



Machine Id  
**MISS ELLIE**  
Component  
**Starboard Reduction Gear**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0027478</b>	MW0027469	MW0037018
Sample Date		Client Info		<b>12 Jan 2024</b>	22 Dec 2023	02 Dec 2023
Machine Age	hrs	Client Info		<b>38446</b>	37965	37496
Oil Age	hrs	Client Info		<b>462</b>	470	1398
Filter Age	hrs	Client Info		<b>462</b>	470	695
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	<b>4</b>	2	1
Chromium	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>5</b>	6	5
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>1</b>	2	2
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>50	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

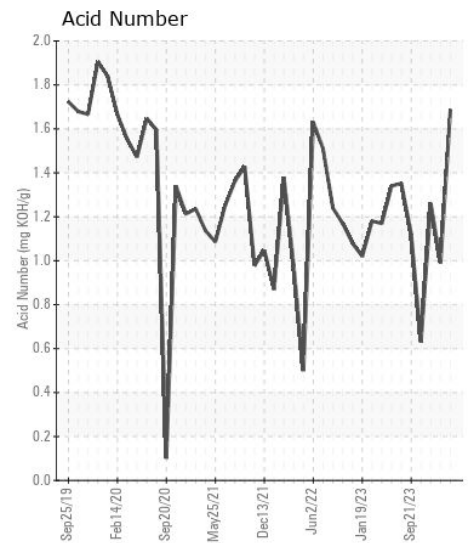
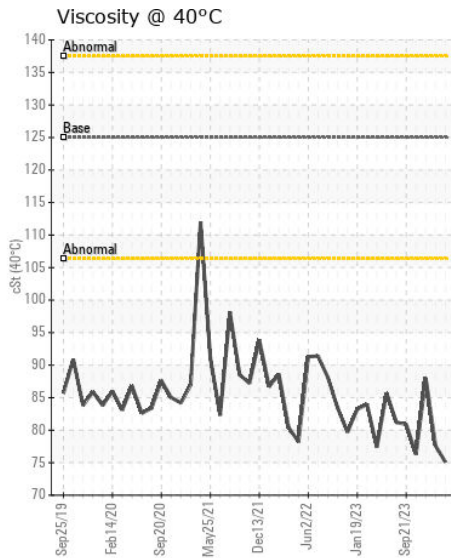
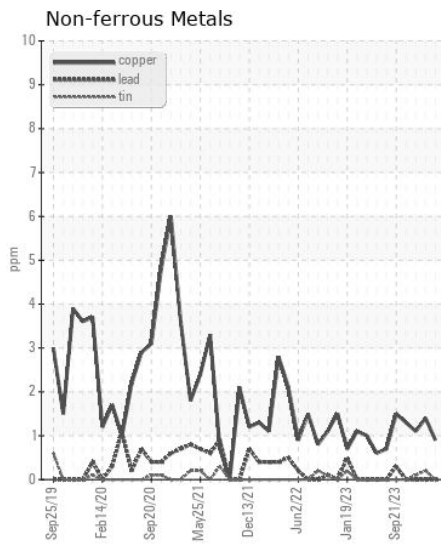
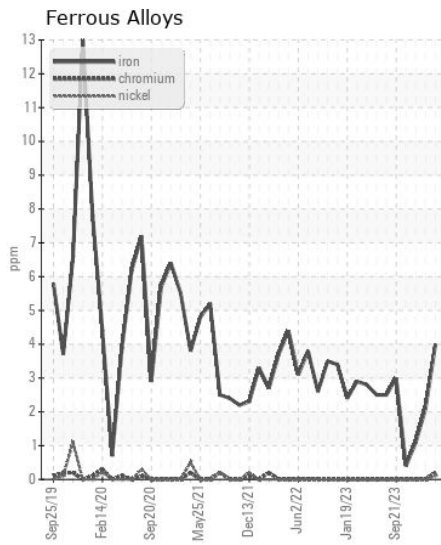
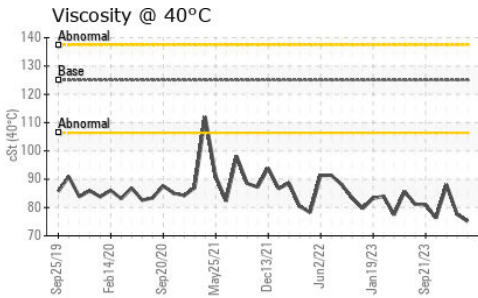
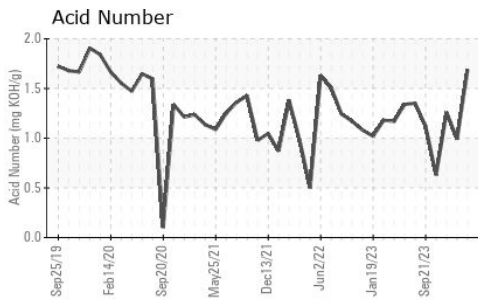
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<b>4</b>	4	5
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	<1
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>&lt;1</b>	2	2
Boron	ppm	ASTM D5185m		<b>235</b>	252	236
Barium	ppm	ASTM D5185m		<b>6</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>74</b>	84	80
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>537</b>	674	662
Calcium	ppm	ASTM D5185m		<b>1199</b>	1472	1418
Phosphorus	ppm	ASTM D5185m	1200	<b>645</b>	738	709
Zinc	ppm	ASTM D5185m	1300	<b>700</b>	833	825
Sulfur	ppm	ASTM D5185m	3200	<b>2550</b>	2701	2652
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.687</b>	0.990	1.26
Visc @ 40°C	cSt	ASTM D445	125	<b>75.1</b>	77.6	88.0



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0027478  
**Lab Number** : 06089609  
**Unique Number** : 10877054  
**Test Package** : MAR 2

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 16 Feb 2024 - Jonathan Hester

**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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