



COOLANT REPORT

CORROSION	NORMAL
CONTAMINANTS	NORMAL
COOLANT CONDITION	NORMAL

Area

Guardian

Machine Id

6772832

Component

Starboard Coolant

Fluid

{not provided} (40 LTR)

RECOMMENDATION

The fluid is suitable for further service. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0895384	WC0764546	WC0394168
Sample Date		Client Info		12 Feb 2024	17 Jan 2023	11 Dec 2019
Machine Age	hrs	Client Info		613	542	466
Oil Age	hrs	Client Info		147	76	466
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	SEVERE

CORROSION

All metal levels are normal indicating no corrosion in the cooling system.

Iron	ppm	ASTM D5185(m)	>15	<1	4	▲ 19
Aluminum	ppm	ASTM D5185(m)	>10	1	2	3
Copper	ppm	ASTM D5185(m)	>10	1	4	5
Lead	ppm	ASTM D5185(m)	>10	0	<1	◆ 17
Tin	ppm	ASTM D5185(m)	>10	0	0	<1
Silver	ppm	ASTM D5185(m)	>10	1	0	0
Zinc	ppm	ASTM D5185(m)	>10	6	2	4

CONTAMINANTS

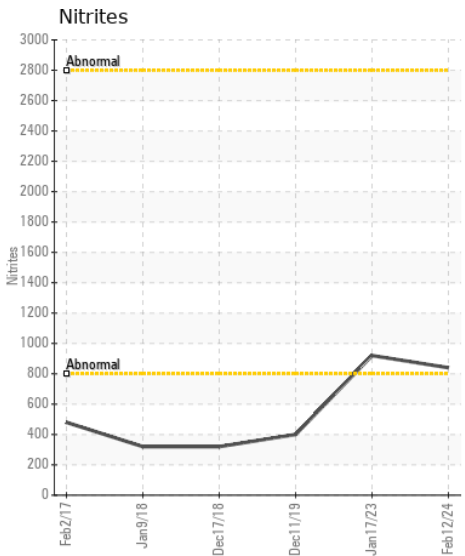
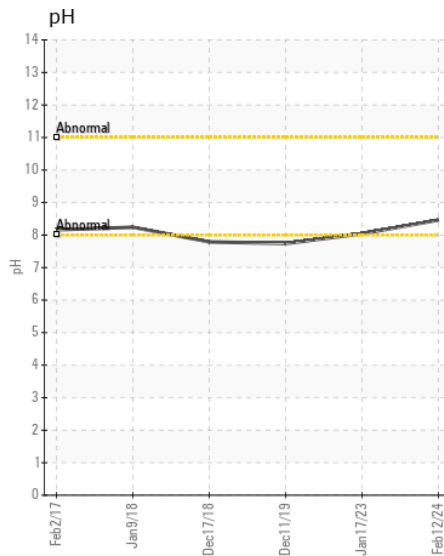
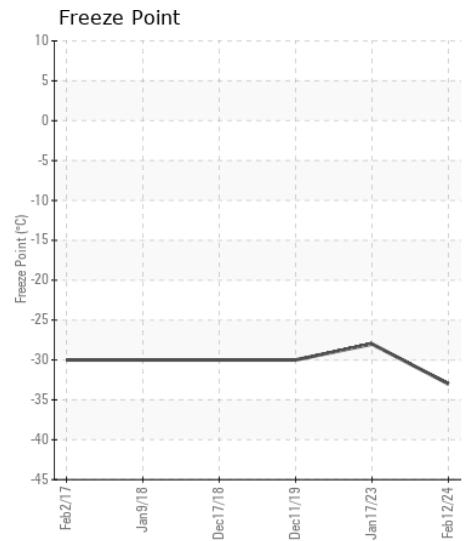
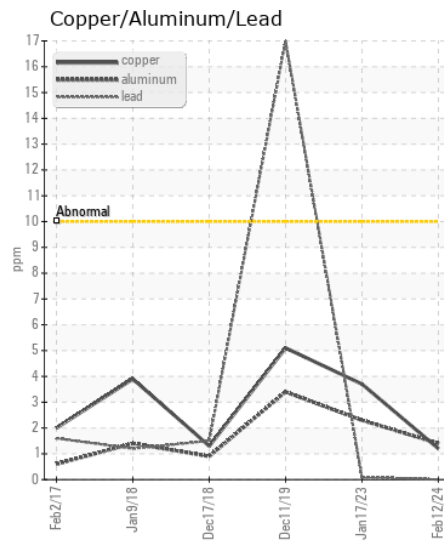
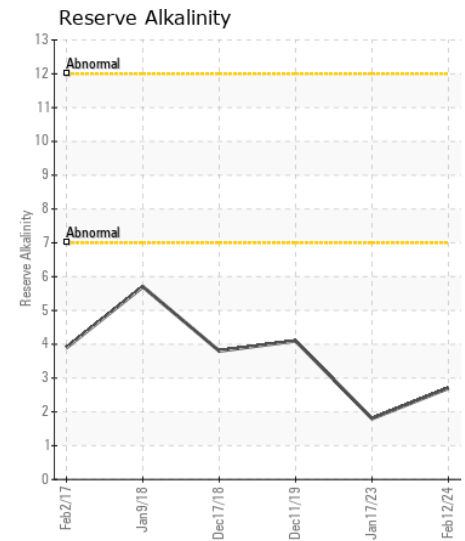
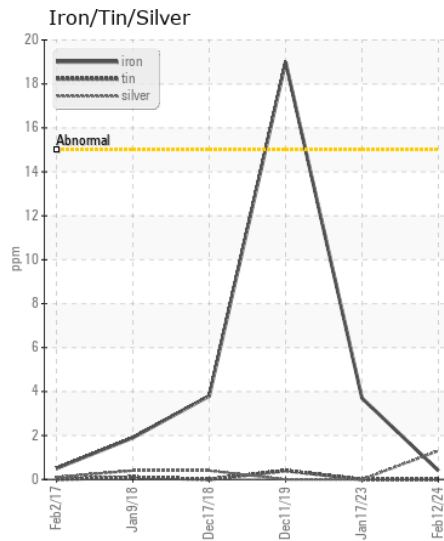
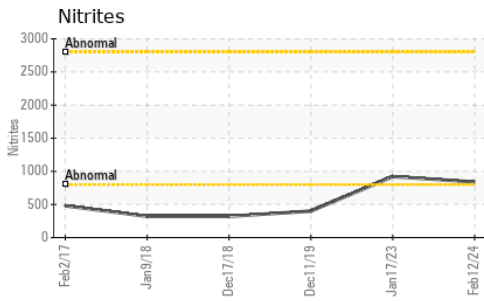
There is no indication of any contamination in the coolant.

Calcium	ppm	ASTM D5185(m)	>100	18	19	22
Magnesium	ppm	ASTM D5185(m)	>40	5	5	3
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Coolant Appearance		Visual*	Clear	Clear	Clear	Clear

COOLANT CONDITION

The nitrite level is acceptable. The pH level of this fluid is within the acceptable limits. The reserve alkalinity of this fluid is acceptable.

Specific Gravity		ASTM D1298*		1.065	1.065	1.060
pH	Scale 0-14	ASTM D1287*		8.46	8.04	7.74
Nitrites	ppm	Alcan Test Kit*		840	920	400
Reserve Alkalinity	Scale 0-20	ASTM D1121*		2.7	1.8	4.1
Percentage Glycol	%	ASTM D3321*		47.8	47.9	44.0
Freezing Point	°C	ASTM D3321*		-33	-28	-30
Carboxylate				---	---	---
Silicon	ppm	ASTM D5185(m)		5	4	12
Phosphorus	ppm	ASTM D5185(m)		13	2	11
Boron	ppm	ASTM D5185(m)		12	6	12
Molybdenum	ppm	ASTM D5185(m)		158	184	9
Sodium	ppm	ASTM D5185(m)		7587	2949	2397
Potassium	ppm	ASTM D5185(m)		9629	2838	1136
Coolant Color		Visual*		Orange	Orange	Pink



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : WC0895384

Lab Number : 02616095

Unique Number : 5733205

Test Package : COOL (Additional Tests: GlycolType)

Received : 15 Feb 2024

Tested : 20 Feb 2024

Diagnosed : 20 Feb 2024 - Kevin Marson

Niagara City Cruises (Hornblower)

5775 River Road

Niagara Falls, ON

CA L2G 3K9

Contact: Evan Dubblestyn

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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.