



Area
DENNIS T DELANEY
Machine Id
[DENNIS T DELANEY] 008 536790-8
Component
Starboard Genset
Fluid
CHEVRON DELO 400 XLE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0067896	MW0058565	MW0061781
Sample Date		Client Info		01 Apr 2024	26 Jan 2024	24 Nov 2023
Machine Age	hrs	Client Info		6938	6169	5616
Oil Age	hrs	Client Info		365	420	480
Filter Age	hrs	Client Info		365	420	480
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	7	13	7
Chromium	ppm	ASTM D5185m	>4	0	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>5	0	<1	0
Aluminum	ppm	ASTM D5185m	>12	4	3	3
Lead	ppm	ASTM D5185m	>17	0	1	0
Copper	ppm	ASTM D5185m	>70	0	1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

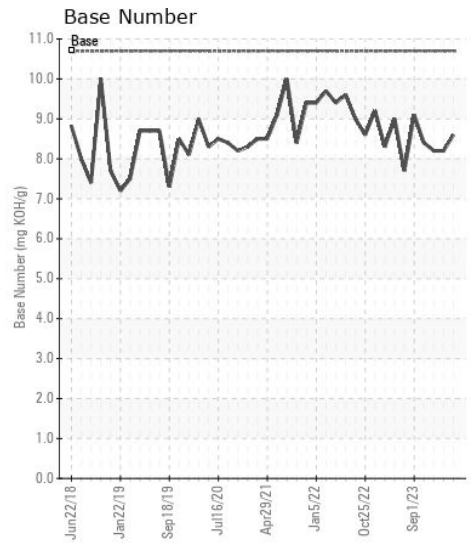
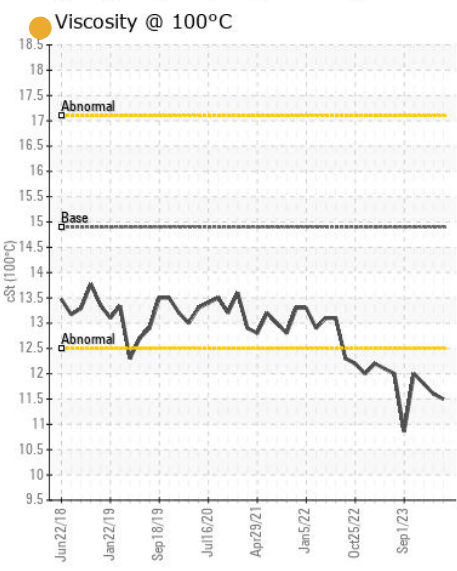
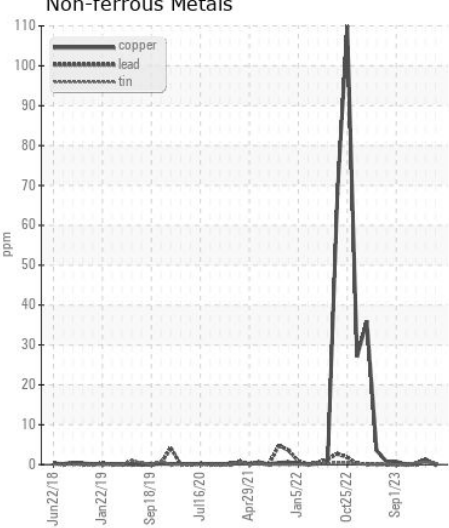
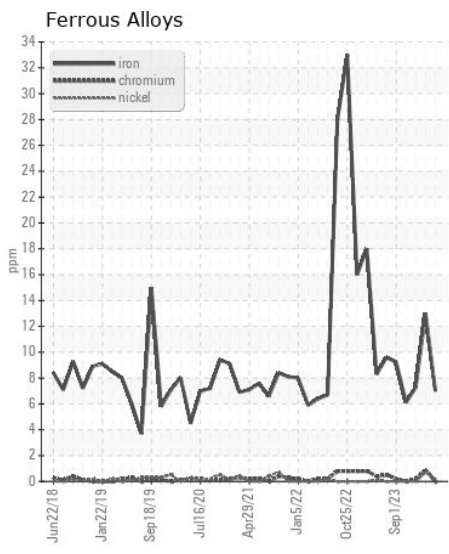
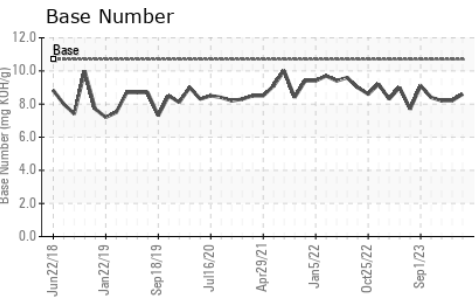
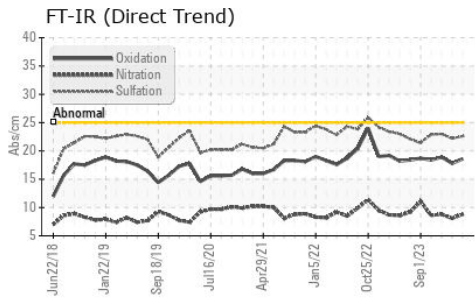
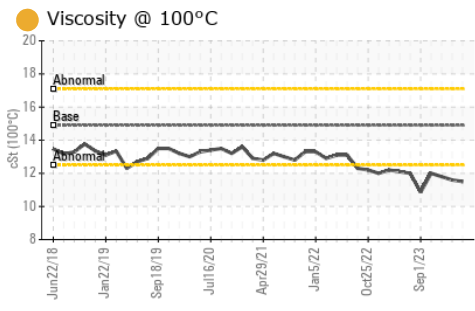
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	12	8
Potassium	ppm	ASTM D5185m	>20	<1	2	<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	8.8	8.1	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	22.2	23.0
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	0	2
Boron	ppm	ASTM D5185m		290	414	332
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		135	187	132
Manganese	ppm	ASTM D5185m		3	4	2
Magnesium	ppm	ASTM D5185m		674	849	667
Calcium	ppm	ASTM D5185m		1648	2108	1537
Phosphorus	ppm	ASTM D5185m	760	740	956	716
Zinc	ppm	ASTM D5185m	830	899	1121	829
Sulfur	ppm	ASTM D5185m	2770	3206	4101	2616
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	17.8	18.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	8.6	8.2	8.2
Visc @ 100°C	cSt	ASTM D445	14.9	11.5	11.6	11.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0067896
Lab Number : 06146385
Unique Number : 10976463
Test Package : MAR 2
Received : 11 Apr 2024
Tested : 12 Apr 2024
Diagnosed : 15 Apr 2024 - Don Baldrige

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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)