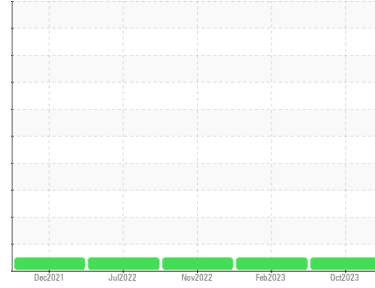


Area  
**Vessel**  
Machine Id  
**KAT 05 (BOWTHRUSTER)**  
Component  
**Bow Thruster**  
Fluid  
**SHELL OMALA 68 (500 LTR)**



**DIAGNOSIS**

**Recommendation**

Resample at the next service interval to monitor. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid. ( Customer Sample Comment: KAT 05 )

**Wear**

All component wear rates are normal.

**Contamination**

There is no indication of any contamination in the component(unconfirmed).

**Fluid Condition**

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

**SAMPLE INFORMATION** method limit/base current history1 history2

Sample Number	Client Info	<b>PC0011769</b>	PC	PC0032247
Sample Date	Client Info	<b>18 Oct 2023</b>	07 Feb 2023	08 Nov 2022
Machine Age	hrs	Client Info	<b>0</b>	0
Oil Age	hrs	Client Info	<b>0</b>	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>NORMAL</b>	NORMAL	NORMAL

**WEAR METALS** method limit/base current history1 history2

Iron	ppm	ASTM D5185(m)	>90	<b>16</b>	15	13
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	1	1
Silver	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	<1
Copper	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

**ADDITIVES** method limit/base current history1 history2

Boron	ppm	ASTM D5185(m)		<b>12</b>	13	13
Barium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)		<b>&lt;1</b>	1	6
Calcium	ppm	ASTM D5185(m)		<b>11</b>	10	12
Phosphorus	ppm	ASTM D5185(m)		<b>295</b>	332	330
Zinc	ppm	ASTM D5185(m)		<b>28</b>	26	25
Sulfur	ppm	ASTM D5185(m)		<b>8258</b>	8346	8245
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

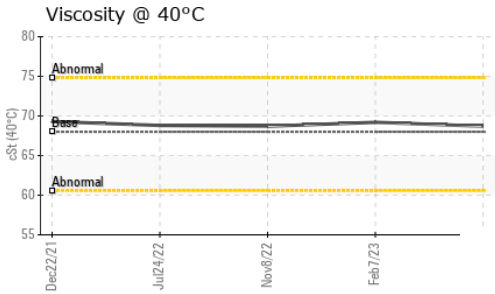
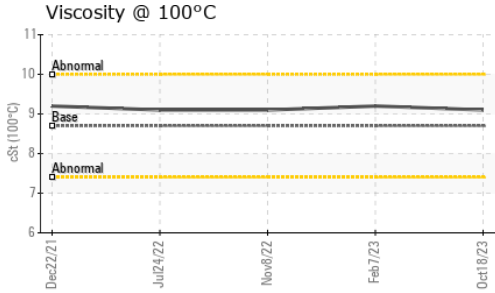
**CONTAMINANTS** method limit/base current history1 history2

Silicon	ppm	ASTM D5185(m)	>7	<b>2</b>	2	3
Sodium	ppm	ASTM D5185(m)		<b>10</b>	11	12
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2

**VISUAL** method limit/base current history1 history2

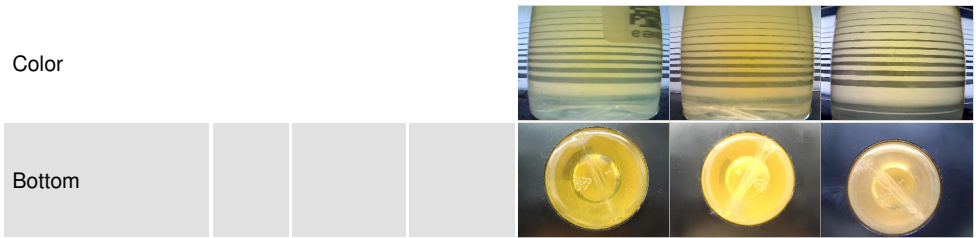
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

