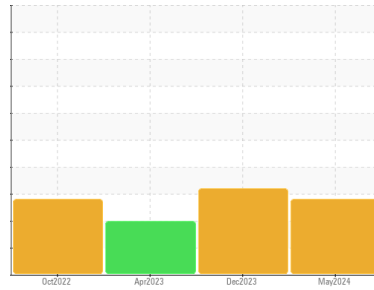




# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area

**HOTLINE/120 MILL**

Machine Id

**120 MILL MTR STAND 1 SOUTH BRG 1415-033-0121**

Component

**South Bearing**

Fluid

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

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component if applicable. 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 silt (particulates < 14 microns in size) present in the oil.

### Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type. The AN level is acceptable for this fluid.

## SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	<b>KFS0004812</b>	KFS0002510	KFS0003400
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>	ABNORMAL	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>	<1	2
Chromium	ppm ASTM D5185m >20	<b>0</b>	<1	0
Nickel	ppm ASTM D5185m >20	<b>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	<1
Lead	ppm ASTM D5185m >20	<b>▲ 37</b>	▲ 31	▲ 120
Copper	ppm ASTM D5185m >20	<b>2</b>	3	13
Tin	ppm ASTM D5185m >20	<b>6</b>	3	14
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>● 11</b>	● 12	85
Calcium	ppm ASTM D5185m	<b>2</b>	<1	2
Phosphorus	ppm ASTM D5185m	<b>50</b>	● 92	4
Zinc	ppm ASTM D5185m	<b>0</b>	0	5
Sulfur	ppm ASTM D5185m	<b>● 6351</b>	● 6131	22289

## CONTAMINANTS

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

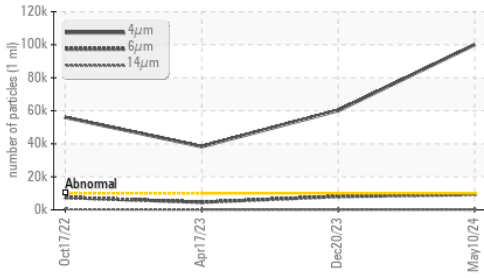
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >10000	<b>▲ 100027</b>	▲ 60097	▲ 38276
Particles >6µm	ASTM D7647 >2500	<b>▲ 9288</b>	▲ 8043	● 4577
Particles >14µm	ASTM D7647 >160	<b>97</b>	60	95
Particles >21µm	ASTM D7647 >40	<b>14</b>	7	16
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >20/18/14	<b>▲ 24/20/14</b>	▲ 23/20/13	▲ 22/19/14

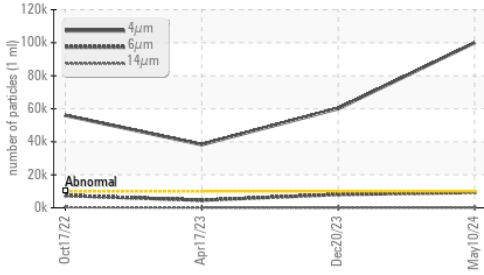
## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.34</b>	0.31	0.39

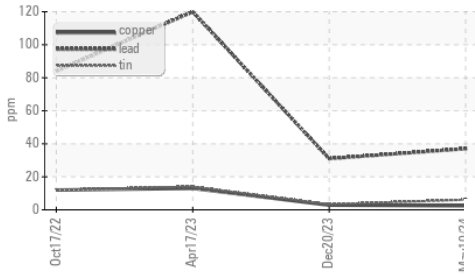
### Particle Trend



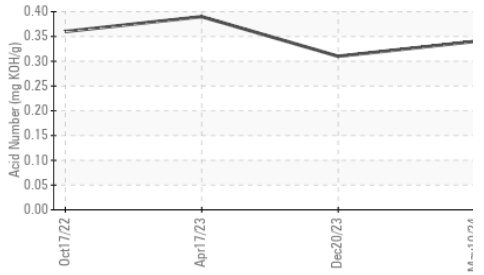
### Particle Trend



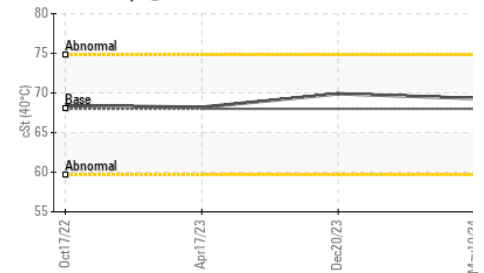
### Non-ferrous Metals



### Acid Number



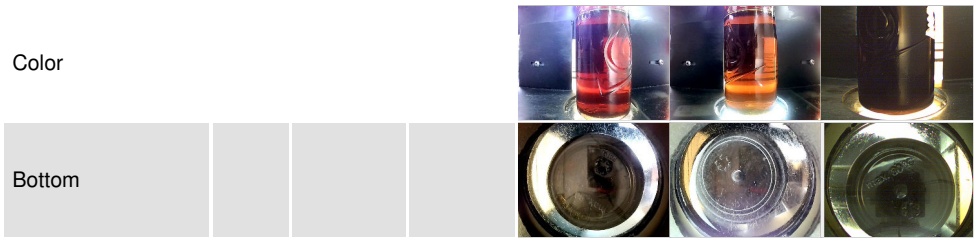
### Viscosity @ 40°C



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

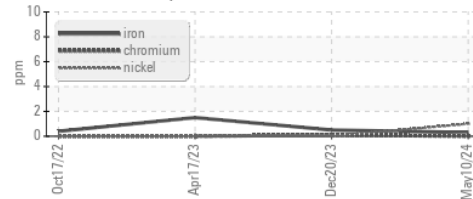
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 68	69.3	69.9	68.2

SAMPLE IMAGES	method	limit/base	current	history1	history2
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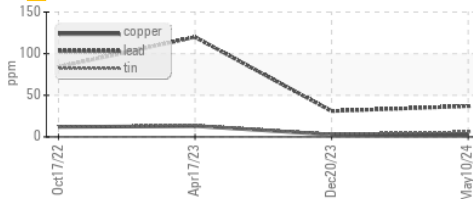


### GRAPHS

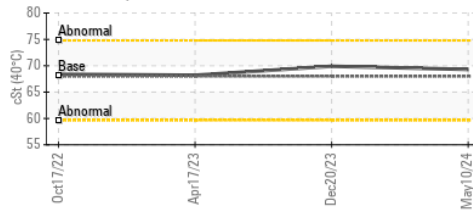
#### Ferrous Alloys



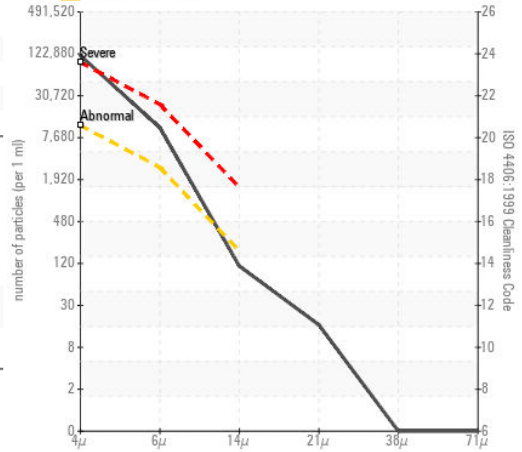
#### Non-ferrous Metals



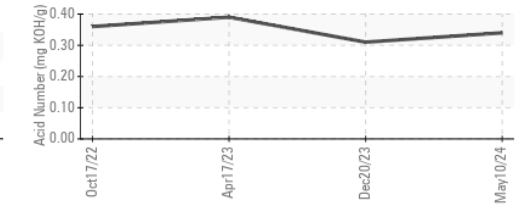
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KFS0004812 **Received** : 14 May 2024  
**Lab Number** : 06179337 **Tested** : 16 May 2024  
**Unique Number** : 11030663 **Diagnosed** : 16 May 2024 - Angela Borella  
**Test Package** : IND 2 ( Additional Tests: PrtCount )

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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