



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SIGNET CHALLENGER
Component
Starboard Reduction Gear
Fluid
CHEVRON MEROPA 150 (317 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0051954	MW0051870	MW0051951
Sample Date		Client Info		05 Mar 2024	30 Dec 2023	29 Jun 2023
Machine Age	hrs	Client Info		27303	27150	26538
Oil Age	hrs	Client Info		27303	1000	0
Filter Age	hrs	Client Info		0	500	500
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	24	23	18
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	<1	0
Lead	ppm	ASTM D5185m	>100	2	<1	0
Copper	ppm	ASTM D5185m	>50	12	7	6
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

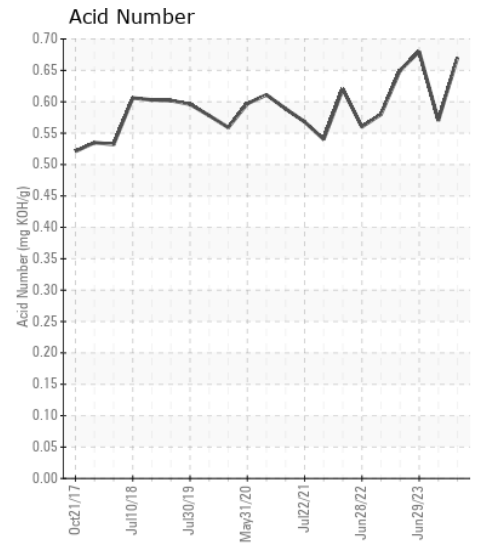
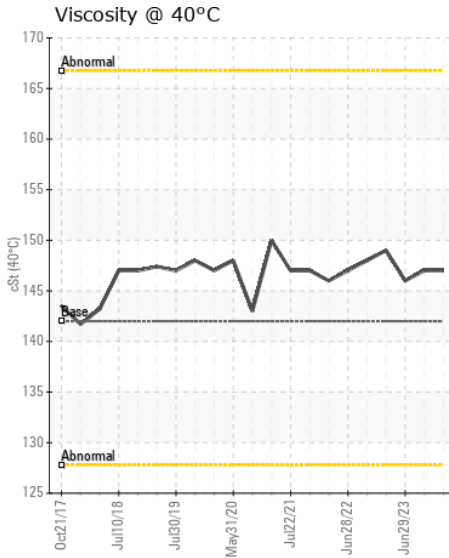
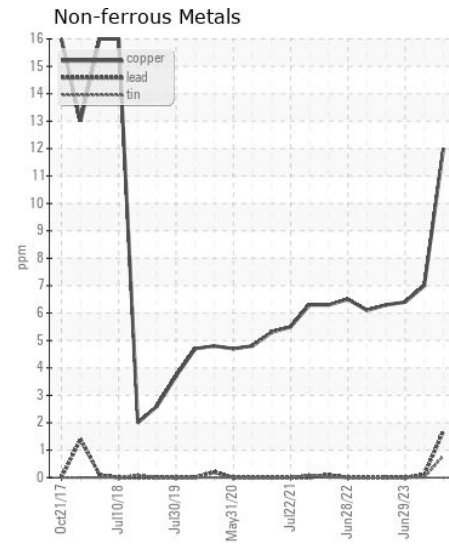
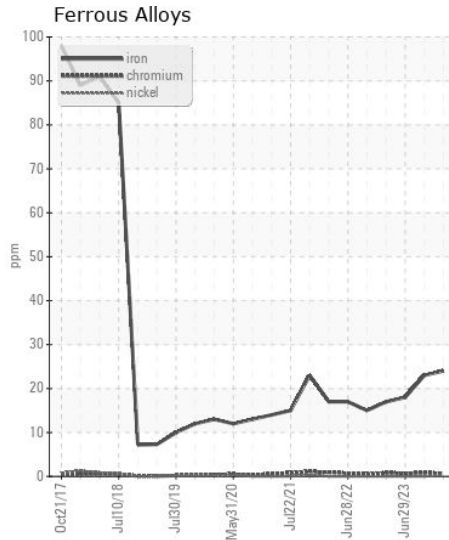
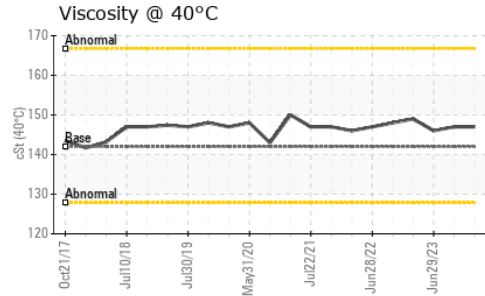
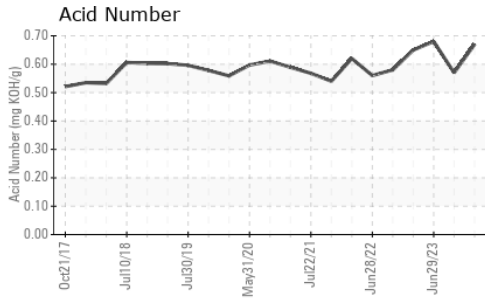
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	2	1	<1
Potassium	ppm	ASTM D5185m	>20	2	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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	3	2
Boron	ppm	ASTM D5185m		12	9	9
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		<1	0	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		3	<1	0
Calcium	ppm	ASTM D5185m		77	17	15
Phosphorus	ppm	ASTM D5185m		230	232	244
Zinc	ppm	ASTM D5185m		22	6	0
Sulfur	ppm	ASTM D5185m		9698	9002	11075
Acid Number (AN)	mg KOH/g	ASTM D8045		0.67	0.57	0.68
Visc @ 40°C	cSt	ASTM D445	142	147	147	146



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0051954
Lab Number : 06125099
Unique Number : 10939250
Test Package : MAR 2

Received : 21 Mar 2024
Tested : 24 Mar 2024
Diagnosed : 24 Mar 2024 - Wes Davis

MARITIME COMPANY
 3802 PORT RIVER RD
 PASCAGOULA, MS
 US 39567

Contact: MARK KOPSYWA
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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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