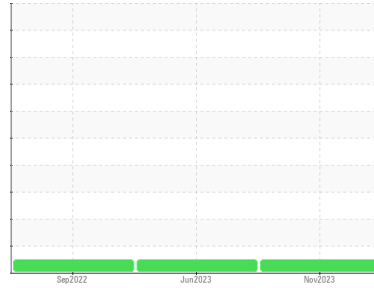




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**MCLAUGHLIN TANK 4**  
 Component  
**Quench Oil**  
 Fluid  
**TUXTON TECH QUENCH 5209 (4000 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the quenching fluid.

### Fluid Condition

The condition of the quenching fluid is acceptable for the time in service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0788790</b>	WC0788799	WC0661362
Sample Date	Client Info		<b>17 Nov 2023</b>	20 Jun 2023	29 Sep 2022
Machine Age	hrs	Client Info	<b>0</b>	14000	10000
Oil Age	hrs	Client Info	<b>0</b>	0	500
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>NORMAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	<b>24</b>	24	22
Chromium	ppm	ASTM D5185m	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	<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	<b>&lt;1</b>	2	1
Lead	ppm	ASTM D5185m	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	<b>0</b>	0	0
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	<1
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	<b>2</b>	4	2
Calcium	ppm	ASTM D5185m	<b>6</b>	4	4
Phosphorus	ppm	ASTM D5185m	<b>1</b>	<1	4
Zinc	ppm	ASTM D5185m	<b>0</b>	<1	<1
Sulfur	ppm	ASTM D5185m	<b>238</b>	258	283

## CONTAMINANTS

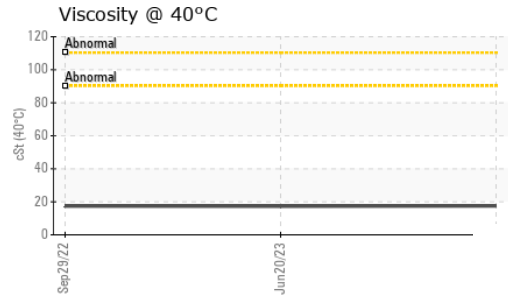
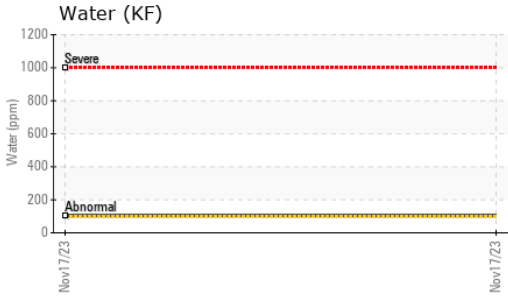
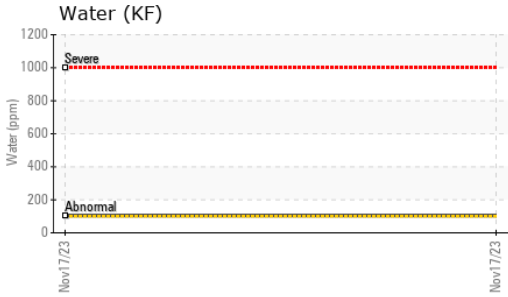
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<b>2</b>	1	2
Sodium	ppm	ASTM D5185m	<b>10</b>	1	4
Potassium	ppm	ASTM D5185m	<b>&gt;20</b>	2	0
Water	%	ASTM D6304	<b>0.010</b>	---	---
ppm Water	ppm	ASTM D6304	<b>104</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.42</b>	0.267	0.18



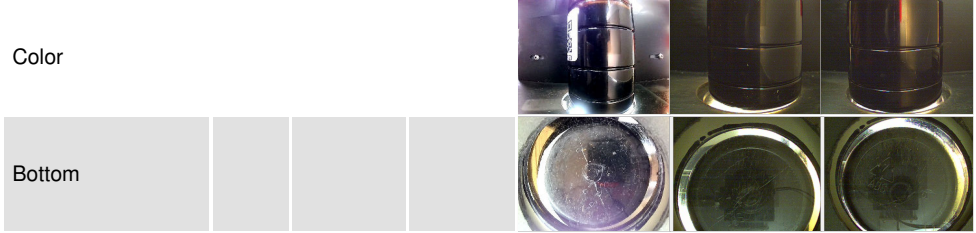
# OIL ANALYSIS REPORT



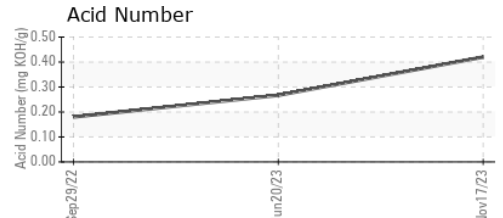
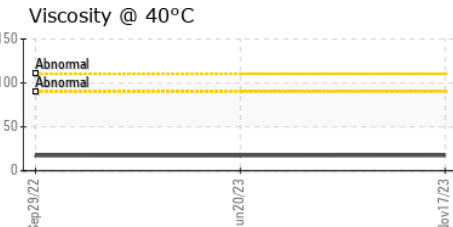
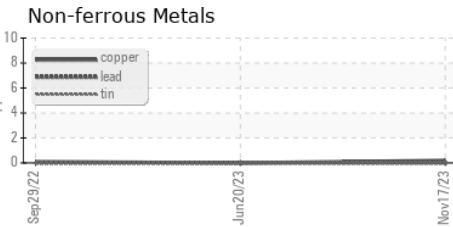
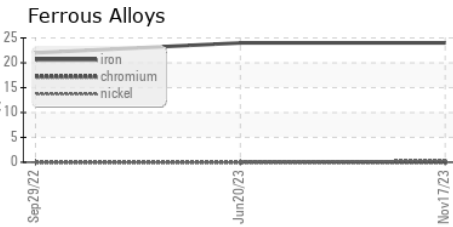
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	17.47	17.3	17.4

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.** : WC0788790 **Received** : 22 Nov 2023  
**Lab Number** : 06015556 **Diagnosed** : 27 Nov 2023  
**Unique Number** : 10754700 **Diagnostician** : Jonathan Hester  
**Test Package** : IND 2 ( Additional Tests: KF )

**BODYCOTE HEAT TREATING**  
 8 DWIGHT PARK DRIVE  
 SYRACUSE, NY  
 US 13209  
 Contact: Service Manager

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)

T:  
F: