



Machine Id
MV GLADYS G
Component
Starboard Main Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (14 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0070027	MW0038990	MW0062724
Sample Date		Client Info		11 Jul 2024	06 Apr 2024	28 Nov 2023
Machine Age	hrs	Client Info		15549	13745	12962
Oil Age	hrs	Client Info		750	1000	500
Filter Age	hrs	Client Info		750	1000	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	8	12	8
Chromium	ppm	ASTM D5185m	>8	<1	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	3	3	3
Lead	ppm	ASTM D5185m	>18	11	▲ 26	19
Copper	ppm	ASTM D5185m	>80	5	7	4
Tin	ppm	ASTM D5185m	>14	<1	<1	<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

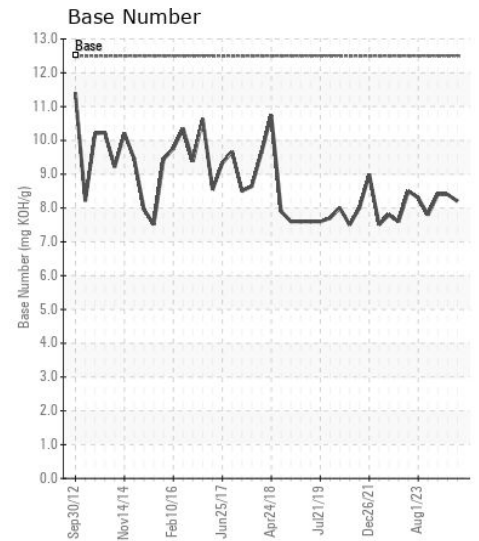
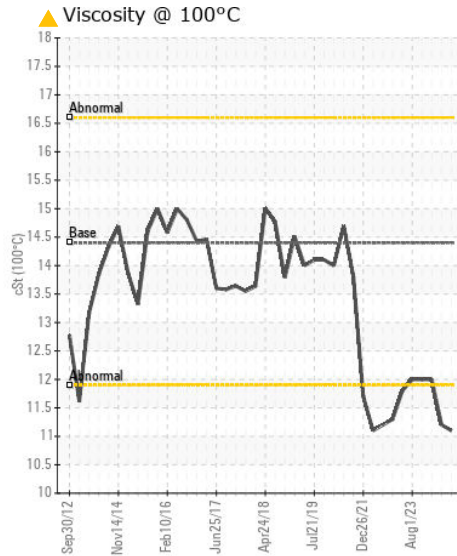
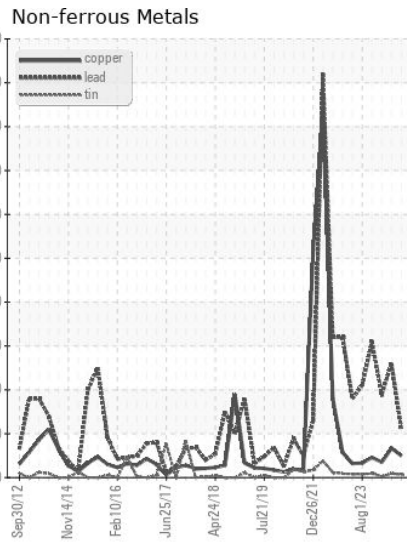
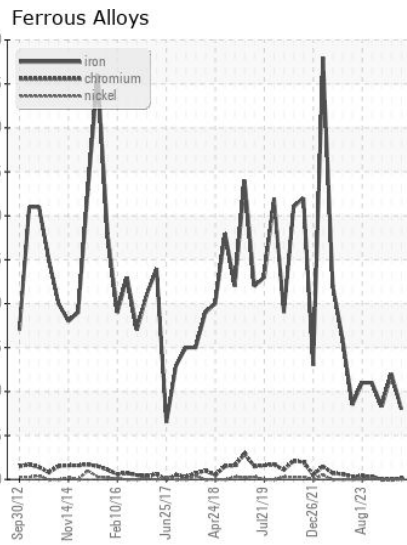
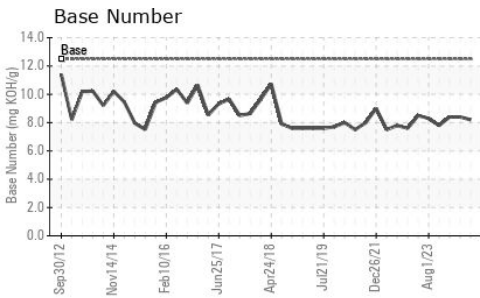
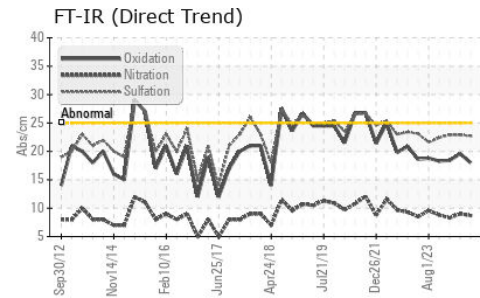
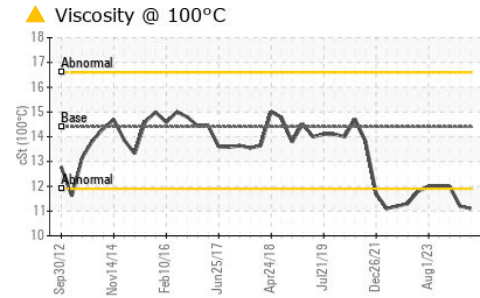
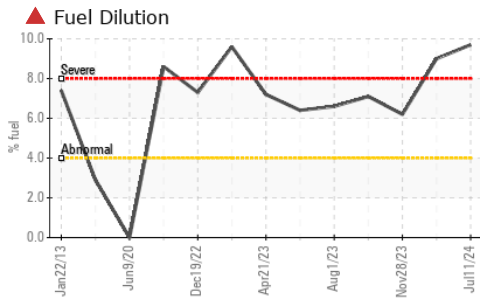
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>20	5	5	5
Potassium	ppm	ASTM D5185m	>20	2	0	1
Fuel	%	ASTM D3524	>4.0	▲ 9.7	▲ 9.0	▲ 6.2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	8.7	9.0	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.9	22.9
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>75	2	2	<1
Boron	ppm	ASTM D5185m	151	236	280	267
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	103	109	111
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m	0	540	583	559
Calcium	ppm	ASTM D5185m	2046	1372	1417	1400
Phosphorus	ppm	ASTM D5185m	1043	619	650	644
Zinc	ppm	ASTM D5185m	943	713	786	773
Sulfur	ppm	ASTM D5185m	5012	2435	2600	2290
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	19.6	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	8.2	8.4	8.4
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.1	▲ 11.2	▲ 12.0



Certificate L2367

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

Sample No. : MW0070027

Lab Number : 06239664

Unique Number : 11128498

Test Package : MAR 2 (Additional Tests: PercentFuel)

Received : 17 Jul 2024

Tested : 18 Jul 2024

Diagnosed : 18 Jul 2024 - Wes Davis

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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