



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

Machine Id  
**MV FRAN C**  
Component  
**Port Main Engine**  
Fluid  
**SHELL 15W40 (--- GAL)**

**RECOMMENDATION**

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0057108</b>	MW0045707	MW0048388
Sample Date		Client Info		<b>08 Feb 2024</b>	03 Nov 2023	10 Sep 2023
Machine Age	hrs	Client Info		<b>10314</b>	9730	9346
Oil Age	hrs	Client Info		<b>1000</b>	1000	1000
Filter Age	hrs	Client Info		<b>0</b>	1000	1000
Oil Changed		Client Info		<b>N/A</b>	Changed	Changed
Filter Changed		Client Info		<b>N/A</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>6</b>	3	6
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m	>3	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>2</b>	2	2
Lead	ppm	ASTM D5185m	>18	<b>3</b>	<1	5
Copper	ppm	ASTM D5185m	>80	<b>2</b>	3	8
Tin	ppm	ASTM D5185m	>14	<b>&lt;1</b>	<1	2
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**

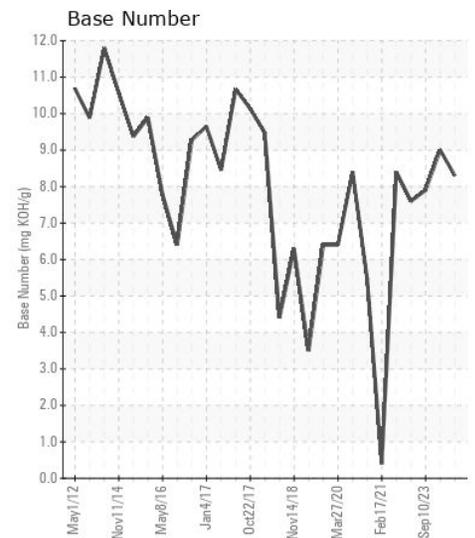
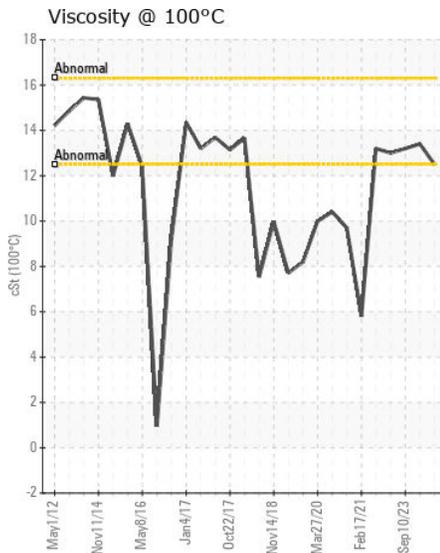
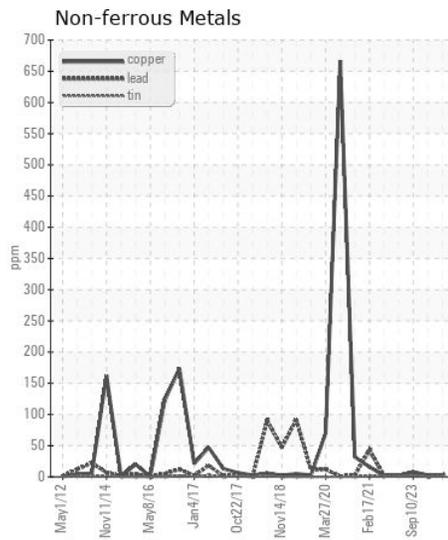
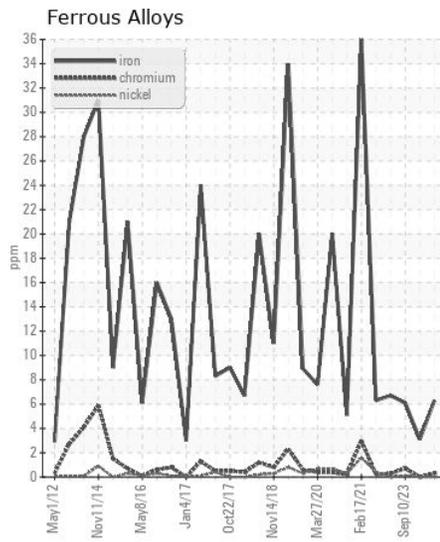
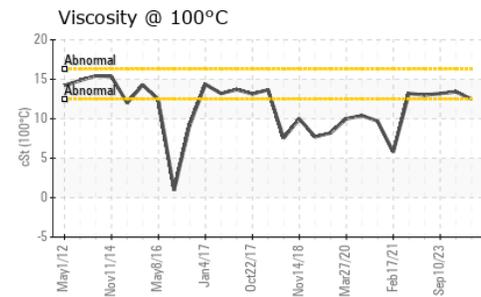
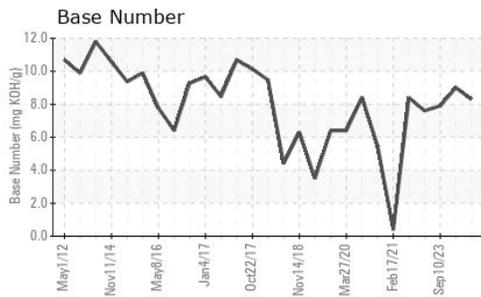
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>4</b>	4	4
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	4
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>0.2</b>	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	6.7	7.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.5</b>	21.4	21.2
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	LIGHT	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	>150	<b>2</b>	1	2
Boron	ppm	ASTM D5185m		<b>129</b>	199	240
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>71</b>	87	100
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>560</b>	615	588
Calcium	ppm	ASTM D5185m		<b>1343</b>	1489	1603
Phosphorus	ppm	ASTM D5185m		<b>840</b>	862	754
Zinc	ppm	ASTM D5185m		<b>1001</b>	1019	918
Sulfur	ppm	ASTM D5185m		<b>2633</b>	2725	3041
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.8</b>	16.2	15.2
Base Number (BN)	mg KOH/g	ASTM D2896		<b>8.3</b>	9.0	7.9
Visc @ 100°C	cSt	ASTM D445		<b>12.5</b>	13.4	13.2



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0057108  
**Lab Number** : 06089351  
**Unique Number** : 10876796  
**Test Package** : MAR 2

**Received** : 14 Feb 2024  
**Tested** : 15 Feb 2024  
**Diagnosed** : 15 Feb 2024 - Wes Davis

**C & B MARINE**  
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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)