



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**[1360]**

Machine Id

**MARATHON G-3560 CITY BREWERY (S/N 142160)**

Component

**Hydraulic System**

Fluid

**AW HYDRAULIC OIL ISO 46 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) AW HYDRAULIC OIL ISO 46. Please confirm.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal.

### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### 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>WC0911539</b>	---	---
Sample Date	Client Info		<b>06 May 2024</b>	---	---
Machine Age	hrs	Client Info	<b>0</b>	---	---
Oil Age	hrs	Client Info	<b>0</b>	---	---
Oil Changed	Client Info		<b>Filtered</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	<b>NEG</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>2</b>	---	---
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Nickel	ppm	ASTM D5185m >10	<b>0</b>	---	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Silver	ppm	ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m >10	<b>2</b>	---	---
Lead	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Copper	ppm	ASTM D5185m >75	<b>1</b>	---	---
Tin	ppm	ASTM D5185m >10	<b>&lt;1</b>	---	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Cadmium	ppm	ASTM D5185m	<b>&lt;1</b>	---	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 5	<b>0</b>	---	---
Barium	ppm	ASTM D5185m 5	<b>1</b>	---	---
Molybdenum	ppm	ASTM D5185m 5	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m 25	<b>4</b>	---	---
Calcium	ppm	ASTM D5185m 200	<b>169</b>	---	---
Phosphorus	ppm	ASTM D5185m 300	<b>406</b>	---	---
Zinc	ppm	ASTM D5185m 370	<b>454</b>	---	---
Sulfur	ppm	ASTM D5185m 2500	<b>1044</b>	---	---

## CONTAMINANTS

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

## FLUID CLEANLINESS

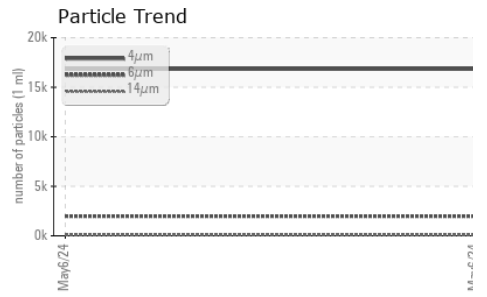
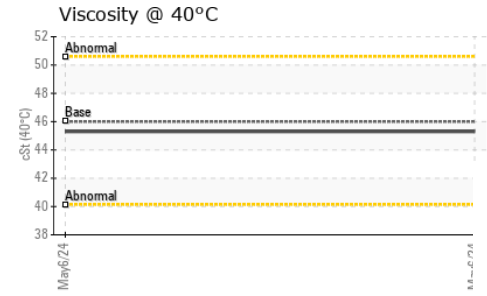
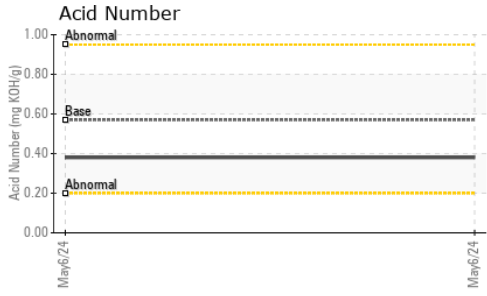
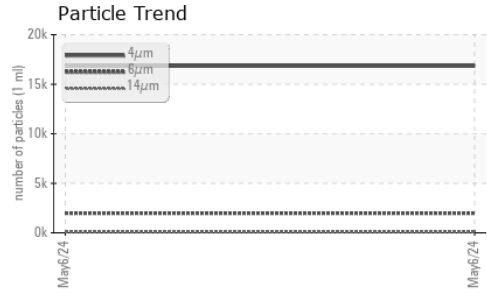
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>16831</b>	---	---
Particles >6µm	ASTM D7647	>5000	<b>1978</b>	---	---
Particles >14µm	ASTM D7647	>640	<b>67</b>	---	---
Particles >21µm	ASTM D7647	>160	<b>14</b>	---	---
Particles >38µm	ASTM D7647	>40	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>10	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>--/19/16	<b>21/18/13</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.57	<b>0.38</b>	---	---



# OIL ANALYSIS REPORT



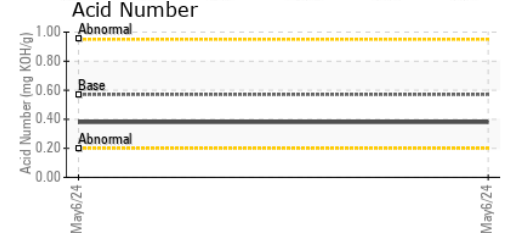
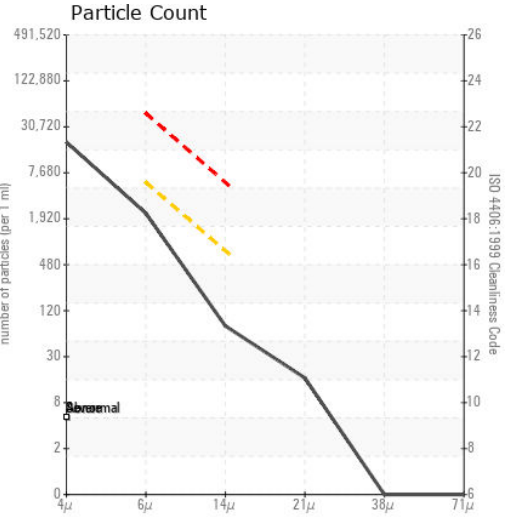
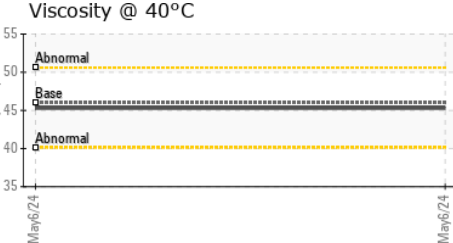
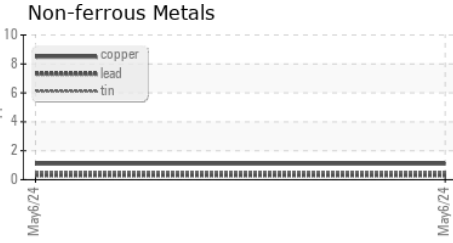
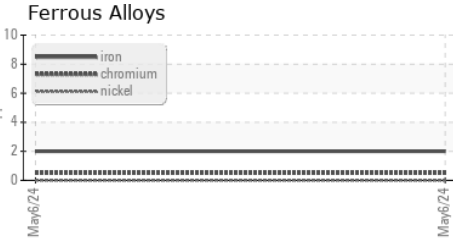
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	<b>45.3</b>	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color					no image	no image
Bottom					no image	no image

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0911539      **Received** : 13 May 2024  
**Lab Number** : **06177681**      **Tested** : 14 May 2024  
**Unique Number** : 11023734      **Diagnosed** : 14 May 2024 - Wes Davis  
**Test Package** : IND 2

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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)