



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

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		MW0068615	MW0068608	MW0060125
Sample Date		Client Info		08 Apr 2024	01 Apr 2024	06 Mar 2024
Machine Age	hrs	Client Info		22985	22801	22577
Oil Age	hrs	Client Info		408	224	408
Filter Age	hrs	Client Info		408	224	408
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	9	5	9
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>12	3	3	4
Lead	ppm	ASTM D5185m	>17	2	0	<1
Copper	ppm	ASTM D5185m	>70	<1	2	<1
Tin	ppm	ASTM D5185m	>15	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

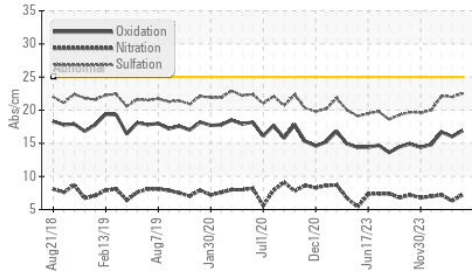
Silicon	ppm	ASTM D5185m	>25	7	5	7
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.2	6.3	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	22.0	22.1
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG

FLUID CONDITION

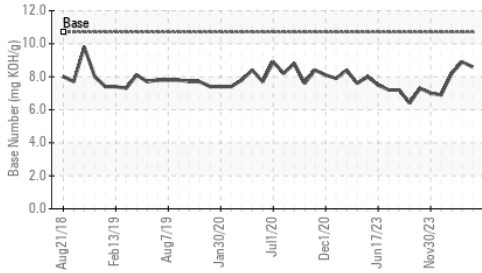
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	1	1
Boron	ppm	ASTM D5185m		401	391	383
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		118	113	117
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		574	608	571
Calcium	ppm	ASTM D5185m		1679	1690	1755
Phosphorus	ppm	ASTM D5185m	760	861	843	872
Zinc	ppm	ASTM D5185m	830	981	978	1041
Sulfur	ppm	ASTM D5185m	2770	3199	3357	3158
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	16.0	16.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	8.6	8.9	8.2
Visc @ 100°C	cSt	ASTM D445	14.9	12.8	13.0	12.7

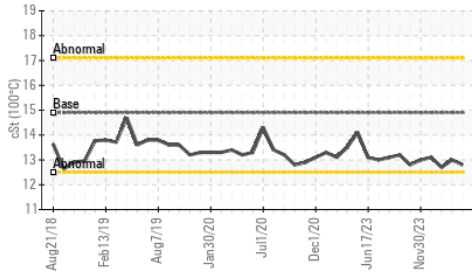
FT-IR (Direct Trend)



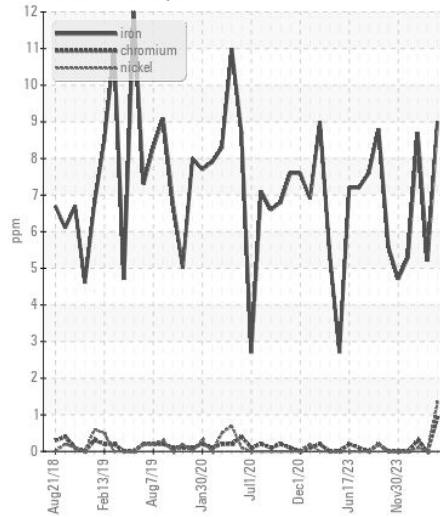
Base Number



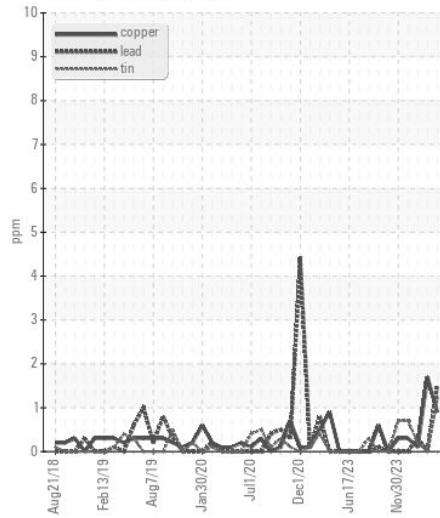
Viscosity @ 100°C



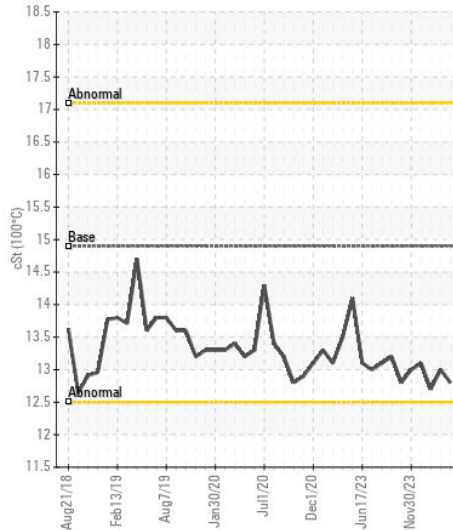
Ferrous Alloys



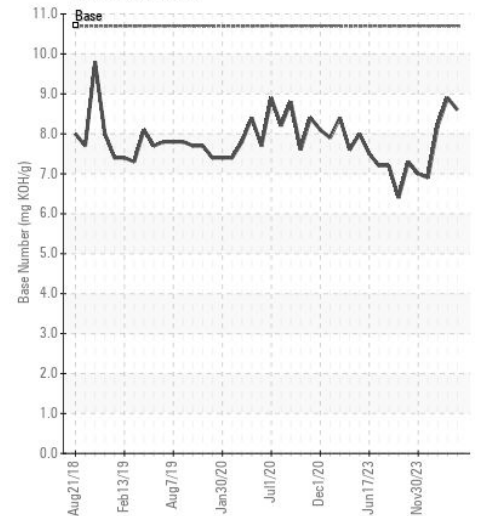
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : MW0068615

Lab Number : 06152538

Unique Number : 10982616

Test Package : MAR 2

Received : 17 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 18 Apr 2024 - Wes Davis

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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)