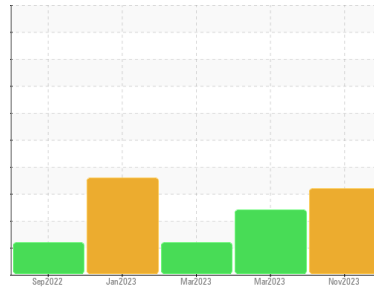




PROBLEM SUMMARY

Sample Rating Trend



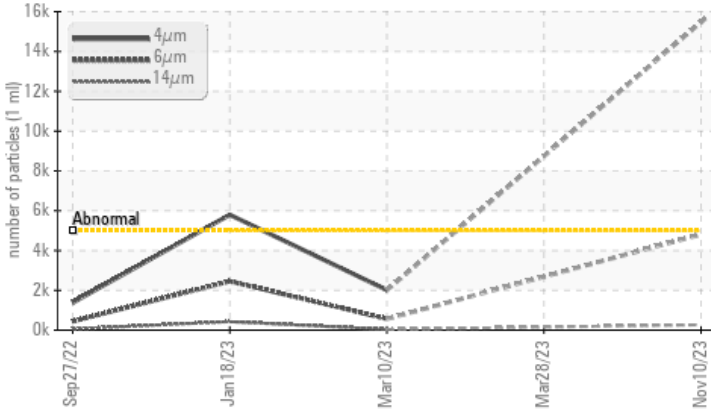
DEGRADATION



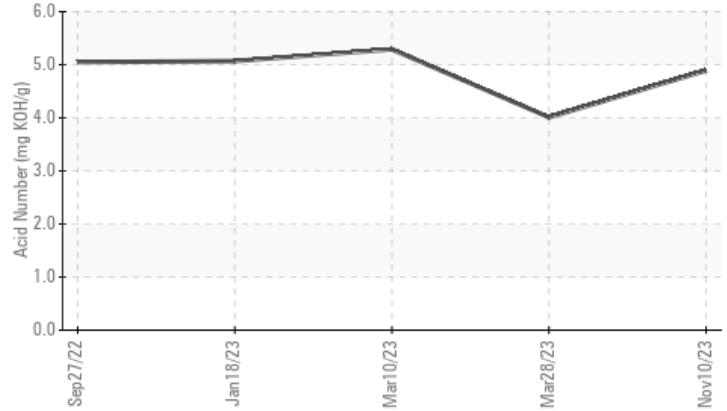
Area
HOTLINE/PUSHER FURNACES
 Machine Id
#2 AUX HYD SYSTEM 1406-B10-0090
 Component
Hydraulic System
 Fluid
BENZ OIL ULTRA GUARD 552 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



▲ Acid Number



RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ATTENTION
Particles >4µm	ASTM D7647	>5000	▲ 15469	---	2014
Particles >6µm	ASTM D7647	>1300	▲ 4812	---	566
Particles >14µm	ASTM D7647	>160	▲ 267	---	35
Particles >21µm	ASTM D7647	>40	▲ 52	---	6
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/19/15	---	18/16/12
Acid Number (AN)	mg KOH/g	ASTM D8045	▲ 4.89	▲ 4.009	▲ 5.29

Customer Id: CONMUSAL
 Sample No.: KFS0004831
 Lab Number: 06007650
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

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.

HISTORICAL DIAGNOSIS

28 Mar 2023 Diag: Doug Bogart

DEGRADATION



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. The tin level is abnormal. All other component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. The AN level appears to be above the recommended limit.

view report



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.

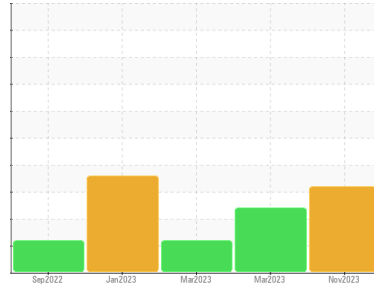
view report





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. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

The AN level is above the recommended limit.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	KFS0004831	KFS0003718	KFS0002628
Sample Date	Client Info	10 Nov 2023	28 Mar 2023	10 Mar 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	ABNORMAL	ATTENTION

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<1	4	2
Chromium	ppm	ASTM D5185m >20	<1	2	2
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >20	0	<1	<1
Lead	ppm	ASTM D5185m >20	0	0	0
Copper	ppm	ASTM D5185m >20	<1	1	1
Tin	ppm	ASTM D5185m >20	9	▲ 83	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	0	2
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	<1	0
Magnesium	ppm	ASTM D5185m	<1	3	2
Calcium	ppm	ASTM D5185m	1	4	4
Phosphorus	ppm	ASTM D5185m	326	196	271
Zinc	ppm	ASTM D5185m	9	7	8
Sulfur	ppm	ASTM D5185m	1118	1525	1105

CONTAMINANTS

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

FLUID CLEANLINESS

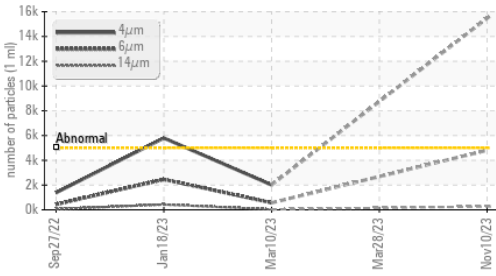
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 15469	---	2014
Particles >6µm	ASTM D7647 >1300	▲ 4812	---	566
Particles >14µm	ASTM D7647 >160	▲ 267	---	35
Particles >21µm	ASTM D7647 >40	▲ 52	---	6
Particles >38µm	ASTM D7647 >10	2	---	0
Particles >71µm	ASTM D7647 >3	0	---	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 21/19/15	---	18/16/12

FLUID DEGRADATION

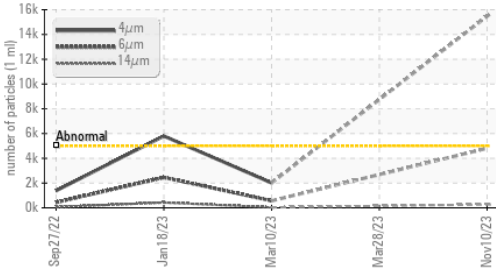
method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	▲ 4.89	▲ 4.009	▲ 5.29

OIL ANALYSIS REPORT

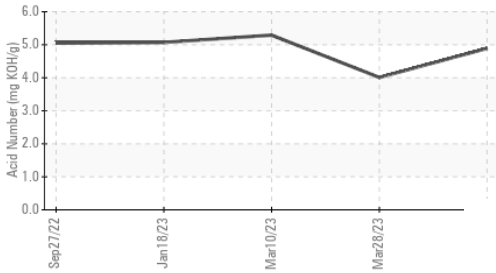
▲ Particle Trend



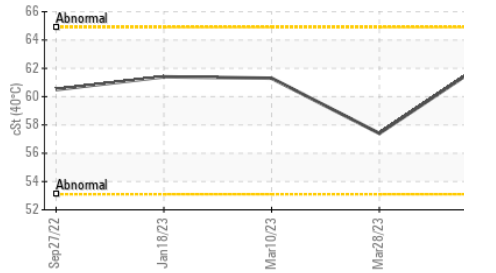
▲ Particle Trend



▲ Acid Number



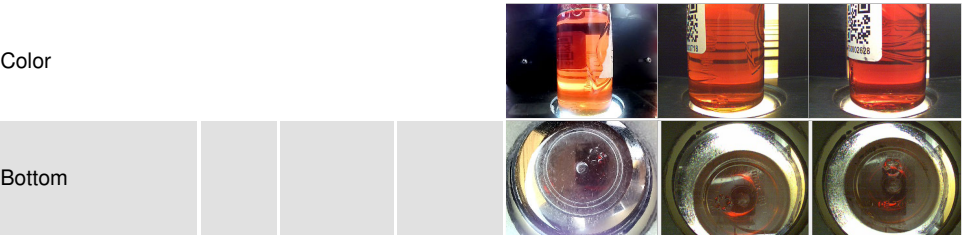
Viscosity @ 40°C



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	NONE	NONE	▲ MODER
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

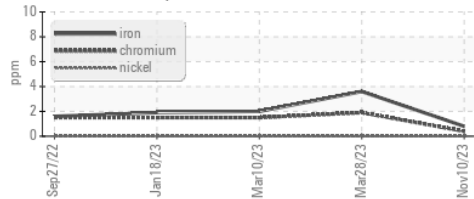
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	62.5	57.4	61.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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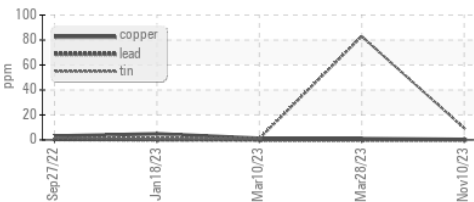


GRAPHS

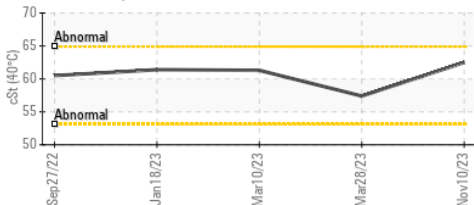
Ferrous Alloys



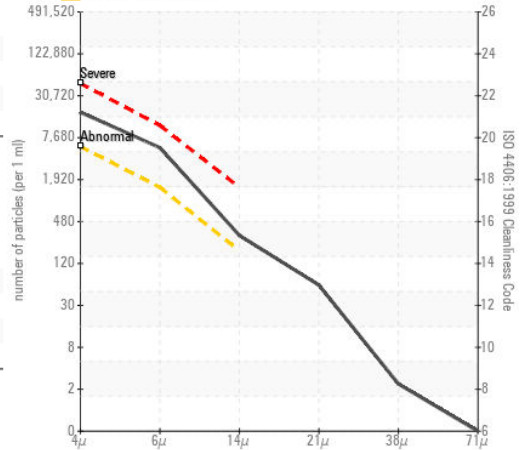
Non-ferrous Metals



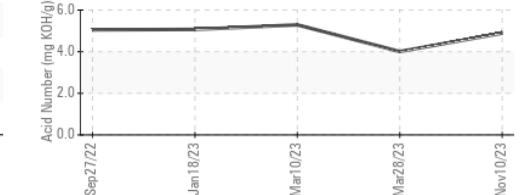
Viscosity @ 40°C



▲ Particle Count



▲ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : KFS0004831 Received : 14 Nov 2023
 Lab Number : 06007650 Diagnosed : 16 Nov 2023
 Unique Number : 10741412 Diagnostician : Don Baldrige
 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)

CONSTELLIUM
 4805 SECOND STREET
 MUSCLE SHOALS, AL
 US 35661

Contact: Joel Even
 joel.even@constellium.com

T: (256)740-7490

F: