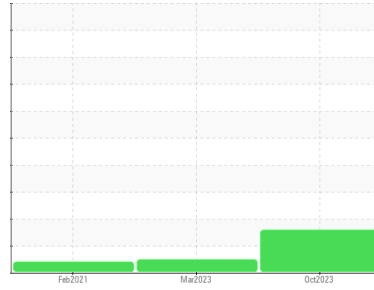




PROBLEM SUMMARY

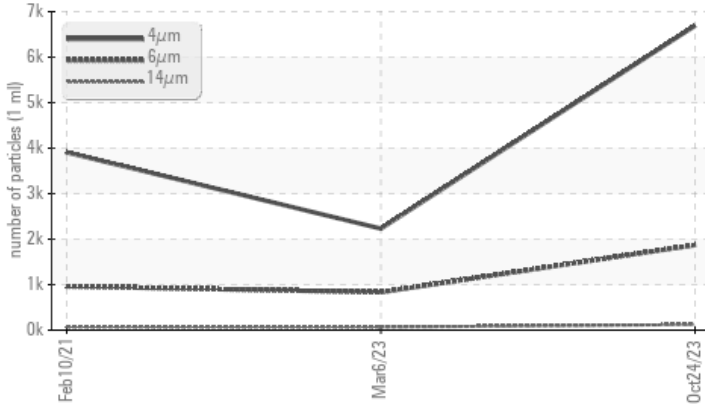
Sample Rating Trend



Machine Id
5843934 (S/N 1065)
 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			ATTENTION	NORMAL	ABNORMAL
Particles >6µm	ASTM D7647	>1300	▲ 1870	834	963
Particles >14µm	ASTM D7647	>80	▲ 123	66	69
Particles >21µm	ASTM D7647	>20	▲ 26	14	25
Oil Cleanliness	ISO 4406 (c)	>--/17/13	▲ 20/18/14	18/17/13	17/13

Customer Id: SMAFORCO
 Sample No.: KCPA007620
 Lab Number: 05995619
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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

06 Mar 2023 Diag: Don Baldrige

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



10 Feb 2021 Diag: Jonathan Hester

VISCOSITY



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 no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is higher than normal. The AN level is acceptable for this fluid.

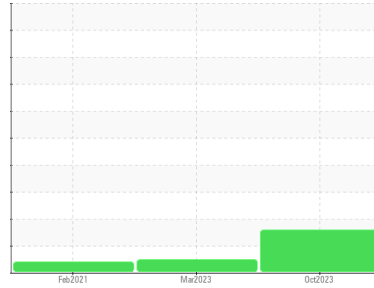
view report





OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
5843934 (S/N 1065)
 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 moderate 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	KCPA007620	KCP54055	KCP28086
Sample Date	Client Info	24 Oct 2023	06 Mar 2023	10 Feb 2021
Machine Age	hrs	26075	22526	11930
Oil Age	hrs	0	3200	0
Oil Changed	Client Info	N/A	Changed	Changed
Sample Status		ATTENTION	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	0	<1
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	<1	0	0
Titanium	ppm	ASTM D5185m >3	0	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >10	<1	<1	0
Lead	ppm	ASTM D5185m >10	0	0	<1
Copper	ppm	ASTM D5185m >50	4	5	2
Tin	ppm	ASTM D5185m >10	0	0	<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	<1
Barium	ppm	ASTM D5185m 90	140	132	14
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m 90	141	130	16
Calcium	ppm	ASTM D5185m 2	6	5	<1
Phosphorus	ppm	ASTM D5185m	4	12	314
Zinc	ppm	ASTM D5185m	0	0	0
Sulfur	ppm	ASTM D5185m	12187	15449	2042

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	3	2
Sodium	ppm	ASTM D5185m	31	35	20
Potassium	ppm	ASTM D5185m >20	4	1	2
Water	%	ASTM D6304 >0.05	0.018	0.016	0.004
ppm Water	ppm	ASTM D6304 >500	184.4	161.4	41.9

FLUID CLEANLINESS

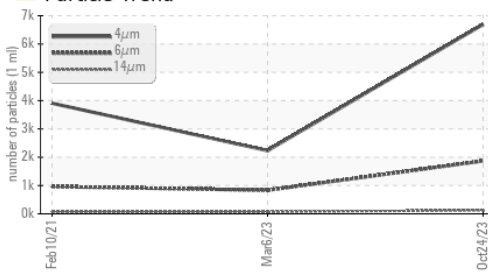
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	6691	2232	3907
Particles >6µm	ASTM D7647 >1300	▲ 1870	834	963
Particles >14µm	ASTM D7647 >80	▲ 123	66	69
Particles >21µm	ASTM D7647 >20	▲ 26	14	25
Particles >38µm	ASTM D7647 >4	1	2	4
Particles >71µm	ASTM D7647 >3	0	1	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 20/18/14	18/17/13	17/13

FLUID DEGRADATION

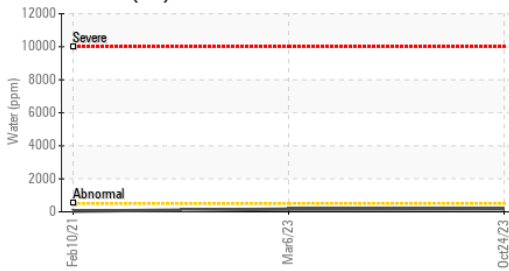
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.43	0.44	0.111

OIL ANALYSIS REPORT

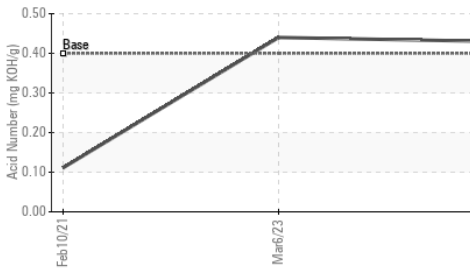
▲ Particle Trend



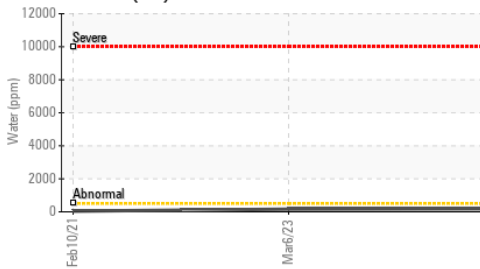
Water (KF)



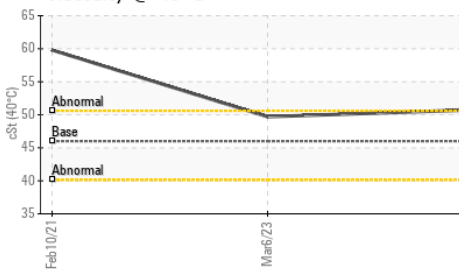
Acid Number



Water (KF)



Viscosity @ 40°C

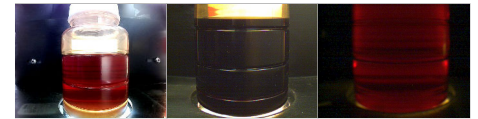


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

PARAMETER	method	limit/base	current	history1	history2
FLUID PROPERTIES					
Visc @ 40°C	cSt	ASTM D445 46	50.8	49.7	▲ 59.8

PARAMETER	method	limit/base	current	history1	history2
SAMPLE IMAGES					

Color

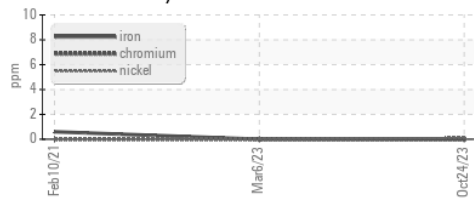


Bottom

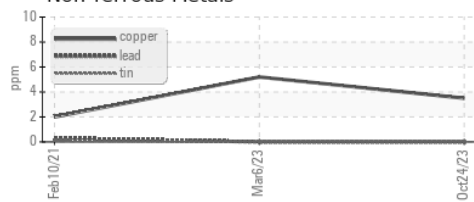


GRAPHS

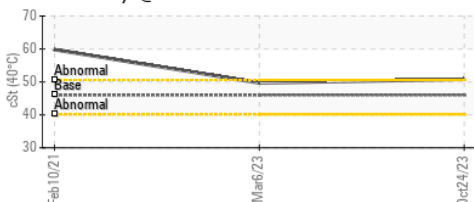
Ferrous Alloys



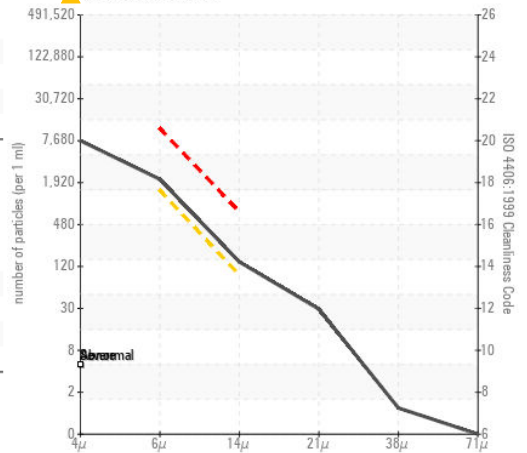
Non-ferrous Metals



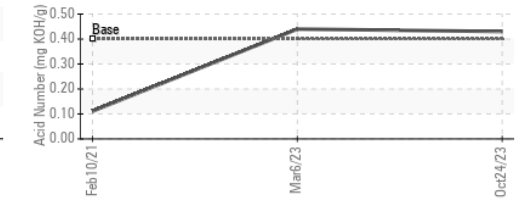
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA007620 **Received** : 01 Nov 2023
Lab Number : 05995619 **Diagnosed** : 02 Nov 2023
Unique Number : 10723979 **Diagnostician** : Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SMALL BEGINNINGS LLC - ANGEL ARMOR
 4557 DENROSE CT
 FORT COLLINS, CO
 US 80524
 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: