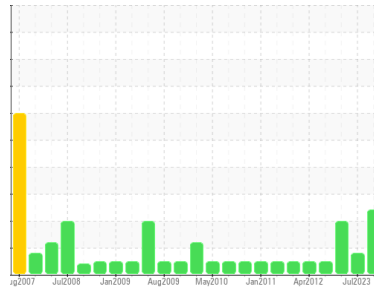




OIL ANALYSIS REPORT

Sample Rating Trend



WATER



Machine Id
KAESER SX 7 2245488 (S/N 1094)

Component
Compressor

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

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. We advise that you stop the unit and follow the water drain-off procedure for this component. We recommend an early resample in 500 hours to monitor this condition.

▲ Wear

The aluminum level is abnormal. All other 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			KCPA010393	KCPA004138	KCP11493
Sample Date	Client Info			25 Jan 2024	21 Jul 2023	10 Oct 2019
Machine Age	hrs	Client Info		36081	35984	28220
Oil Age	hrs	Client Info		0	0	2444
Oil Changed	Client Info			N/A	N/A	Not Changd
Sample Status				ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	31	▲ 37	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>10	▲ 35	1	0
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>50	<1	2	0
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

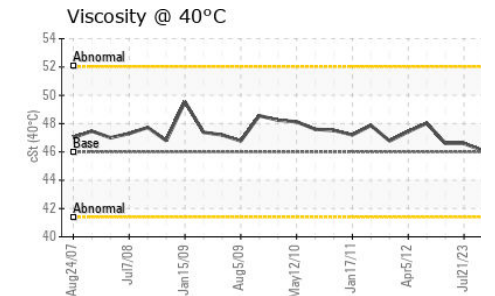
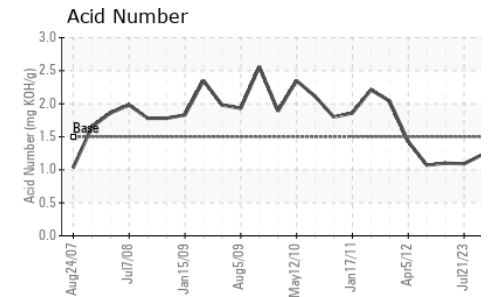
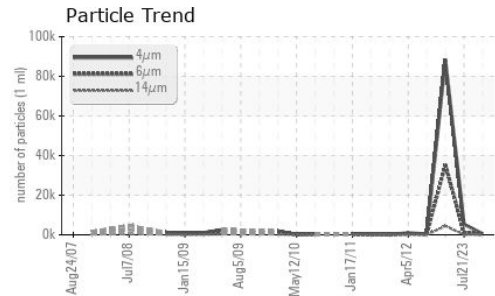
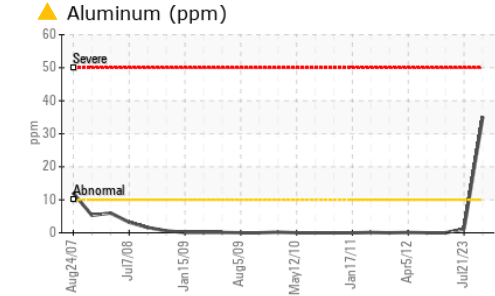
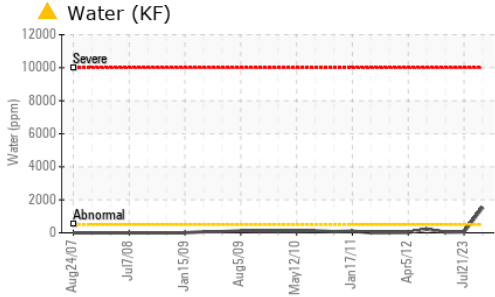
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	12
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	4
Magnesium	ppm	ASTM D5185m		0	4	0
Calcium	ppm	ASTM D5185m		0	0	0
Phosphorus	ppm	ASTM D5185m	500	444	384	234
Zinc	ppm	ASTM D5185m		305	266	0
Sulfur	ppm	ASTM D5185m		2312	2239	0

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	0
Sodium	ppm	ASTM D5185m		2	<1	2
Potassium	ppm	ASTM D5185m	>20	<1	0	9
Water	%	ASTM D6304	>0.05	▲ 0.153	0.005	0.003
ppm Water	ppm	ASTM D6304	>500	▲ 1530	53.3	38.3

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		531	5319	88335
Particles >6µm		ASTM D7647	>1300	289	1114	▲ 35345
Particles >14µm		ASTM D7647	>80	49	75	▲ 4471
Particles >21µm		ASTM D7647	>20	17	22	▲ 1543
Particles >38µm		ASTM D7647	>4	3	1	▲ 110
Particles >71µm		ASTM D7647	>3	0	0	▲ 6
Oil Cleanliness		ISO 4406 (c)	>--/17/13	16/15/13	20/17/13	▲ 22/19

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.5	1.23	1.09	1.099

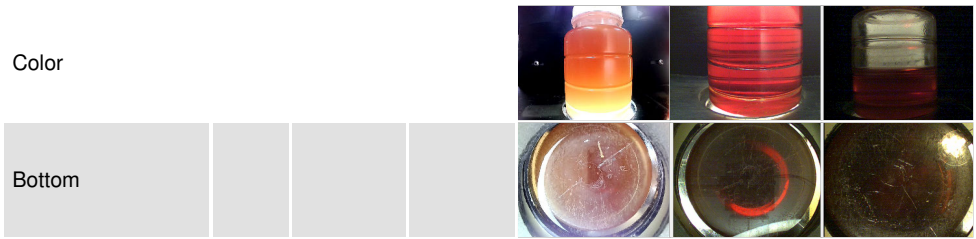
OIL ANALYSIS REPORT



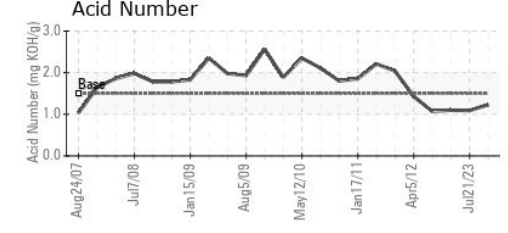
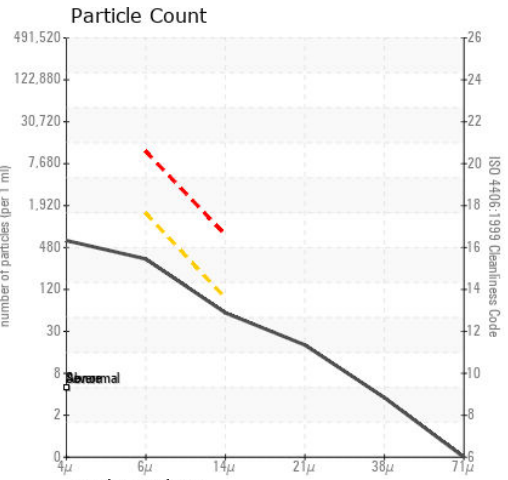
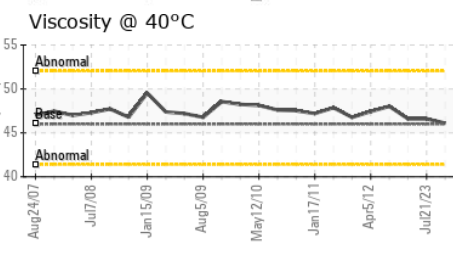
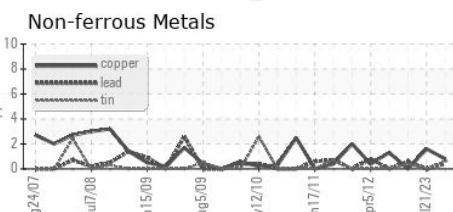
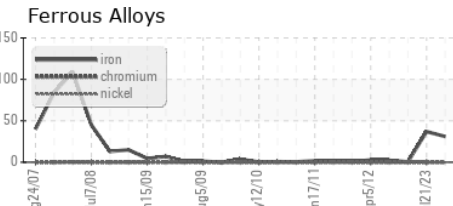
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	46	46.1	46.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA010393 **Received** : 01 Feb 2024
Lab Number : 06076884 **Diagnosed** : 07 Feb 2024
Unique Number : 10858975 **Diagnostician** : Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, PrtCount)

ISOTIS ORTHOBIOLOGICS - SEASPINE
 2 GOODYEAR, SUITES A & B
 IRVINE, CA
 US 92618
 Contact: JULIO MANDEZ
 julio.mandez@seaspine.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)