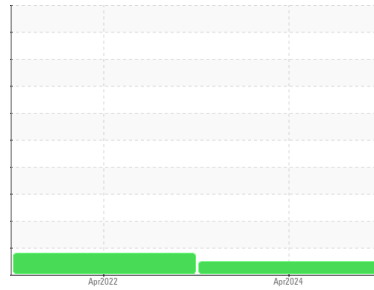


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**REEL ROOM**  
Machine Id  
**MARATHON MARATHON BALER 2**  
Component  
**Hydraulic System**  
Fluid  
**TULCO LUBSOIL SUPER HYDRAULIC AW 68 (360 GAL)**

## DIAGNOSIS

**Recommendation**  
Resample at the next service interval to monitor.

**Wear**  
All component wear rates are normal.

**Contamination**  
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination 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>TO50000783</b>	TO5000387	---
Sample Date	Client Info		<b>17 Apr 2024</b>	20 Apr 2022	---
Machine Age	hrs	Client Info	<b>0</b>	0	---
Oil Age	hrs	Client Info	<b>0</b>	0	---
Oil Changed	Client Info		<b>N/A</b>	Not Changd	---
Sample Status			<b>NORMAL</b>	ABNORMAL	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<b>0</b>	<1	---
Chromium	ppm	ASTM D5185m >10	<b>2</b>	4	---
Nickel	ppm	ASTM D5185m >10	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Silver	ppm	ASTM D5185m	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Lead	ppm	ASTM D5185m >10	<b>0</b>	<1	---
Copper	ppm	ASTM D5185m >75	<b>10</b>	11	---
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>&lt;1</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	<1	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>0</b>	<1	---
Manganese	ppm	ASTM D5185m	<b>0</b>	0	---
Magnesium	ppm	ASTM D5185m	<b>15</b>	11	---
Calcium	ppm	ASTM D5185m	<b>18</b>	14	---
Phosphorus	ppm	ASTM D5185m 425	<b>319</b>	333	---
Zinc	ppm	ASTM D5185m 500	<b>399</b>	417	---
Sulfur	ppm	ASTM D5185m 1900	<b>1945</b>	1284	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>1</b>	1	---
Sodium	ppm	ASTM D5185m	<b>0</b>	0	---
Potassium	ppm	ASTM D5185m >20	<b>0</b>	1	---
Water	%	ASTM D6304 >0.1	<b>0.015</b>	0.016	---
ppm Water	ppm	ASTM D6304 >1000	<b>157</b>	169.9	---

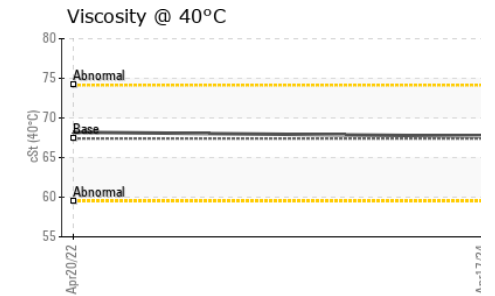
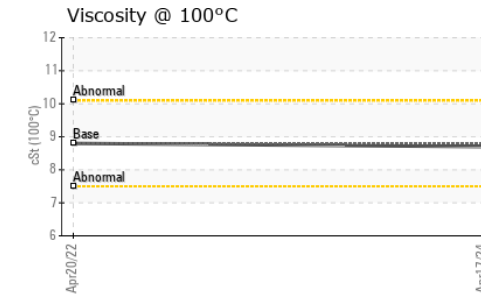
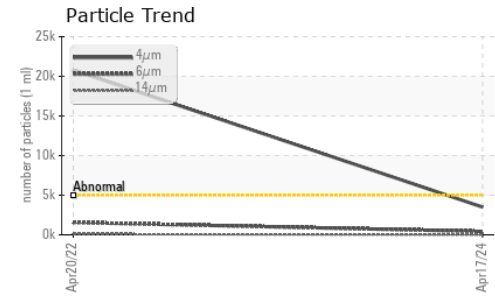
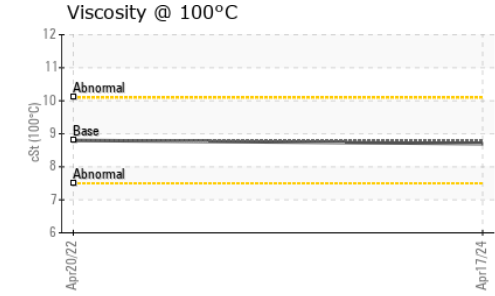
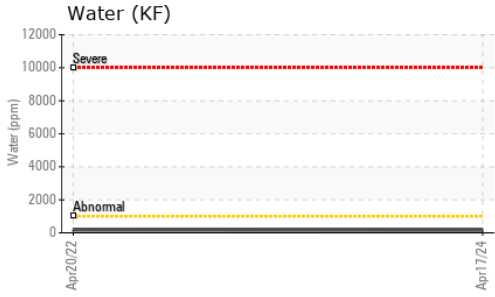
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>3497</b>	▲ 20778	---
Particles >6µm	ASTM D7647	>1300	<b>424</b>	● 1565	---
Particles >14µm	ASTM D7647	>160	<b>26</b>	82	---
Particles >21µm	ASTM D7647	>40	<b>6</b>	19	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	3	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>19/16/12</b>	▲ 22/18/14	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.7	<b>0.66</b>	0.38	---

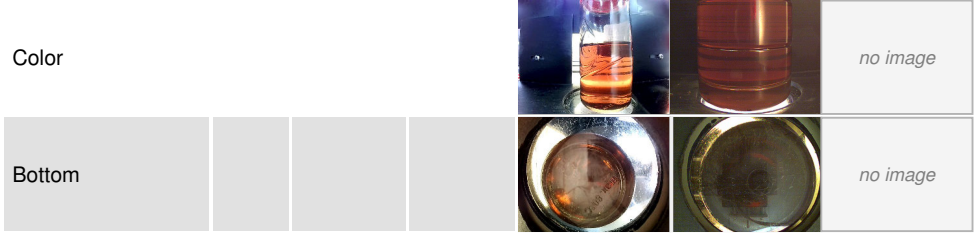
# OIL ANALYSIS REPORT



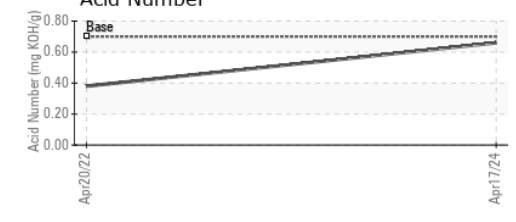
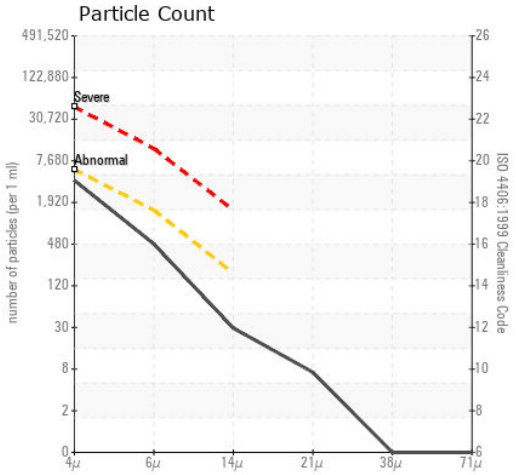
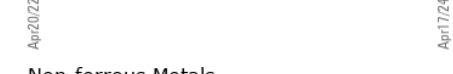
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	67.4	<b>67.7</b>	68.2	---
Visc @ 100°C	cSt	ASTM D445	8.8	<b>8.7</b>	8.8	---
Viscosity Index (VI)	Scale	ASTM D2270	102	<b>99</b>	101	---

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO50000783      **Received** : 22 Apr 2024  
**Lab Number** : **06155894**      **Tested** : 23 Apr 2024  
**Unique Number** : 10991317      **Diagnosed** : 24 Apr 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, VI )

**DALLAS MORNING NEWS**  
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 F: (214)977-6888

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)