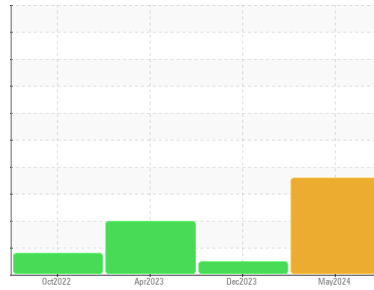




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**HOTLINE/120 MILL**

Machine Id

**120 STAND 1B GEN EAST BRG 1415-033-0011**

Component

**Bearing**

Fluid

**ROYAL PURPLE SYNFLIM GT 68 (25 GAL)**

## DIAGNOSIS

### Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample at the next service interval to monitor.

### Wear

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

### Contamination

There is a high amount of particulates present in the oil. There is a moderate amount of visible silt present in the sample.

### 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	<b>KFS0004798</b>	KFS0002498	KFS0003481
Sample Date	Client Info	<b>10 May 2024</b>	20 Dec 2023	17 Apr 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	NORMAL	ABNORMAL

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >2	<b>NEG</b>	NEG	NEG

## WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >20	<b>&lt;1</b>	0	0
Chromium	ppm ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm ASTM D5185m >20	<b>&lt;1</b>	0	0
Titanium	ppm ASTM D5185m	<b>0</b>	0	0
Silver	ppm ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm ASTM D5185m >20	<b>&lt;1</b>	2	0
Lead	ppm ASTM D5185m >20	<b>▲ 44</b>	9	▲ 30
Copper	ppm ASTM D5185m >20	<b>2</b>	<1	2
Tin	ppm ASTM D5185m >20	<b>4</b>	0	1
Vanadium	ppm ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>0</b>	0	0
Barium	ppm ASTM D5185m	<b>&lt;1</b>	0	0
Molybdenum	ppm ASTM D5185m	<b>0</b>	0	0
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	0	<1
Magnesium	ppm ASTM D5185m 90	<b>82</b>	89	97
Calcium	ppm ASTM D5185m	<b>3</b>	2	3
Phosphorus	ppm ASTM D5185m	<b>4</b>	31	4
Zinc	ppm ASTM D5185m	<b>&lt;1</b>	0	3
Sulfur	ppm ASTM D5185m	<b>21864</b>	20747	22472

## CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >15	<b>4</b>	1	<1
Sodium	ppm ASTM D5185m	<b>1</b>	<1	<1
Potassium	ppm ASTM D5185m >20	<b>1</b>	<1	0

## FLUID CLEANLINESS

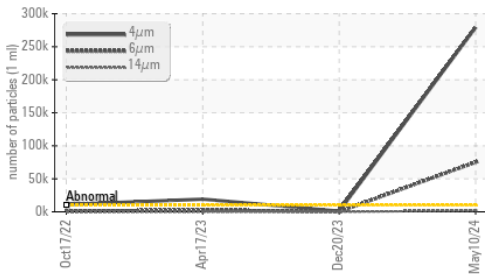
method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 279164</b>	989	● 19181
Particles >6µm	ASTM D7647 >2500	<b>▲ 75240</b>	178	● 2642
Particles >14µm	ASTM D7647 >160	<b>▲ 1834</b>	15	83
Particles >21µm	ASTM D7647 >40	<b>▲ 268</b>	5	18
Particles >38µm	ASTM D7647 >10	<b>3</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/14	<b>▲ 25/23/18</b>	17/15/11	● 21/19/14

## FLUID DEGRADATION

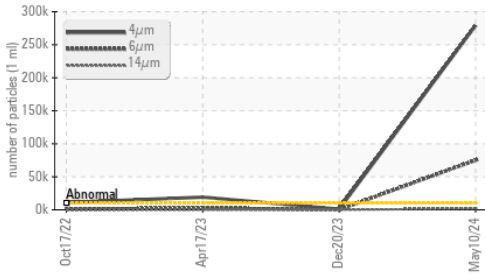
method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.38</b>	0.37	0.37

# OIL ANALYSIS REPORT

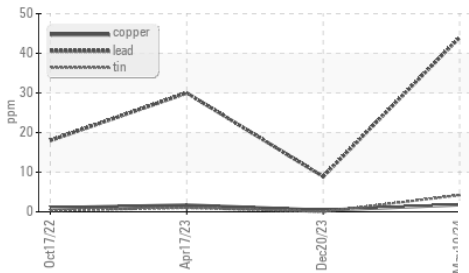
## ▲ Particle Trend



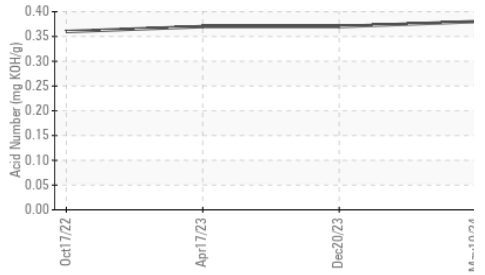
## ▲ Particle Trend



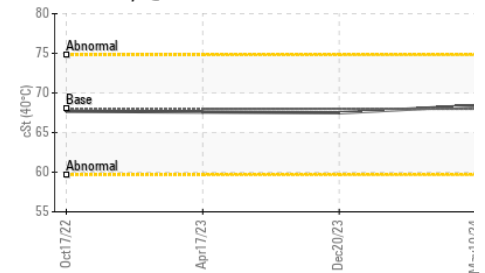
## ▲ Non-ferrous Metals



## 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	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	68.4	67.5	67.6

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

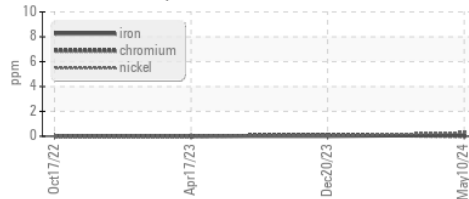


Bottom

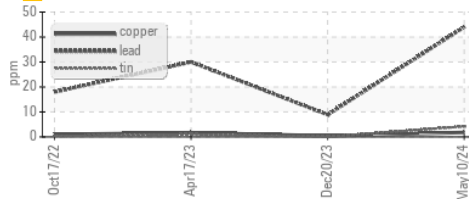


## GRAPHS

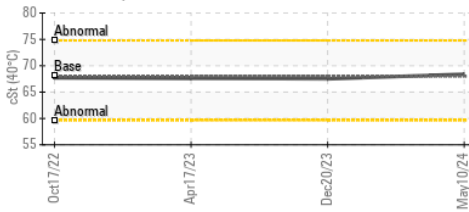
### Ferrous Alloys



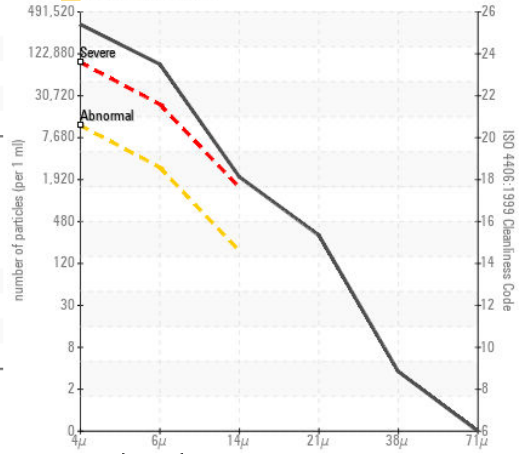
### Non-ferrous Metals



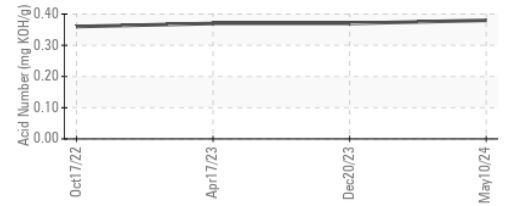
### Viscosity @ 40°C



### ▲ Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : KFS0004798

**Lab Number** : 06179332

**Unique Number** : 11030658

**Test Package** : IND 2 ( Additional Tests: PrtCount )

**Received** : 14 May 2024

**Tested** : 16 May 2024

**Diagnosed** : 16 May 2024 - Angela Borella

**CONSTELLIUM**

4805 SECOND STREET

MUSCLE SHOALS, AL

US 35661

Contact: Joel Even

joel.even@constellium.com

T: (256)740-7490

F:

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)