



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
CPT OA FRANKS
Machine Id
[CPT OA FRANKS] 008 586734-8
Component
Starboard Genset
Fluid
CHEVRON DELO 400 LE 15W40 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06121352	MW06063261	MW06063258
Sample Date		Client Info		14 Feb 2024	01 Jan 2024	16 Dec 2023
Machine Age	hrs	Client Info		28328	27779	27545
Oil Age	hrs	Client Info		375	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

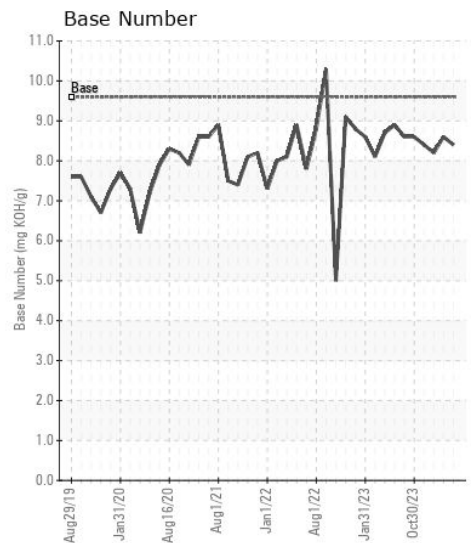
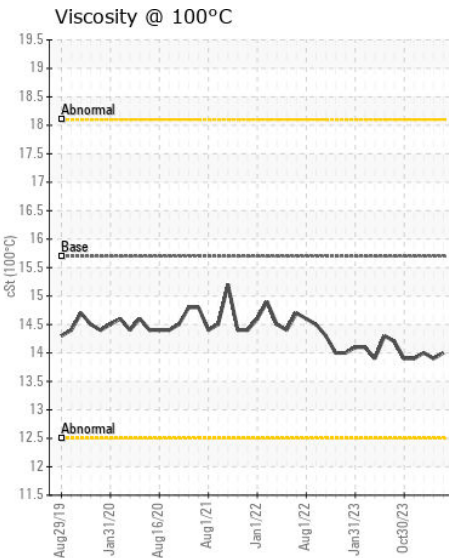
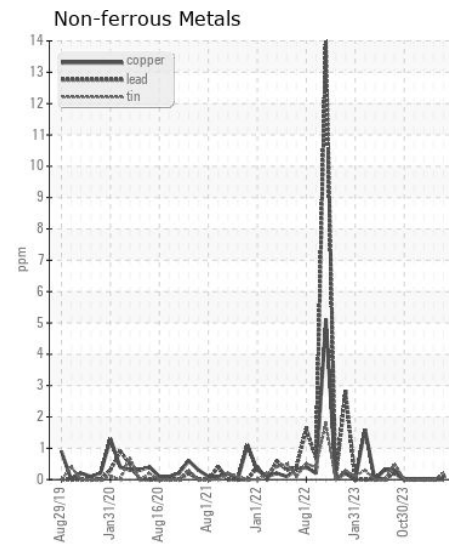
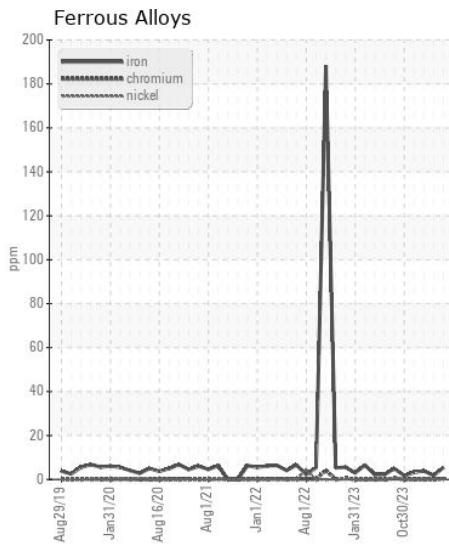
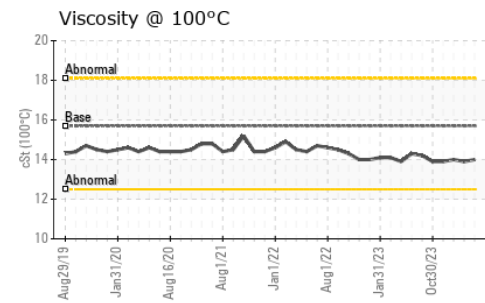
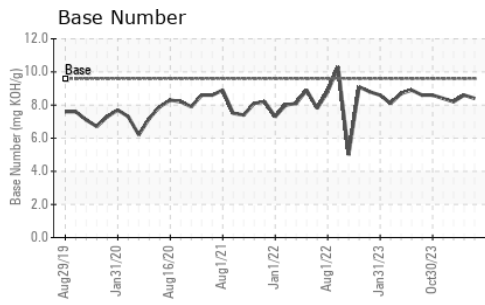
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	5	6
Potassium	ppm	ASTM D5185m	>20	1	0	0
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	8.2	7.1	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.9	21.5	22.3
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		2	1	2
Boron	ppm	ASTM D5185m		311	304	282
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		108	102	104
Manganese	ppm	ASTM D5185m		2	<1	2
Magnesium	ppm	ASTM D5185m		660	672	689
Calcium	ppm	ASTM D5185m		1644	1651	1698
Phosphorus	ppm	ASTM D5185m	1200	747	729	720
Zinc	ppm	ASTM D5185m	1300	901	841	867
Sulfur	ppm	ASTM D5185m	3200	2986	2734	2757
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	16.2	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	8.4	8.6	8.2
Visc @ 100°C	cSt	ASTM D445	15.7	14.0	13.9	14.0



Certificate L2367

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

Sample No. : MW06121352

Lab Number : 06121352

Unique Number : 10930185

Test Package : MAR 2

Received : 18 Mar 2024

Tested : 19 Mar 2024

Diagnosed : 19 Mar 2024 - Wes Davis

INGRAM BARGE

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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)