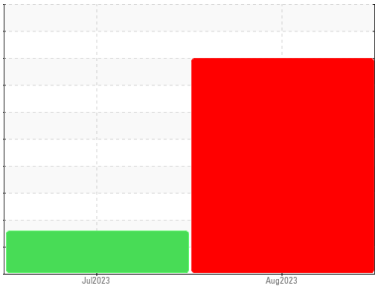
PROBLEM SUMMARY

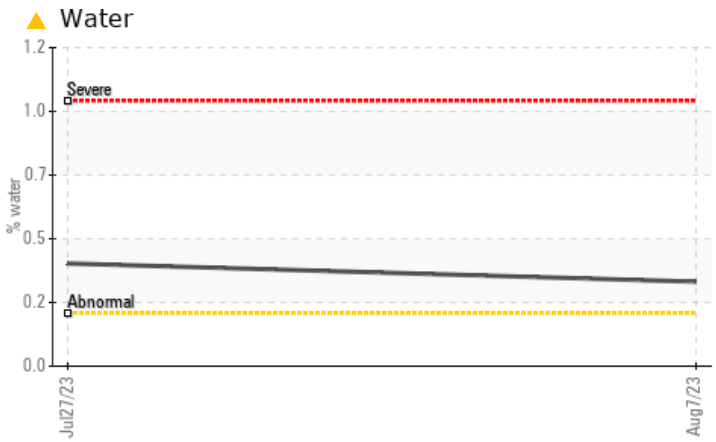
Sample Rating Trend



WATER

Area
OCEAN VOYAGER
Machine Id
[OCEAN VOYAGER] OCEAN VOYAGER - Z-DRIVE
Component
Port Gearbox
Fluid
FUCHS RENOLIN UNISYN CLP 150 (1600 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	---
Water	%	ASTM D6304	>0.2	▲ **0.318**	▲ 0.387	---
ppm Water	ppm	ASTM D6304	>2000	▲ **3180**	▲ 3870	---
Silt	scalar	*Visual	NONE	▲ **HEAVY**	NONE	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	---
Free Water	scalar	*Visual		⬢ **>10%**	NEG	---

Customer Id: VICNEWIN
Sample No.: WC0824816
Lab Number: 05922903
Test Package: MAR 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 Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Water Access	---	---	?	We advise that you check for the source of water entry.

HISTORICAL DIAGNOSIS

27 Jul 2023 Diag: Jonathan Hester

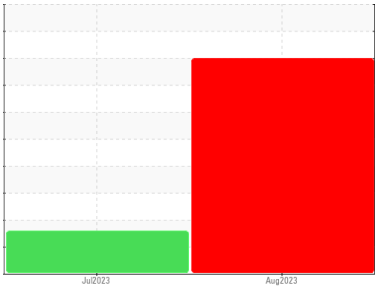
WATER

We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate concentration of water present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Area
OCEAN VOYAGER
Machine Id
[OCEAN VOYAGER] OCEAN VOYAGER - Z-DRIVE
Component
Port Gearbox
Fluid
FUCHS RENOLIN UNISYN CLP 150 (1600 LTR)

DIAGNOSIS

Recommendation
We advise that you check for the source of water entry. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear
All component wear rates are normal.

Contamination
Appearance is hazy. Excessive free water present. There is a moderate concentration of water present in the oil. There is a high amount of visible silt present in the sample.

Fluid Condition
The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0824816**	WC0824807	---
Sample Date		Client Info		**07 Aug 2023**	27 Jul 2023	---
Machine Age	hrs	Client Info		**15844**	23711	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Changed**	Changed	---
Sample Status				**SEVERE**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	**26**	20	---
Chromium	ppm	ASTM D5185m	>10	**<1**	0	---
Nickel	ppm	ASTM D5185m	>10	**0**	0	---
Titanium	ppm	ASTM D5185m		**<1**	0	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>25	**<1**	<1	---
Lead	ppm	ASTM D5185m	>50	**0**	0	---
Copper	ppm	ASTM D5185m	>200	**2**	<1	---
Tin	ppm	ASTM D5185m	>10	**<1**	0	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

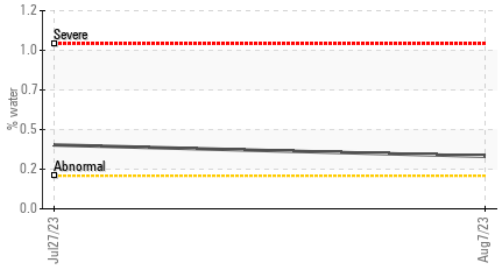
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**0**	0	---
Manganese	ppm	ASTM D5185m		**<1**	0	---
Magnesium	ppm	ASTM D5185m		**3**	5	---
Calcium	ppm	ASTM D5185m		**6**	30	---
Phosphorus	ppm	ASTM D5185m		**228**	249	---
Zinc	ppm	ASTM D5185m		**5**	29	---
Sulfur	ppm	ASTM D5185m		**10611**	11231	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	**<1**	<1	---
Sodium	ppm	ASTM D5185m		**1**	<1	---
Potassium	ppm	ASTM D5185m	>20	**<1**	0	---
Water	%	ASTM D6304	>0.2	▲ **0.318**	▲ 0.387	---
ppm Water	ppm	ASTM D6304	>2000	▲ **3180**	▲ 3870	---

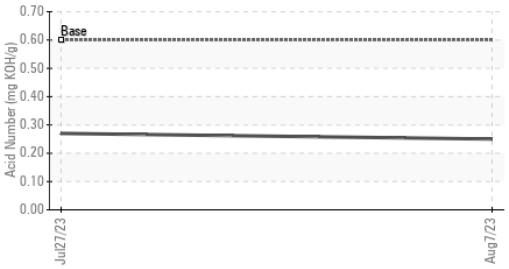
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.6	**0.25**	0.27	---

OIL ANALYSIS REPORT

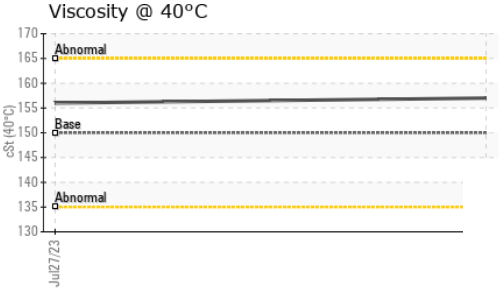
Water



Acid Number

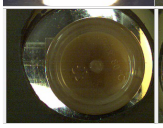
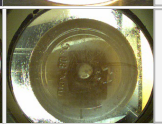


Viscosity @ 40°C



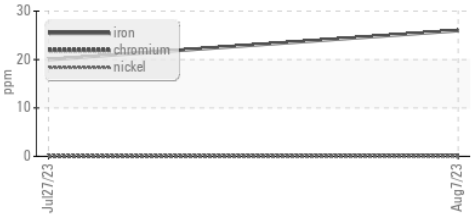
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	▲ **HEAVY**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	▲ 0.2%	---
Free Water	scalar	*Visual		⬢ **>10%**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	150	**157**	156	---

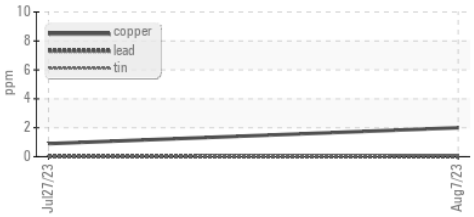
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

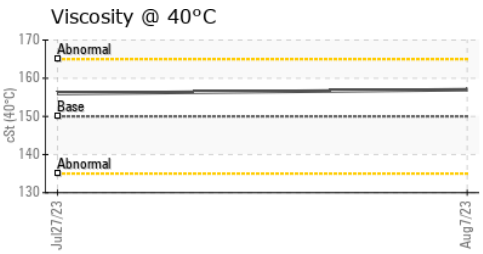
Ferrous Alloys



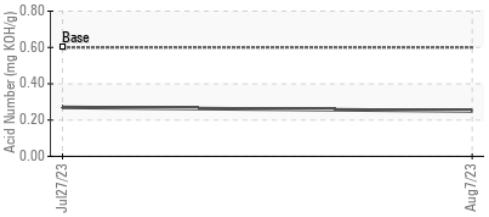
Non-ferrous Metals



Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0824816 **Received** : 11 Aug 2023
Lab Number : 05922903 **Diagnosed** : 14 Aug 2023
Unique Number : 10602850 **Diagnostician** : Jonathan Hester
Test Package : MAR 2 (Additional Tests: KF)

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)

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