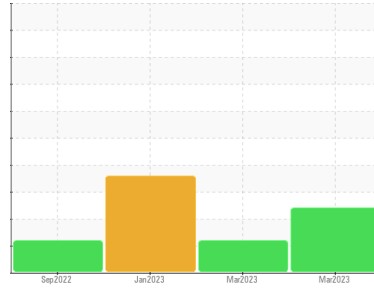




PROBLEM SUMMARY

Sample Rating Trend



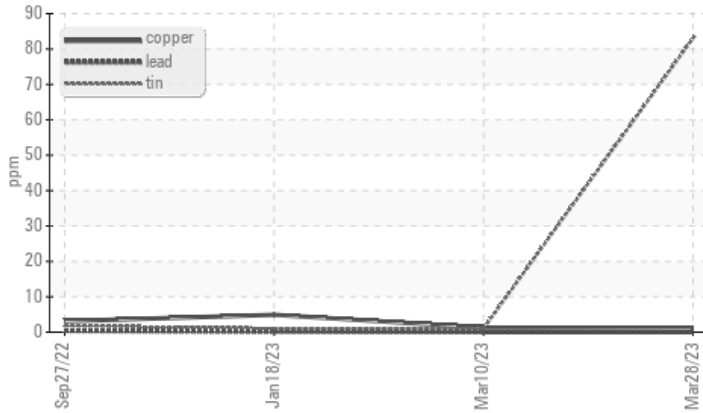
DEGRADATION



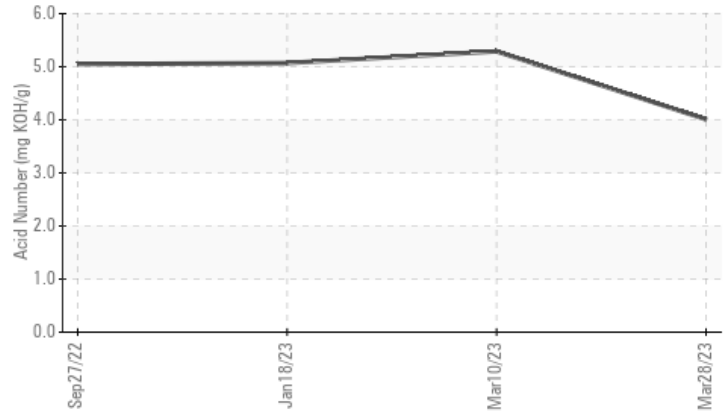
Area
HOTLINE/PUSHER FURNACES
 Machine Id
#2 AUX HYD SYSTEM 1406-B10-0090
 Component
Hydraulic System
 Fluid
BENZ OIL ULTRA GUARD 552 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Non-ferrous Metals



▲ Acid Number



RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ATTENTION	ABNORMAL
Tin	ppm	ASTM D5185m	>20	▲ 83	1	1
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ 4.009	▲ 5.29	▲ 5.07
Debris	scalar	*Visual	NONE	▲ MODER	NONE	LIGHT

Customer Id: CONMUSAL
 Sample No.: KFS0003718
 Lab Number: 05806158
 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
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

10 Mar 2023 Diag: Don Baldrige

DEGRADATION



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is above the recommended limit.

view report



18 Jan 2023 Diag: Jonathan Hester

DEGRADATION



We recommend you service the filters on this component. Resample at the next service interval to monitor. Please submit a sample of the new (unused) oil to establish a baseline. All component wear rates are normal. There is a high amount of particulates present in the oil. The AN level is above the recommended limit.

view report



27 Sep 2022 Diag: Doug Bogart

DEGRADATION



Resample at the next service interval to monitor. Please submit a sample of the new (unused) oil to establish a baseline. All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level appears to be above the recommended limit.

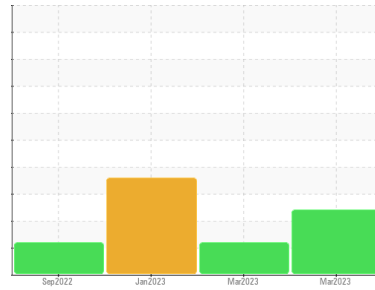
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Area
HOTLINE/PUSHER FURNACES
 Machine Id
#2 AUX HYD SYSTEM 1406-B10-0090
 Component
Hydraulic System
 Fluid
BENZ OIL ULTRA GUARD 552 (--- GAL)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition. Please submit a sample of the new (unused) oil to establish a baseline. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

The tin level is abnormal. All other component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level appears to be above the recommended limit.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KFS0003718	KFS0002628	KFS0003067
Sample Date	Client Info	28 Mar 2023	10 Mar 2023	18 Jan 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ATTENTION	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	4	2	2
Chromium	ppm	ASTM D5185m >20	2	2	2
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	<1	0
Lead	ppm	ASTM D5185m >20	0	0	<1
Copper	ppm	ASTM D5185m >20	1	1	5
Tin	ppm	ASTM D5185m >20	▲ 83	1	1
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
Barium	ppm	ASTM D5185m	0	2	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	0	0
Magnesium	ppm	ASTM D5185m	3	2	0
Calcium	ppm	ASTM D5185m	4	4	<1
Phosphorus	ppm	ASTM D5185m	196	271	297
Zinc	ppm	ASTM D5185m	7	8	0
Sulfur	ppm	ASTM D5185m	1525	1105	1101

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	2	2	2
Sodium	ppm	ASTM D5185m	1	0	0
Potassium	ppm	ASTM D5185m >20	1	<1	0

FLUID CLEANLINESS

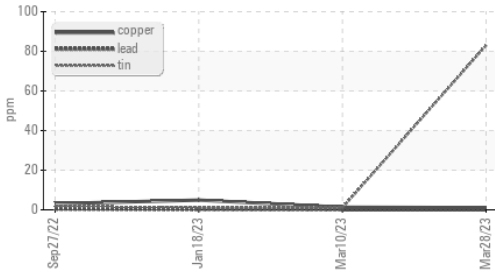
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	2014	▲ 5797
Particles >6µm	ASTM D7647 >1300	---	566	▲ 2456
Particles >14µm	ASTM D7647 >160	---	35	▲ 426
Particles >21µm	ASTM D7647 >40	---	6	▲ 174
Particles >38µm	ASTM D7647 >10	---	0	▲ 11
Particles >71µm	ASTM D7647 >3	---	0	1
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	18/16/12	▲ 20/18/16

FLUID DEGRADATION

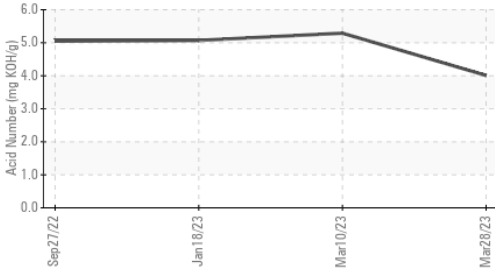
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	▲ 4.009	▲ 5.29	▲ 5.07

OIL ANALYSIS REPORT

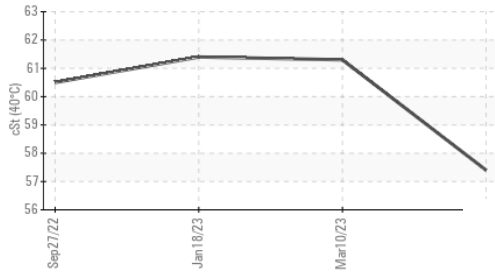
▲ Non-ferrous Metals



▲ Acid Number



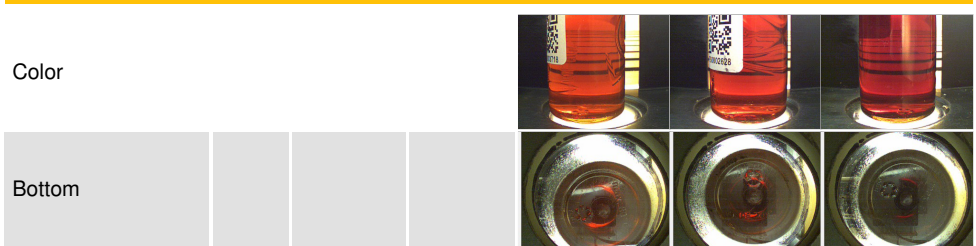
Viscosity @ 40°C



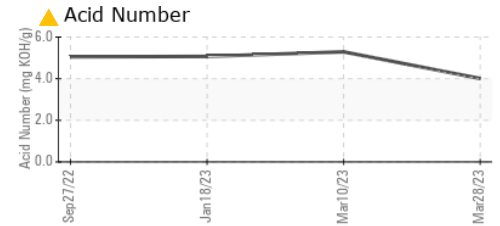
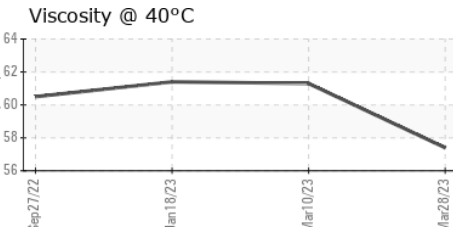
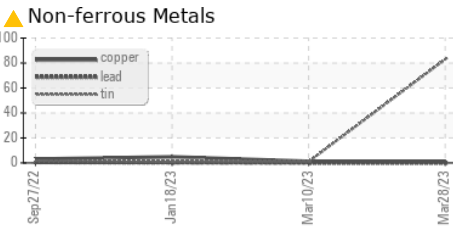
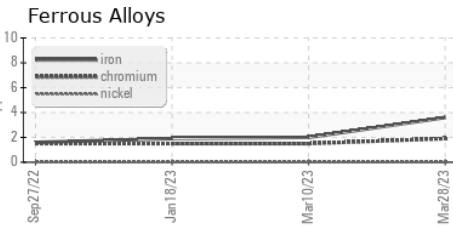
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	▲ MODER	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	57.4	61.3	61.4

SAMPLE IMAGES



GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : KFS0003718 **Received** : 30 Mar 2023
Lab Number : 05806158 **Diagnosed** : 11 Apr 2023
Unique Number : 10403687 **Diagnostician** : Doug Bogart
Test Package : IND 2

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)

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