



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CAMILLE B BARRETT
Machine Id
[CAMILLE B BARRETT] 008 538801-8
Component
Starboard Genset
Fluid
CHEVRON DELO 400 XLE 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0068684	MW0068683	MW0038617
Sample Date		Client Info		21 Apr 2024	17 Mar 2024	03 Nov 2023
Machine Age	hrs	Client Info		34253	33819	32054
Oil Age	hrs	Client Info		434	470	372
Filter Age	hrs	Client Info		434	470	372
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	11	12	10
Chromium	ppm	ASTM D5185m	>4	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		1	6	6
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	2	3	2
Lead	ppm	ASTM D5185m	>17	<1	0	0
Copper	ppm	ASTM D5185m	>70	3	0	0
Tin	ppm	ASTM D5185m	>15	<1	0	0
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.

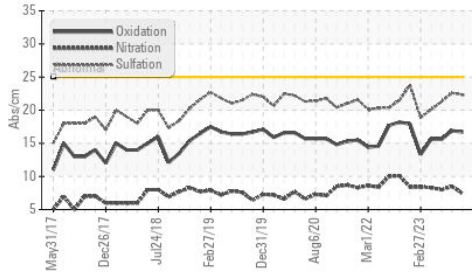
Silicon	ppm	ASTM D5185m	>25	6	6	6
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.4	8.5	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.6	21.3
Silt	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

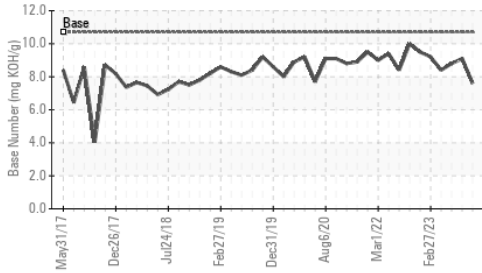
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	1	0
Boron	ppm	ASTM D5185m		384	228	223
Barium	ppm	ASTM D5185m		2	0	2
Molybdenum	ppm	ASTM D5185m		108	98	90
Manganese	ppm	ASTM D5185m		1	2	0
Magnesium	ppm	ASTM D5185m		485	801	649
Calcium	ppm	ASTM D5185m		1460	1798	1631
Phosphorus	ppm	ASTM D5185m	760	933	800	691
Zinc	ppm	ASTM D5185m	830	1041	940	822
Sulfur	ppm	ASTM D5185m	2770	3062	3477	2834
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	16.9	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	7.6	9.1	8.8
Visc @ 100°C	cSt	ASTM D445	14.9	13.3	13.8	13.5

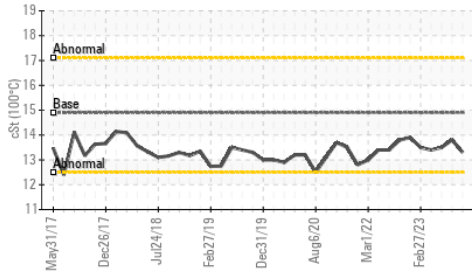
FT-IR (Direct Trend)



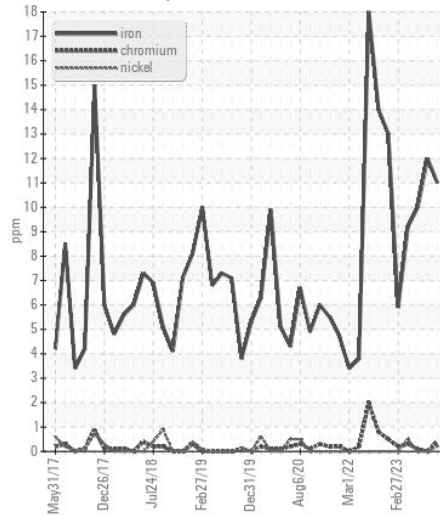
Base Number



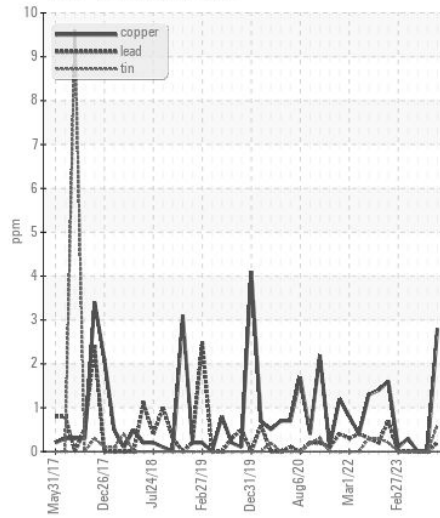
Viscosity @ 100°C



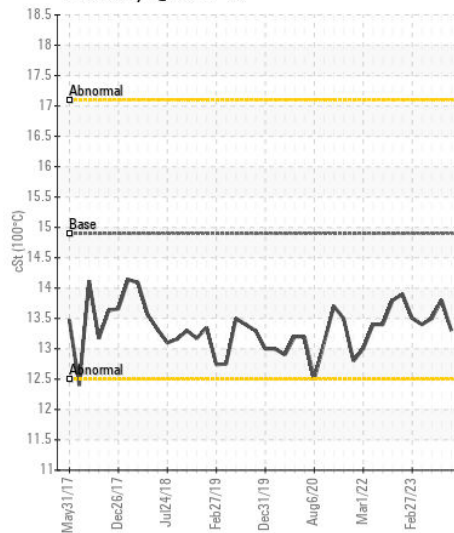
Ferrous Alloys



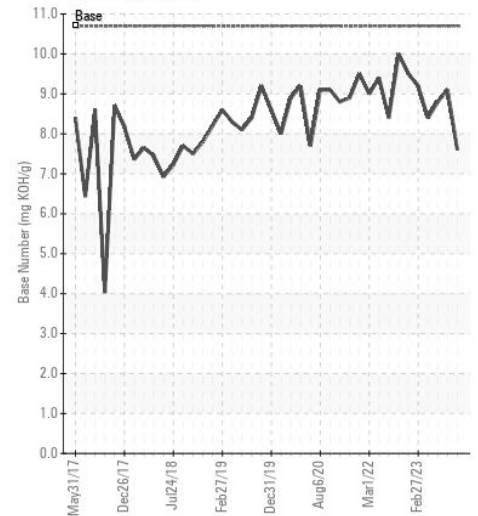
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : MW0068684

Lab Number : 06176542

Unique Number : 11022595

Test Package : MAR 2

Received : 10 May 2024

Tested : 13 May 2024

Diagnosed : 13 May 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)