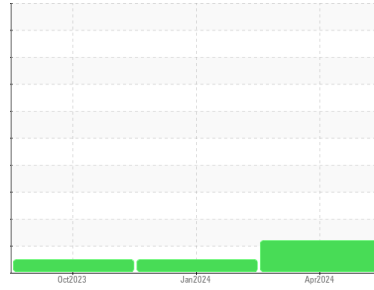




OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
KAESER ESD 300 8937798 (S/N 1175)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) S-460 (--- GAL)

DIAGNOSIS

Recommendation

The oil is near the end of its useful service life, recommend schedule an oil change. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Fluid Condition

The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KC06156958	KC121965	KC100931
Sample Date	Client Info			04 Apr 2024	25 Jan 2024	05 Oct 2023
Machine Age	hrs	Client Info		6367	4922	2816
Oil Age	hrs	Client Info		0	0	2816
Oil Changed	Client Info			N/A	N/A	Not Chngd
Sample Status				ABNORMAL	NORMAL	NORMAL

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	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>10	8	7	9
Lead	ppm	ASTM D5185m	>10	<1	<1	<1
Copper	ppm	ASTM D5185m	>50	2	<1	0
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

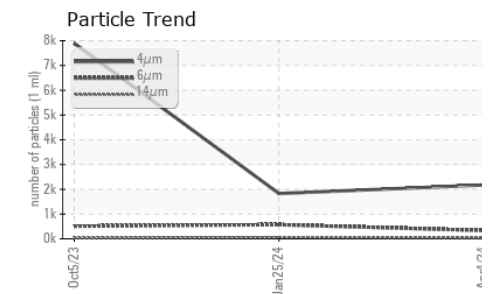
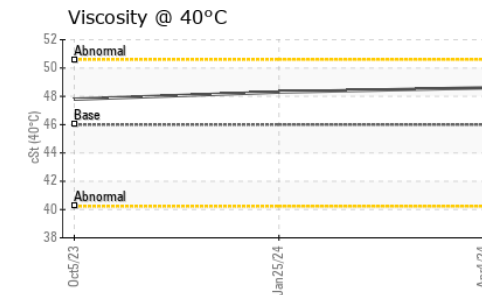
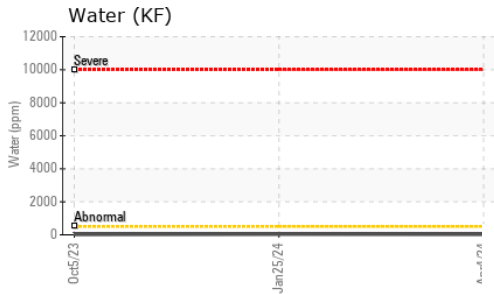
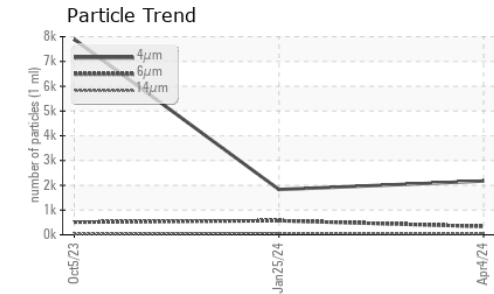
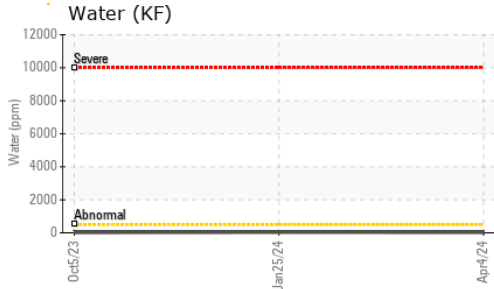
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	90	<1	1	2
Calcium	ppm	ASTM D5185m	2	0	1	<1
Phosphorus	ppm	ASTM D5185m		27	36	33
Zinc	ppm	ASTM D5185m		0	0	6

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	<1
Sodium	ppm	ASTM D5185m		<1	3	0
Potassium	ppm	ASTM D5185m	>20	6	4	4
Water	%	ASTM D6304	>0.05	0.002	0.003	0.002
ppm Water	ppm	ASTM D6304	>500	21	35	22.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		2174	1829	7895
Particles >6µm		ASTM D7647	>1300	337	571	510
Particles >14µm		ASTM D7647	>80	38	62	24
Particles >21µm		ASTM D7647	>20	12	17	6
Particles >38µm		ASTM D7647	>4	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	18/16/12	18/16/13	20/16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	▲ 1.13	0.69	0.40

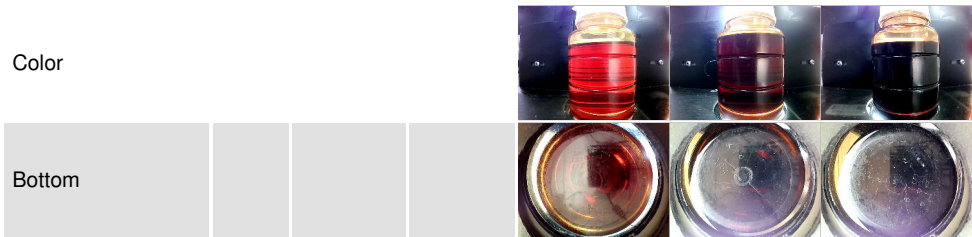
OIL ANALYSIS REPORT



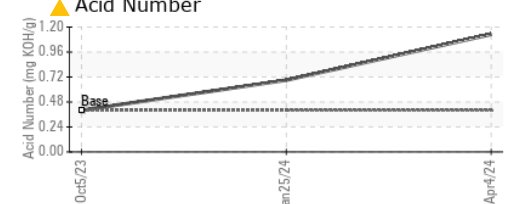
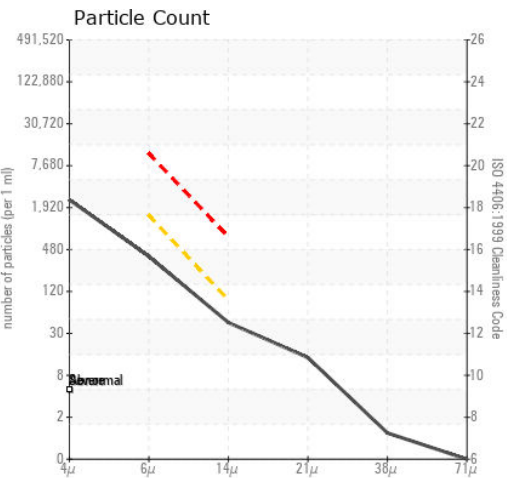
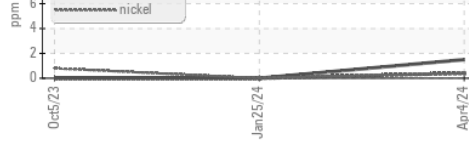
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	48.6	48.3	47.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KC06156958
Lab Number : 06156958
Unique Number : 10992381
Test Package : IND 2
Received : 22 Apr 2024
Tested : 23 Apr 2024
Diagnosed : 25 Apr 2024 - Jonathan Hester

HYDRO PRECISION TUBING USA, LL
 100 GUS HIPP BLVD
 ROCKLEDGE, FL
 US 32955
 Contact:

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)