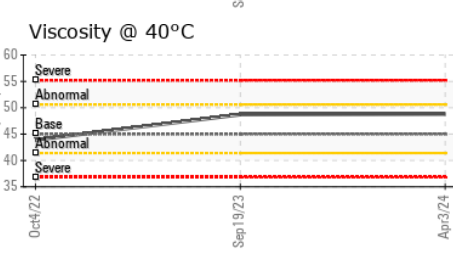
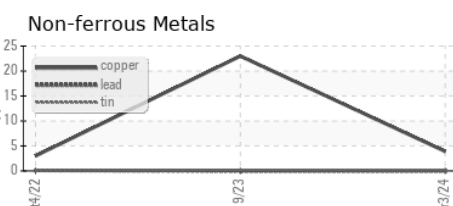
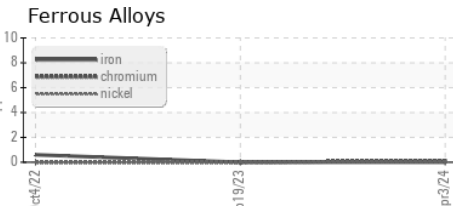
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.8	48.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016966 **Received** : 09 Apr 2024
Lab Number : 06143712 **Tested** : 10 Apr 2024
Unique Number : 10968520 **Diagnosed** : 12 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OLIVER MANUFACTURING
 27151 HARRIS RD
 LA JUNTA, CO
 US 81050

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: PURCHASING
 purchasing@olivermanufacturing.com

* - 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)