



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
GERALD SHREVE (S/N RG-6090G008010)
Component
Starboard Genset
Fluid
CHEVRON DELO 710 LS (300 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0066685	MW0050343	MW0056222
Sample Date		Client Info		16 Jun 2024	21 Jan 2024	13 Oct 2023
Machine Age	hrs	Client Info		1913	522	20143
Oil Age	hrs	Client Info		208	522	303
Filter Age	hrs	Client Info		208	522	303
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

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

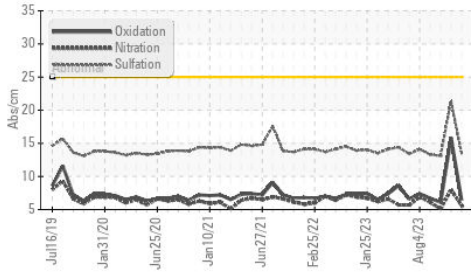
Silicon	ppm	ASTM D5185m	>25	3	42	4
Potassium	ppm	ASTM D5185m	>20	<1	4	2
Fuel		WC Method	>4.0	<1.0	0.2	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.4	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.6	8.0	5.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	13.5	21.4	13.1
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

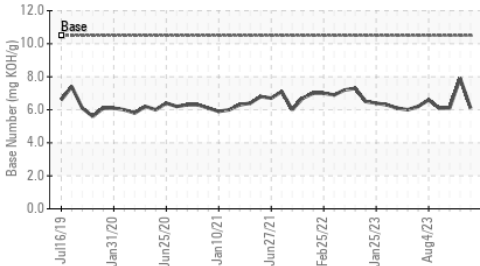
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	7	1
Boron	ppm	ASTM D5185m		40	255	45
Barium	ppm	ASTM D5185m		0	0	11
Molybdenum	ppm	ASTM D5185m		41	246	41
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		14	731	9
Calcium	ppm	ASTM D5185m		3269	1514	3057
Phosphorus	ppm	ASTM D5185m		4	808	29
Zinc	ppm	ASTM D5185m		6	964	<1
Sulfur	ppm	ASTM D5185m		2414	2769	2399
Oxidation	Abs/.1mm	*ASTM D7414	>25	6.4	15.8	6.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	6.1	7.9	6.1
Visc @ 100°C	cSt	ASTM D445	15.5	14.5	11.0	14.6

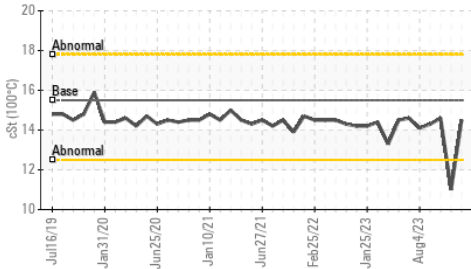
FT-IR (Direct Trend)



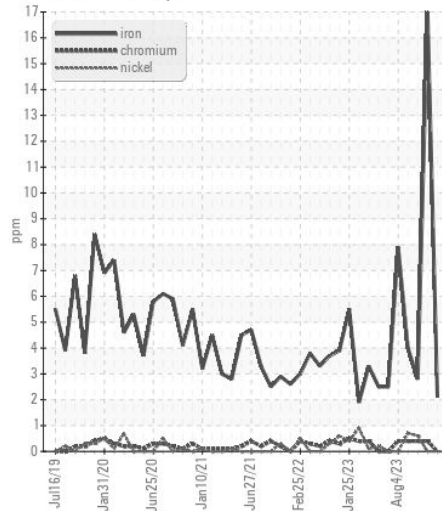
Base Number



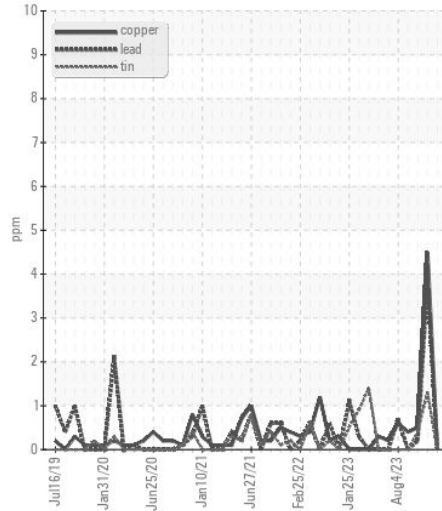
Viscosity @ 100°C



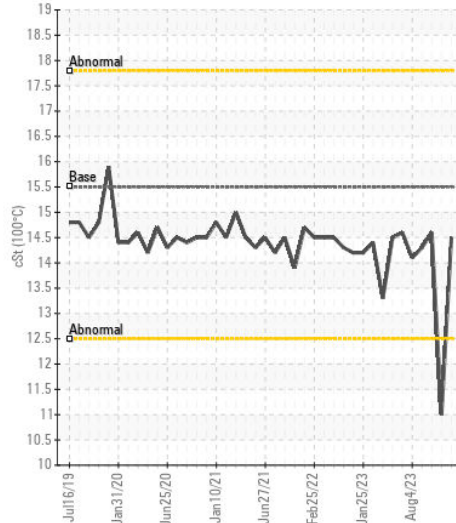
Ferrous Alloys



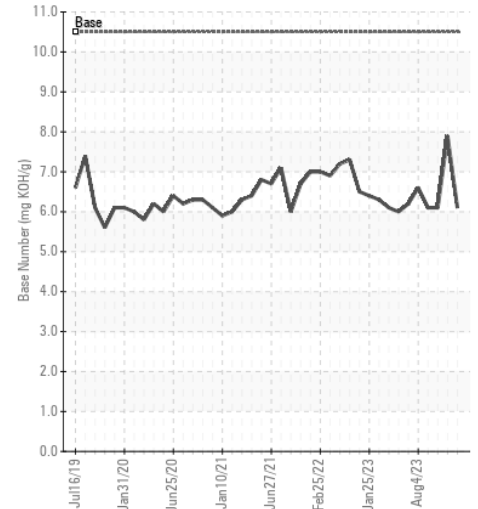
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0066685
Lab Number : 06238852
Unique Number : 11127686
Test Package : MAR 2

Received : 17 Jul 2024
Tested : 18 Jul 2024
Diagnosed : 18 Jul 2024 - Wes Davis

AMERICAN COMMERCIAL LINES
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 JEFFERSONVILLE, IN
 US 47130
 Contact: RONALD SCHNEIDER
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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)

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