



Machine Id
TWIN DISC LILLIAN LOUISE
Component
Starboard Reduction Gear
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0058034	MW0049188	MW0058036
Sample Date		Client Info		23 Dec 2023	07 Oct 2023	14 Sep 2023
Machine Age	hrs	Client Info		0	44414	0
Oil Age	hrs	Client Info		0	500	1000
Filter Age	hrs	Client Info		0	500	1000
Oil Changed		Client Info		N/A	Not Changd	Changed
Filter Changed		Client Info		N/A	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	13	12	19
Chromium	ppm	ASTM D5185m	>10	<1	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		7	6	7
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	2	2	5
Lead	ppm	ASTM D5185m	>100	<1	<1	0
Copper	ppm	ASTM D5185m	>50	5	4	7
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

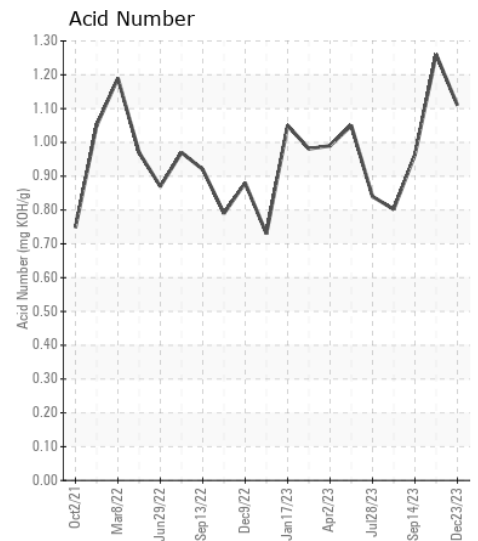
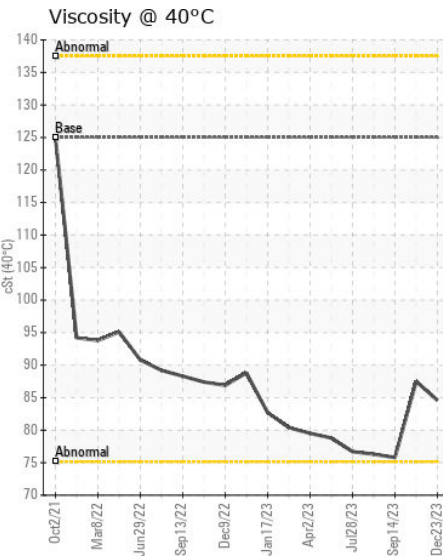
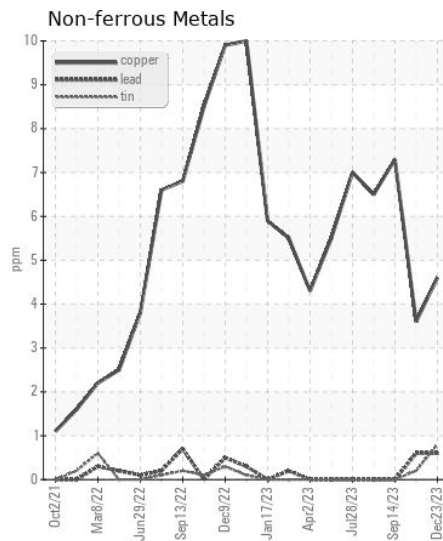
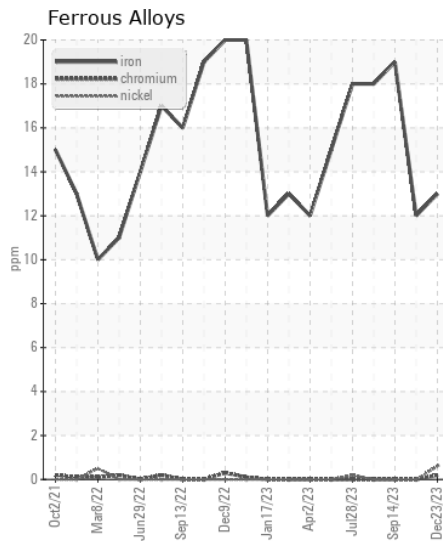
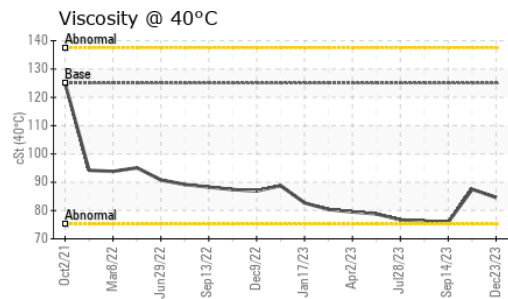
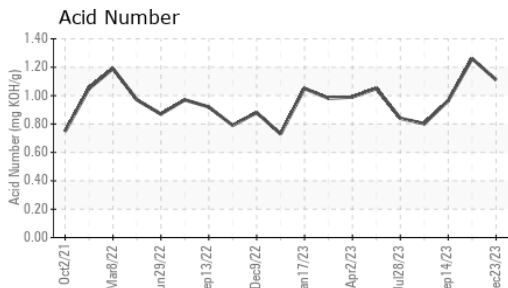
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	6	5	6
Potassium	ppm	ASTM D5185m	>20	3	2	2
Water		WC Method	>0.1	NEG	NEG	NEG
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		0	2	0
Boron	ppm	ASTM D5185m		266	250	202
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		50	51	60
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		425	453	510
Calcium	ppm	ASTM D5185m		2305	2288	1725
Phosphorus	ppm	ASTM D5185m	1360	784	914	739
Zinc	ppm	ASTM D5185m	1480	942	1086	839
Sulfur	ppm	ASTM D5185m		3736	3883	3243
Acid Number (AN)	mg KOH/g	ASTM D8045		1.11	1.26	0.964
Visc @ 40°C	cSt	ASTM D445	125	84.6	87.5	75.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0058034 **Received** : 08 Jan 2024
Lab Number : 06055001 **Diagnosed** : 10 Jan 2024
Unique Number : 10820950 **Diagnostician** : Sean Felton
Test Package : MAR 2

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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