



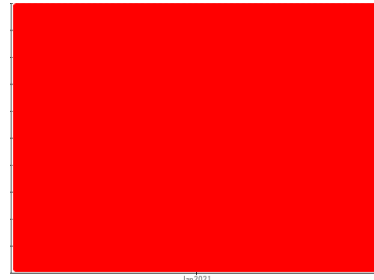
PROBLEM SUMMARY

Sample Rating Trend

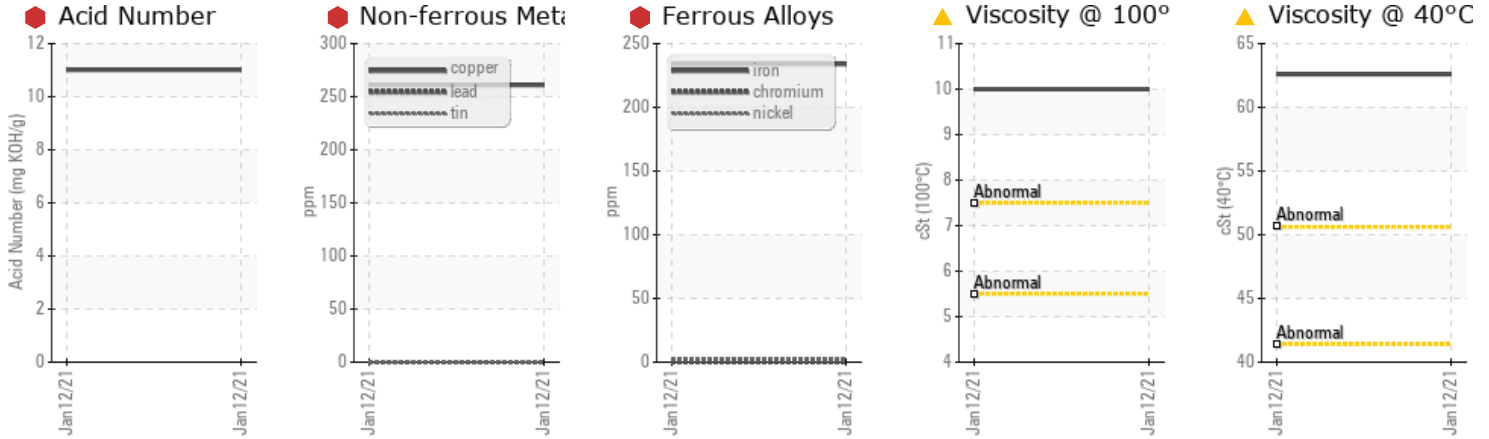
WEAR



Machine Id
KAESER 2350 NORTH
Component
Air Compressor
Fluid
BEACON SIGNAL TEC AIR 46 H1 (5 GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for a possible overheat condition. Recommend drain oil if not already done and flush with cleaner before refilling with oil. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that this is a corrected copy for laboratory data and diagnostic comment updates.

PROBLEMATIC TEST RESULTS

Sample Status	SEVERE	---	---
Iron ppm ASTM D5185m >50	234	---	---
Copper ppm ASTM D5185m >40	261	---	---
Particles >6µm ASTM D7647 >1300	1451	---	---
Particles >14µm ASTM D7647 >80	122	---	---
Particles >21µm ASTM D7647 >20	29	---	---
Oil Cleanliness ISO 4406 (c) >--/17/13	20/18/14	---	---
Acid Number (AN) mg KOH/g ASTM D8045	11.01	---	---
Visc @ 40°C cSt ASTM D445	62.6	---	---
Visc @ 100°C cSt ASTM D445	10.0	---	---

Customer Id: BEADEI
Sample No.: WCI2277566
Lab Number: 05161895
Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	MISSED	Feb 22 2021	?	We advise that you inspect for the source(s) of wear.
Change Fluid	MISSED	Feb 22 2021	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Flush System	MISSED	Feb 22 2021	?	Recommend drain oil if not already done and flush with cleaner before refilling with oil.
Change Filter	MISSED	Feb 22 2021	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	MISSED	Feb 22 2021	?	We recommend an early resample to monitor this condition.
Check For Overheating	MISSED	Feb 22 2021	?	We advise that you check for a possible overheat condition.

HISTORICAL DIAGNOSIS



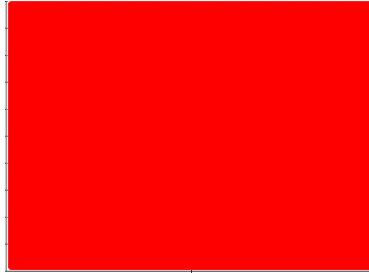
OIL ANALYSIS REPORT

Sample Rating Trend

WEAR



Machine Id
KAESER 2350 NORTH
 Component
Air Compressor
 Fluid
BEACON SIGNAL TEC AIR 46 H1 (5 GAL)



DIAGNOSIS

Recommendation

We advise that you check for a possible overheat condition. Recommend drain oil if not already done and flush with cleaner before refilling with oil. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Please note that this is a corrected copy for laboratory data and diagnostic comment updates.

Wear

The iron level is severe. The copper level is severe.

Contamination

There is a moderate amount of particulates present in the oil.

Fluid Condition

The AN level is above the recommended limit. The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type. The oil is no longer serviceable.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WCI2277566	---	---
Sample Date	Client Info		12 Jan 2021	---	---
Machine Age	hrs	Client Info	24819	---	---
Oil Age	hrs	Client Info	2337	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	234	---	---
Chromium	ppm	ASTM D5185m >4	0	---	---
Nickel	ppm	ASTM D5185m >4	2	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >10	<1	---	---
Lead	ppm	ASTM D5185m >20	0	---	---
Copper	ppm	ASTM D5185m >40	261	---	---
Tin	ppm	ASTM D5185m >5	0	---	---
Antimony	ppm	ASTM D5185m	0	---	---
Vanadium	ppm	ASTM D5185m	0	---	---
Cadmium	ppm	ASTM D5185m	0	---	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	3	---	---
Barium	ppm	ASTM D5185m	<1	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	<1	---	---
Magnesium	ppm	ASTM D5185m	1	---	---
Calcium	ppm	ASTM D5185m	<1	---	---
Phosphorus	ppm	ASTM D5185m	114	---	---
Zinc	ppm	ASTM D5185m	559	---	---
Sulfur	ppm	ASTM D5185m	152	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	---	---
Sodium	ppm	ASTM D5185m	5	---	---
Potassium	ppm	ASTM D5185m >20	6	---	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		5940	---	---
Particles >6µm	ASTM D7647	>1300	1451	---	---
Particles >14µm	ASTM D7647	>80	122	---	---
Particles >21µm	ASTM D7647	>20	29	---	---
Particles >38µm	ASTM D7647	>4	0	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>--/17/13	20/18/14	---	---

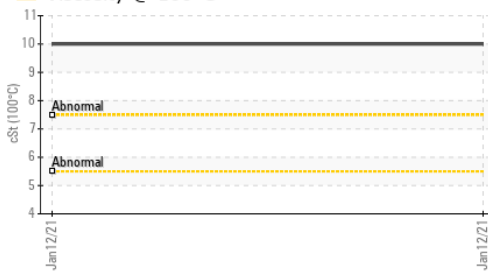
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	11.01	---	---

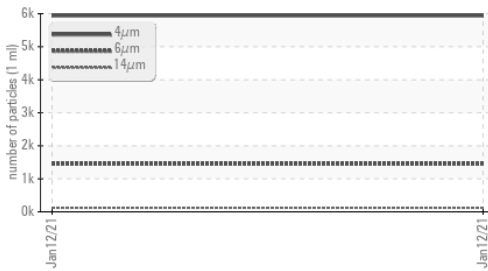


OIL ANALYSIS REPORT

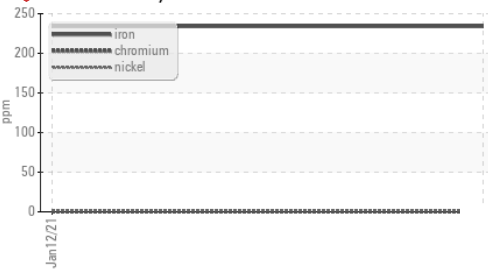
▲ Viscosity @ 100°C



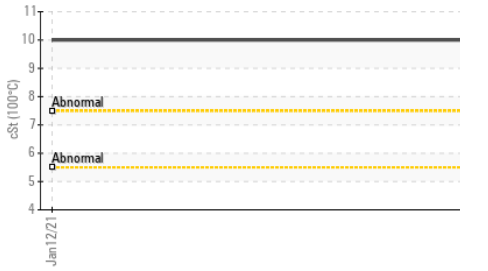
▲ Particle Trend



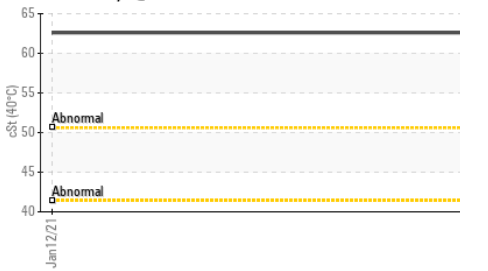
◆ Ferrous Alloys



▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.6	NEG	---
Free Water	scalar	*Visual		NEG	---

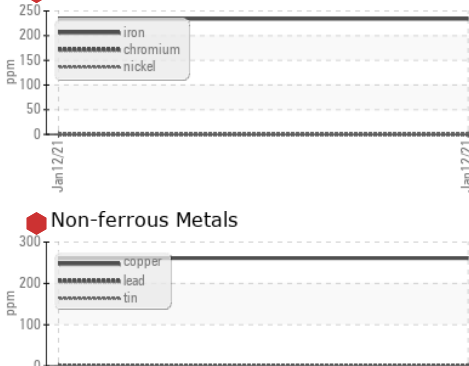
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	▲ 62.6	---	---
Visc @ 100°C	cSt	ASTM D445	▲ 10.0	---	---
Viscosity Index (VI)	Scale	ASTM D2270	145	---	---

▲ SAMPLE IMAGES

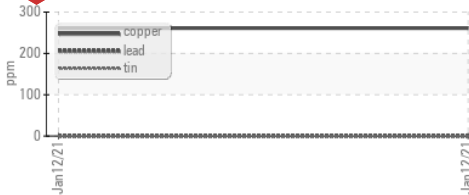
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

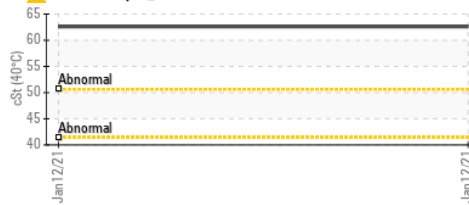
◆ Ferrous Alloys



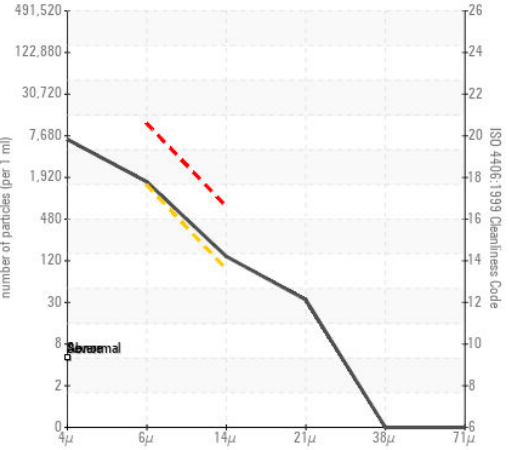
◆ Non-ferrous Metals



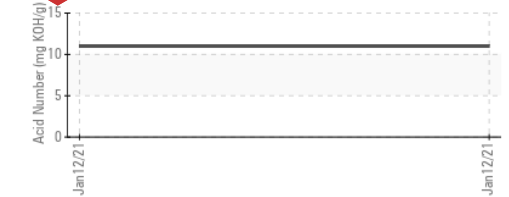
▲ Viscosity @ 40°C



▲ Particle Count



◆ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC12277566 Received : 20 Jan 2021
 Lab Number : 05161895 Diagnosed : 28 Jan 2021
 Unique Number : 9332177 Diagnostician : Doug Bogart
 Test Package : IND 2 (Additional Tests: KV100, PrtCount, VI)

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)

BEACON LUBRICANTS

P.O. BOX 754
 EDINBORO, PA
 US 16412

Contact: Brent Hulings
 purchasing@beaconlubricants.com

T: (814)734-7535
 F: (814)734-3460