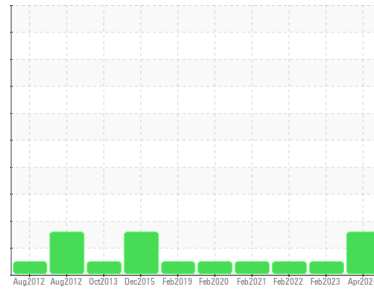




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**MAPLEN M-3**

Component  
**Hydraulic System**

Fluid  
**MOBIL HYDRAULIC OIL AW 46 (65 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>WC0885373</b>	WC0691907	WC0559893
Sample Date	Client Info			<b>03 Apr 2024</b>	14 Feb 2023	09 Feb 2022
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>	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.05	<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>2</b>	3	0
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Lead	ppm	ASTM D5185m	>20	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>20	<b>2</b>	3	3
Tin	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	0
Antimony	ppm	ASTM D5185m		<b>---</b>	---	<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>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	0
Calcium	ppm	ASTM D5185m		<b>34</b>	34	36
Phosphorus	ppm	ASTM D5185m		<b>241</b>	226	246
Zinc	ppm	ASTM D5185m		<b>286</b>	276	286
Sulfur	ppm	ASTM D5185m		<b>3326</b>	3214	3019

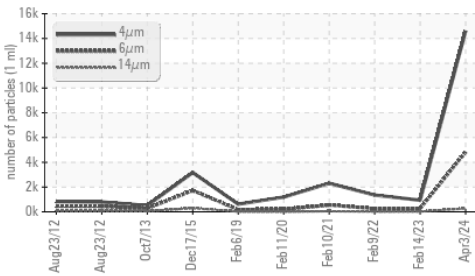
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		<b>14605</b>	937	1353
Particles >6µm		ASTM D7647	>1300	<b>▲ 4830</b>	273	251
Particles >14µm		ASTM D7647	>160	<b>▲ 270</b>	20	17
Particles >21µm		ASTM D7647	>40	<b>▲ 42</b>	5	4
Particles >38µm		ASTM D7647	>10	<b>1</b>	0	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>--/17/14	<b>▲ 21/19/15</b>	17/15/11	18/15/11

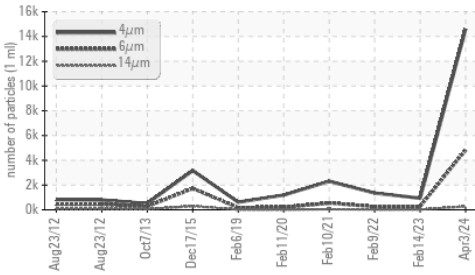


# OIL ANALYSIS REPORT

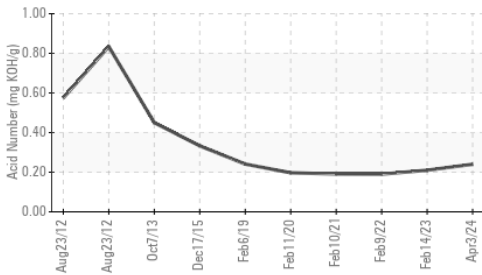
▲ Particle Trend



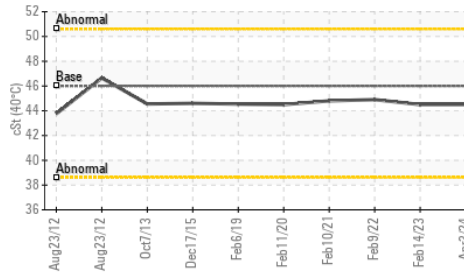
▲ Particle Trend



Acid Number



Viscosity @ 40°C



**FLUID DEGRADATION**    method    limit/base    current    history1    history2

Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.24</b>	0.21	0.19
<b>VISUAL</b>						
White Metal	scalar	*Visual	NONE	<b>NONE</b>	VLITE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

**FLUID PROPERTIES**    method    limit/base    current    history1    history2

Visc @ 40°C	cSt	ASTM D445	46	<b>44.5</b>	44.5	44.9
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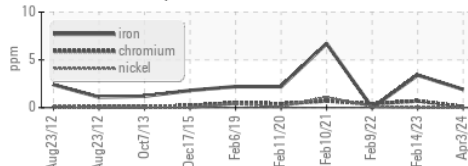
**SAMPLE IMAGES**    method    limit/base    current    history1    history2

Color

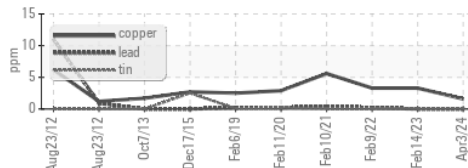
Bottom

**GRAPHS**

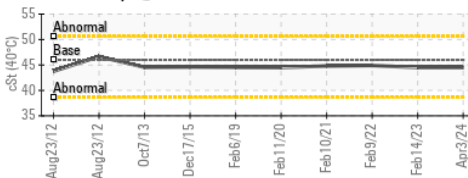
Ferrous Alloys



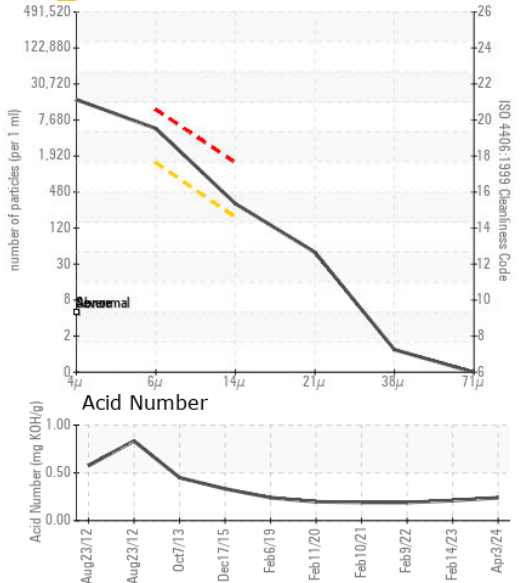
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Certificate L2367

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

Sample No. : WC0885373

Lab Number : 06143689

Unique Number : 10968497

Test Package : IND 2

Received : 09 Apr 2024

Tested : 10 Apr 2024

Diagnosed : 12 Apr 2024 - Jonathan Hester

**ROBINSON RUBBER**

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MINNEAPOLIS, MN

US 55428

Contact: DENNIS YOUNG

dyoung@robinsonrubber.com

T: (763)535-6737

F: (763)535-0828

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)