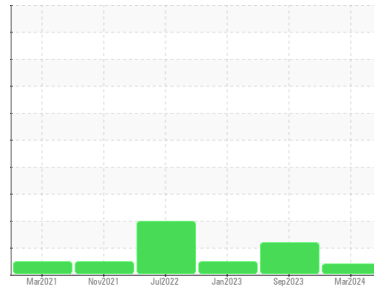




OIL ANALYSIS REPORT

Sample Rating Trend



VIS DEBRIS



Machine Id
7292517 (S/N 1598)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-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. 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		KCPA013020	KCPA002183	KCP49200
Sample Date	Client Info		15 Mar 2024	11 Sep 2023	24 Jan 2023
Machine Age	hrs	Client Info	25047	20583	15156
Oil Age	hrs	Client Info	8000	0	8566
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			ABNORMAL	ATTENTION	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	0	0	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >3	0	0	0
Titanium	ppm	ASTM D5185m >3	0	<1	0
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >10	0	0	<1
Lead	ppm	ASTM D5185m >10	0	0	1
Copper	ppm	ASTM D5185m >50	7	5	7
Tin	ppm	ASTM D5185m >10	0	0	<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	0
Barium	ppm	ASTM D5185m 90	3	0	20
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m 90	24	43	53
Calcium	ppm	ASTM D5185m 2	0	<1	1
Phosphorus	ppm	ASTM D5185m	<1	3	0
Zinc	ppm	ASTM D5185m	0	0	10
Sulfur	ppm	ASTM D5185m	15930	17814	19277

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	0	0	2
Sodium	ppm	ASTM D5185m	12	13	16
Potassium	ppm	ASTM D5185m >20	0	3	5
Water	%	ASTM D6304 >0.05	0.012	0.031	0.018
ppm Water	ppm	ASTM D6304 >500	121	319.7	184.4

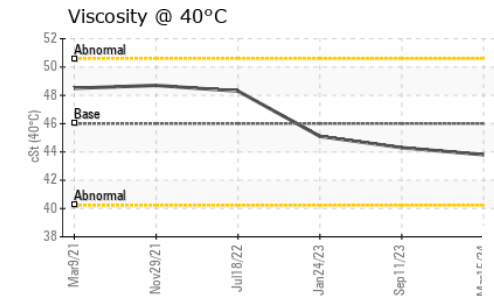
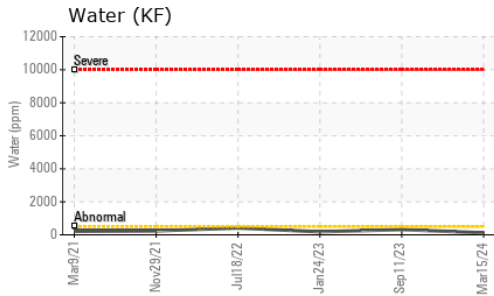
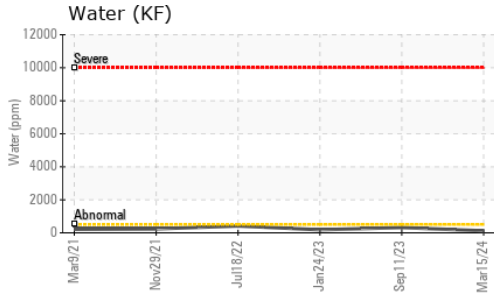
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		---	4518	4781
Particles >6µm	ASTM D7647 >1300		---	1136	1142
Particles >14µm	ASTM D7647 >80		---	88	56
Particles >21µm	ASTM D7647 >20		---	28	15
Particles >38µm	ASTM D7647 >4		---	3	2
Particles >71µm	ASTM D7647 >3		---	2	0
Oil Cleanliness	ISO 4406 (c) >--/17/13		---	19/17/14	19/17/13

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	0.30	0.30	0.29

OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	VLITE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	VLITE
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

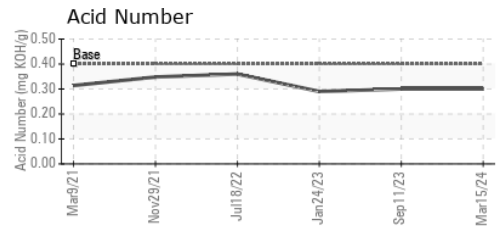
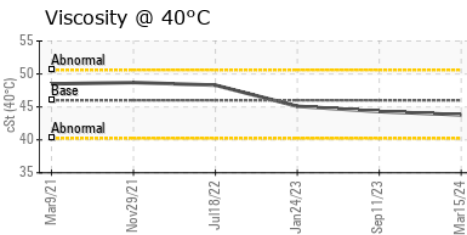
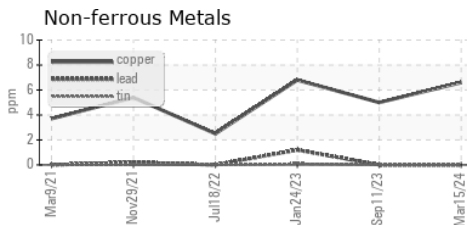
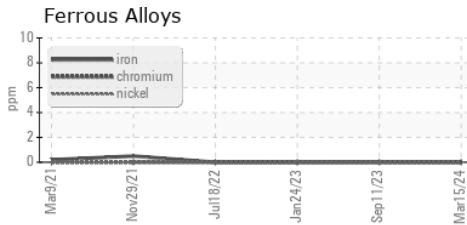
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	43.8	44.3

SAMPLE IMAGES

Color

Bottom

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013020 **Received** : 15 Apr 2024
Lab Number : 06149523 **Tested** : 17 Apr 2024
Unique Number : 10979601 **Diagnosed** : 17 Apr 2024 - Don Baldrige
Test Package : IND 2 (Additional Tests: KF, PrtCount)

INSERT MOLDING SOLUTIONS
 4465 ALICIA LN
 CUMMING, GA
 US 30028
 Contact: PAUL
 paul@makerammo.com

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)