

# WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

#### Machine Id CHA Component Starboard Reduction Gear Fluid {not provided} (--- GAL)

RECOMMENDATION

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

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#### WEAR

All component wear rates are normal.

## CONTAMINATION

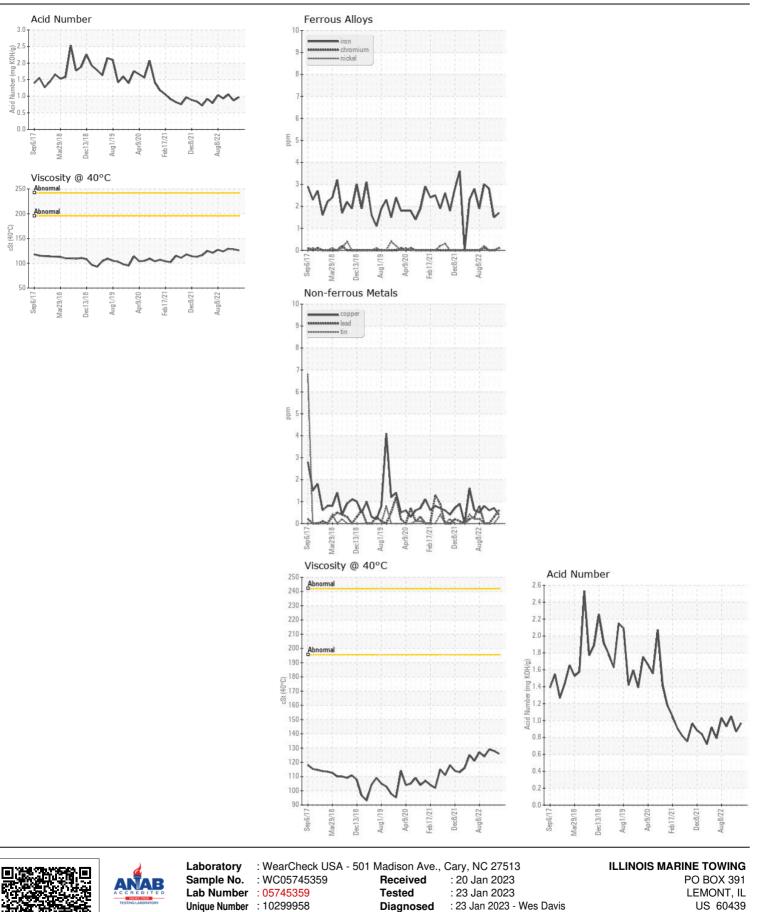
There is no indication of any contamination in the oil.

### **FLUID CONDITION**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Numbe	er	Client Info		WC05745359	MW05718520	MW05675161
Sample Date		Client Info		22 Jan 2023	14 Dec 2022	24 Oct 2022
Machine Age	hrs	Client Info		48872	48285	47506
Oil Age	hrs	Client Info		587	1402	622
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Change	d	Client Info		N/A	N/A	N/A
Sample Statu	s			NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>150	2	2	3
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	<1	<1	<1
Lead	ppm	ASTM D5185m	>100	<1	<1	0
Copper	ppm	ASTM D5185m	>50	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	5	4	4
Potassium	ppm	ASTM D5185m	>20	1	0	2
Water	le le	WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	-		
U.I.				NONE	NONE	NUNE
Debris	scalar			NONE NONE	NONE	NONE
Debris Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE	NONE NONE
Sand/Dirt Appearance	scalar scalar	*Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML	NONE NONE NORML	NONE NONE NORML
Sand/Dirt Appearance Odor	scalar scalar scalar	*Visual *Visual *Visual *Visual	NONE NORML NORML	NONE NONE NORML NORML	NONE NORML NORML	NONE NORML NORML
Sand/Dirt Appearance	scalar scalar scalar	*Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML	NONE NONE NORML	NONE NONE NORML
Sand/Dirt Appearance Odor	scalar scalar scalar	*Visual *Visual *Visual *Visual	NONE NORML NORML	NONE NONE NORML NORML	NONE NORML NORML	NONE NORML NORML
Sand/Dirt Appearance Odor Emulsified Wate	scalar scalar scalar scalar er scalar	*Visual *Visual *Visual *Visual *Visual	NONE NORML NORML	NONE NORML NORML NEG	NONE NORML NORML NEG	NONE NORML NORML NEG
Sand/Dirt Appearance Odor Emulsified Wate Sodium	scalar scalar scalar er scalar ppm	*Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2	NONE NORML NORML NEG 2	NONE NORML NORML NEG 0
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron	scalar scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291	NONE NORML NORML NEG 2 290	NONE NORML NORML NEG 0 270
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium	scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0	NONE NORML NORML NEG 2 290 0	NONE NORML NORML NEG 0 270 0
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32	NONE NORML NORML NEG 2 290 0 31	NONE NORML NORML NEG 0 270 0 31
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32 <1	NONE NORML NORML NEG 2 290 0 31 <1	NONE NORML NORML NEG 0 270 0 31 <1
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32 <1 88	NONE NORML NORML NEG 2 290 0 31 <1 64	NONE   NORML   NORML   NEG   0   270   0   31   <1   63
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32 <1 88 2470	NONE NORML NORML NEG 2 290 0 31 <1 64 2281	NONE   NORML   NORML   NEG   0   270   0   31   <1   63   2337
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32 <1 88 2470 768	NONE NORML NORML NEG 2 290 0 31 <1 64 2281 679	NONE NORML NORML NEG 0 270 0 31 <1 63 2337 709
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32 <1 88 2470 768 887	NONE NORML NORML NEG 2 290 0 31 <1 64 2281 679 750	NONE NORML NORML NEG 0 270 0 31 <1 63 2337 709 813
Sand/Dirt Appearance Odor Emulsified Wate Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm pp	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NORML NORML	NONE NORML NORML NEG 2 291 0 32 <1 88 2470 768 887 3633	NONE NORML NORML NEG 2 290 0 31 <1 64 2281 679 750 2964	NONE NORML NORML NEG 0 270 0 31 <1 63 2337 63 2337 709 813 3323

Contact/Location: RHETT DANIEL - AMELEMIL



Test Package : MAR 2 Contact: RHETT DANIEL Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. rdaniel@imtowing.com \* - 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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