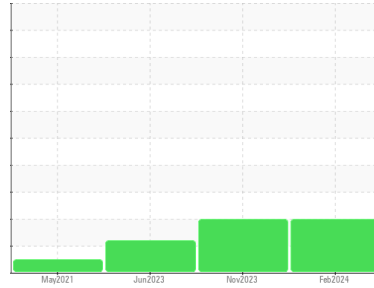




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
6612979 (S/N 1196)

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and 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	KCPA015879	KCPA003771	KCPA003321
Sample Date	Client Info	22 Feb 2024	06 Nov 2023	09 Jun 2023
Machine Age	hrs	43830	41247	38308
Oil Age	hrs	0	0	0
Oil Changed	Client Info	Changed	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	0	0	0
Chromium	ppm	ASTM D5185m >10	<1	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	2	0	0
Lead	ppm	ASTM D5185m >10	0	0	0
Copper	ppm	ASTM D5185m >50	5	8	8
Tin	ppm	ASTM D5185m >10	0	0	0
Antimony	ppm	ASTM D5185m	---	---	---
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	0
Barium	ppm	ASTM D5185m 90	11	8	2
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	0	0	0
Magnesium	ppm	ASTM D5185m 100	6	10	<1
Calcium	ppm	ASTM D5185m 0	0	1	0
Phosphorus	ppm	ASTM D5185m 0	23	1	0
Zinc	ppm	ASTM D5185m 0	0	0	0
Sulfur	ppm	ASTM D5185m 23500	18433	17511	15155

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >25	2	2	0
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	1	0	<1
Water	%	ASTM D6304 >0.05	0.002	0.011	0.007
ppm Water	ppm	ASTM D6304 >500	24	114.2	76.7

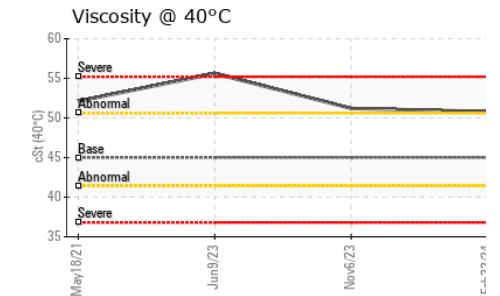
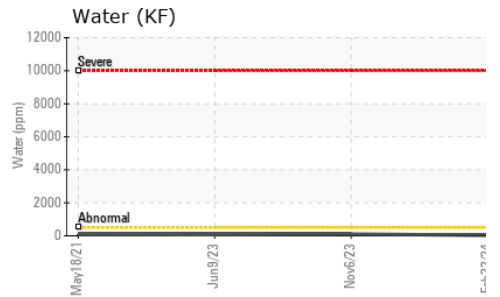
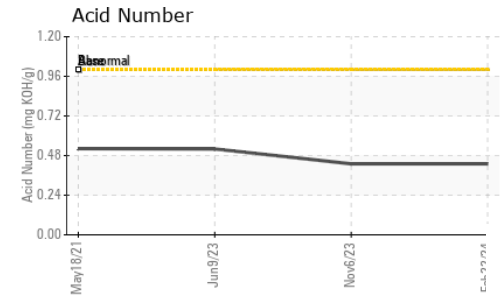
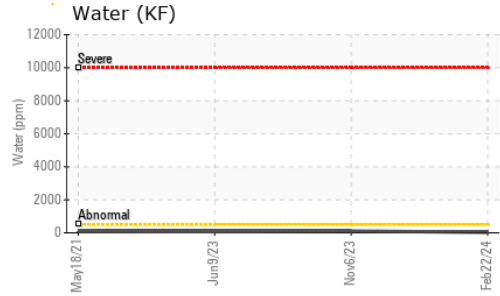
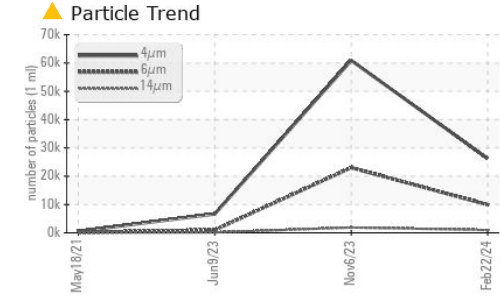
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	26253	60913	6664
Particles >6µm	ASTM D7647 >1300	▲ 9937	▲ 23030	994
Particles >14µm	ASTM D7647 >80	▲ 976	▲ 1865	● 122
Particles >21µm	ASTM D7647 >20	▲ 253	▲ 555	● 60
Particles >38µm	ASTM D7647 >4	▲ 16	▲ 17	4
Particles >71µm	ASTM D7647 >3	1	2	0
Oil Cleanliness	ISO 4406 (c) >--/17/13	▲ 22/20/17	▲ 23/22/18	● 20/17/14

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 1.0	0.43	0.43	0.52

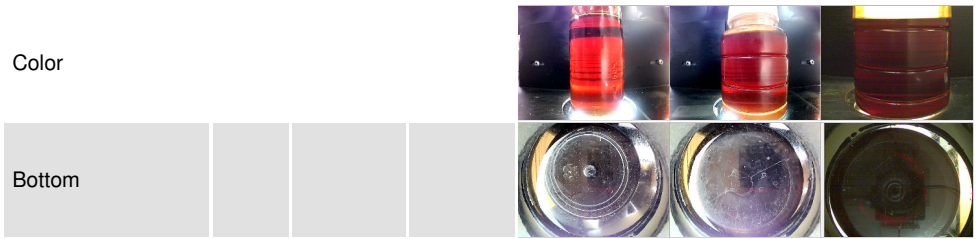
OIL ANALYSIS REPORT



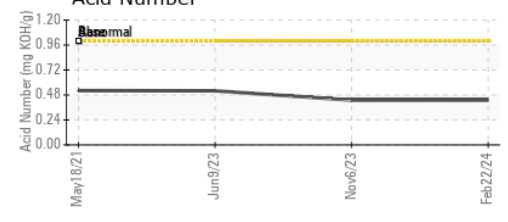
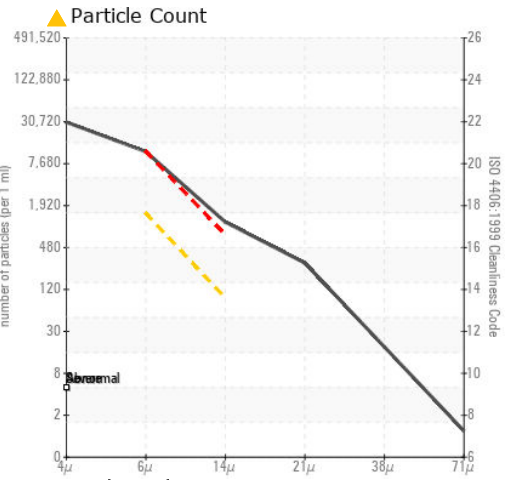
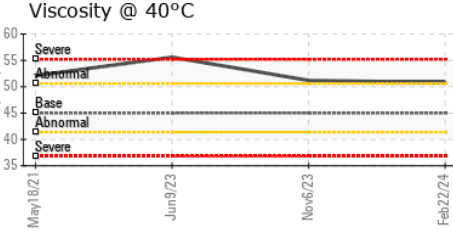
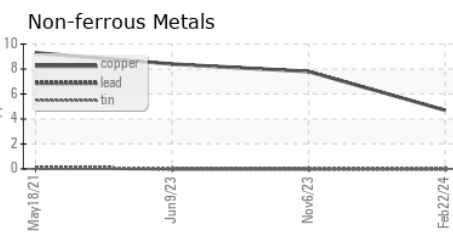
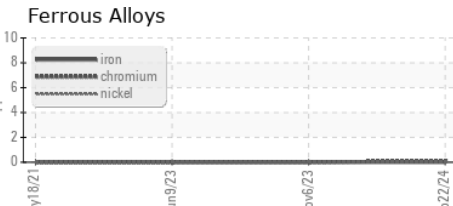
PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	45	50.8	51.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA015879 **Received** : 26 Feb 2024
Lab Number : 06100966 **Tested** : 28 Feb 2024
Unique Number : 10899196 **Diagnosed** : 28 Feb 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

APPLIED THIN FILM
 3439 EDISON WAY
 FREMONT, CA
 US 94538
 Contact: NATHAN THOMAS
 nathan.thomas@vishay.com
 T:
 F:

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)