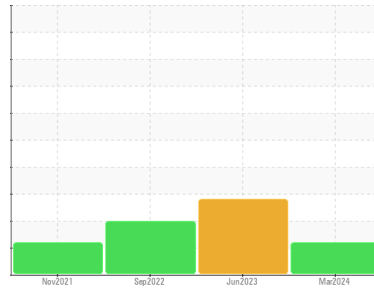




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
KAESER 7167707

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			KCPA016896	KCPA003042	KC106567
Sample Date	Client Info			28 Mar 2024	07 Jun 2023	22 Sep 2022
Machine Age	hrs	Client Info		16457	13659	10621
Oil Age	hrs	Client Info		1185	0	3761
Oil Changed	Client Info			Not Chngd	N/A	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	0	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	<1	0	0
Titanium	ppm	ASTM D5185m	>3	<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	<1
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	3	4	2
Tin	ppm	ASTM D5185m	>10	1	0	<1
Antimony	ppm	ASTM D5185m		---	---	---
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	19	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	90	64	38	33
Calcium	ppm	ASTM D5185m	2	4	0	0
Phosphorus	ppm	ASTM D5185m		2	0	3
Zinc	ppm	ASTM D5185m		7	0	3
Sulfur	ppm	ASTM D5185m		21949	21714	20337

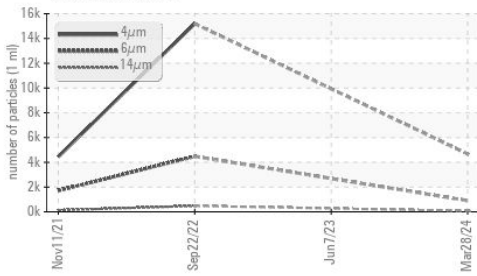
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	0	0
Sodium	ppm	ASTM D5185m		15	12	11
Potassium	ppm	ASTM D5185m	>20	3	<1	0
Water	%	ASTM D6304	>0.05	0.031	▲ 0.154	0.014
ppm Water	ppm	ASTM D6304	>500	312	▲ 1540	141.8

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		4673	---	15197
Particles >6µm		ASTM D7647	>1300	904	---	▲ 4479
Particles >14µm		ASTM D7647	>20	▲ 69	---	▲ 478
Particles >21µm		ASTM D7647	>4	▲ 21	---	▲ 129
Particles >38µm		ASTM D7647	>3	1	---	▲ 16
Particles >71µm		ASTM D7647	>3	1	---	2
Oil Cleanliness		ISO 4406 (c)	>17/11	▲ 17/13	---	▲ 19/16

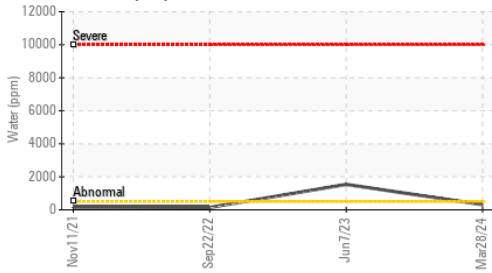
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.35	0.14	0.51

OIL ANALYSIS REPORT

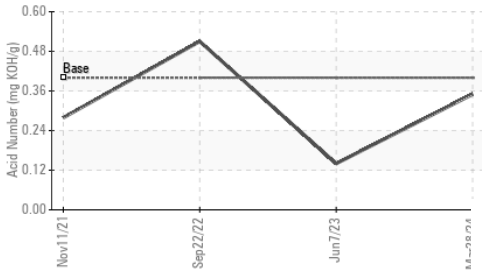
▲ Particle Trend



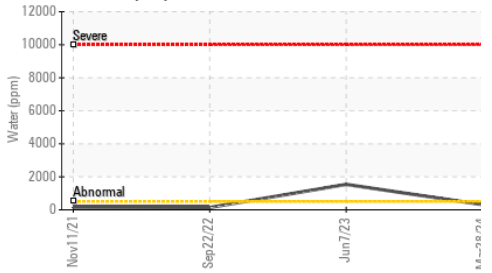
Water (KF)



