PROBLEM SUMMARY

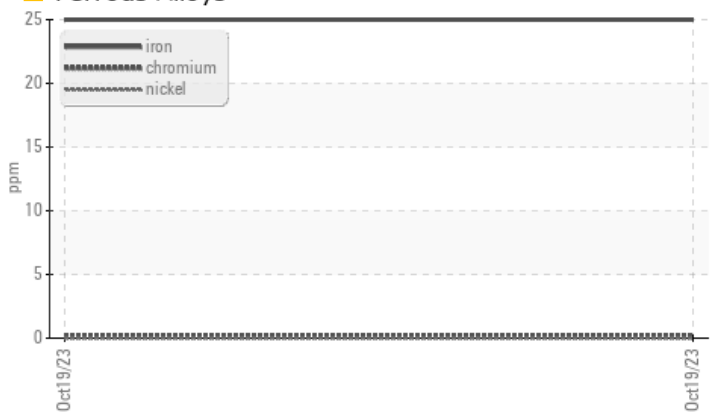
Sample Rating Trend

WEAR

Area
Preparation-Prep EB CALENDAR
Machine Id
[Preparation-Prep EB CALENDAR] 360014005 - EB CALENDAR BUSHING LUBE SYSTEM
Component
Lube System
Fluid
SHELL MORLINA S4 B 320 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



RECOMMENDATION

We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	---	---
Iron	ppm	ASTM D5185m	>20	▲ **25**	---	---
Debris	scalar	*Visual	NONE	▲ **MODER**	---	---

Customer Id: MICAND
Sample No.: TLC0001084
Lab Number: 05998153
Test Package: PLANT

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend

WEAR

Area
Preparation-Prep EB CALENDAR
Machine Id
[Preparation-Prep EB CALENDAR] 360014005 - EB CALENDAR BUSHING LUBE SYSTEM
Component
Lube System
Fluid
SHELL MORLINA S4 B 320 (--- GAL)

DIAGNOSIS

Recommendation
We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Wear
The iron level is abnormal. All other component wear rates are normal.

Contamination
Moderate concentration of visible dirt/debris present 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		**TLC0001084**	---	---
Sample Date		Client Info		**19 Oct 2023**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**ABNORMAL**	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		**22**	---	---
Iron	ppm	ASTM D5185m	>20	▲ **25**	---	---
Chromium	ppm	ASTM D5185m	>20	**<1**	---	---
Nickel	ppm	ASTM D5185m	>20	**0**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	**2**	---	---
Lead	ppm	ASTM D5185m	>20	**<1**	---	---
Copper	ppm	ASTM D5185m	>20	**2**	---	---
Tin	ppm	ASTM D5185m	>20	**0**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**0**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**<1**	---	---
Barium	ppm	ASTM D5185m		**20**	---	---
Molybdenum	ppm	ASTM D5185m		**0**	---	---
Manganese	ppm	ASTM D5185m		**0**	---	---
Magnesium	ppm	ASTM D5185m		**<1**	---	---
Calcium	ppm	ASTM D5185m		**2**	---	---
Phosphorus	ppm	ASTM D5185m		**42**	---	---
Zinc	ppm	ASTM D5185m		**22**	---	---
Sulfur	ppm	ASTM D5185m		**7299**	---	---

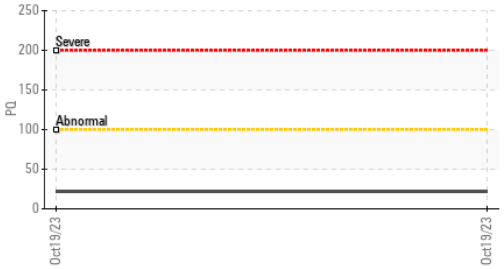
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**1**	---	---
Sodium	ppm	ASTM D5185m		**14**	---	---
Potassium	ppm	ASTM D5185m	>20	**<1**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.42**	---	---

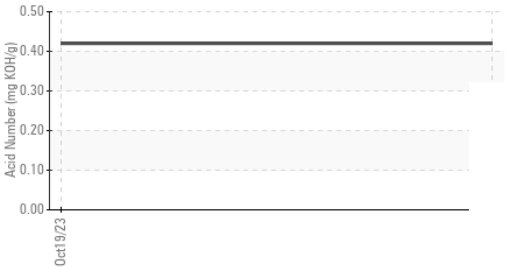
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	▲ **MODER**	---	---
Sand/Dirt	scalar	*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**	---	---

OIL ANALYSIS REPORT

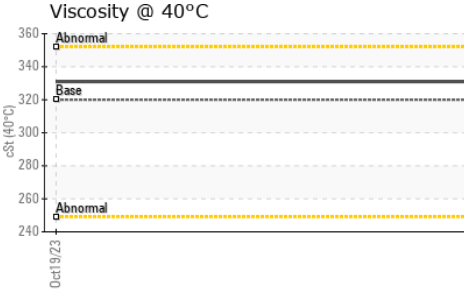
PQ



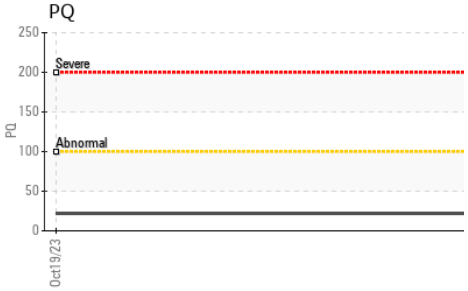
Acid Number



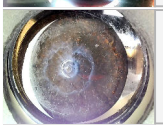
Viscosity @ 40°C



PQ

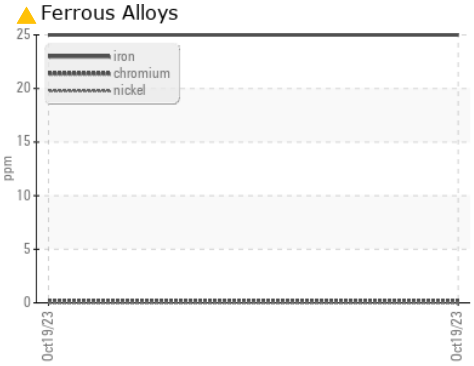


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	320	**331**	---	---

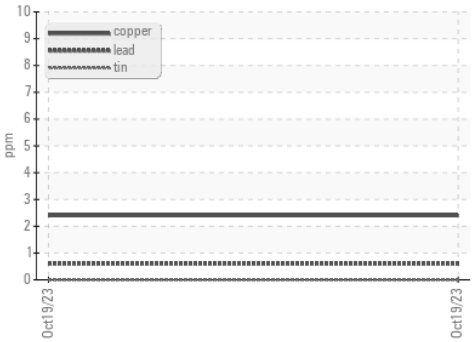
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS

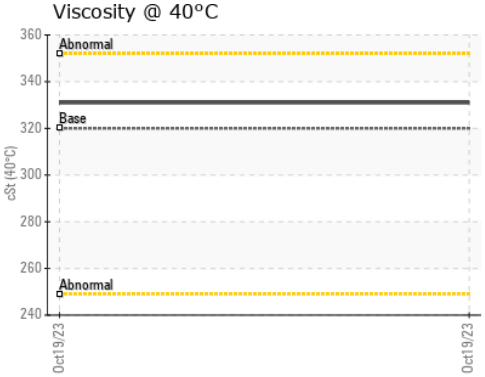
Ferrous Alloys



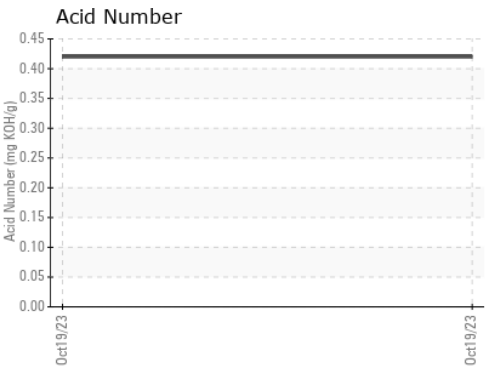
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLC0001084
Lab Number : 05998153
Unique Number : 10726513
Test Package : PLANT

Received : 03 Nov 2023
Diagnosed : 07 Nov 2023
Diagnostician : Jonathan Hester

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)

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