



WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**KATHY AZLIN**  
Component  
**Starboard Reduction Gear**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (35 GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0057994</b>	MW0057990	MW0057947
Sample Date		Client Info		<b>13 Apr 2024</b>	18 Mar 2024	25 Feb 2024
Machine Age	hrs	Client Info		<b>62806</b>	62336	61821
Oil Age	hrs	Client Info		<b>991</b>	521	120
Filter Age	hrs	Client Info		<b>240</b>	463	120
Oil Changed		Client Info		<b>N/A</b>	Changed	N/A
Filter Changed		Client Info		<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>2</b>	3	4
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>10	<b>1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>13</b>	11	11
Silver	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>2</b>	1	2
Lead	ppm	ASTM D5185m	>100	<b>3</b>	2	<1
Copper	ppm	ASTM D5185m	>50	<b>2</b>	1	<1
Tin	ppm	ASTM D5185m	>10	<b>1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

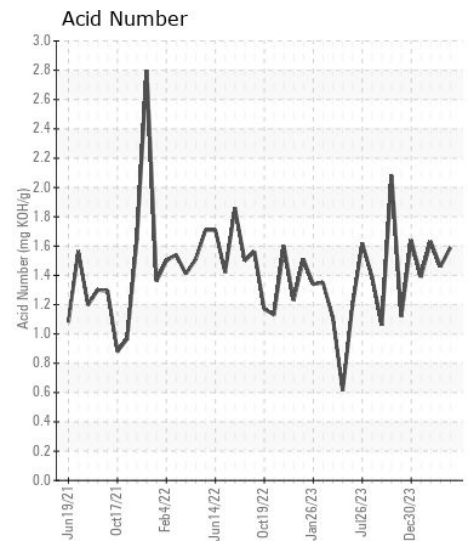
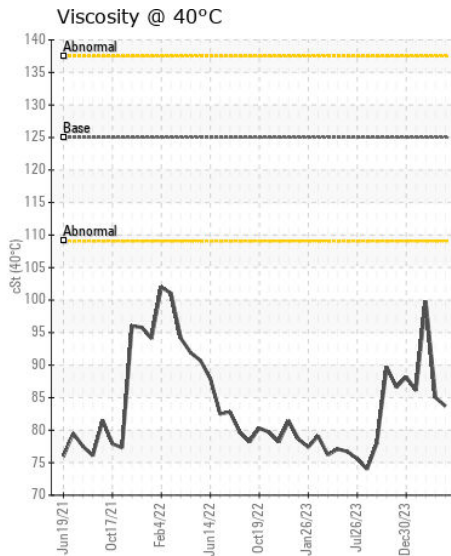
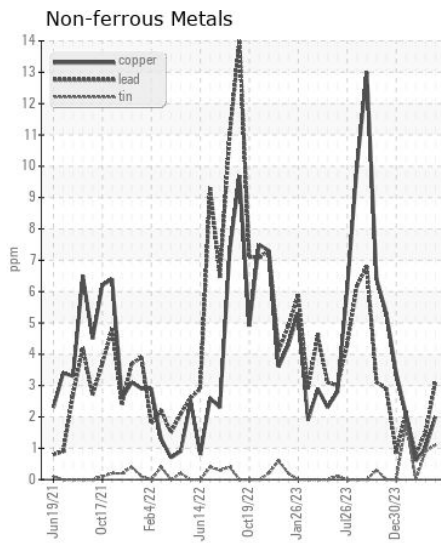
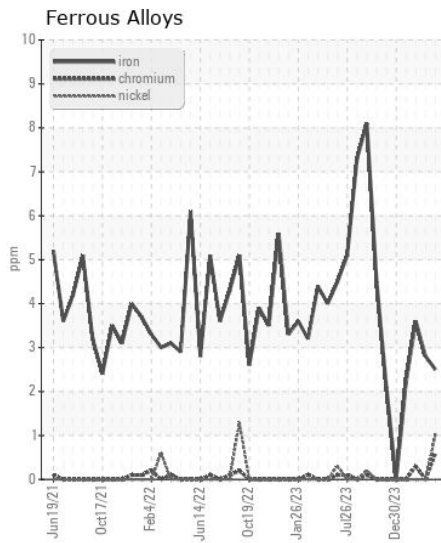
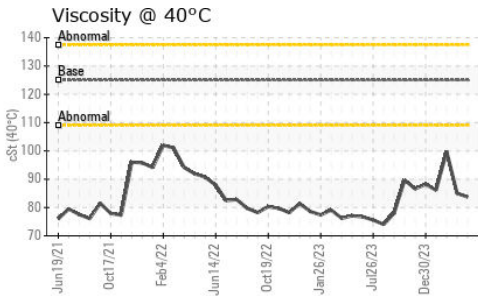
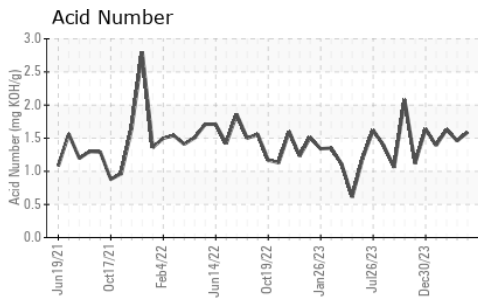
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>5</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	2	3
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m		<b>1</b>	3	<1
Boron	ppm	ASTM D5185m		<b>181</b>	173	150
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>35</b>	31	32
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>601</b>	557	529
Calcium	ppm	ASTM D5185m		<b>1822</b>	1824	1616
Phosphorus	ppm	ASTM D5185m	1200	<b>798</b>	725	609
Zinc	ppm	ASTM D5185m	1300	<b>867</b>	818	762
Sulfur	ppm	ASTM D5185m	3200	<b>3711</b>	3654	2855
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.59</b>	1.46	1.63
Visc @ 40°C	cSt	ASTM D445	125	<b>83.7</b>	85.0	99.8



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0057994  
**Lab Number** : 06159840  
**Unique Number** : 10995263  
**Test Package** : MAR 2

**Received** : 24 Apr 2024  
**Tested** : 25 Apr 2024  
**Diagnosed** : 26 Apr 2024 - Don Baldrige

**MAGNOLIA MARINE TRANSPORT**  
 697 HAINING ROAD  
 VICKSBURG, MS  
 US 39183  
 Contact: MMT MAINTENANCE PLANNERS  
 mmtmaintenanceplanners@ergon.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)

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