



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

Area  
**SAM M FLEMING**  
Machine Id  
[SAM M FLEMING] 008 590071-8  
Component  
Starboard Genset  
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>MW0068606</b>	MWM690521	MWM683757
Sample Date		Client Info		<b>01 Apr 2024</b>	01 Apr 2020	23 Mar 2020
Machine Age	hrs	Client Info		<b>58510</b>	55018	55016
Oil Age	hrs	Client Info		<b>108</b>	2	386
Filter Age	hrs	Client Info		<b>108</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	<b>6</b>	2	6
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	2	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	9
Silver	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>4</b>	2	1
Lead	ppm	ASTM D5185m	>17	<b>2</b>	0	0
Copper	ppm	ASTM D5185m	>70	<b>1</b>	<1	<1
Tin	ppm	ASTM D5185m	>15	<b>1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

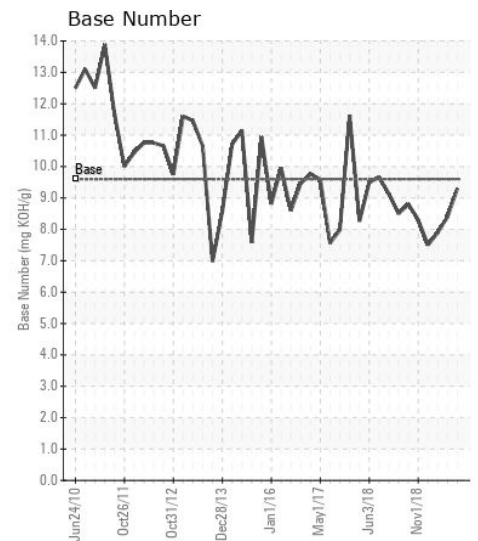
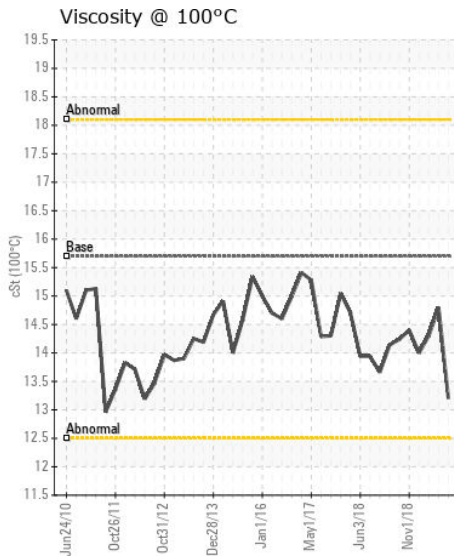
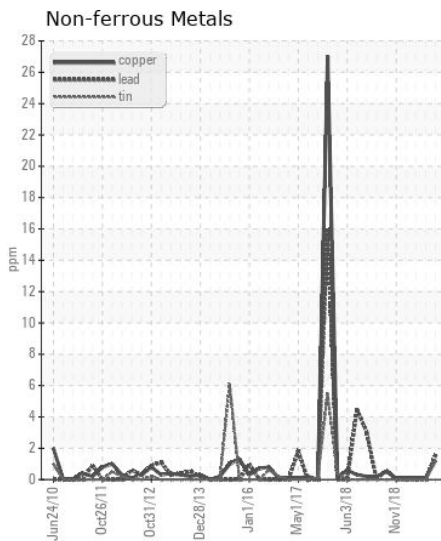
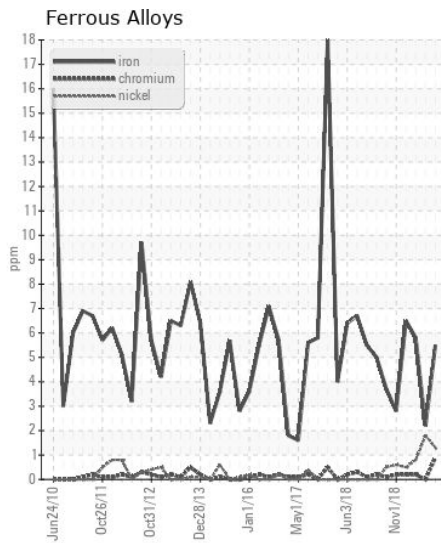
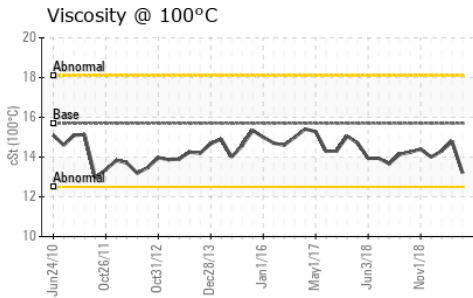
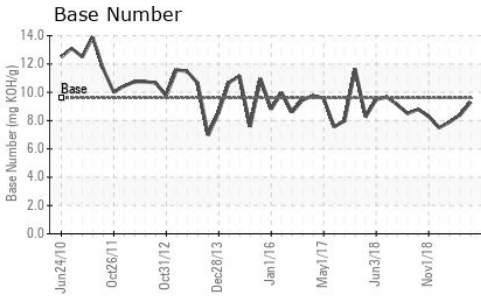
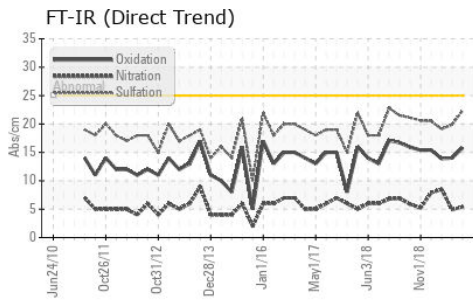
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>7</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	1
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	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>5.4</b>	4.9	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.4</b>	19.9	19.1
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		<b>2</b>	2	2
Boron	ppm	ASTM D5185m		<b>410</b>	340	105
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>131</b>	72	29
Manganese	ppm	ASTM D5185m		<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>659</b>	516	728
Calcium	ppm	ASTM D5185m		<b>1531</b>	1522	1509
Phosphorus	ppm	ASTM D5185m	1200	<b>785</b>	893	694
Zinc	ppm	ASTM D5185m	1300	<b>861</b>	904	763
Sulfur	ppm	ASTM D5185m	3200	<b>2946</b>	2798	3044
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.8</b>	14	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>9.3</b>	8.4	7.9
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.2</b>	14.8	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : MW0068606

**Lab Number** : 06152564

**Unique Number** : 10982642

**Test Package** : MAR 2

**Received** : 17 Apr 2024

**Tested** : 18 Apr 2024

**Diagnosed** : 18 Apr 2024 - Wes Davis

**INGRAM BARGE**

900 S 3RD ST

PADUCAH, KY

US 42003

Contact: JUSTIN WHEELER

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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)