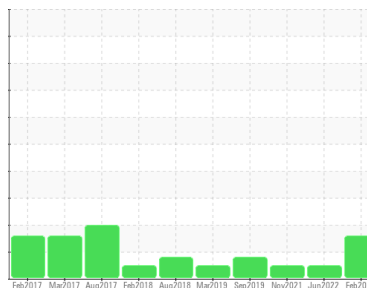


Machine Id
KAESER CSD 75T 3089130 (S/N 1104)

Component
Compressor

Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)



DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. 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		KCP49147	KCP51922	KCP11965
Sample Date	Client Info		10 Feb 2023	23 Jun 2022	05 Nov 2021
Machine Age	hrs	Client Info	23155	22418	22377
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	1	<1	2
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	0	<1	1
Lead	ppm	ASTM D5185m >10	0	<1	0
Copper	ppm	ASTM D5185m >50	2	2	7
Tin	ppm	ASTM D5185m >10	0	<1	<1
Antimony	ppm	ASTM D5185m	---	---	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
Barium	ppm	ASTM D5185m 90	<1	41	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 90	61	62	32
Calcium	ppm	ASTM D5185m 2	1	1	0
Phosphorus	ppm	ASTM D5185m	4	11	2
Zinc	ppm	ASTM D5185m	25	10	32
Sulfur	ppm	ASTM D5185m	18328	21472	15971

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	<1	<1
Sodium	ppm	ASTM D5185m	20	4	12
Potassium	ppm	ASTM D5185m >20	4	2	0
Water	%	ASTM D6304 >0.05	0.027	0.044	0.017
ppm Water	ppm	ASTM D6304 >500	279.0	442.8	172.5

FLUID CLEANLINESS

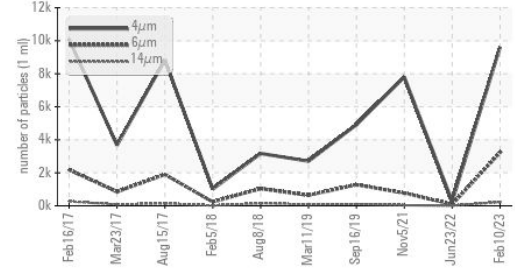
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		9616	268	7801
Particles >6µm	ASTM D7647 >1300		▲ 3229	87	773
Particles >14µm	ASTM D7647 >80		▲ 226	9	34
Particles >21µm	ASTM D7647 >20		▲ 41	3	12
Particles >38µm	ASTM D7647 >4		3	0	0
Particles >71µm	ASTM D7647 >3		0	0	0
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/19/15	15/14/10	17/12

FLUID DEGRADATION

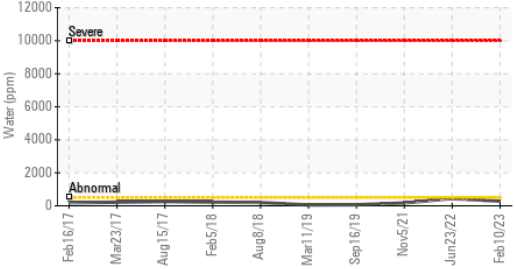
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.35	0.43	0.325

OIL ANALYSIS REPORT

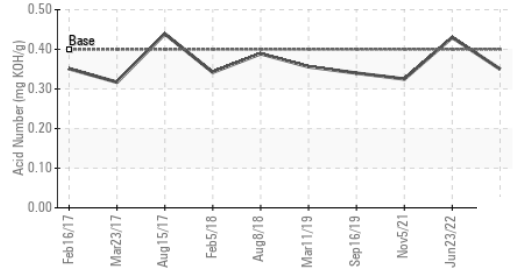
▲ Particle Trend



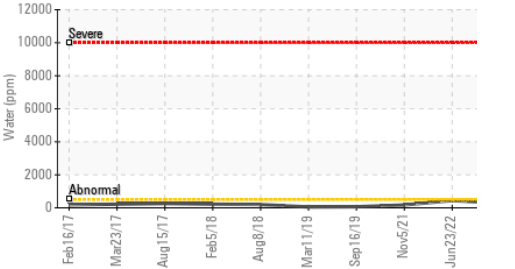
Water (KF)



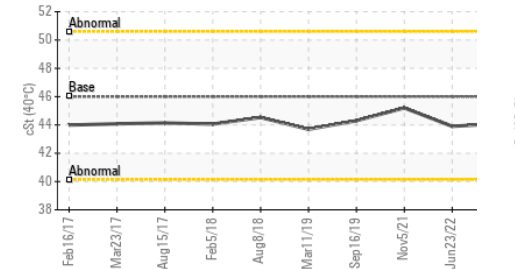
Acid Number



Water (KF)



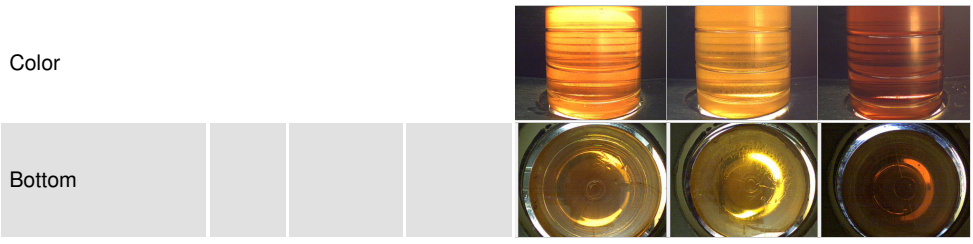
Viscosity @ 40°C



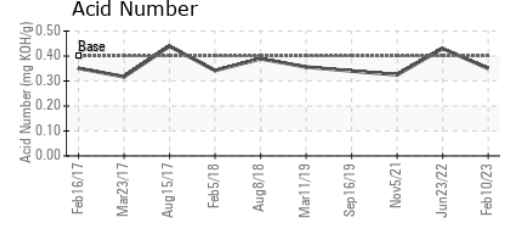
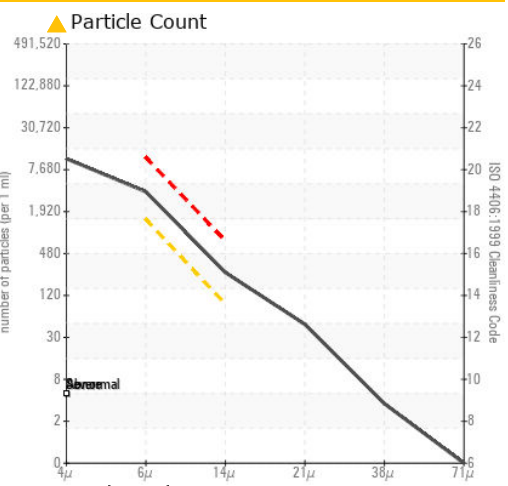
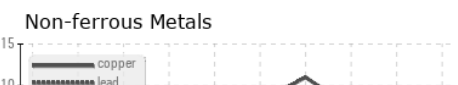
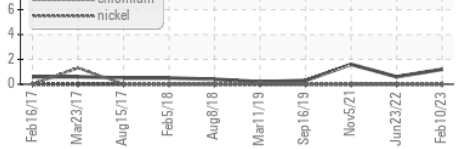
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	44.1	43.9

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCP49147 **Received** : 25 Apr 2023
Lab Number : 05829595 **Diagnosed** : 27 Apr 2023
Unique Number : 10443088 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ZODIAC ENT LLC - BASF MOBILE EMISSIONS CATALYSTS
 1112 INDUSTRIAL BLVD
 CALDWELL, TX
 US 77836
 Contact: DONOVAN KNIGHT
 donovan.knight@basf-catalystsmetals.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)