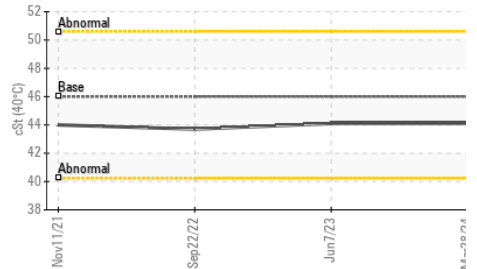
Acid Number



Water (KF)



Viscosity @ 40°C

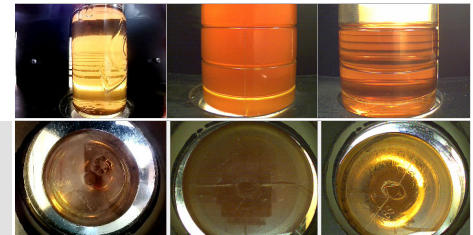


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● HAZY
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	▲ 0.2%
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.1	44.1	43.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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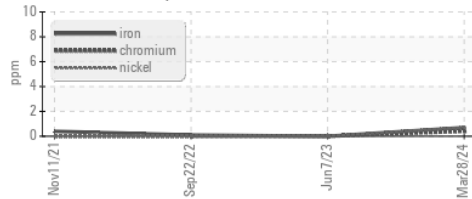
Color



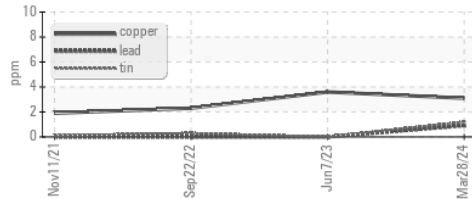
Bottom

GRAPHS

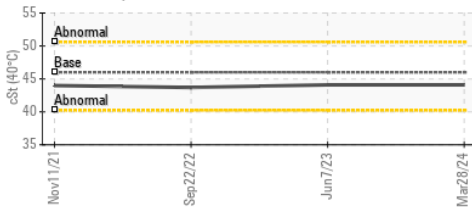
Ferrous Alloys



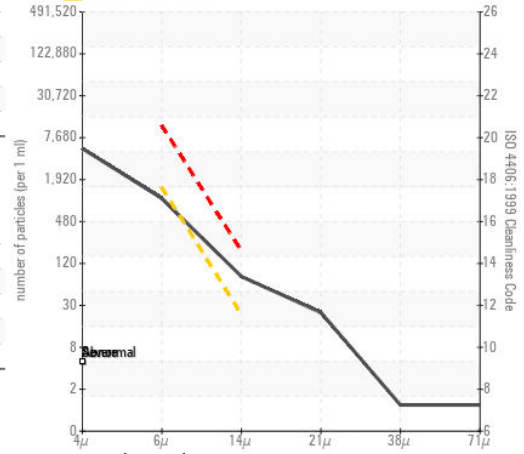
Non-ferrous Metals



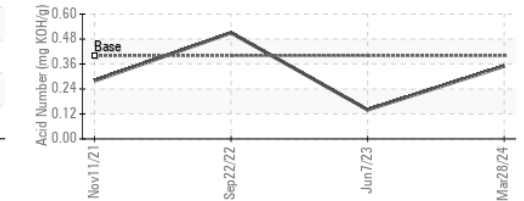
Viscosity @ 40°C



▲ Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA016896 **Received** : 01 Apr 2024
Lab Number : 06135663 **Tested** : 03 Apr 2024
Unique Number : 10955128 **Diagnosed** : 04 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

OXMOOR HYUNDAI
 8107 SHELBYVILLE RD
 LOUISVILLE, KY
 US 40222
 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: