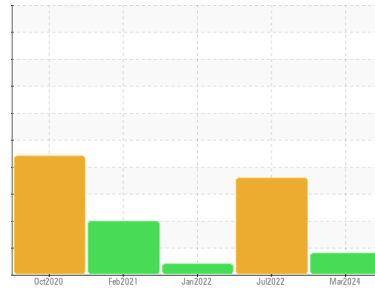




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
7250193 (S/N 1017)
 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 moderate amount of silt (particulates < 14 microns in size) 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			KCPA013453	KC102267	KC96045
Sample Date	Client Info			20 Mar 2024	15 Jul 2022	24 Jan 2022
Machine Age	hrs	Client Info		22438	13081	10199
Oil Age	hrs	Client Info		0	0	2965
Oil Changed	Client Info			Not Changed	Changed	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	4	5
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	<1	2	3
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	6	32	7
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

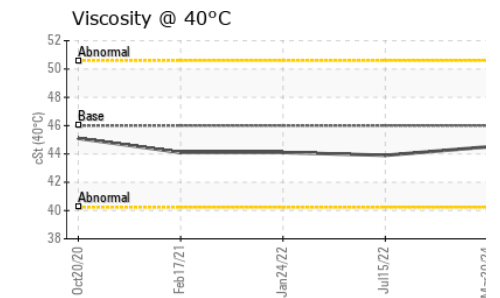
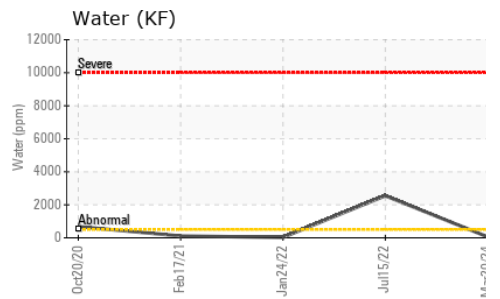
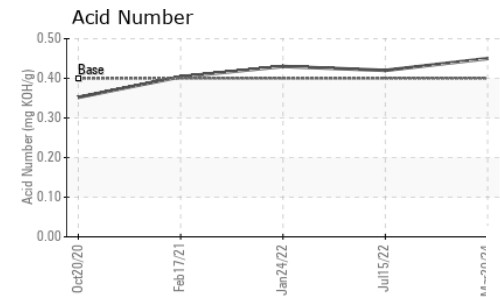
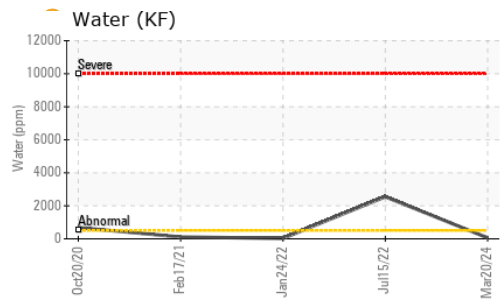
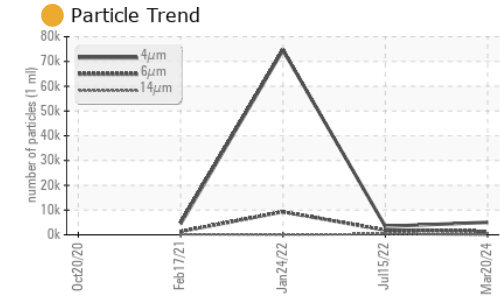
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	1
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m	90	0	1	0
Calcium	ppm	ASTM D5185m	2	0	0	0
Phosphorus	ppm	ASTM D5185m		0	4	6
Zinc	ppm	ASTM D5185m		0	15	<1
Sulfur	ppm	ASTM D5185m		18314	20539	15061

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	2	<1
Sodium	ppm	ASTM D5185m		<1	0	2
Potassium	ppm	ASTM D5185m	>20	0	2	0
Water	%	ASTM D6304	>0.05	0.006	▲ 0.255	0.003
ppm Water	ppm	ASTM D6304	>500	60	▲ 2550	25.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		5051	3430	74601
Particles >6µm		ASTM D7647	>1300	● 1367	● 1868	▲ 9278
Particles >14µm		ASTM D7647	>80	75	▲ 318	65
Particles >21µm		ASTM D7647	>20	19	▲ 107	9
Particles >38µm		ASTM D7647	>4	1	▲ 17	0
Particles >71µm		ASTM D7647	>3	0	2	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	● 20/18/13	▲ 19/18/15	▲ 20/13

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.4	0.45	0.42	0.43

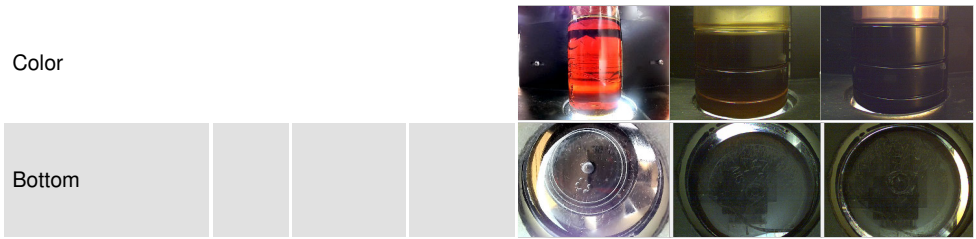
OIL ANALYSIS REPORT



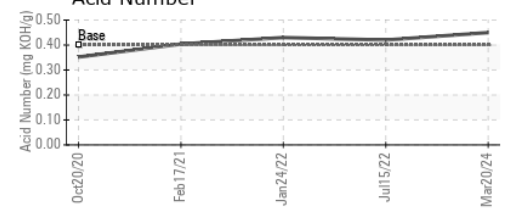
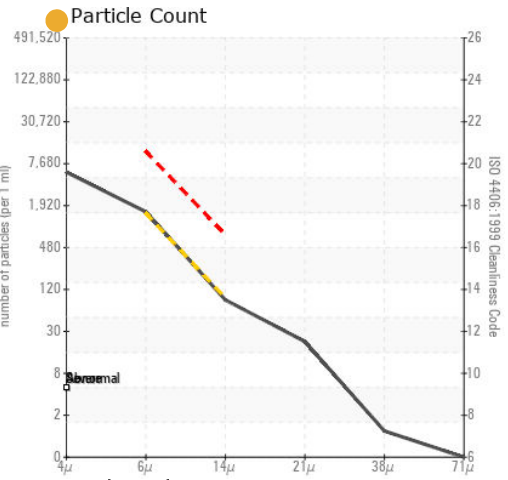
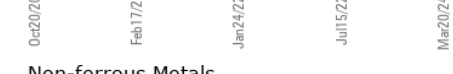
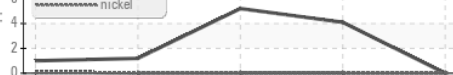
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	44.5	43.9	44.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA013453
Lab Number : 06139271
Unique Number : 10964079
Test Package : IND 2 (Additional Tests: KF, PrtCount)
Received : 04 Apr 2024
Tested : 05 Apr 2024
Diagnosed : 06 Apr 2024 - Don Baldrige

RAND-WHITNEY MID ATLANTIC LLC
 175 E WALNUT ST
 RED LION, PA
 US 17356
 Contact: A. SITLER
 asitler@rand.whitney.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)