# OIL ANALYSIS REPORT

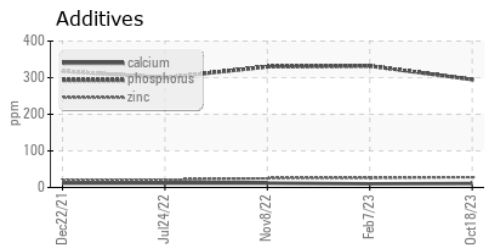
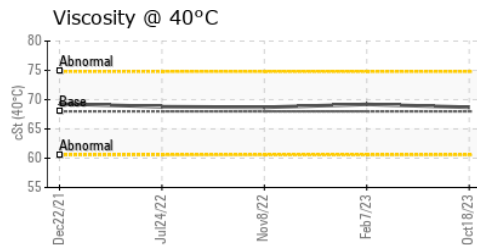
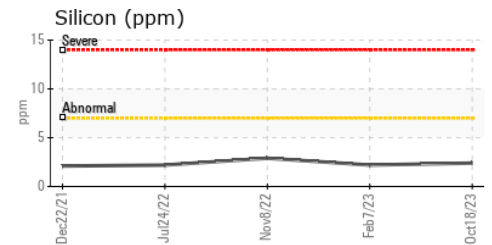
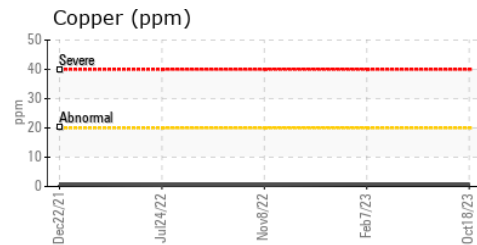
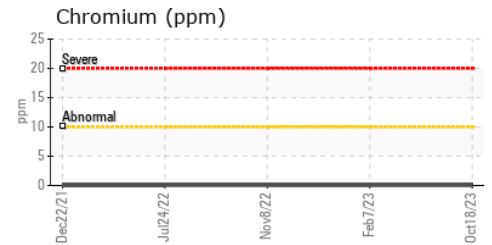
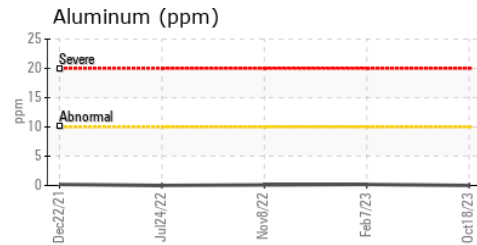
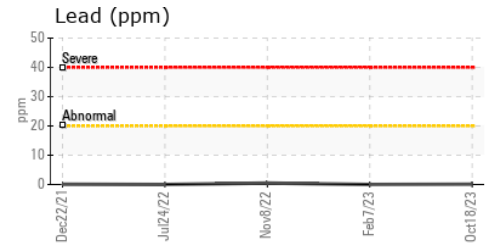
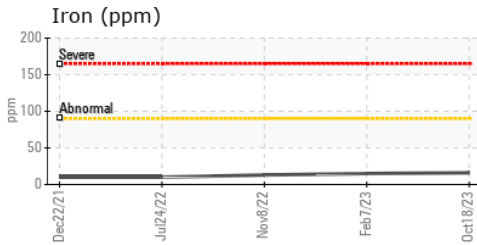


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	68.0	<b>68.7</b>	69.2	68.7
Visc @ 100°C	cSt	ASTM D7279(m)	8.7	<b>9.1</b>	9.2	9.1
Viscosity Index (VI)	Scale	ASTM D2270*	99	<b>107</b>	108	107

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Ocean Choice International - Katsheshuk II  
**Sample No.** : PC0011769 **Received** : 27 Oct 2023  
**Lab Number** : 02592434 **Diagnosed** : 27 Oct 2023  
**Unique Number** : 5669513 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KV100, VI )

1315 Topsail Rd, P.O. Box 8190  
 St. John's, NL  
 CA A1B 3N4  
 Contact: Chief Engineer  
 katengine@oceanchoice.com

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.

T:  
F: