

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

KAESER 4869637

Component Compressor Fluid KAESER SIGMA (OEM) FG-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

🔺 Wear

The aluminum level is abnormal. All other component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.

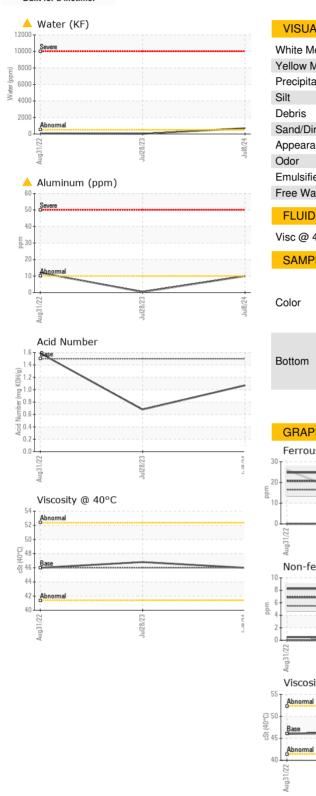
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

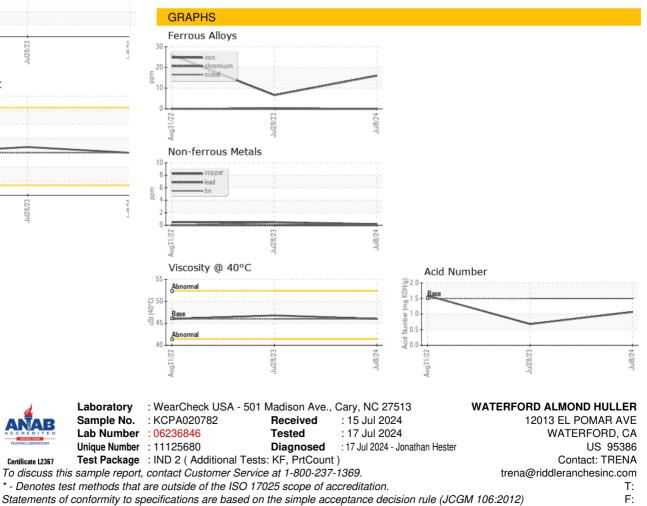
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		KCPA020782	KCPA004349	KCP31961
Sample Date		Client Info		08 Jul 2024	28 Jul 2023	31 Aug 2022
Machine Age	hrs	Client Info		11270	10683	8565
Oil Age	hrs	Client Info		600	0	2000
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	16	7	26
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	<u> </u>	<1	<u>▲</u> 12
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 0	history1 0	history2 0
	ppm ppm		limit/base			
Boron		ASTM D5185m	limit/base	0 0 0	0	0
Boron Barium	ppm	ASTM D5185m ASTM D5185m	limit/base	0 0	0	0
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0	0 0 0 0	0 0 0
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1	0 0 0 <1	0 0 0 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	0 0 0 <1 0	0 0 0 <1 3	0 0 0 <1 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 <1 0 0	0 0 0 <1 3 0	0 0 0 <1 0 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 <1 0 0 437	0 0 <1 3 0 291	0 0 <1 0 0 515
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m		0 0 0 <1 0 0 437 343	0 0 <1 3 0 291 329	0 0 0 <1 0 0 515 545
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	500	0 0 2 3 1 0 0 4 3 7 3 4 3 4 3 4 3 2 0 2 9 2 0 2 9 2 2 2 9 2 2 2 2 9 2 2 2 2	0 0 () () () () () () () () () () () () ()	0 0 0 <1 0 0 515 545 2421 history2 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	500 limit/base	0 0 2 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4 3 4	0 0 () () () () () () () () () () () () ()	0 0 0 <1 0 0 515 545 2421 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	500 limit/base >25 >20	0 0 0 <1 0 0 437 343 2029 current <1 3 2	0 0 () () () () () () () () () () () () ()	0 0 0 <1 0 0 515 545 2421 history2 <1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	500 limit/base >25	0 0 0 <1 0 0 437 343 2029 current <1 3	0 0 0 <1 3 0 291 329 2129 2129 history1 <1 2	0 0 0 <1 0 0 515 545 2421 history2 <1 5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	500 limit/base >25 >20	0 0 0 <1 0 0 437 343 2029 current <1 3 2	0 0 291 329 2129 history1 <1 2 1	0 0 0 <1 0 0 515 545 2421 history2 <1 5 0
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	500 limit/base >25 >20 >0.05	0 0 0 <1 0 0 437 343 2029 current <1 3 2 2 0.070	0 0 (1 3 0 291 329 2129 history1 <1 2 1 0.002	0 0 0 <1 0 0 515 545 2421 history2 <1 5 0 0 0.005



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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	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	A MODER	🔺 MODER	🔺 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	0.2%	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
∕isc @ 40°C	cSt	ASTM D445	46	46.0	46.8	46.0
SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						



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Certificate 12367

Contact/Location: TRENA ? - WATWATCAL