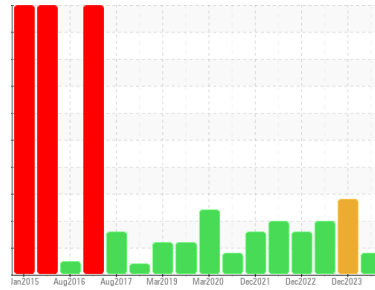




# OIL ANALYSIS REPORT

Sample Rating Trend



SEDIMENT



Area  
**ACRYLIC**  
 Machine Id  
**STG TK 4 - AGITATOR**  
 Component  
**Gearbox**  
 Fluid  
**SHELL OMALA S4 WE 460 (3 GAL)**

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

### Wear

All component wear rates are normal.

### Contamination

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 suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC06193946</b>	WC0855209	WC0802664
Sample Date	Client Info			<b>22 May 2024</b>	04 Dec 2023	07 Jun 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<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		>0.2	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>37</b>	▲ 290	▲ 230
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	3	3
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	<1	1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	2	<1
Lead	ppm	ASTM D5185m	>100	<b>1</b>	2	0
Copper	ppm	ASTM D5185m	>200	<b>19</b>	165	162
Tin	ppm	ASTM D5185m	>25	<b>5</b>	24	22
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
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>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	2
Magnesium	ppm	ASTM D5185m		<b>1</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>1</b>	0	5
Phosphorus	ppm	ASTM D5185m		<b>402</b>	382	322
Zinc	ppm	ASTM D5185m		<b>0</b>	0	1
Sulfur	ppm	ASTM D5185m		<b>32</b>	136	107

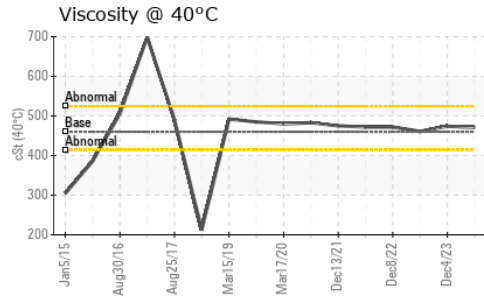
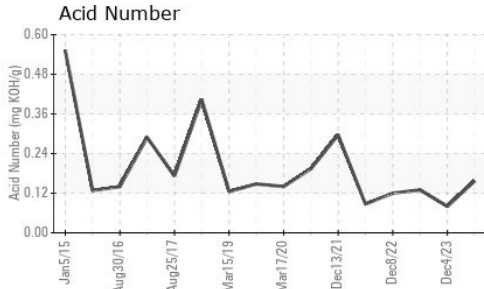
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>9</b>	14	15
Sodium	ppm	ASTM D5185m		<b>0</b>	0	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	3	1

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	---	▲ 326468	---
Particles >6µm		ASTM D7647	>5000	---	▲ 265736	---
Particles >14µm		ASTM D7647	>640	---	▲ 34640	---
Particles >21µm		ASTM D7647	>160	---	▲ 1393	---
Particles >38µm		ASTM D7647	>40	---	0	---
Particles >71µm		ASTM D7647	>10	---	0	---
Oil Cleanliness		ISO 4406 (c)	>21/19/16	---	▲ 26/25/22	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.157</b>	0.08	0.13



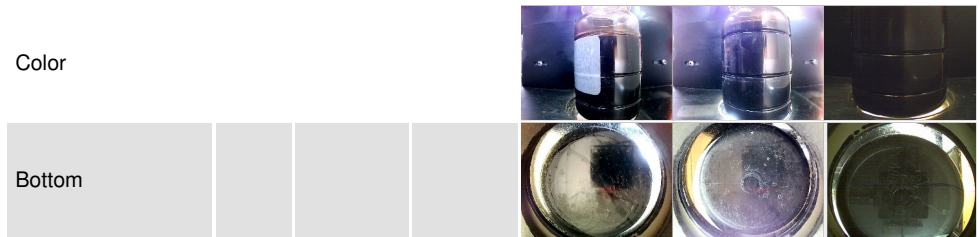
# OIL ANALYSIS REPORT



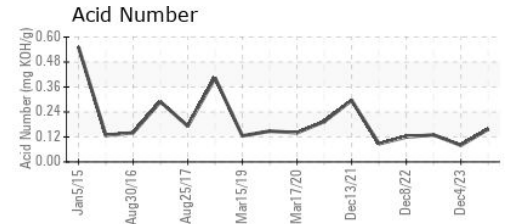
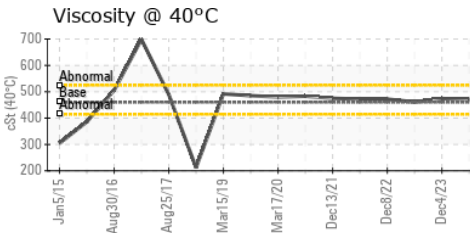
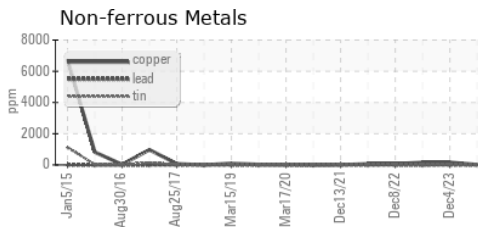
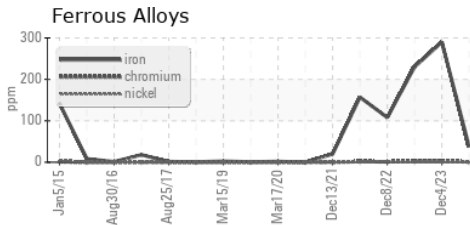
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	▲ MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	▲ MODER	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 460	471	474	461

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

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

**Sample No.** : WC06193946

**Lab Number** : 06193946

**Unique Number** : 11056069

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

**Received** : 29 May 2024

**Tested** : 31 May 2024

**Diagnosed** : 31 May 2024 - Jonathan Hester

**LUBRIZOL ADVANCED MATERIALS INC**

207 TELEGRAPH DR

GASTONIA, NC

US 28056

Contact: TIMOTHY DAVIS

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F: x:

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)