STAUFF
FILTRATION TECHNOLOGY

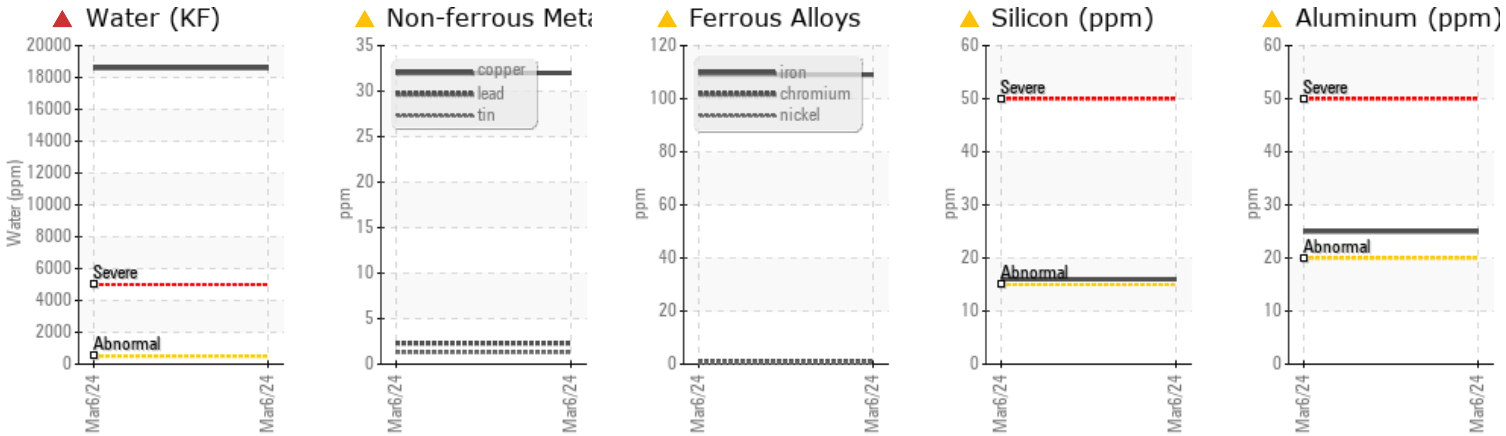
PROBLEM SUMMARY

Sample Rating Trend

WATER

Machine Id
BESS TYME TANK
Component
Hydraulic System
Fluid
VALVOLINE 75W90 (5 GAL)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Iron	ppm	ASTM D5185m	>20	▲ **109**	---	---
Aluminum	ppm	ASTM D5185m	>20	▲ **25**	---	---
Copper	ppm	ASTM D5185m	>20	▲ **32**	---	---
Silicon	ppm	ASTM D5185m	>15	▲ **16**	---	---
Water	%	ASTM D6304	>0.05	▲ **1.86**	---	---
ppm Water	ppm	ASTM D6304	>500	▲ **18600**	---	---
Debris	scalar	*Visual	NONE	▲ **MODER**	---	---
Emulsified Water	scalar	*Visual	>0.05	▲ **0.2%**	---	---

Customer Id: STEFORFL
Sample No.: ST42866
Lab Number: 06123130
Test Package: IND 2

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

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Contact Required	---	---	?	Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

STAUFF FILTRATION TECHNOLOGY

OIL ANALYSIS REPORT

Sample Rating Trend

WATER

Machine Id
BESS TYME TANK
Component
Hydraulic System
Fluid
VALVOLINE 75W90 (5 GAL)

DIAGNOSIS

▲ Recommendation

We advise that you check for the source of water entry. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. We were unable to perform a particle count due to a high concentration of particles present in this sample. We were unable to perform a particle count due to a high concentration of particles present in this sample. Due to an abnormal test result it is recommended to contact Stauff Corp at (201)-444-7800 for help resolving the issue.

▲ Wear

The iron level is abnormal. The aluminum level is abnormal. The copper level is abnormal.

▲ Contamination

There is a high concentration of water present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**ST42866**	---	---
Sample Date		Client Info		**06 Mar 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**SEVERE**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	▲ **109**	---	---
Chromium	ppm	ASTM D5185m	>20	**<1**	---	---
Nickel	ppm	ASTM D5185m	>20	**<1**	---	---
Titanium	ppm	ASTM D5185m		**0**	---	---
Silver	ppm	ASTM D5185m		**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	▲ **25**	---	---
Lead	ppm	ASTM D5185m	>20	**2**	---	---
Copper	ppm	ASTM D5185m	>20	▲ **32**	---	---
Tin	ppm	ASTM D5185m	>20	**1**	---	---
Vanadium	ppm	ASTM D5185m		**0**	---	---
Cadmium	ppm	ASTM D5185m		**<1**	---	---

