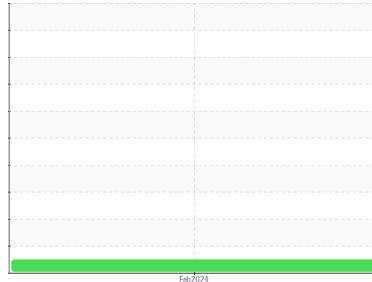




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Plant US1 Greenville**  
 Machine Id  
**BD-4 - Roller Nose Gearbox**  
 Component  
**Gearbox**  
 Fluid  
**SHELL MORLINA S4 B 460 (12 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 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>TLC0001458</b>	---	---
Sample Date	Client Info	<b>19 Feb 2024</b>	---	---
Machine Age	hrs Client Info	<b>0</b>	---	---
Oil Age	hrs Client Info	<b>0</b>	---	---
Oil Changed	Client Info	<b>N/A</b>	---	---
Sample Status		<b>NORMAL</b>	---	---

## CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.2	<b>NEG</b>	---	---

## WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184	<b>11</b>	---	---
Iron	ppm ASTM D5185m >200	<b>6</b>	---	---
Chromium	ppm ASTM D5185m >15	<b>0</b>	---	---
Nickel	ppm ASTM D5185m >15	<b>&lt;1</b>	---	---
Titanium	ppm ASTM D5185m	<b>0</b>	---	---
Silver	ppm ASTM D5185m	<b>0</b>	---	---
Aluminum	ppm ASTM D5185m >25	<b>&lt;1</b>	---	---
Lead	ppm ASTM D5185m >100	<b>0</b>	---	---
Copper	ppm ASTM D5185m >200	<b>&lt;1</b>	---	---
Tin	ppm ASTM D5185m >25	<b>&lt;1</b>	---	---
Vanadium	ppm ASTM D5185m	<b>0</b>	---	---
Cadmium	ppm ASTM D5185m	<b>0</b>	---	---

## ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	<b>14</b>	---	---
Barium	ppm ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m	<b>0</b>	---	---
Manganese	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm ASTM D5185m	<b>6</b>	---	---
Calcium	ppm ASTM D5185m	<b>25</b>	---	---
Phosphorus	ppm ASTM D5185m	<b>412</b>	---	---
Zinc	ppm ASTM D5185m	<b>6</b>	---	---
Sulfur	ppm ASTM D5185m	<b>5642</b>	---	---

## CONTAMINANTS

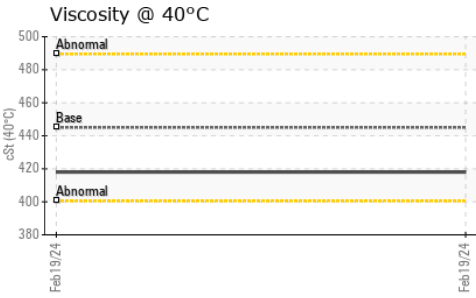
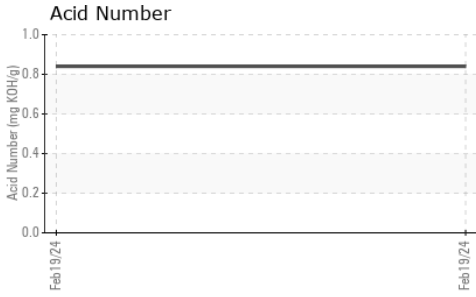
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>5</b>	---	---
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>2</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.84</b>	---	---



# OIL ANALYSIS REPORT



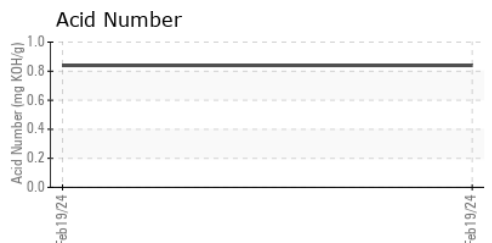
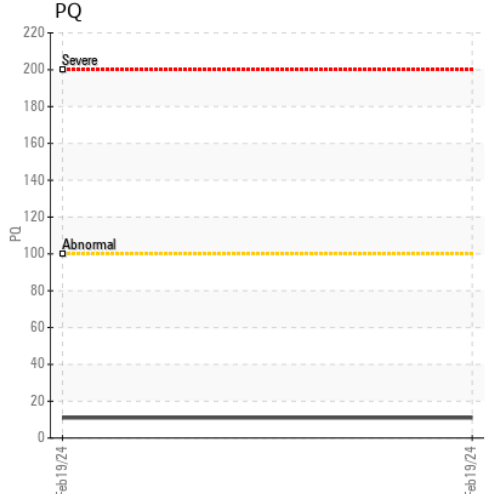
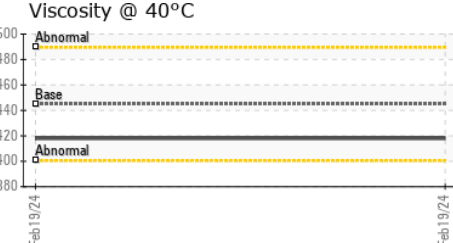
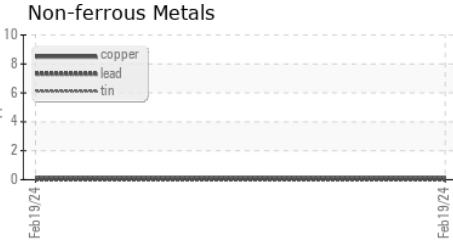
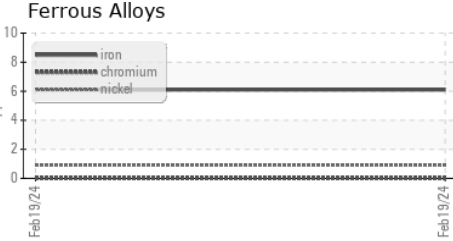
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	445	<b>418</b>	---

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

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TLC0001458  
**Lab Number** : 06098550  
**Unique Number** : 10896780  
**Test Package** : PLANT

**Received** : 23 Feb 2024  
**Tested** : 26 Feb 2024  
**Diagnosed** : 26 Feb 2024 - Wes Davis

**MICHELIN TIRE-GRENVILLE US 1 JN DOCK**  
 1401 ANTIOCH CHURCH ROAD  
 Greenville, SC  
 US 29605  
 Contact: Nicolas Jackson  
 nicolas.jackson@michelin.com

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: