



# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Plant US1 Greenville**  
 Machine Id  
**BD-1 -Extruder Gearbox**  
 Component  
**Gearbox**  
 Fluid  
**SHELL OMALA 320 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### 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>TLC0001469</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>33</b>	---	---
Iron	ppm ASTM D5185m >200	<b>59</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>3</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 5.5	<b>5</b>	---	---
Barium	ppm ASTM D5185m 0.4	<b>0</b>	---	---
Molybdenum	ppm ASTM D5185m 0.5	<b>0</b>	---	---
Manganese	ppm ASTM D5185m	<b>1</b>	---	---
Magnesium	ppm ASTM D5185m 23	<b>1</b>	---	---
Calcium	ppm ASTM D5185m 13	<b>3</b>	---	---
Phosphorus	ppm ASTM D5185m 450	<b>266</b>	---	---
Zinc	ppm ASTM D5185m 9.9	<b>2</b>	---	---
Sulfur	ppm ASTM D5185m 8181	<b>14315</b>	---	---

## CONTAMINANTS

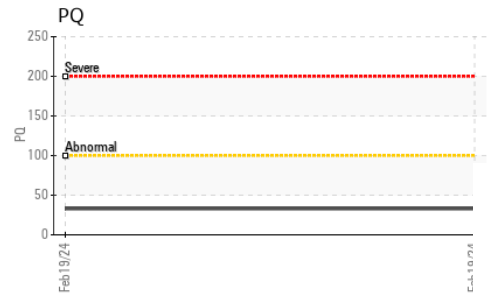
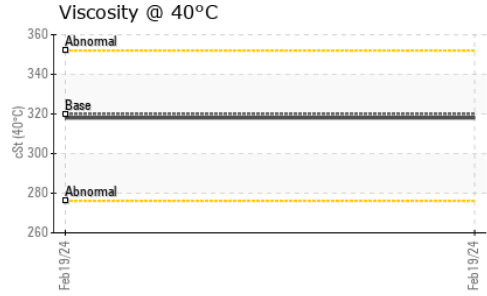
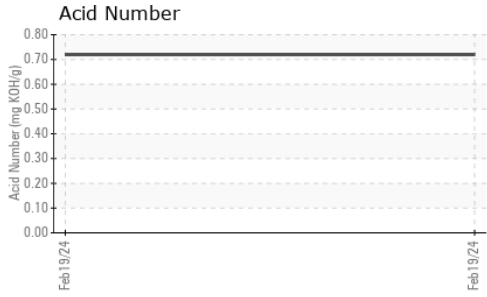
method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >50	<b>14</b>	---	---
Sodium	ppm ASTM D5185m	<b>&lt;1</b>	---	---
Potassium	ppm ASTM D5185m >20	<b>1</b>	---	---

## FLUID DEGRADATION

method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D8045	<b>0.72</b>	---	---



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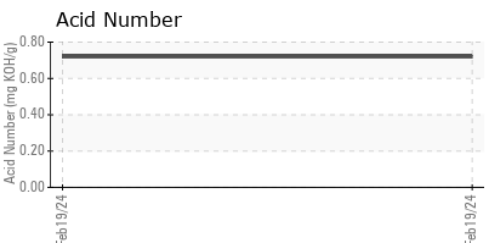
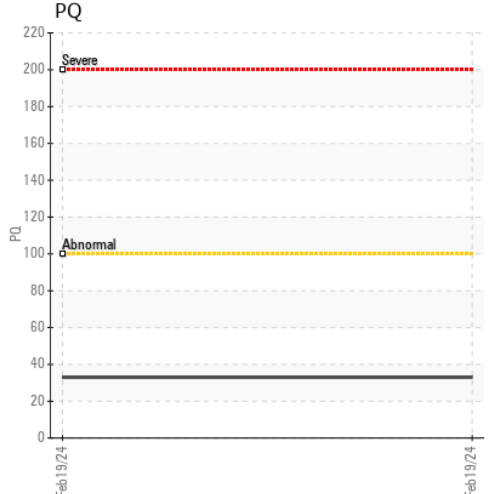
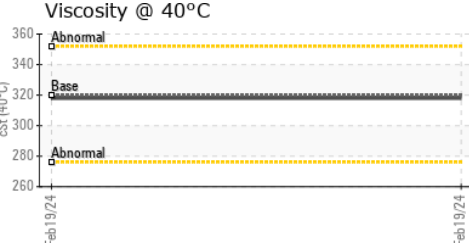
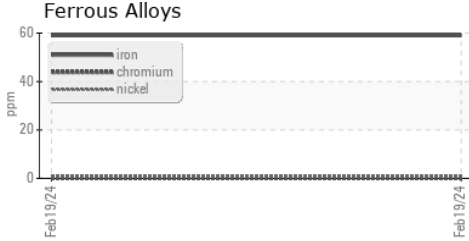
VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---	---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

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	320	<b>318</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.** : TLC0001469      **Received** : 23 Feb 2024  
**Lab Number** : 06098593      **Tested** : 26 Feb 2024  
**Unique Number** : 10896823      **Diagnosed** : 26 Feb 2024 - Wes Davis  
**Test Package** : PLANT

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