



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HL26122 Starboard Steering Sump
 Component
Starboard Steering
 Fluid
SHELL TELLUS 32 (1400 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0807872	WC0709110	WC0616912
Sample Date		Client Info		21 May 2024	20 Mar 2023	26 Apr 2022
Machine Age	hrs	Client Info		12016	9963	8429
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	2061	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<1	<1	<1
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>5	0	<1	<1
Lead	ppm	ASTM D5185(m)	>10	0	<1	<1
Copper	ppm	ASTM D5185(m)	>50	5	5	3
Tin	ppm	ASTM D5185(m)	>5	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

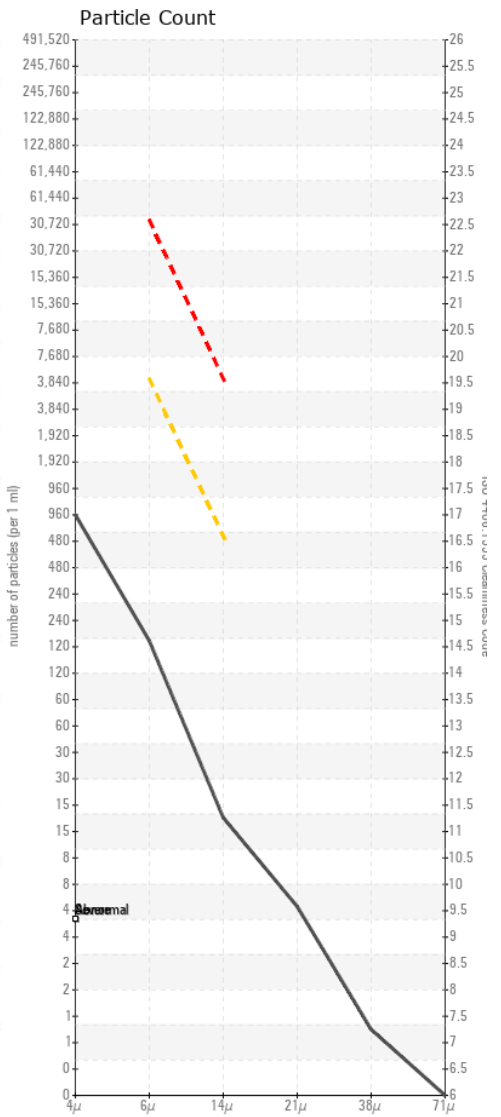
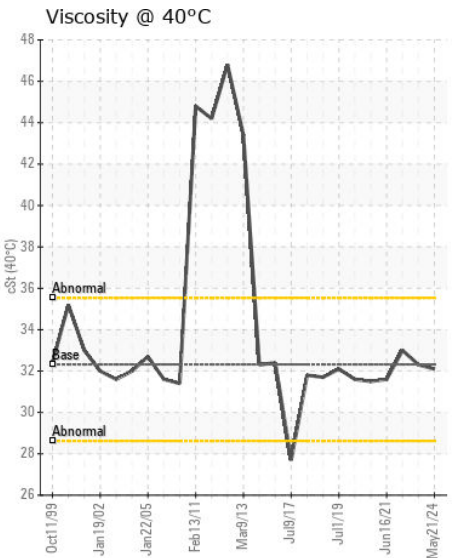
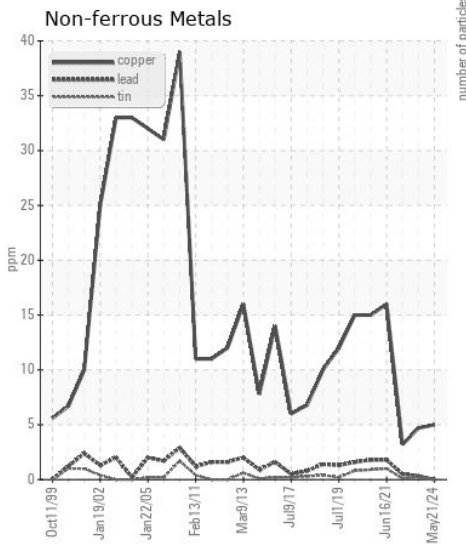
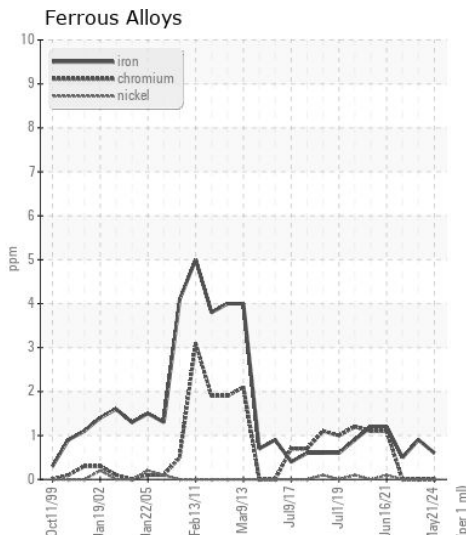
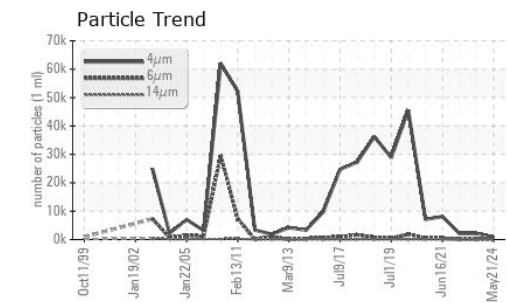
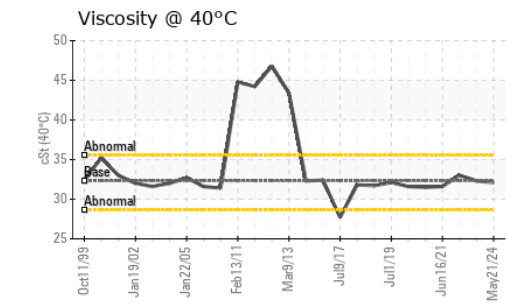
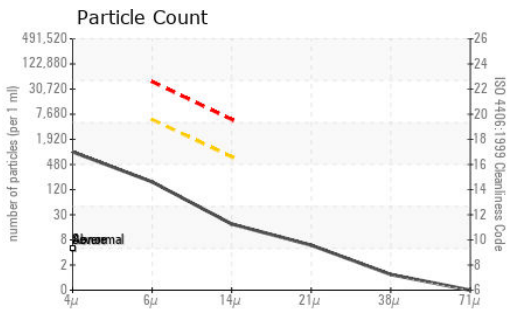
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>15	0	1	1
Potassium	ppm	ASTM D5185(m)	>20	0	0	0
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647		842	2075	2072
Particles >6µm		ASTM D7647	>5000	162	214	156
Particles >14µm		ASTM D7647	>640	16	14	11
Particles >21µm		ASTM D7647	>160	5	5	2
Particles >38µm		ASTM D7647	>40	1	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/16	17/15/11	18/15/11	18/14/11
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*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the fluid is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	0	0
Boron	ppm	ASTM D5185(m)		<1	0	<1
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	11	20	23	24
Calcium	ppm	ASTM D5185(m)	35	33	39	40
Phosphorus	ppm	ASTM D5185(m)	259	209	282	267
Zinc	ppm	ASTM D5185(m)	277	274	307	314
Sulfur	ppm	ASTM D5185(m)	1865	1090	1332	1311
Visc @ 40°C	cSt	ASTM D7279(m)	32.32	32.1	32.3	33.0



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0807872
Lab Number : 02637144
Unique Number : 5786306
Test Package : MAR 5 (Additional Tests: ICP, KV40, PrtCount, Spat, Visual)

CANADIAN COAST GUARD
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.