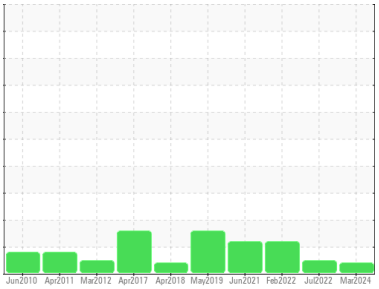
KAESER COMPRESSORS
Built for a lifetime.

OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS

Machine Id
KAESER DSD 150 3487907 (S/N 1537)
Component
Compressor
Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation
Oil and 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.

Wear
All component wear rates are normal.

Contamination
Moderate concentration of visible dirt/debris 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		**KCPA013275**	KCP40655	KCP41251
Sample Date		Client Info		**18 Mar 2024**	26 Jul 2022	09 Feb 2022
Machine Age	hrs	Client Info		**86429**	75546	72674
Oil Age	hrs	Client Info		**6960**	0	0
Oil Changed		Client Info		**Changed**	Changed	Not Changd
Sample Status				**ABNORMAL**	NORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**2**	0	0
Chromium	ppm	ASTM D5185m	>10	**<1**	0	0
Nickel	ppm	ASTM D5185m	>3	**<1**	<1	0
Titanium	ppm	ASTM D5185m	>3	**<1**	0	0
Silver	ppm	ASTM D5185m	>2	**<1**	<1	0
Aluminum	ppm	ASTM D5185m	>10	**2**	2	0
Lead	ppm	ASTM D5185m	>10	**<1**	0	0
Copper	ppm	ASTM D5185m	>50	**3**	33	13
Tin	ppm	ASTM D5185m	>10	**<1**	<1	0
Antimony	ppm	ASTM D5185m		**---**	---	0
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	<1	<1
Barium	ppm	ASTM D5185m	90	**0**	0	0
Molybdenum	ppm	ASTM D5185m		**<1**	0	0
Manganese	ppm	ASTM D5185m		**<1**	0	0
Magnesium	ppm	ASTM D5185m	90	**1**	0	0
Calcium	ppm	ASTM D5185m	2	**3**	0	0
Phosphorus	ppm	ASTM D5185m		**10**	0	0
Zinc	ppm	ASTM D5185m		**1**	0	0
Sulfur	ppm	ASTM D5185m		**6593**	10144	11907

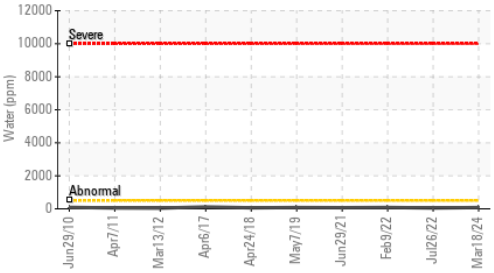
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**<1**	<1	<1
Sodium	ppm	ASTM D5185m		**0**	0	0
Potassium	ppm	ASTM D5185m	>20	**1**	0	<1
Water	%	ASTM D6304	>0.05	**0.007**	0.005	0.008
ppm Water	ppm	ASTM D6304	>500	**79**	50.2	83.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	262	1553
Particles >6µm		ASTM D7647	>1300	**---**	39	374
Particles >14µm		ASTM D7647	>80	**---**	6	92
Particles >21µm		ASTM D7647	>20	**---**	2	42
Particles >38µm		ASTM D7647	>4	**---**	0	8
Particles >71µm		ASTM D7647	>3	**---**	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	**---**	15/12/10	16/14

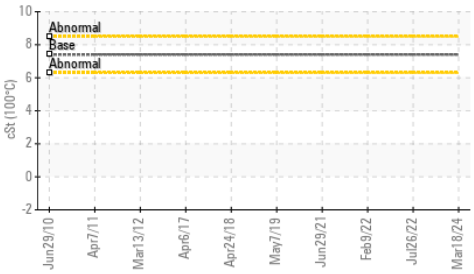
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	**0.51**	0.40	0.428

OIL ANALYSIS REPORT

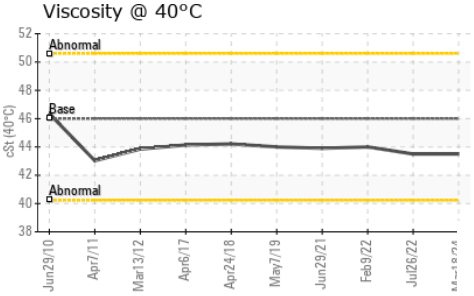
Water (KF)



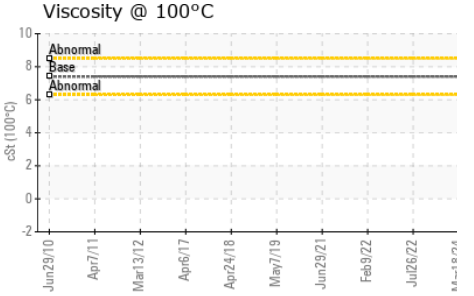
Viscosity @ 100°C



Viscosity @ 40°C

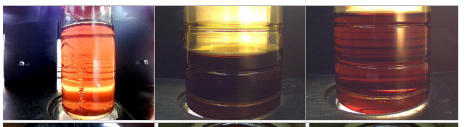
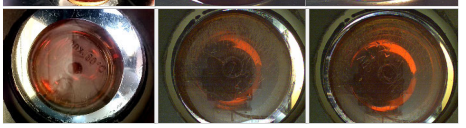


Viscosity @ 100°C



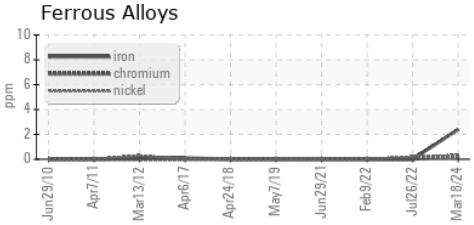
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	LIGHT
Sand/Dirt	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	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	**43.5**	43.5	44.0

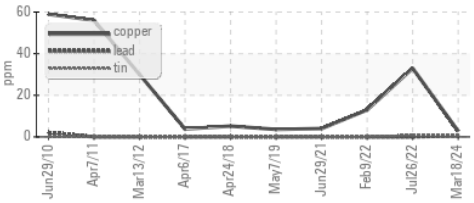
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

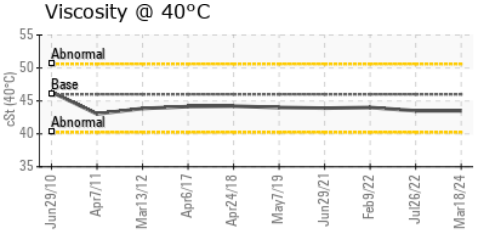
Ferrous Alloys



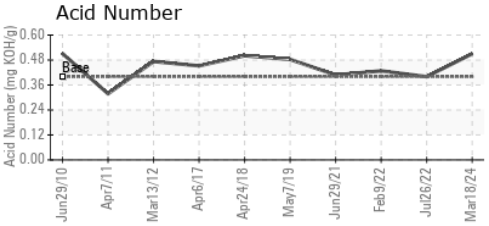
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013275 **Received** : 27 Mar 2024
Lab Number : 06131421 **Tested** : 02 Apr 2024
Unique Number : 10950886 **Diagnosed** : 02 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, VI)

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)

FLEXIBLE CIRCUITS
222 VALLEY RD.
WARRINGTON, PA
US 18976
Contact: R. BOETTCHER
boettcher.r@flexiblecircuits.net
T:
F: