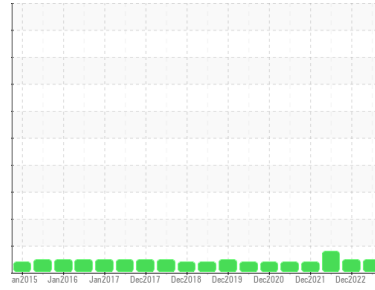




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**COMPOUND**  
 Machine Id  
**MT F - AGITATOR**

Component  
**Gearbox**  
 Fluid  
**SHELL OMALA S2 G 220 (19 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 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>WC0782807</b>	WC0748718	WC0690336
Sample Date	Client Info			<b>07 Jun 2023</b>	08 Dec 2022	10 Jun 2022
Machine Age	mths	Client Info		<b>0</b>	0	0
Oil Age	mths	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>2</b>	2	2
Chromium	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<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	>25	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185m	>25	<b>0</b>	0	<1
Antimony	ppm	ASTM D5185m	>5	<b>---</b>	---	---
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	4.4	<b>16</b>	18	22
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	0	<b>3</b>	3	3
Manganese	ppm	ASTM D5185m		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	0	<b>1</b>	<1	0
Calcium	ppm	ASTM D5185m	0	<b>65</b>	60	58
Phosphorus	ppm	ASTM D5185m	215	<b>239</b>	244	246
Zinc	ppm	ASTM D5185m	0	<b>31</b>	28	28
Sulfur	ppm	ASTM D5185m	7039	<b>12078</b>	15111	11489

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>1</b>	2	1
Sodium	ppm	ASTM D5185m		<b>0</b>	0	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0

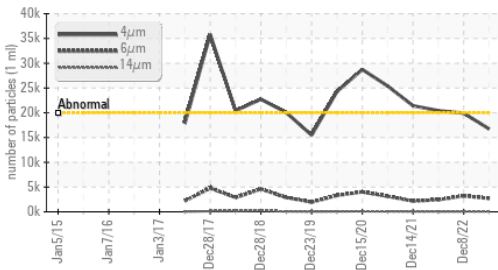
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>16738</b>	19910	▲ 20422
Particles >6µm		ASTM D7647	>5000	<b>2698</b>	3209	2432
Particles >14µm		ASTM D7647	>640	<b>57</b>	70	58
Particles >21µm		ASTM D7647	>160	<b>7</b>	12	13
Particles >38µm		ASTM D7647	>40	<b>0</b>	1	1
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>21/19/13</b>	21/19/13	▲ 22/18/13

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

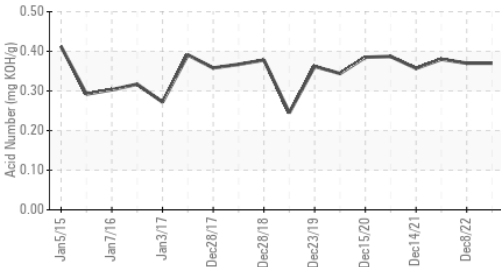


# OIL ANALYSIS REPORT

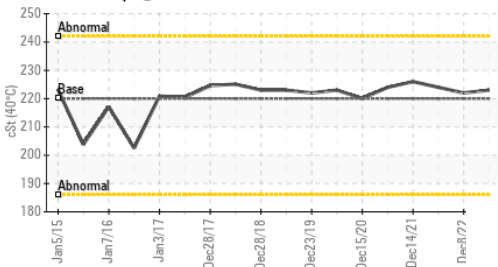
Particle Trend



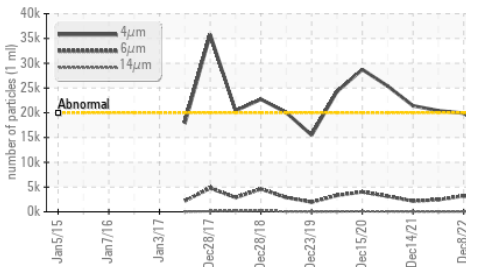
Acid Number



Viscosity @ 40°C



Particle Trend

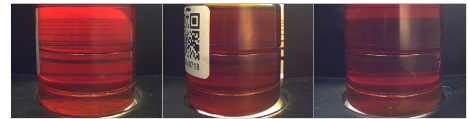


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 220	223	222	224

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

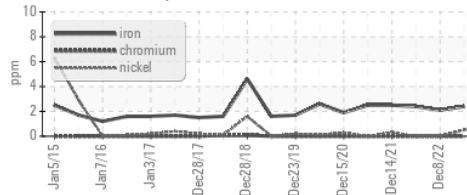


Bottom

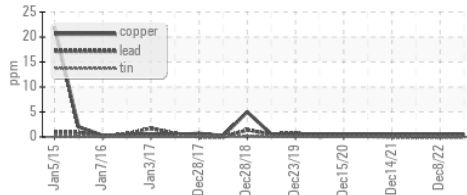


## GRAPHS

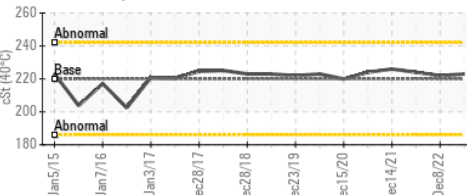
Ferrous Alloys



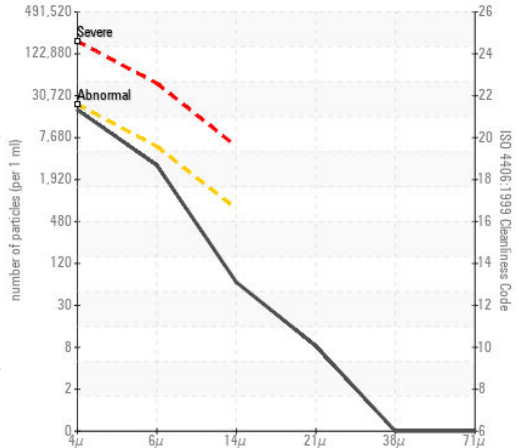
Non-ferrous Metals



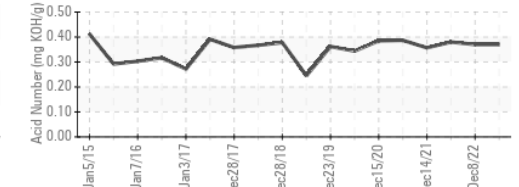
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : WC0782807  
 Lab Number : 05868678  
 Unique Number : 10508462  
 Test Package : IND 2 ( Additional Tests: PrtCount )

LUBRIZOL ADVANCED MATERIALS INC  
 207 TELEGRAPH DR  
 GASTONIA, NC  
 US 28056  
 Contact: TIMOTHY DAVIS  
 timothy.davis@lubrizol.com  
 T: (704)915-4131  
 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)