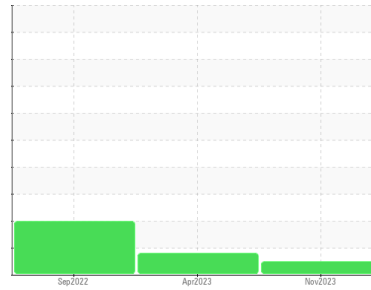


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
8245500 (S/N 1871)

Component
Compressor

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

DIAGNOSIS

Recommendation

The 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 on this sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination 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			KCPA004682	KCP53276	KCP30956
Sample Date	Client Info			17 Nov 2023	04 Apr 2023	08 Sep 2022
Machine Age	hrs	Client Info		11482	6035	1408
Oil Age	hrs	Client Info		0	4000	1408
Oil Changed		Client Info		N/A	Changed	Not Changed
Sample Status				NORMAL	ATTENTION	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	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	0	<1	<1
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>50	14	7	2
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

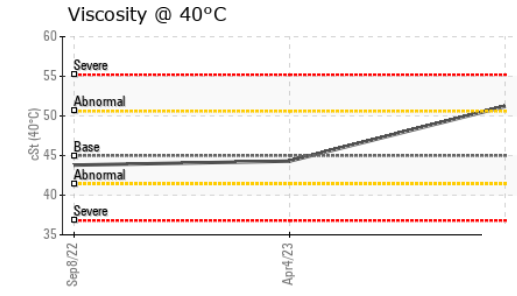
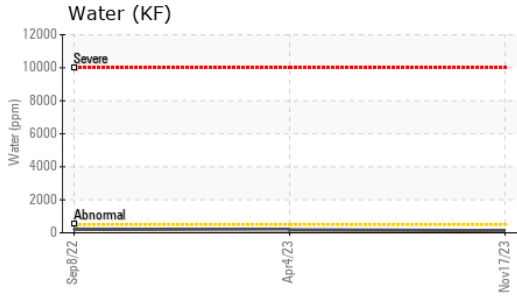
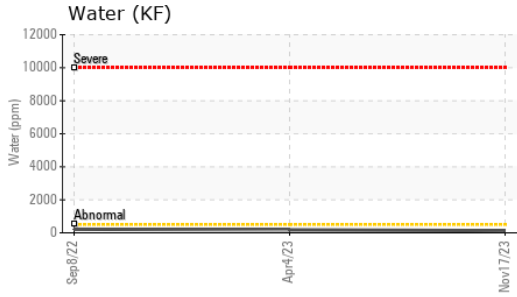
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	0
Barium	ppm	ASTM D5185m	90	3	0	45
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	20	35	69
Calcium	ppm	ASTM D5185m	0	0	<1	4
Phosphorus	ppm	ASTM D5185m	0	0	1	3
Zinc	ppm	ASTM D5185m	0	6	0	3
Sulfur	ppm	ASTM D5185m	23500	20119	19465	19666

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	<1
Sodium	ppm	ASTM D5185m		7	12	14
Potassium	ppm	ASTM D5185m	>20	1	12	15
Water	%	ASTM D6304	>0.05	0.013	0.017	0.021
ppm Water	ppm	ASTM D6304	>500	132	179.5	216.9

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	7178	5707
Particles >6µm		ASTM D7647	>1300	---	▲ 1828	▲ 2276
Particles >14µm		ASTM D7647	>80	---	62	▲ 171
Particles >21µm		ASTM D7647	>20	---	10	▲ 33
Particles >38µm		ASTM D7647	>4	---	0	▲ 5
Particles >71µm		ASTM D7647	>3	---	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	▲ 20/18/13	▲ 20/18/15

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.35	0.28	0.31

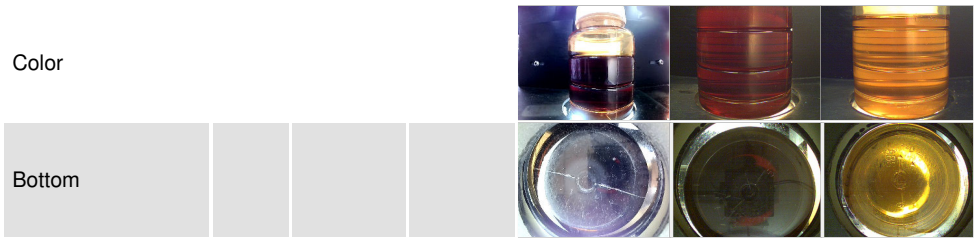
OIL ANALYSIS REPORT



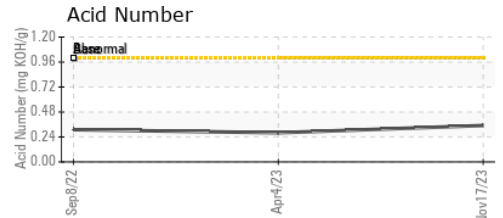
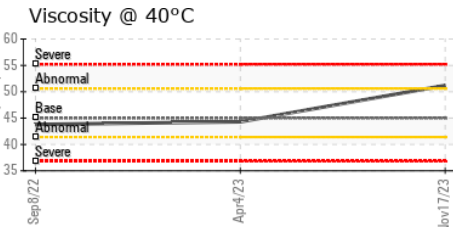
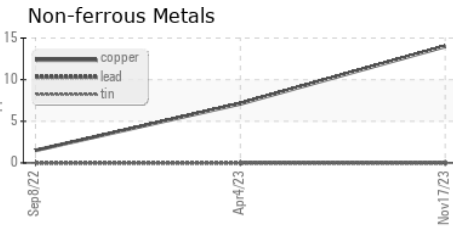
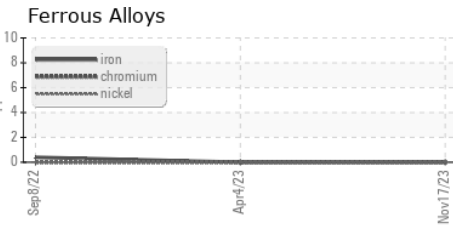
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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	45	51.2	44.3	43.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA004682 **Received** : 24 Nov 2023
Lab Number : 06017367 **Diagnosed** : 01 Dec 2023
Unique Number : 10756511 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

HERMEUS CORP
 3960 DEKALB TECHNOLOGY PKWY
 DORAVILLE, GA
 US 30340
 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)

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F: