



# RAPPORT D'ANALYSE D'HUILE

USURE	<b>NORMAL</b>
CONTAMINATION	<b>ANORMAL</b>
ÉTAT DU FLUIDE	<b>NORMAL</b>

Secteur

## Propulsion

Identité de la machine

### 12H11 Propulseur d'Etrave (S/N 5003/0081)

Composant

### Propulseur d'étrave

Fluid

### SHELL OMALA 100 (80 LTR)

## RECOMMENDATION

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Numéro d'échant.		Client Info		<b>WC0878494</b>	WC0811246	WC0549538
Date d'échant.		Client Info		<b>18 Mar 2024</b>	27 Oct 2023	02 Apr 2023
Âge d la Machine	yrs	Client Info		<b>0</b>	0	0
Âge de l'huile	yrs	Client Info		<b>0</b>	4	0
Âge du filtre	yrs	Client Info		<b>0</b>	4	0
Huile changée		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filtre changé		Client Info		<b>Not Changd</b>	N/A	Not Changd
Statut de l'échant.				<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## USURE

All component wear rates are normal.

Fer	ppm	ASTM D5185(m)	>90	<b>5</b>	5	3
Chrome	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titane	ppm	ASTM D5185(m)		<b>0</b>	0	0
Argent	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	<1
Plomb	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	0
Cuivre	ppm	ASTM D5185(m)	>20	<b>5</b>	4	4
Étain	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Métal blanc	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Bronze	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

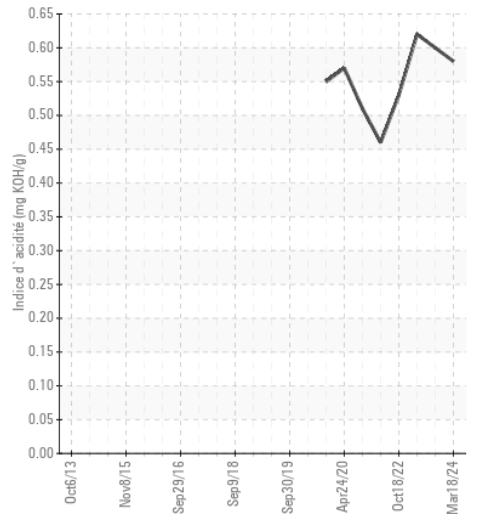
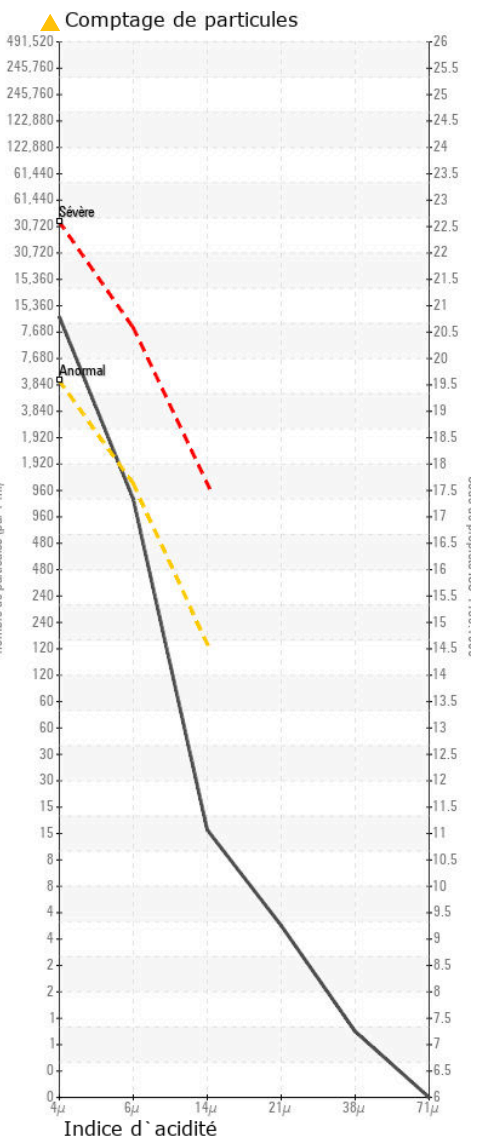
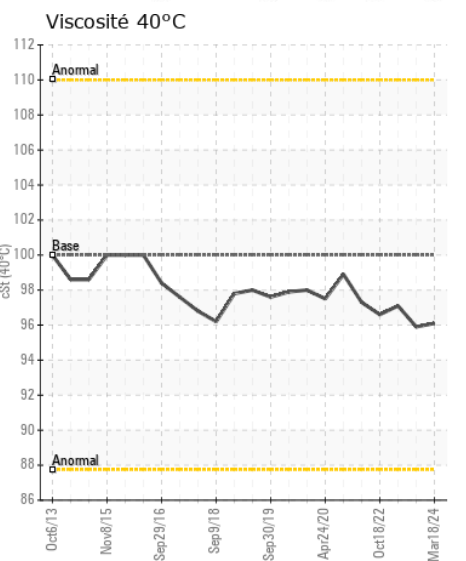
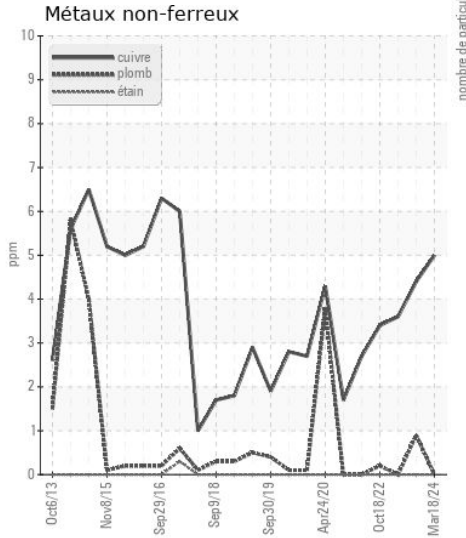
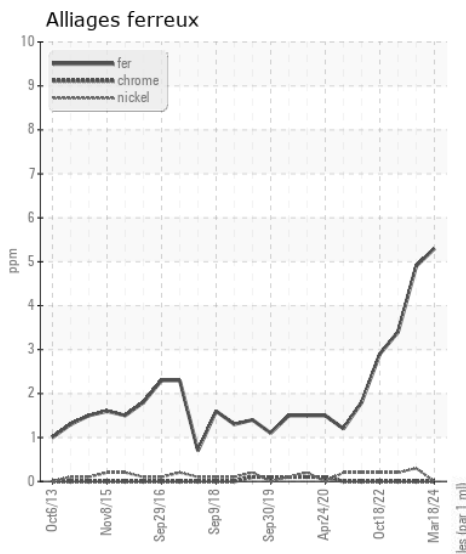
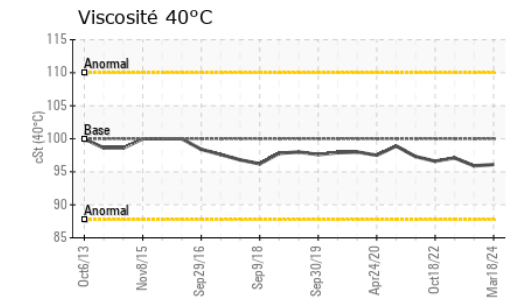
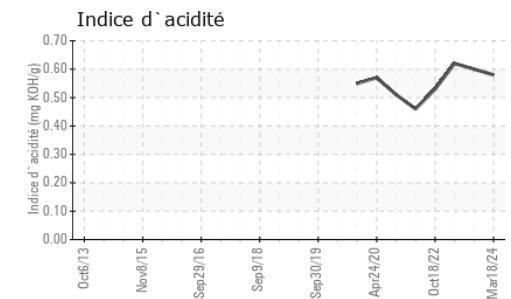
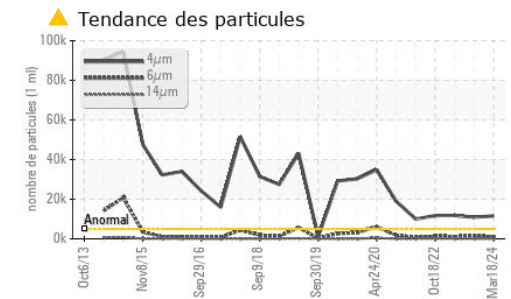
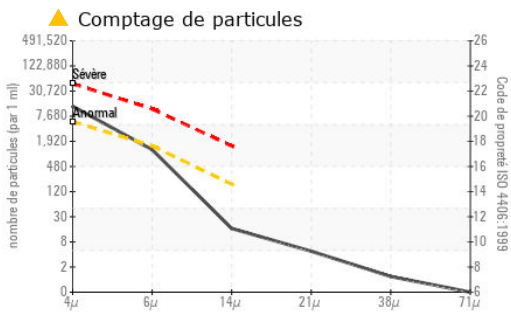
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicium	ppm	ASTM D5185(m)	>7	<b>&lt;1</b>	2	2
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	0
L'eau		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Particules >4µ		ASTM D7647	>5000	<b>▲ 11565</b>	▲ 10895	▲ 11772
Particules >6µ		ASTM D7647	>1300	<b>1063</b>	● 1402	1137
Particules >14µ		ASTM D7647	>160	<b>14</b>	39	9
Particules >21µ		ASTM D7647	>40	<b>4</b>	5	2
Particules >38µ		ASTM D7647	>10	<b>1</b>	0	0
Particules >71µ		ASTM D7647	>3	<b>0</b>	0	0
Propreté de l'huile		ISO 4406 (c)	>19/17/14	<b>▲ 21/17/11</b>	▲ 21/18/12	▲ 21/17/10
Limon	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Débris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Saleté	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Apparence	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odeur	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Eau émulsifiée	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## ÉTAT DU FLUIDE

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	2
Bore	ppm	ASTM D5185(m)	6.2	<b>13</b>	13	15
Baryum	ppm	ASTM D5185(m)	0.0	<b>0</b>	<1	0
Molybdène	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganèse	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnésium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	<1
Calcium	ppm	ASTM D5185(m)	0.0	<b>9</b>	9	8
Phosphore	ppm	ASTM D5185(m)	512	<b>293</b>	302	333
Zinc	ppm	ASTM D5185(m)	3.8	<b>58</b>	52	39
Soufre	ppm	ASTM D5185(m)	8167	<b>6378</b>	6558	6609
Indice d'acidité	mg KOH/g	ASTM D974*		<b>0.58</b>	0.60	0.62
Visc 40°C	cSt	ASTM D7279(m)	100.0	<b>96.1</b>	95.9	97.1



**Laboratoire** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**N° d'échantillon** : WC0878494  
**N° de laboratoire** : 02624304  
**Numéro unique** : 5749423  
**Analyse** : MAR 2

**Reçu** : 25 Mar 2024  
**Tested** : 26 Mar 2024  
**Diagnostiqué** : 26 Mar 2024 - Wes Davis

**Canadian Coast Guard**  
 CCGS Amundsen, 101 Boul. Champlain  
 Quebec, QC  
 CA G1K 7Y7

Pour discuter ce rapport, contacter le service à la clientèle au 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 La validez de los resultados y la interpretación se basan en la muestra y la información proporcionada.

Contact: Chief Engineer  
 amundsense@ccgs-ngcc.gc.ca  
 T: (418)953-8233  
 F: x: