



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

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05981760	MW05904209	MW05843078
Sample Date		Client Info		16 Oct 2023	20 Jul 2023	09 May 2023
Machine Age	hrs	Client Info		25882	25346	24546
Oil Age	hrs	Client Info		536	800	546
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				ATTENTION	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

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

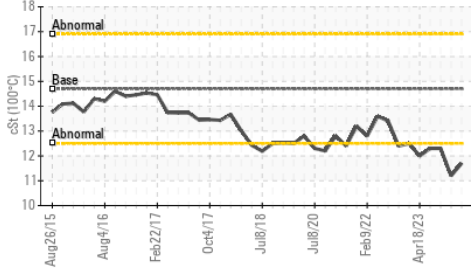
Silicon	ppm	ASTM D5185m	>25	4	3	4
Potassium	ppm	ASTM D5185m	>20	2	0	2
Fuel	%	ASTM D3524	>4.0	<1.0	0.5	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.8	6.1	5.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.1	18.4	19.6
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

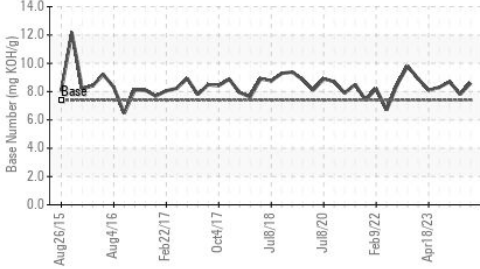
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		0	1	<1
Boron	ppm	ASTM D5185m		336	152	194
Barium	ppm	ASTM D5185m		10	0	0
Molybdenum	ppm	ASTM D5185m		108	48	69
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m		558	430	625
Calcium	ppm	ASTM D5185m		1489	2023	1377
Phosphorus	ppm	ASTM D5185m	1000	759	900	737
Zinc	ppm	ASTM D5185m	1090	897	1078	885
Sulfur	ppm	ASTM D5185m		2807	4016	3071
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	13.1	14.2
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	8.6	7.8	8.7
Visc @ 100°C	cSt	ASTM D445	14.7	11.7	11.2	12.3

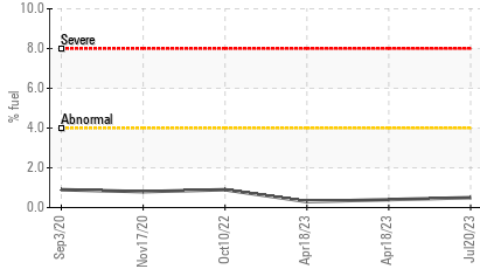
● Viscosity @ 100°C



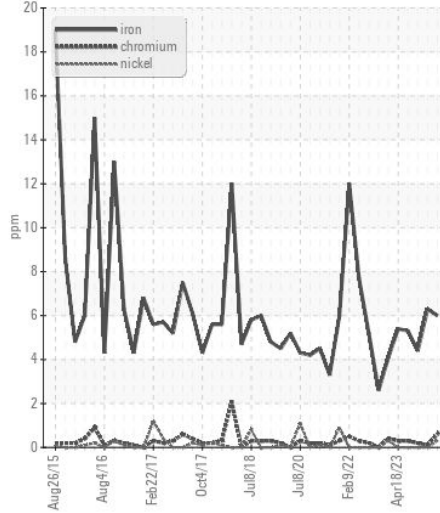
Base Number



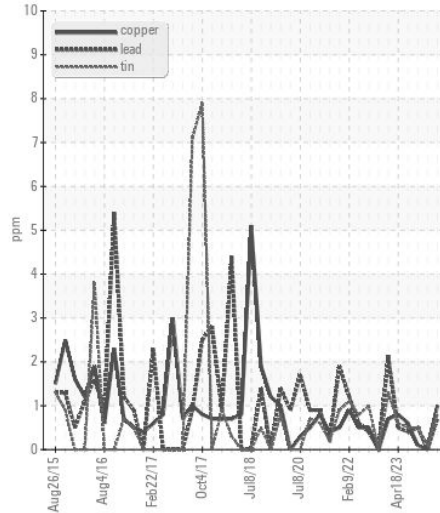
Fuel Dilution



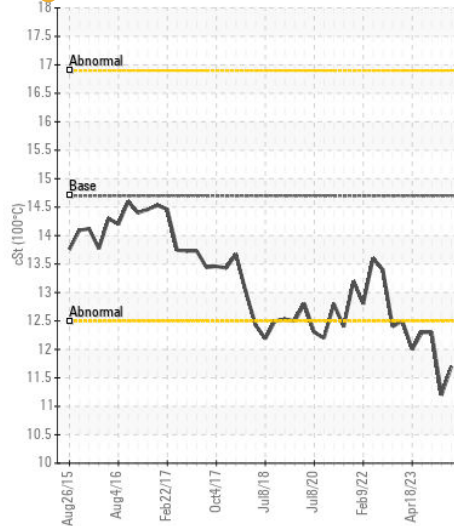
Ferrous Alloys



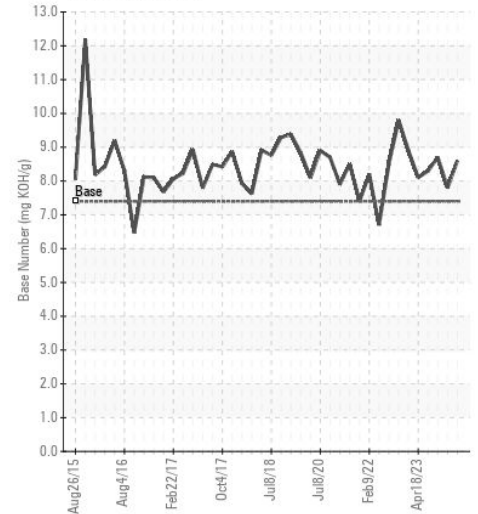
Non-ferrous Metals



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05981760 **Received** : 17 Oct 2023
Lab Number : 05981760 **Tested** : 18 Oct 2023
Unique Number : 10699055 **Diagnosed** : 19 Oct 2023 - Don Baldrige
Test Package : MAR 2 (Additional Tests: FuelDilution)

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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)