



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
WMC
Component
Starboard Genset
Fluid
CHEVRON URSA SUPER PLUS 40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05745121	MW05685042	MW05663161
Sample Date		Client Info		19 Jan 2023	03 Nov 2022	10 Oct 2022
Machine Age	hrs	Client Info		48436	47902	47554
Oil Age	hrs	Client Info		524	348	623
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	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>25	7	5	14
Chromium	ppm	ASTM D5185m	>5	<1	<1	1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		2	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	3	5
Lead	ppm	ASTM D5185m	>10	0	1	3
Copper	ppm	ASTM D5185m	>20	0	<1	1
Tin	ppm	ASTM D5185m	>5	0	<1	1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

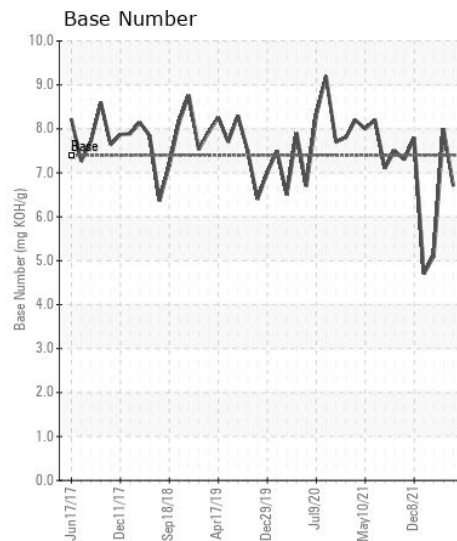
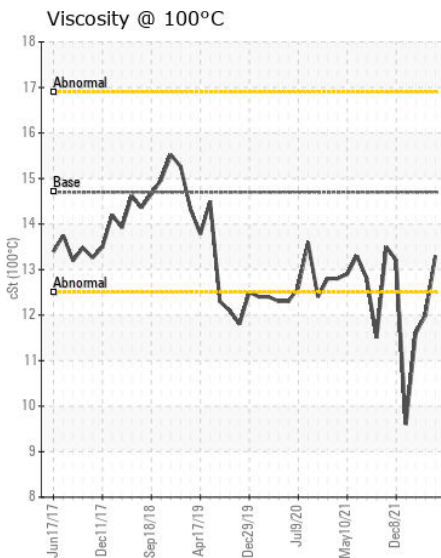
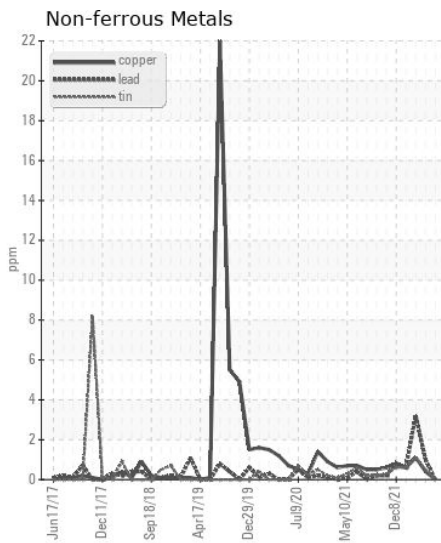
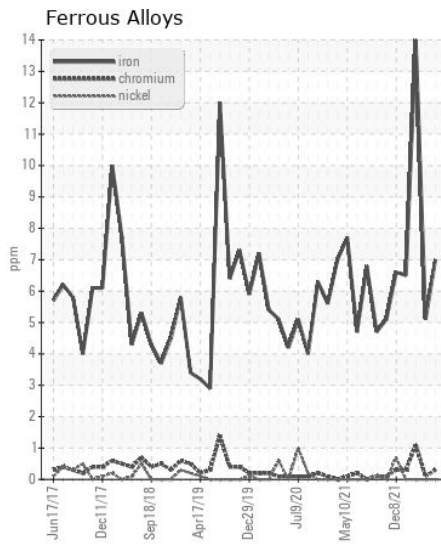
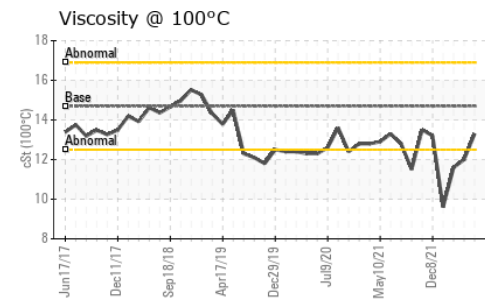
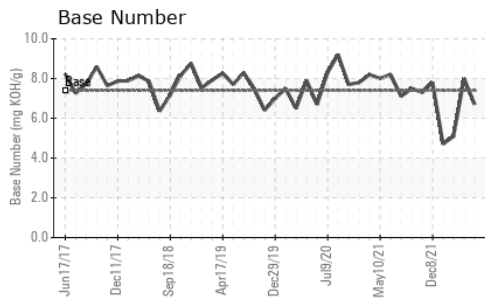
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	6	10
Potassium	ppm	ASTM D5185m	>20	0	1	6
Fuel		WC Method	>4.0	<1.0	▲ 2.2	▲ 3.9
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	9.2	8.4	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.9	25.5	30.5
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	4
Boron	ppm	ASTM D5185m		305	336	141
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		80	105	82
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		501	574	426
Calcium	ppm	ASTM D5185m		1324	1506	1291
Phosphorus	ppm	ASTM D5185m	1000	778	726	593
Zinc	ppm	ASTM D5185m	1090	939	870	778
Sulfur	ppm	ASTM D5185m		3049	3031	2411
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.2	22.2	38.5
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	6.7	8.0	5.1
Visc @ 100°C	cSt	ASTM D445	14.7	13.3	● 12.0	▲ 11.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05745121
Lab Number : 05745121
Unique Number : 10299720
Test Package : MAR 2

Received : 20 Jan 2023
Tested : 23 Jan 2023
Diagnosed : 24 Jan 2023 - Sean Felton

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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)