



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
AGC
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		MW05843057	MW05823772	MW05774577
Sample Date		Client Info		09 May 2023	18 Apr 2023	22 Feb 2023
Machine Age	hrs	Client Info		33846	33398	32960
Oil Age	hrs	Client Info		448	438	462
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	>25	3	4	3
Chromium	ppm	ASTM D5185m	>5	0	<1	<1
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>10	5	0	2
Lead	ppm	ASTM D5185m	>10	0	0	2
Copper	ppm	ASTM D5185m	>20	0	0	0
Tin	ppm	ASTM D5185m	>5	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

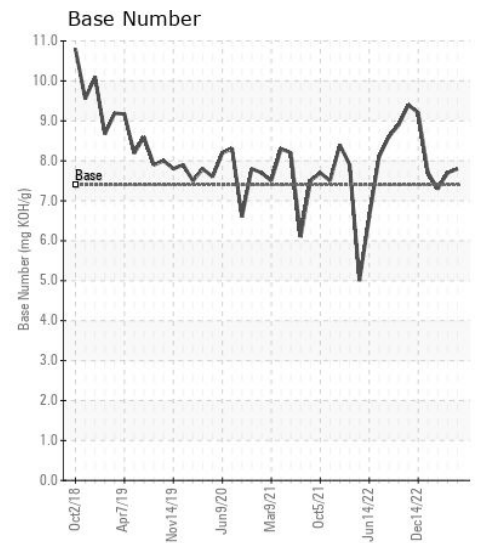
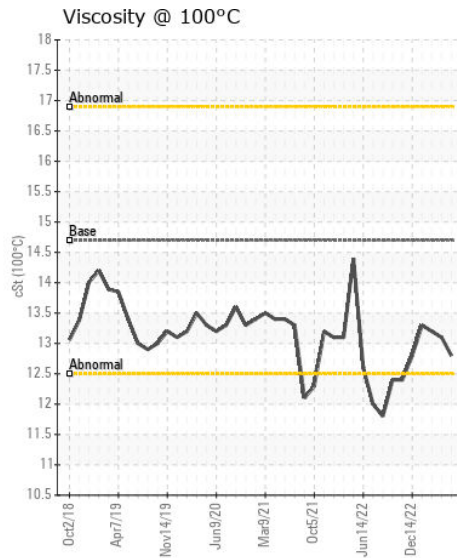
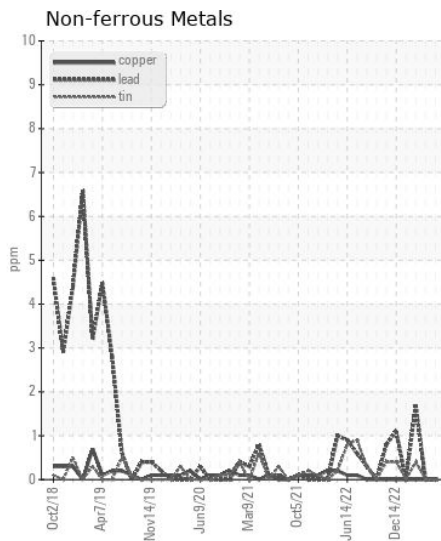
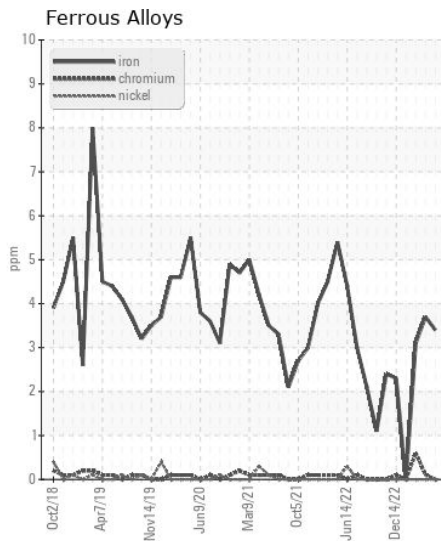
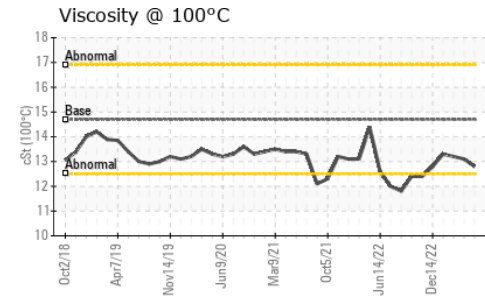
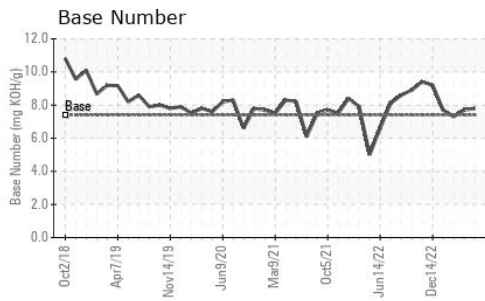
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	5	5
Potassium	ppm	ASTM D5185m	>20	<1	1	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	6.9	6.5	6.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.1	21.5	20.9
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		312	358	389
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		97	99	89
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		524	482	451
Calcium	ppm	ASTM D5185m		1638	1538	1453
Phosphorus	ppm	ASTM D5185m	1000	869	819	917
Zinc	ppm	ASTM D5185m	1090	1071	982	1137
Sulfur	ppm	ASTM D5185m		3190	2778	3218
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.9	15.8	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	7.8	7.7	7.3
Visc @ 100°C	cSt	ASTM D445	14.7	12.8	13.1	13.2



Certificate L2367

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

Sample No. : MW05843057

Lab Number : 05843057

Unique Number : 10467164

Test Package : MAR 2

Received : 10 May 2023

Tested : 12 May 2023

Diagnosed : 12 May 2023 - Don Baldrige

ILLINOIS MARINE TOWING

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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)