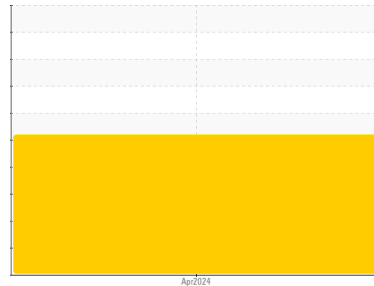




PROBLEM SUMMARY

Sample Rating Trend



DEGRADATION



Area

LCAC-81

Machine Id

LCAC-81 BOW RAMP

Component

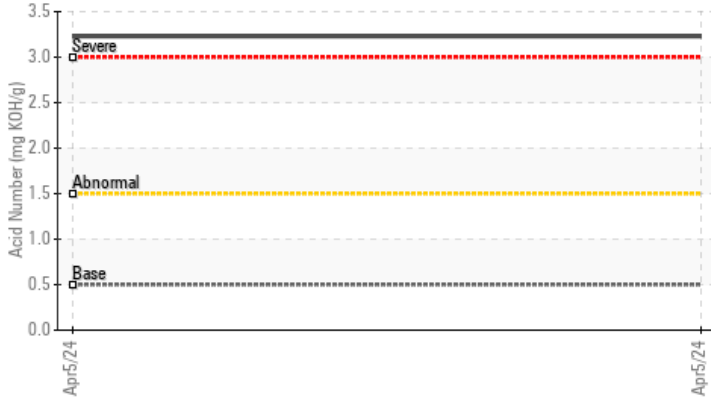
Starboard Hydraulic System

Fluid

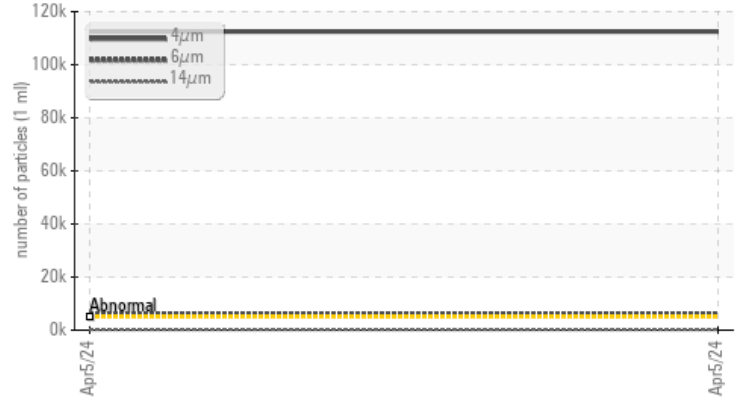
MILITARY MIL-L-23699D (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Acid Number



▲ Particle Trend



RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that this is a corrected copy for diagnostic comment updates. Please note that this is a corrected copy for diagnostic comment updates.

PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	---	---
Particles >4µm	ASTM D7647	>5000	▲ 112461	---	---
Particles >6µm	ASTM D7647	>1300	▲ 5824	---	---
Particles >14µm	ASTM D7647	>160	▲ 214	---	---
Particles >21µm	ASTM D7647	>40	▲ 54	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 24/20/15	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	▲ 3.23	---	---

Customer Id: WALNAT
 Sample No.: WC0865216
 Lab Number: 06148612
 Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Angela Borella +1 800-237-1369
angela.borella@wearcheckusa.com

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

RECOMMENDED ACTIONS

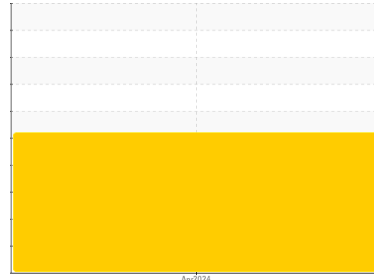
Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Area

LCAC-81

Machine Id

LCAC-81 BOW RAMP

Component

Starboard Hydraulic System

Fluid

MILITARY MIL-L-23699D (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that this is a corrected copy for diagnostic comment updates. Please note that this is a corrected copy for diagnostic comment updates.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil. Discrete particle counts [100 ml] 5-15µm = 561000, 15-25µm = 16000, 25-50µm = 5300, 50-100µm = 100, >100µm = 0. Class 11

▲ Fluid Condition

The AN level is above the recommended limit. The oil is no longer serviceable.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0865216	---	---
Sample Date	Client Info		05 Apr 2024	---	---
Machine Age	hrs	Client Info	0	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Not Chngd	---	---
Sample Status			SEVERE	---	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	<1	---	---
Chromium	ppm	ASTM D5185m >20	0	---	---
Nickel	ppm	ASTM D5185m >20	0	---	---
Titanium	ppm	ASTM D5185m	0	---	---
Silver	ppm	ASTM D5185m	0	---	---
Aluminum	ppm	ASTM D5185m >20	1	---	---
Lead	ppm	ASTM D5185m >20	<1	---	---
Copper	ppm	ASTM D5185m >20	0	---	---
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	0	---	---
Barium	ppm	ASTM D5185m	0	---	---
Molybdenum	ppm	ASTM D5185m	0	---	---
Manganese	ppm	ASTM D5185m	0	---	---
Magnesium	ppm	ASTM D5185m	<1	---	---
Calcium	ppm	ASTM D5185m	2	---	---
Phosphorus	ppm	ASTM D5185m	2057	---	---
Zinc	ppm	ASTM D5185m	0	---	---
Sulfur	ppm	ASTM D5185m	0	---	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	3	---	---
Sodium	ppm	ASTM D5185m	0	---	---
Potassium	ppm	ASTM D5185m >20	0	---	---
Water	%	ASTM D6304 >0.05	NEG	---	---

FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	▲ 112461	---	---
Particles >6µm	ASTM D7647	>1300	▲ 5824	---	---
Particles >14µm	ASTM D7647	>160	▲ 214	---	---
Particles >21µm	ASTM D7647	>40	▲ 54	---	---
Particles >38µm	ASTM D7647	>10	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 24/20/15	---	---

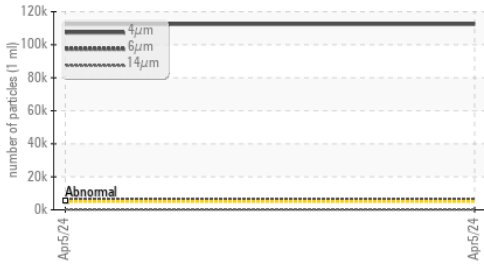
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.5	▲ 3.23	---	---

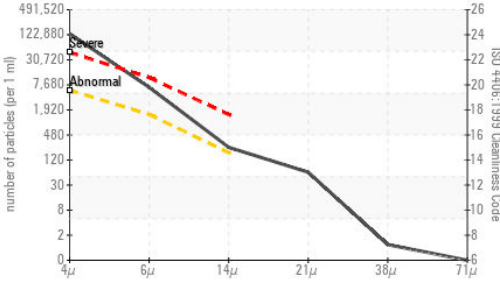


OIL ANALYSIS REPORT

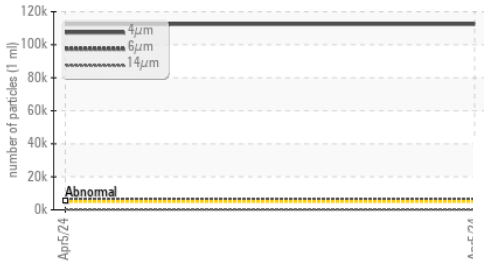
▲ Particle Trend



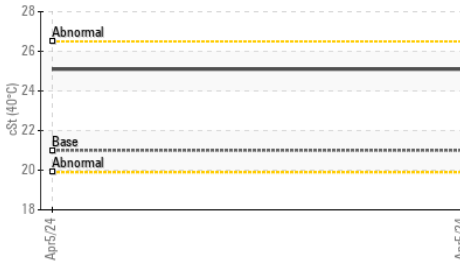
▲ Particle Count



▲ Particle Trend



Viscosity @ 40°C



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	LIGHT	---
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 21.0	25.1	---	---

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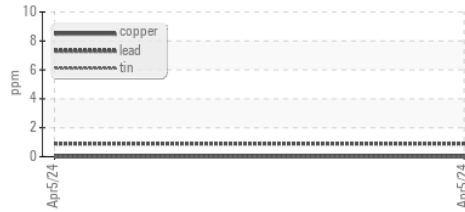
Color				no image	no image
Bottom				no image	no image

GRAPHS

Ferrous Alloys



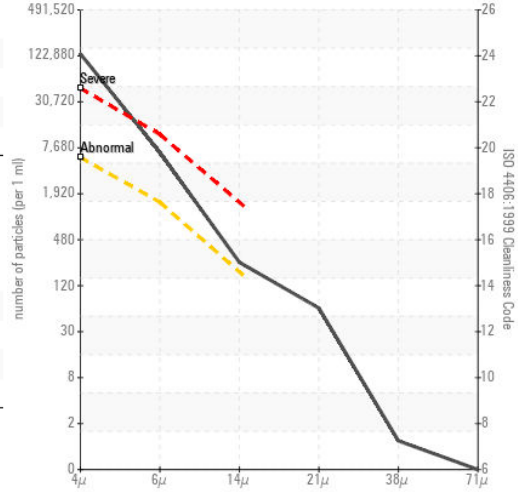
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



▲ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0865216
Lab Number : 06148612
Unique Number : 10978690
Test Package : PLANT

Received : 15 Apr 2024
Tested : 17 Apr 2024
Diagnosed : 24 Apr 2024 - Angela Borella

WALASHEK INDUSTRIAL & MARINE INC
 1428 MCKINLEY AVE
 NATIONAL CITY, CA
 US 91950
 Contact: BOB CLAGETT
 bobclagett@walashek.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)