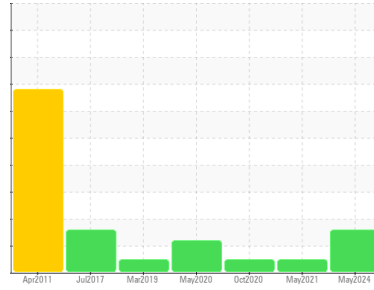




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER SK 15T 2935326 (S/N 1471)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- GAL)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We recommend an early resample in 500 hours to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a light concentration of water present in the oil. The amount and size of particulates present in the system are acceptable.

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			KCPA017513	KCP33508	KCP31791
Sample Date	Client Info			06 May 2024	06 May 2021	12 Oct 2020
Machine Age	hrs	Client Info		22534	18960	18400
Oil Age	hrs	Client Info		490	202	895
Oil Changed	Client Info			Changed	Changed	Not Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	<1	<1
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	0
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	<1
Aluminum	ppm	ASTM D5185m	>10	2	<1	0
Lead	ppm	ASTM D5185m	>10	<1	0	0
Copper	ppm	ASTM D5185m	>50	5	<1	4
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m		---	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

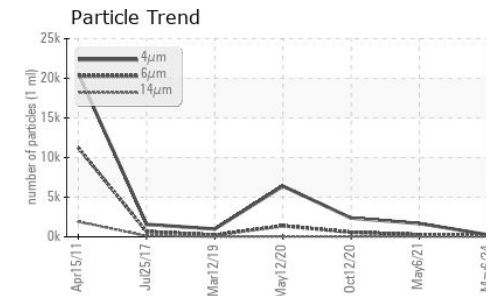
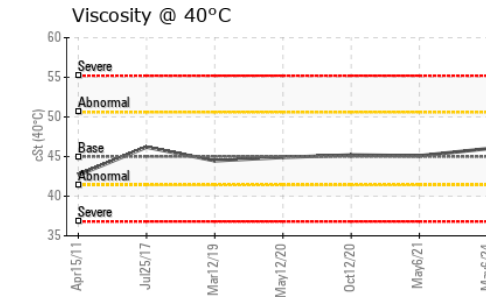
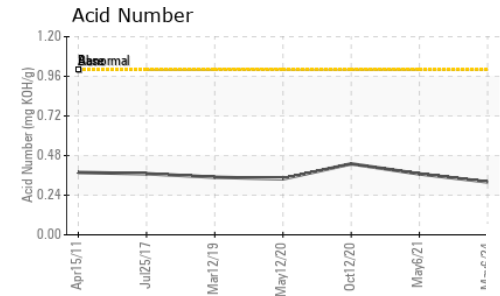
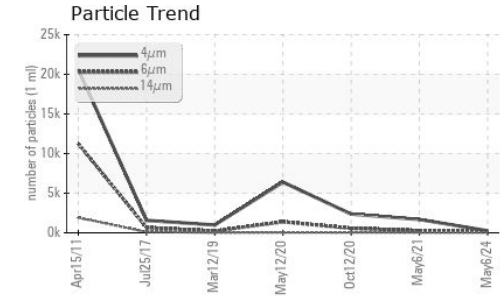
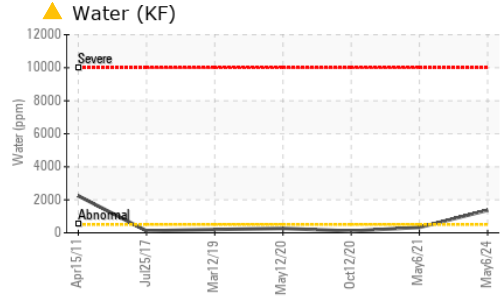
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	<1	10
Barium	ppm	ASTM D5185m	90	1	29	0
Molybdenum	ppm	ASTM D5185m	0	<1	0	0
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	100	30	76	18
Calcium	ppm	ASTM D5185m	0	5	1	0
Phosphorus	ppm	ASTM D5185m	0	6	4	<1
Zinc	ppm	ASTM D5185m	0	56	0	7
Sulfur	ppm	ASTM D5185m	23500	24009	17513	16117

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	<1	0
Sodium	ppm	ASTM D5185m		0	9	4
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Water	%	ASTM D6304	>0.05	▲ 0.137	0.032	0.011
ppm Water	ppm	ASTM D6304	>500	▲ 1370	327.3	110.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		261	1681	2364
Particles >6µm		ASTM D7647	>1300	142	265	567
Particles >14µm		ASTM D7647	>80	24	28	31
Particles >21µm		ASTM D7647	>20	8	13	8
Particles >38µm		ASTM D7647	>4	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	15/14/12	15/12	16/12

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.32	0.369	0.430

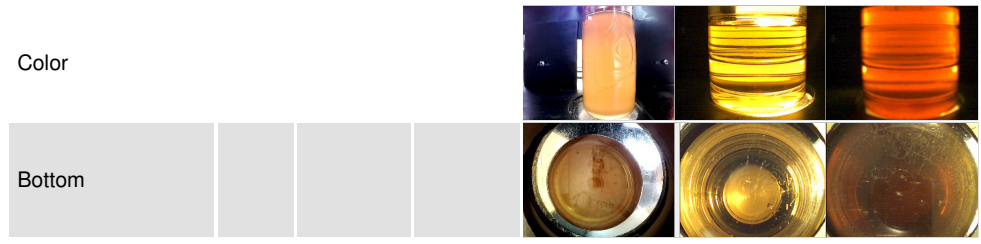
OIL ANALYSIS REPORT



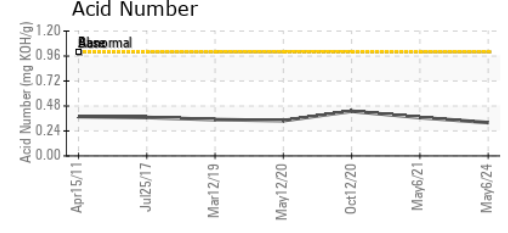
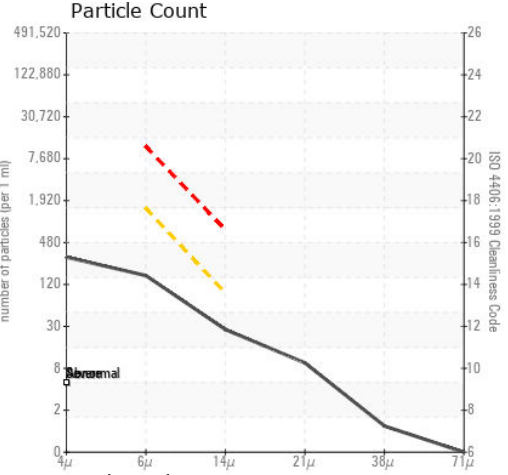
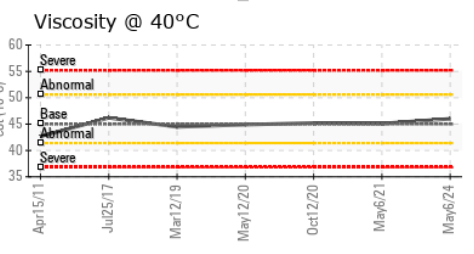
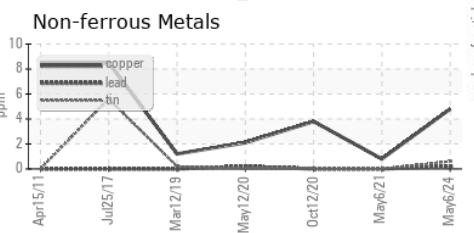
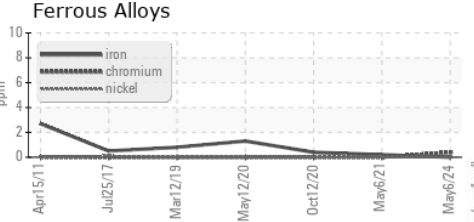
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	46.0	45.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA017513 **Received** : 13 May 2024
Lab Number : 06177687 **Tested** : 22 May 2024
Unique Number : 11023740 **Diagnosed** : 22 May 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

SHORELINE BOAT AND RV REPAIR
 12526 E 52ND ST
 TULSA, OK
 US 74146
 Contact: BROCK E.
 brocke@shorelineboatandr.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)