



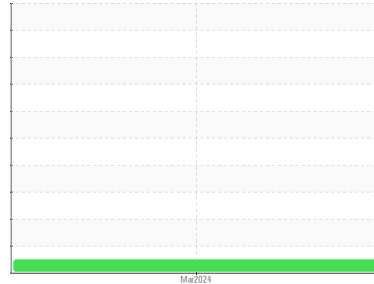
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**Plant US1 Greenville**  
 Machine Id  
**ASM3 - Hydraulic Unit**  
 Component  
**Hydraulic System**  
 Fluid  
**SHELL TELLUS S2 M 46 (--- 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. The amount and size of particulates present in the system are acceptable.

**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>TLC0001521</b>	---	---
Sample Date	Client Info		<b>18 Mar 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>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	<b>0</b>	---
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	---
Nickel	ppm	ASTM D5185m	>20	<b>0</b>	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---
Silver	ppm	ASTM D5185m		<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>20	<b>0</b>	---
Lead	ppm	ASTM D5185m	>20	<b>0</b>	---
Copper	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---
Tin	ppm	ASTM D5185m	>20	<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>0</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>57</b>	---
Calcium	ppm	ASTM D5185m		<b>13</b>	---
Phosphorus	ppm	ASTM D5185m		<b>267</b>	---
Zinc	ppm	ASTM D5185m		<b>313</b>	---
Sulfur	ppm	ASTM D5185m		<b>756</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	<b>0</b>	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---
Water	%	ASTM D6304	>0.05	<b>NEG</b>	---

## FLUID CLEANLINESS

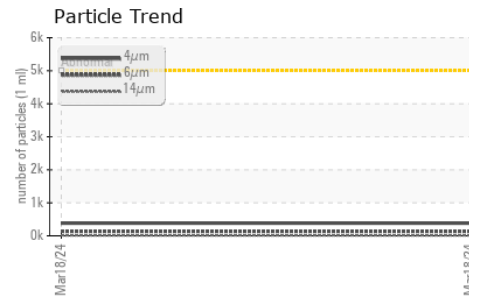
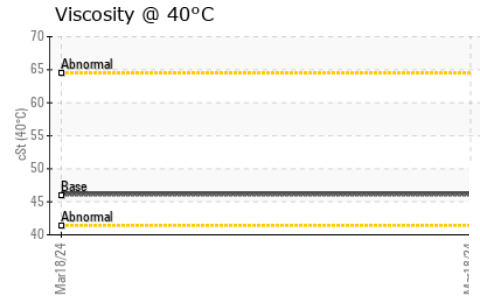
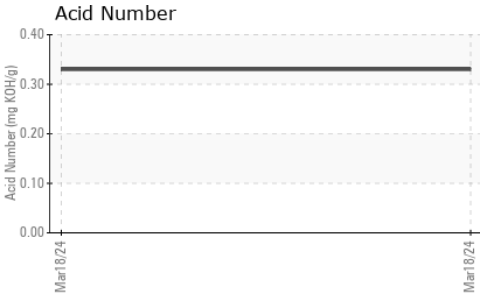
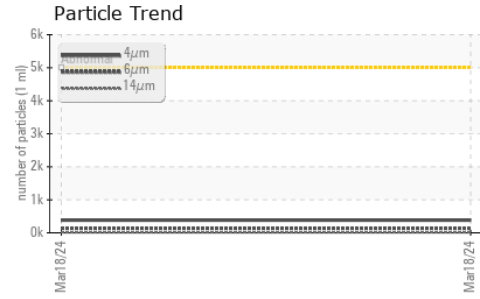
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>382</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>134</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>13</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>4</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>16/14/11</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.33</b>	---



# OIL ANALYSIS REPORT



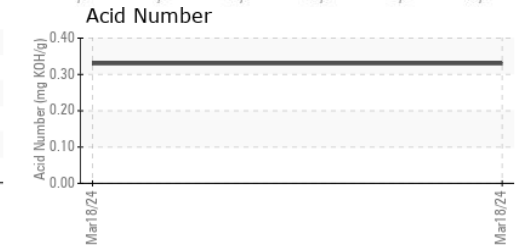
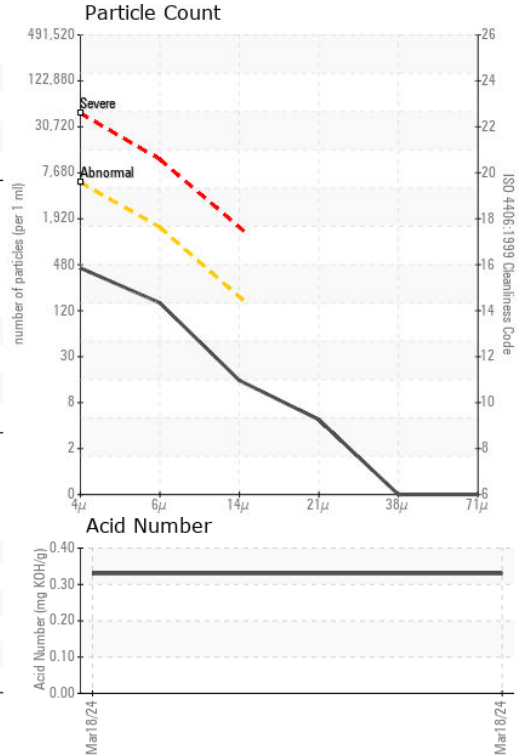
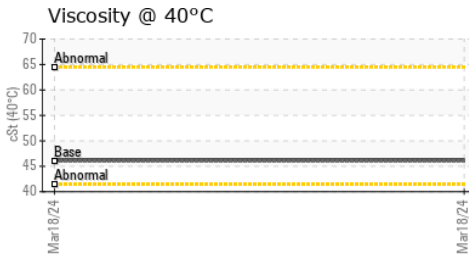
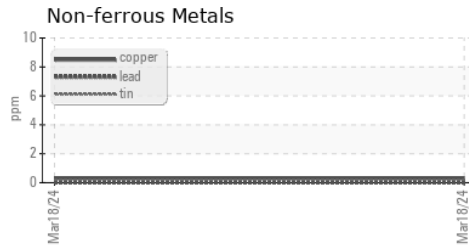
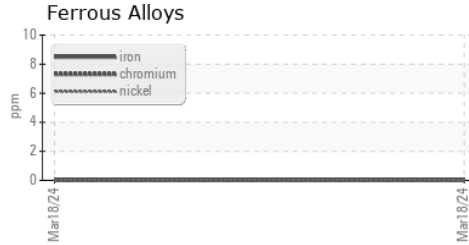
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.05	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46.0	46.2	---

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. : TLC0001521  
 Lab Number : 06123598  
 Unique Number : 10937749  
 Test Package : PLANT

Received : 20 Mar 2024  
 Tested : 25 Mar 2024  
 Diagnosed : 25 Mar 2024 - Jonathan Hester

MICHELIN TIRE-GRENVILLE US 1 JN DOCK  
 1401 ANTIOCH CHURCH ROAD  
 Greenville, SC  
 US 29605  
 Contact: Nicolas Jackson  
 nicolas.jackson@michelin.com  
 T: (864)458-1870  
 F:

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)