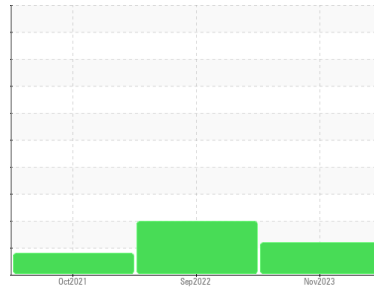




OIL ANALYSIS REPORT

Sample Rating Trend



CONTAMINANT



Machine Id
7380714 (S/N 1028)
 Component
Compressor
 Fluid
KAESER SIGMA (OEM) M-460 (--- QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

All component wear rates are normal.

Contamination

Appearance is hazy. High concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			KCPA005753	KCP51466	KCP38755
Sample Date	Client Info			15 Nov 2023	22 Sep 2022	04 Oct 2021
Machine Age	hrs	Client Info		15505	9360	5342
Oil Age	hrs	Client Info		0	4024	5342
Oil Changed	Client Info			Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<1	5	<1
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>3	0	<1	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	<1	1
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>50	12	15	9
Tin	ppm	ASTM D5185m	>10	0	0	0
Antimony	ppm	ASTM D5185m		---	---	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

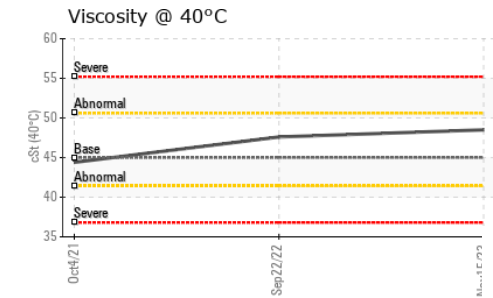
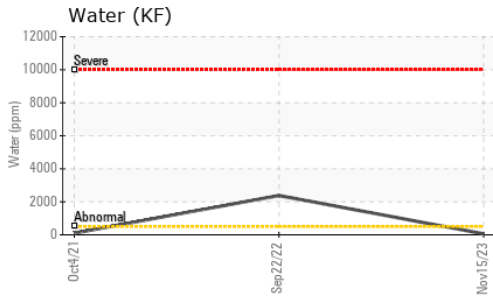
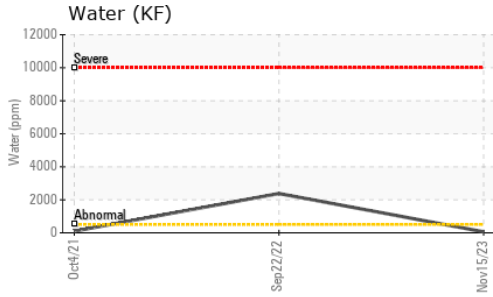
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0	<1
Barium	ppm	ASTM D5185m	90	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0	0
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	100	0	1	<1
Calcium	ppm	ASTM D5185m	0	0	0	0
Phosphorus	ppm	ASTM D5185m	0	0	32	0
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m	23500	15759	19832	14111

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<1	2	0
Sodium	ppm	ASTM D5185m		<1	<1	1
Potassium	ppm	ASTM D5185m	>20	0	0	0
Water	%	ASTM D6304	>0.05	0.006	▲ 0.238	0.010
ppm Water	ppm	ASTM D6304	>500	60	▲ 2380	100.7

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		---	---	2251
Particles >6µm		ASTM D7647	>1300	---	---	572
Particles >14µm		ASTM D7647	>80	---	---	● 110
Particles >21µm		ASTM D7647	>20	---	---	● 40
Particles >38µm		ASTM D7647	>4	---	---	3
Particles >71µm		ASTM D7647	>3	---	---	0
Oil Cleanliness		ISO 4406 (c)	>--/17/13	---	---	● 16/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.56	0.37	0.337

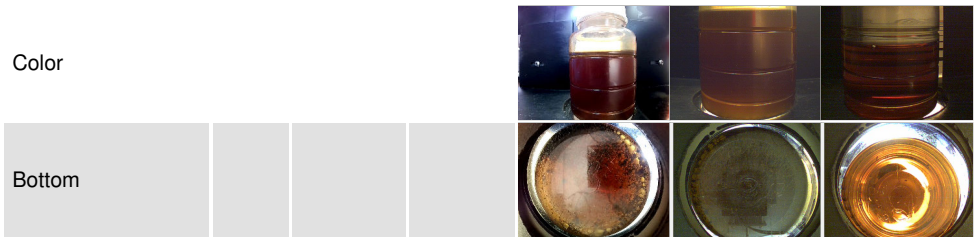
OIL ANALYSIS REPORT



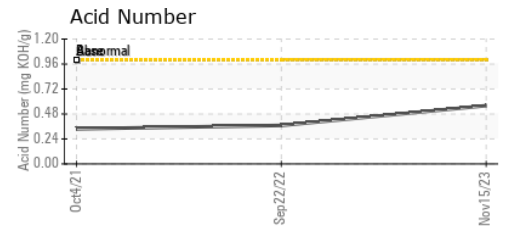
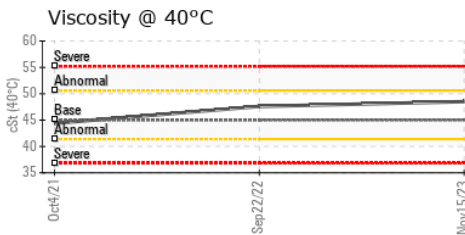
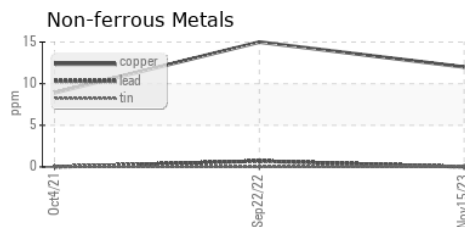
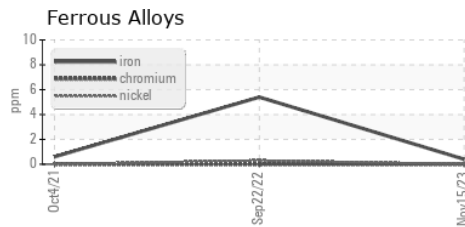
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ HEAVY	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	45	48.5	47.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KCPA005753
Lab Number : 06161453
Unique Number : 10996876
Test Package : IND 2 (Additional Tests: KF, PrtCount)

Received : 26 Apr 2024

Tested : 30 Apr 2024

Diagnosed : 30 Apr 2024 - Don Baldrige

HEXION
 333 NEILS EDDY RD
 RIEGELWOOD, NC
 US 28456
 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)

T:
F: