



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

Area  
**CPT OA FRANKS**  
Machine Id  
**[CPT OA FRANKS] 003 586734-3**  
Component  
**Starboard Main Engine**  
Fluid  
**CHEVRON DELO 400 LE 15W40 (41 GAL)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0071101</b>	MW06153833	MW06121738
Sample Date		Client Info		<b>30 Jun 2024</b>	09 Apr 2024	24 Feb 2024
Machine Age	hrs	Client Info		<b>29974</b>	24802	23446
Oil Age	hrs	Client Info		<b>300</b>	0	1398
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>N/A</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

**WEAR**

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	<b>6</b>	6	9
Chromium	ppm	ASTM D5185m	>8	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>3	<b>2</b>	3	3
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>3</b>	2	3
Lead	ppm	ASTM D5185m	>18	<b>&lt;1</b>	▲ 20	2
Copper	ppm	ASTM D5185m	>80	<b>&lt;1</b>	4	2
Tin	ppm	ASTM D5185m	>14	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

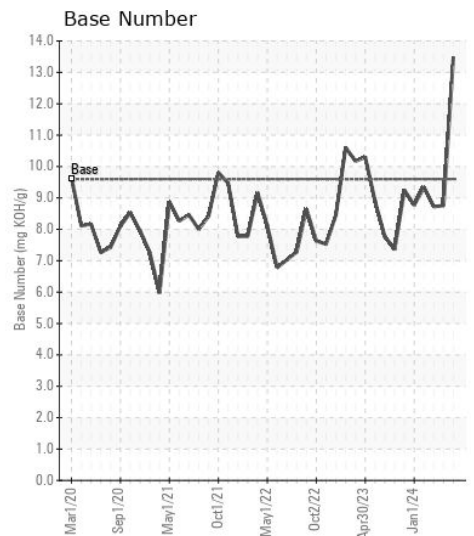
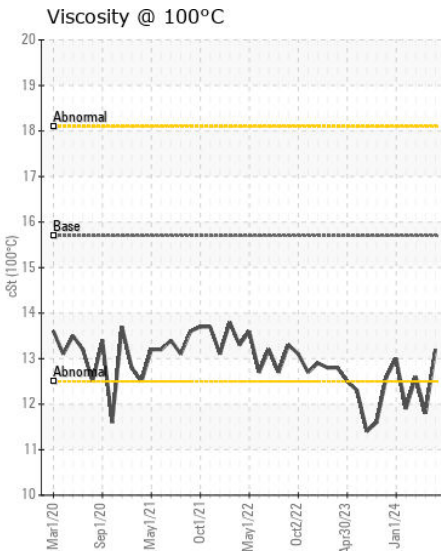
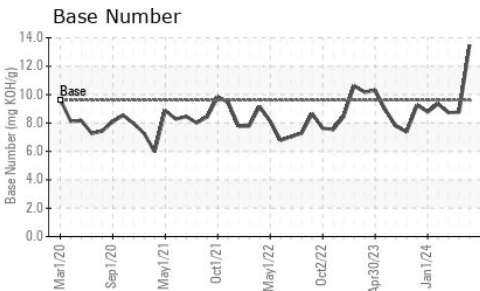
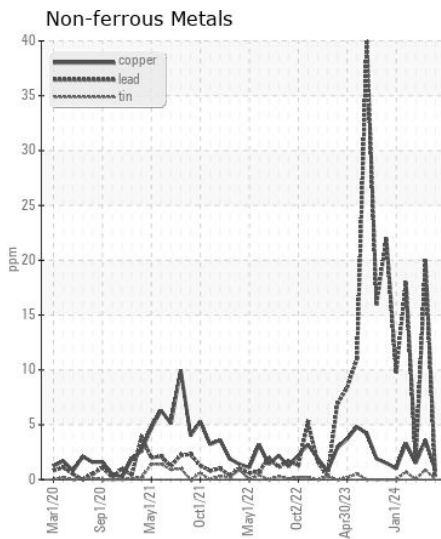
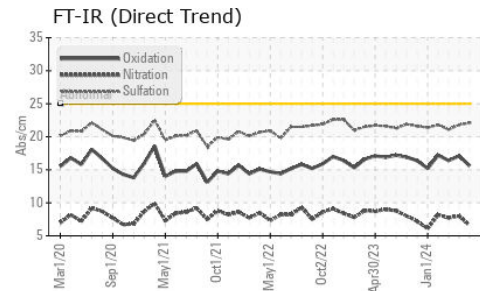
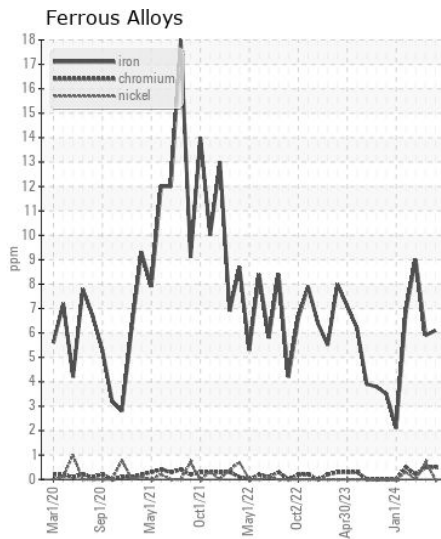
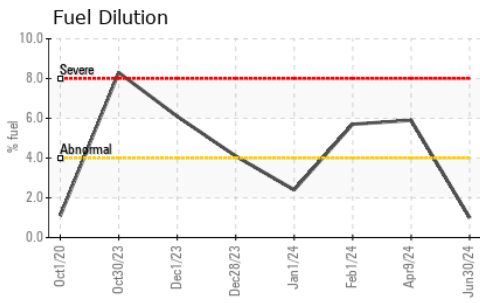
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>6</b>	6	8
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Fuel	%	ASTM D3524	>4.0	<b>1.0</b>	▲ 5.9	<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	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.6</b>	8.0	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.1</b>	21.8	21.1
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	>75	<b>&lt;1</b>	0	<1
Boron	ppm	ASTM D5185m		<b>338</b>	338	311
Barium	ppm	ASTM D5185m		<b>0</b>	2	0
Molybdenum	ppm	ASTM D5185m		<b>109</b>	108	107
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	2	<1
Magnesium	ppm	ASTM D5185m		<b>620</b>	561	625
Calcium	ppm	ASTM D5185m		<b>1522</b>	1438	1575
Phosphorus	ppm	ASTM D5185m	1200	<b>722</b>	636	804
Zinc	ppm	ASTM D5185m	1300	<b>866</b>	748	862
Sulfur	ppm	ASTM D5185m	3200	<b>2544</b>	2492	2942
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.6</b>	17.1	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	<b>13.48</b>	8.76	8.72
Visc @ 100°C	cSt	ASTM D445	15.7	<b>13.2</b>	▲ 11.8	12.6



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : MW0071101 **Received** : 15 Jul 2024  
**Lab Number** : 06237064 **Tested** : 17 Jul 2024  
**Unique Number** : 11125898 **Diagnosed** : 17 Jul 2024 - Wes Davis  
**Test Package** : MAR 2 ( Additional Tests: PercentFuel )

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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)