



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

Area  
**ROBERT W TAYLOR**  
Machine Id  
**[ROBERT W TAYLOR] 003 568680-3**  
Component  
**Starboard Main Engine**  
Fluid  
**RT 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0062957</b>	MW0061508	MW0046410
Sample Date		Client Info		<b>01 Dec 2023</b>	04 Nov 2023	07 Oct 2023
Machine Age	hrs	Client Info		<b>11831</b>	11166	10882
Oil Age	hrs	Client Info		<b>345</b>	130	452
Filter Age	hrs	Client Info		<b>345</b>	130	452
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>3</b>	5	9
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>&lt;1</b>	2	2
Lead	ppm	ASTM D5185m	>18	<b>&lt;1</b>	<1	3
Copper	ppm	ASTM D5185m	>80	<b>2</b>	2	6
Tin	ppm	ASTM D5185m	>14	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

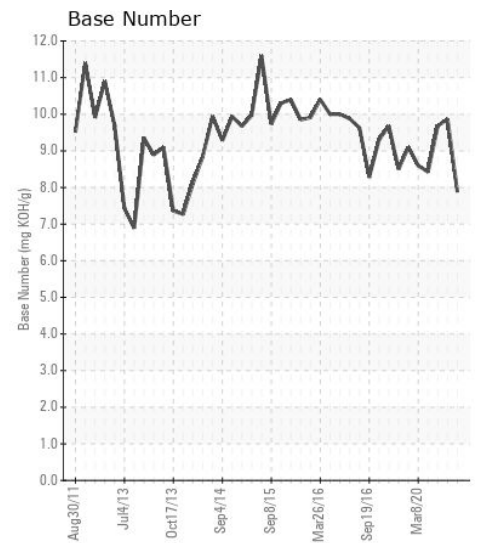
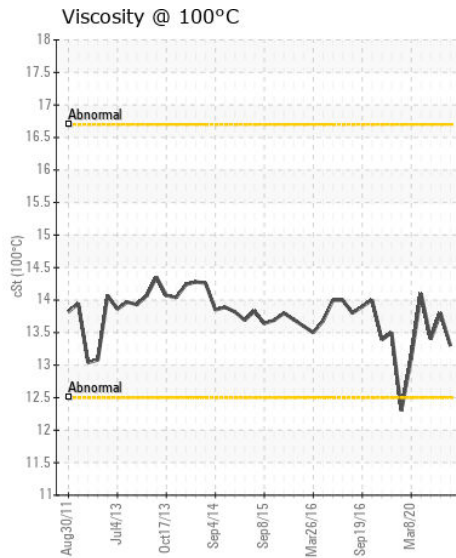
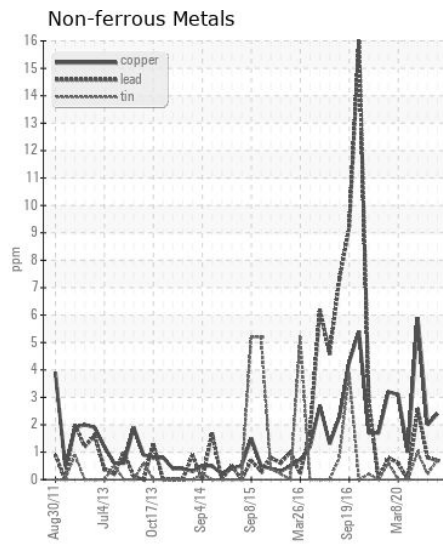
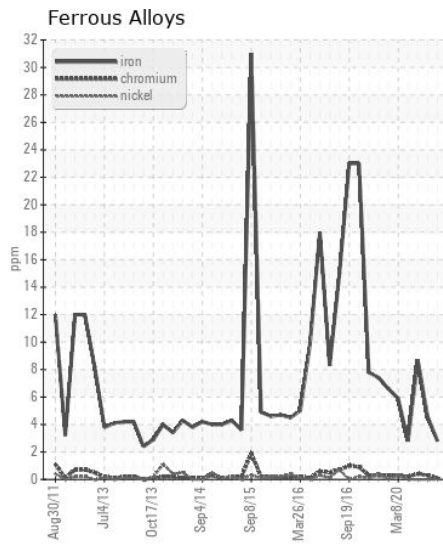
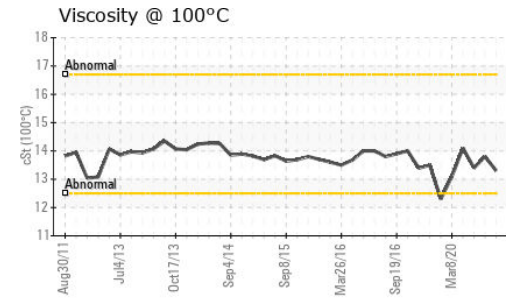
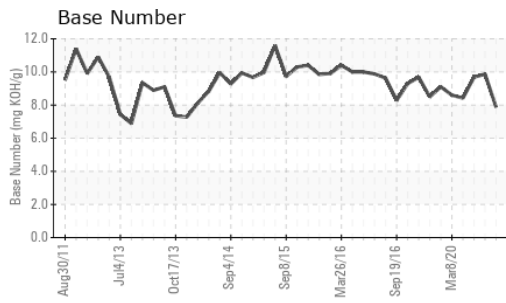
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>5</b>	6	7
Potassium	ppm	ASTM D5185m	>20	<b>5</b>	9	8
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844		<b>0.1</b>	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>7.7</b>	6.4	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.4</b>	20.6	20.6
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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>75	<b>4</b>	21	11
Boron	ppm	ASTM D5185m		<b>165</b>	214	165
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>8</b>	13	4
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m		<b>60</b>	98	14
Calcium	ppm	ASTM D5185m		<b>2052</b>	2015	2221
Phosphorus	ppm	ASTM D5185m		<b>945</b>	1016	971
Zinc	ppm	ASTM D5185m		<b>1132</b>	1209	1353
Sulfur	ppm	ASTM D5185m		<b>3378</b>	3647	4027
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.4</b>	16.8	17.5
Base Number (BN)	mg KOH/g	ASTM D2896		<b>7.88</b>	9.87	9.68
Visc @ 100°C	cSt	ASTM D445		<b>13.3</b>	13.8	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0062957 **Received** : 09 Jan 2024  
**Lab Number** : 06055537 **Diagnosed** : 10 Jan 2024  
**Unique Number** : 10821486 **Diagnostician** : Wes Davis  
**Test Package** : MAR 2

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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