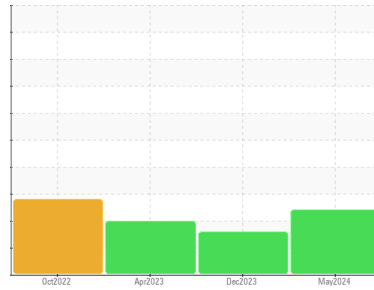




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**HOTLINE/120 MILL**

Machine Id

**120 MILL MTR STAND 3B SOUTH BRG 1415-035-0232**

Component

**South Bearing**

Fluid

**ROYAL PURPLE SYNFLM GT 68 (30 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. 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.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KFS0004810</b>	KFS0005145	KFS0003473
Sample Date	Client Info	<b>10 May 2024</b>	19 Dec 2023	17 Apr 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## CONTAMINATION

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

## WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	1
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>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>20	<b>▲ 163</b>	▲ 188	▲ 189
Copper	ppm	ASTM D5185m	>20	<b>3</b>	4	4
Tin	ppm	ASTM D5185m	>20	<b>16</b>	15	19
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>2</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>79</b>	90	98
Calcium	ppm	ASTM D5185m		<b>3</b>	2	2
Phosphorus	ppm	ASTM D5185m		<b>5</b>	34	2
Zinc	ppm	ASTM D5185m		<b>0</b>	0	2
Sulfur	ppm	ASTM D5185m		<b>20222</b>	18568	22557

## CONTAMINANTS

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

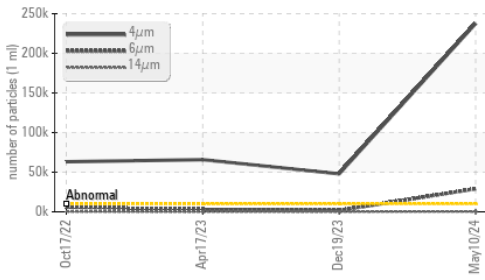
## FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>10000	<b>▲ 237572</b>	▲ 47914	▲ 65827
Particles >6µm	ASTM D7647	>2500	<b>▲ 29076</b>	1737	● 2980
Particles >14µm	ASTM D7647	>160	<b>● 216</b>	11	29
Particles >21µm	ASTM D7647	>40	<b>44</b>	1	4
Particles >38µm	ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/18/14	<b>▲ 25/22/15</b>	▲ 23/18/11	▲ 23/19/12

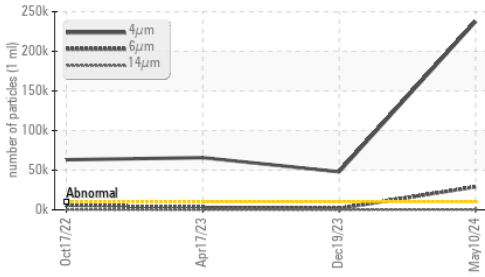
## FLUID DEGRADATION

method	limit/base	current	history1	history2		
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.38</b>	0.34	0.36

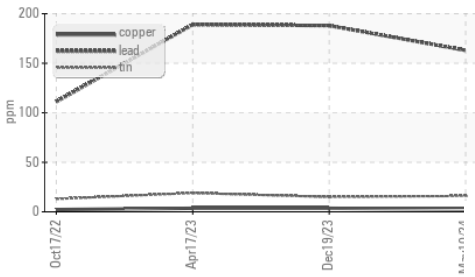
### Particle Trend



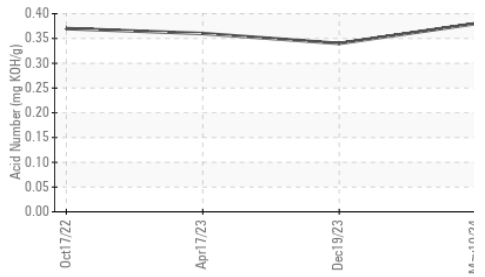
### Particle Trend



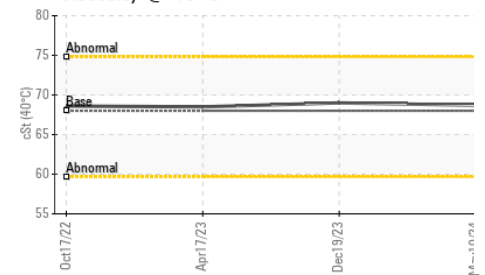
### Non-ferrous Metals



### 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	NONE	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	68.7	69.0	68.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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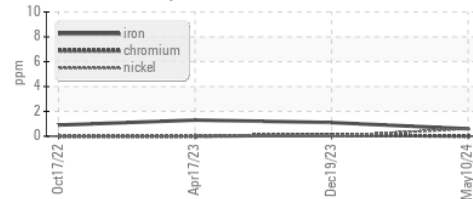
Color



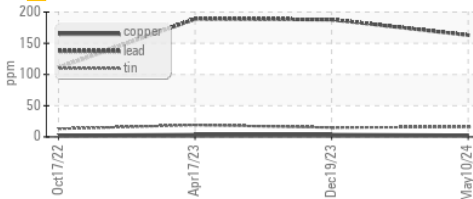
Bottom

### GRAPHS

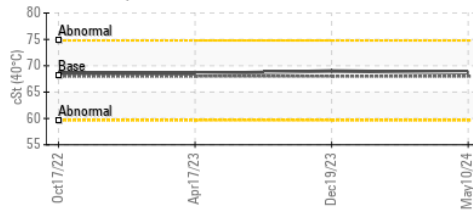
#### Ferrous Alloys



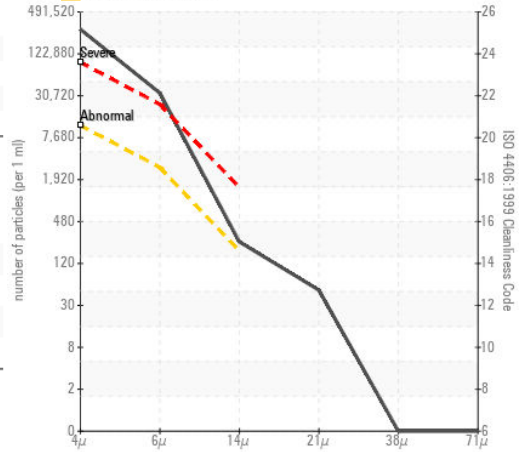
#### Non-ferrous Metals



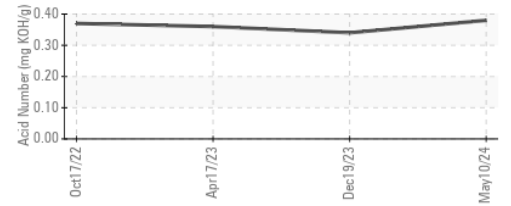
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



Certificate L2367

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

Sample No. : KFS0004810

Lab Number : 06179333

Unique Number : 11030659

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)