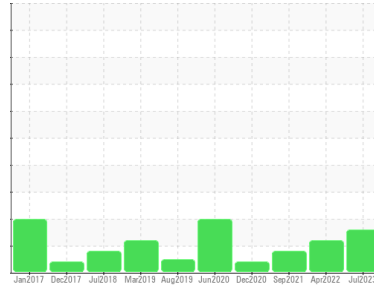




PROBLEM SUMMARY

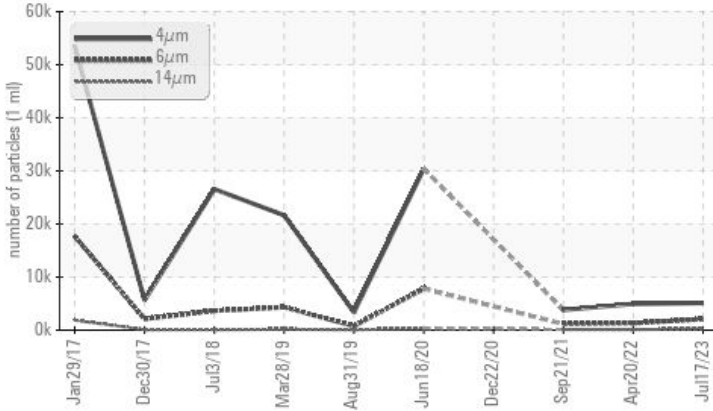
Sample Rating Trend



Machine Id
KAESER CSD 75 5461225 (S/N 1018)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ATTENTION	ATTENTION
Particles >6µm	ASTM D7647	>1300	▲ 2074	▲ 1321	1151
Particles >14µm	ASTM D7647	>80	▲ 211	▲ 100	▲ 123
Particles >21µm	ASTM D7647	>20	▲ 58	▲ 21	▲ 27
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/15	▲ 18/14	▲ 17/14

Customer Id: GENWEN
 Sample No.: KCPA004644
 Lab Number: 05903794
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

20 Apr 2022 Diag: Doug Bogart

ISO



No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



21 Sep 2021 Diag: Don Baldrige

ISO



Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



22 Dec 2020 Diag: Jonathan Hester

VIS DEBRIS



The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

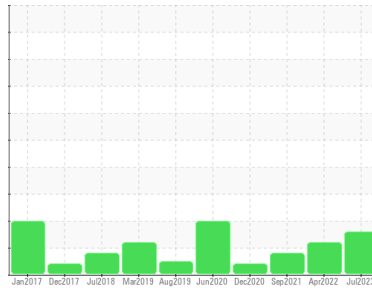
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
KAESER CSD 75 5461225 (S/N 1018)

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

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. The 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			KCPA004644	KCP44354	KCP36328
Sample Date	Client Info			17 Jul 2023	20 Apr 2022	21 Sep 2021
Machine Age	hrs	Client Info		37188	33668	31144
Oil Age	hrs	Client Info		0	2000	5068
Oil Changed	Client Info			N/A	Not Changd	Changed
Sample Status				ABNORMAL	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	<1	<1
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	<1	<1	3
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	4	2	6
Tin	ppm	ASTM D5185m	>10	0	<1	0
Antimony	ppm	ASTM D5185m		---	---	<1
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	<1
Barium	ppm	ASTM D5185m	90	0	35	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	90	25	83	24
Calcium	ppm	ASTM D5185m	2	1	2	0
Phosphorus	ppm	ASTM D5185m		<1	7	2
Zinc	ppm	ASTM D5185m		9	0	17
Sulfur	ppm	ASTM D5185m		21227	15951	16236

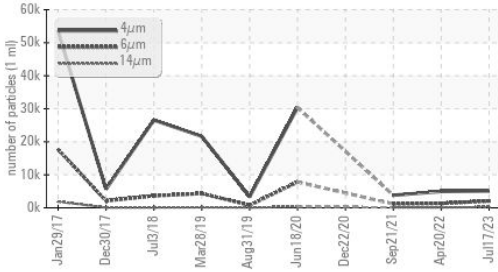
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	<1	0
Sodium	ppm	ASTM D5185m		10	18	8
Potassium	ppm	ASTM D5185m	>20	2	<1	3
Water	%	ASTM D6304	>0.05	0.012	0.016	0.014
ppm Water	ppm	ASTM D6304	>500	126.5	167.7	145.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		5112	4943	3806
Particles >6µm		ASTM D7647	>1300	▲ 2074	▲ 1321	1151
Particles >14µm		ASTM D7647	>80	▲ 211	▲ 100	▲ 123
Particles >21µm		ASTM D7647	>20	▲ 58	▲ 21	▲ 27
Particles >38µm		ASTM D7647	>4	2	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	▲ 20/18/15	▲ 18/14	▲ 17/14

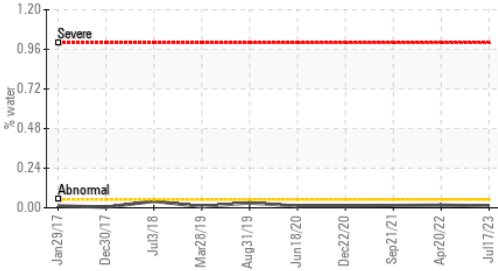
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.39	0.36	0.335

OIL ANALYSIS REPORT

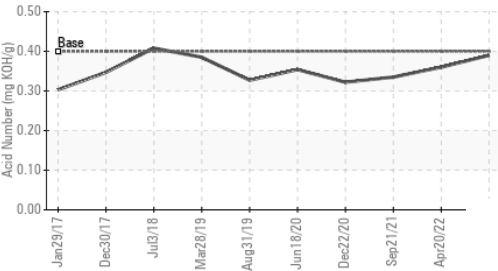
▲ Particle Trend



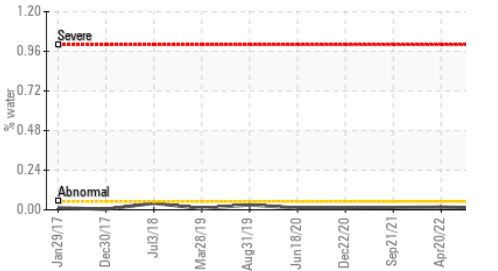
Water



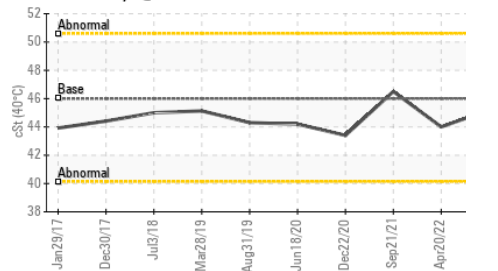
Acid Number



Water



Viscosity @ 40°C

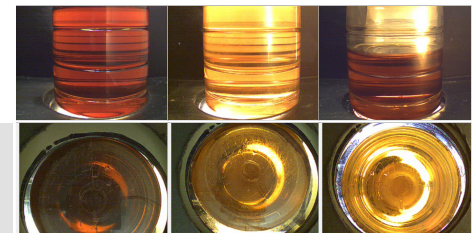


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45.2	44.0	46.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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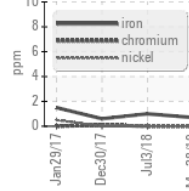
Color



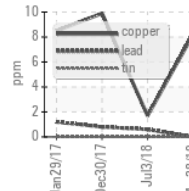
Bottom

GRAPHS

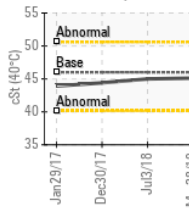
Ferrous Alloys



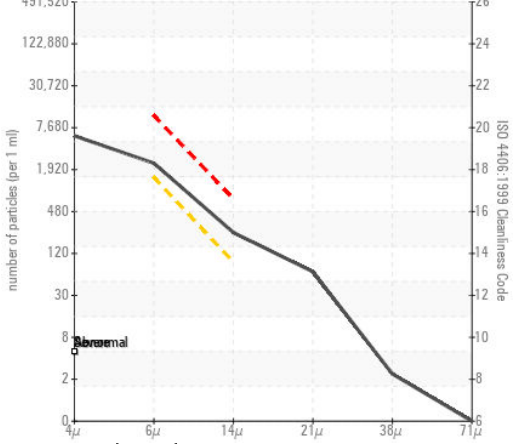
Non-ferrous Metals



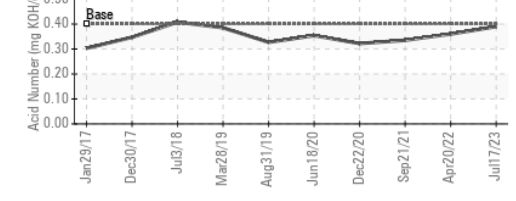
Viscosity @ 40°C



▲ Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004644 **Received** : 20 Jul 2023
Lab Number : 05903794 **Diagnosed** : 24 Jul 2023
Unique Number : 10565150 **Diagnostician** : Angela Borella
Test Package : IND 2 (Additional Tests: KF, PrtCount)

GENERAL MOTORS
 1500 E ROUTE A
 WENTZVILLE, MO
 US 63385
 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: