



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

Area

**LEE SYNNOTT**

Machine Id

**[LEE SYNNOTT] 008 523550-8**

Component

**Starboard Genset**

Fluid

**CHEVRON DELO 400 XLE 15W40 (18 LTR)**

**RECOMMENDATION**

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>MW0055431</b>	MW0055522	MW0055429
Sample Date		Client Info		<b>30 Nov 2023</b>	28 Oct 2023	25 Sep 2023
Machine Age	hrs	Client Info		<b>21505</b>	21117	20712
Oil Age	hrs	Client Info		<b>388</b>	405	409
Filter Age	hrs	Client Info		<b>388</b>	405	409
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	>50	<b>5</b>	6	9
Chromium	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>12	<b>1</b>	1	2
Lead	ppm	ASTM D5185m	>17	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>70	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185m	>15	<b>&lt;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**

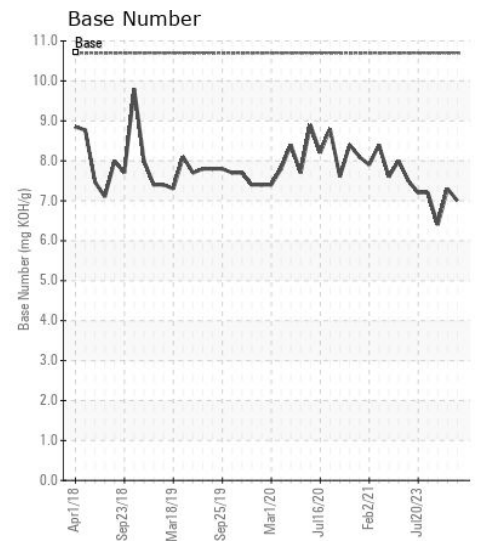
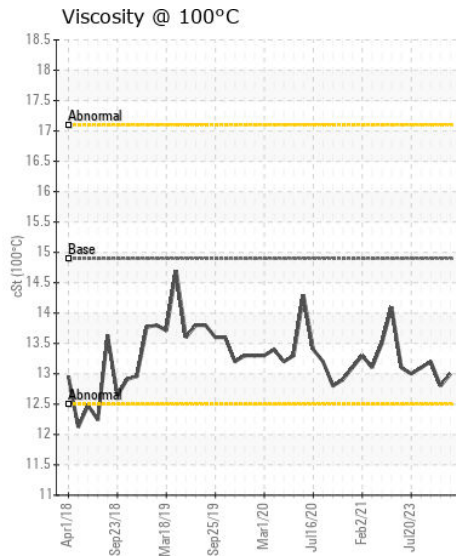
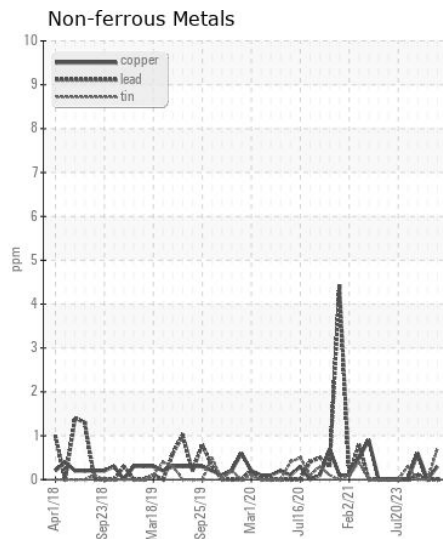
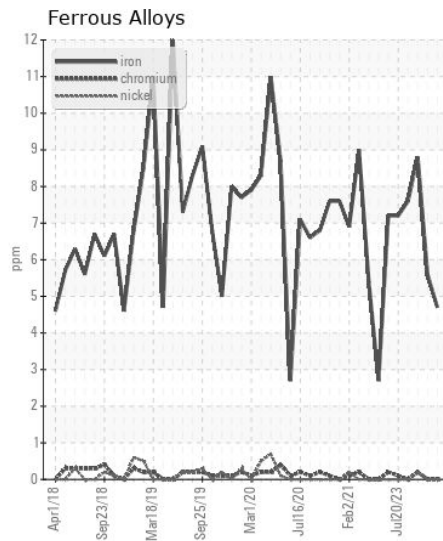
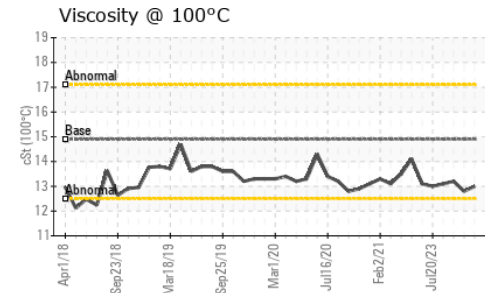
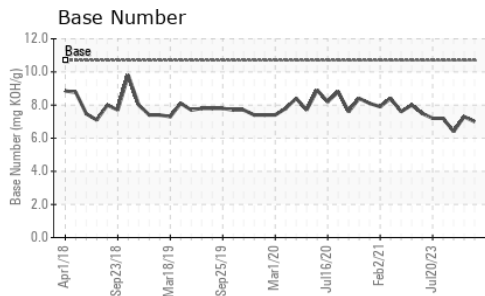
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	4	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	<1	3
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>6.8</b>	7.2	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.6</b>	19.7	19.3
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>	<1	0
Boron	ppm	ASTM D5185m		<b>368</b>	380	439
Barium	ppm	ASTM D5185m		<b>0</b>	0	3
Molybdenum	ppm	ASTM D5185m		<b>62</b>	66	77
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>294</b>	311	318
Calcium	ppm	ASTM D5185m		<b>1766</b>	2109	2113
Phosphorus	ppm	ASTM D5185m	760	<b>1035</b>	1160	1126
Zinc	ppm	ASTM D5185m	830	<b>1258</b>	1479	1392
Sulfur	ppm	ASTM D5185m	2770	<b>3555</b>	4130	4351
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.4</b>	14.9	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	<b>7.0</b>	7.3	6.4
Visc @ 100°C	cSt	ASTM D445	14.9	<b>13.0</b>	12.8	13.2



Certificate L2367

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

**Sample No.** : MW0055431

**Lab Number** : 06084195

**Unique Number** : 10871640

**Test Package** : MAR 2

**Received** : 08 Feb 2024

**Tested** : 09 Feb 2024

**Diagnosed** : 12 Feb 2024 - Don Baldrige

**INGRAM BARGE**

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PADUCAH, KY

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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)