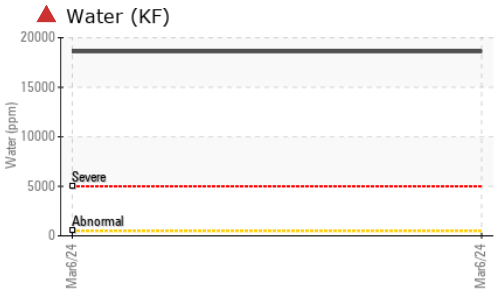
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**9**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**0**	---	---
Manganese	ppm	ASTM D5185m		**1**	---	---
Magnesium	ppm	ASTM D5185m		**0**	---	---
Calcium	ppm	ASTM D5185m		**14**	---	---
Phosphorus	ppm	ASTM D5185m		**1232**	---	---
Zinc	ppm	ASTM D5185m		**33**	---	---
Sulfur	ppm	ASTM D5185m		**17429**	---	---

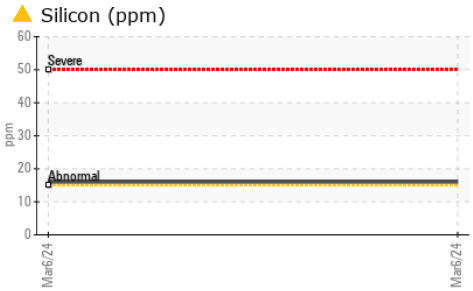
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	▲ **16**	---	---
Sodium	ppm	ASTM D5185m		**<1**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---
Water	%	ASTM D6304	>0.05	▲ **1.86**	---	---
ppm Water	ppm	ASTM D6304	>500	▲ **18600**	---	---

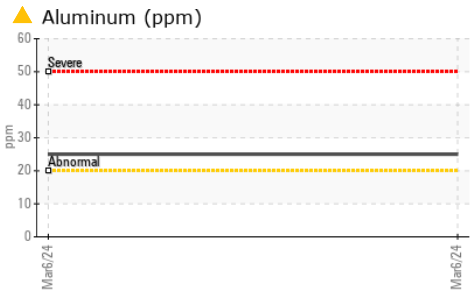
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**2.16**	---	---

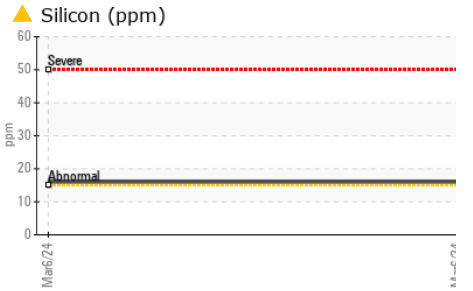
STAUFF FILTRATION TECHNOLOGY

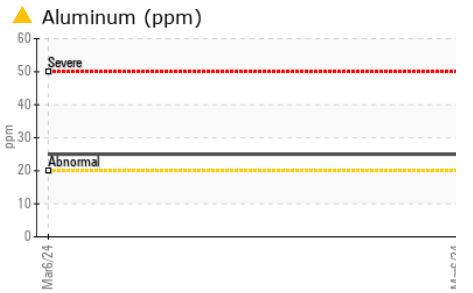
OIL ANALYSIS REPORT









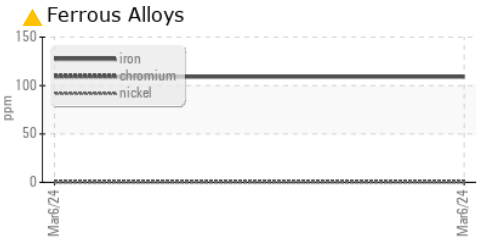


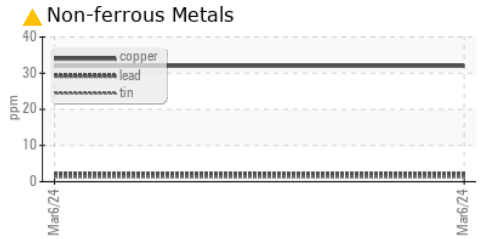
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	▲ **MODER**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	**NORML**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.05	▲ **0.2%**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

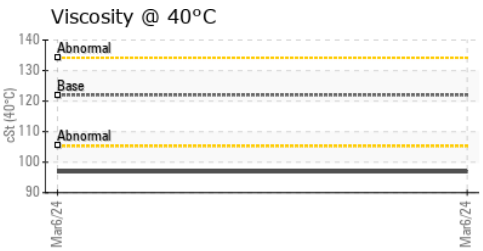
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	122	**96.9**	---	---

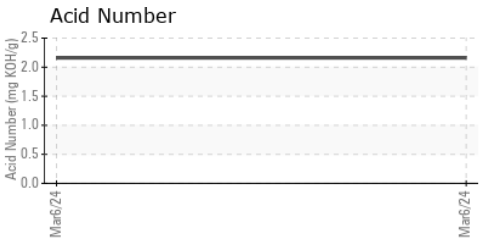
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				*no image*	*no image*
Bottom				*no image*	*no image*

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ST42866
Lab Number : 06123130
Unique Number : 10937281
Test Package : IND 2 (Additional Tests: KF)

Received : 19 Mar 2024
Tested : 22 Mar 2024
Diagnosed : 22 Mar 2024 - 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)

STERLING MARINE SYSTEMS
4081 SW 47TH AVE, SUITE 10
FORT LAUDERDALE, FL
US 33314
Contact: DALE WORSNOP
operations@sterlingmarine.com
T:
F: