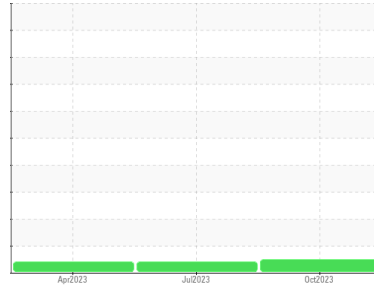




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area

## Preparation-Prep CBL MILL

Machine Id

[Preparation-Prep CBL MILL] 360006002 - CBL MILL BULL GEAR LEFT

Component

Left Gearbox

Fluid

SHELL OMALA S2 G 680 (18 LTR)

### 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 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>TLC0001087</b>	TLC0001188	TLC0001233
Sample Date	Client Info			<b>19 Oct 2023</b>	11 Jul 2023	13 Apr 2023
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>NORMAL</b>	ATTENTION	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>47</b>	38	23
Iron	ppm	ASTM D5185m	>200	<b>28</b>	27	21
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	<1	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>0</b>	1	<1
Tin	ppm	ASTM D5185m	>25	<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>19</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	0	2
Calcium	ppm	ASTM D5185m		<b>49</b>	44	4
Phosphorus	ppm	ASTM D5185m		<b>285</b>	240	267
Zinc	ppm	ASTM D5185m		<b>6</b>	0	6
Sulfur	ppm	ASTM D5185m		<b>9004</b>	9492	12287

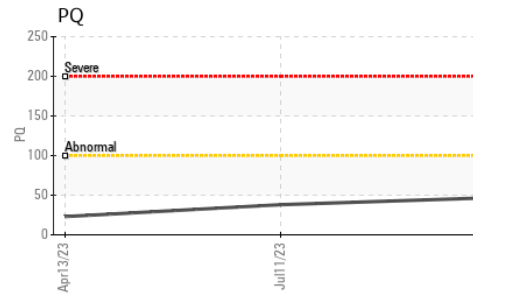
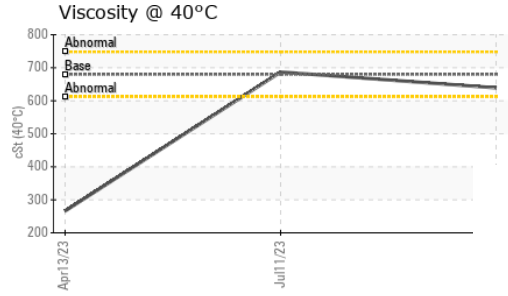
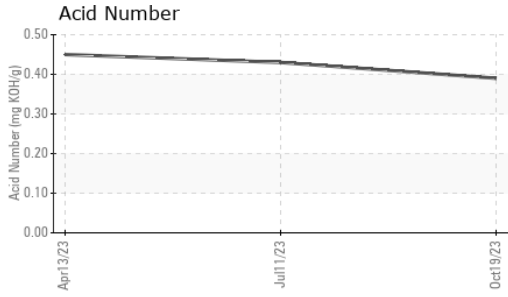
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>3</b>	2	15
Sodium	ppm	ASTM D5185m		<b>4</b>	3	0
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	3	<1

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.39</b>	0.43	0.45

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>MODER</b>	NONE	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	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

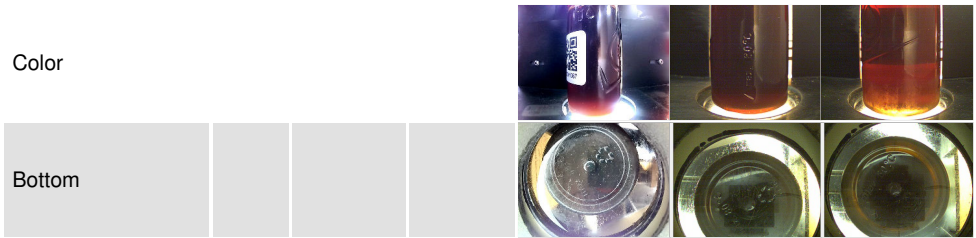


# OIL ANALYSIS REPORT

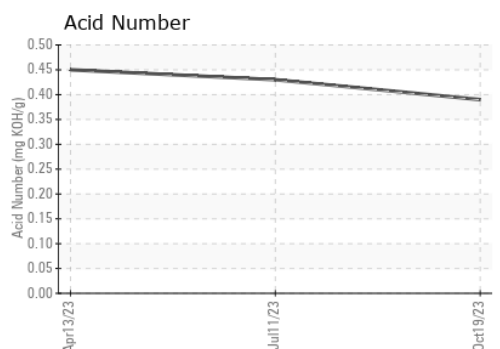
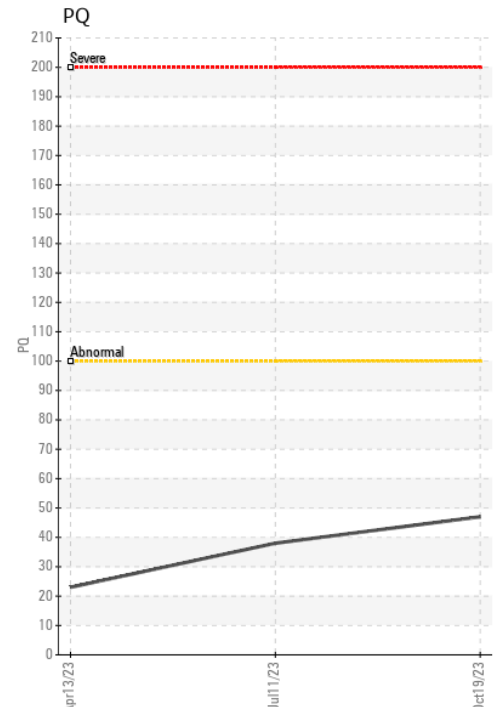
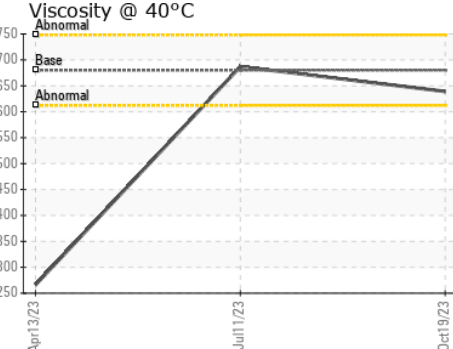
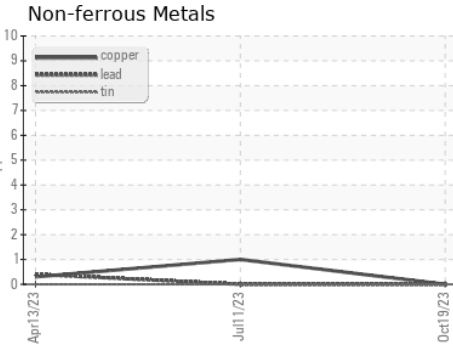
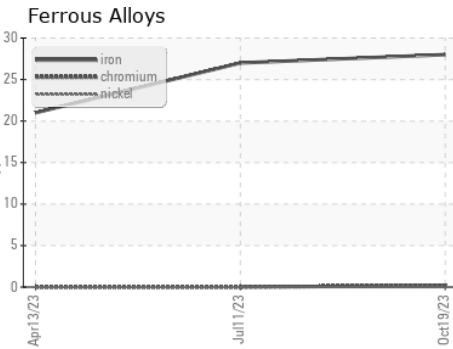


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	680	639	▲ 687	▲ 266.1

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



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLC0001087 **Received** : 03 Nov 2023  
**Lab Number** : 05998155 **Diagnosed** : 06 Nov 2023  
**Unique Number** : 10726515 **Diagnostician** : Wes Davis  
**Test Package** : PLANT

**MICHELIN US 10**  
 16 BIBB WAY  
 ANDERSON, SC  
 US 29626  
 Contact: TERRICK PRESLEY  
 terrick.presley@michelin.com  
 T: (803)761-8053  
 F:

Certificate L2367  
 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)