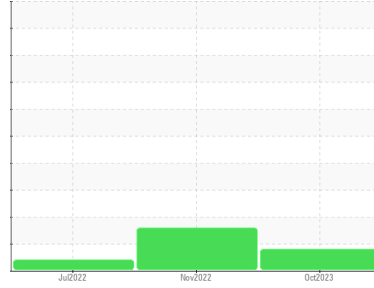


Area  
**Vessel**  
Machine Id  
**KAT 014 (Refrigeration Compressors #1 & #2)**  
Component  
**Compressor**  
Fluid  
**ESSO ZERICE S 68 (250 LTR)**



**DIAGNOSIS**

- Recommendation**  
Resample at the next service interval to monitor. ( Customer Sample Comment: KAT014 )
- Wear**  
All component wear rates are normal.
- Contamination**  
There is no indication of any contamination in the oil.
- Fluid Condition**  
Viscosity of sample indicates oil is within ISO 46 range, advise investigate. 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>PC0018596</b>	PC0031768	PC0018572
Sample Date	Client Info	<b>18 Oct 2023</b>	08 Nov 2022	24 Jul 2022
Machine Age	mths Client Info	<b>0</b>	0	0
Oil Age	mths Client Info	<b>0</b>	0	0
Oil Changed	Client Info	<b>N/A</b>	N/A	N/A
Sample Status		<b>ABNORMAL</b>	ATTENTION	ABNORMAL

**WEAR METALS**

method	limit/base	current	history1	history2
Iron ppm ASTM D5185(m)	>50	<b>7</b>	23	10
Chromium ppm ASTM D5185(m)	>5	<b>0</b>	0	0
Nickel ppm ASTM D5185(m)		<b>0</b>	<1	0
Titanium ppm ASTM D5185(m)		<b>0</b>	0	0
Silver ppm ASTM D5185(m)		<b>&lt;1</b>	0	0
Aluminum ppm ASTM D5185(m)	>15	<b>0</b>	0	0
Lead ppm ASTM D5185(m)	>65	<b>&lt;1</b>	0	0
Copper ppm ASTM D5185(m)	>65	<b>1</b>	1	2
Tin ppm ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony ppm ASTM D5185(m)		<b>0</b>	0	<1
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>2</b>	<1	<1
Barium ppm ASTM D5185(m)		<b>&lt;1</b>	0	0
Molybdenum ppm ASTM D5185(m)		<b>0</b>	0	0
Manganese ppm ASTM D5185(m)		<b>0</b>	<1	0
Magnesium ppm ASTM D5185(m)		<b>0</b>	4	<1
Calcium ppm ASTM D5185(m)		<b>0</b>	▲ 42	0
Phosphorus ppm ASTM D5185(m)		<b>&lt;1</b>	▲ 311	1
Zinc ppm ASTM D5185(m)		<b>&lt;1</b>	▲ 339	<1
Sulfur ppm ASTM D5185(m)		<b>12</b>	▲ 2352	41
Lithium ppm ASTM D5185(m)		<b>1</b>	<1	<1

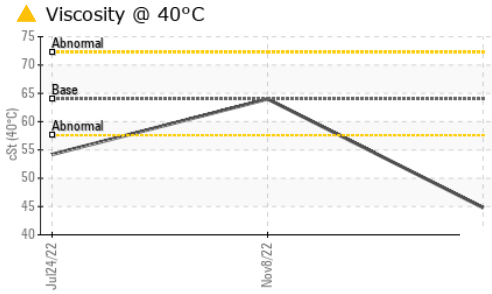
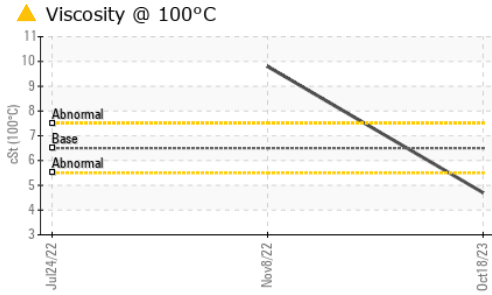
**CONTAMINANTS**

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185(m)	>35	<b>1</b>	3	2
Sodium ppm ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Potassium ppm ASTM D5185(m)	>20	<b>0</b>	0	0

**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>VLITE</b>	NONE	NONE
Debris scalar Visual*	NONE	<b>NONE</b>	VLITE	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*	>0.1	<b>NEG</b>	NEG	NEG
Free Water scalar Visual*		<b>NEG</b>	NEG	NEG

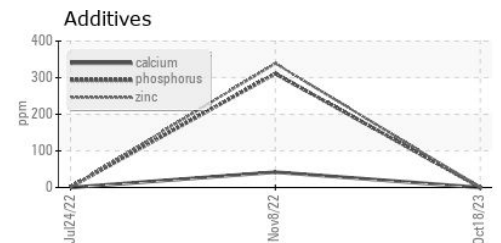
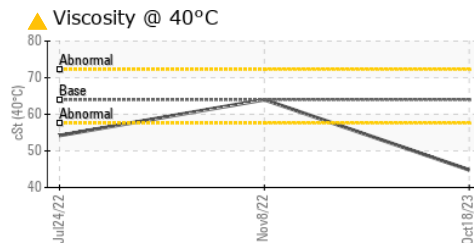
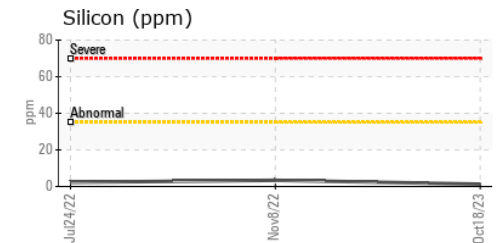
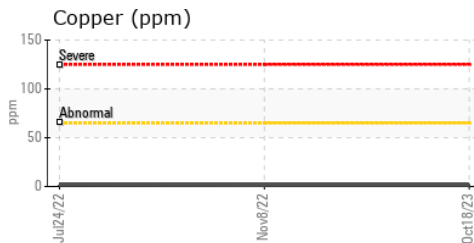
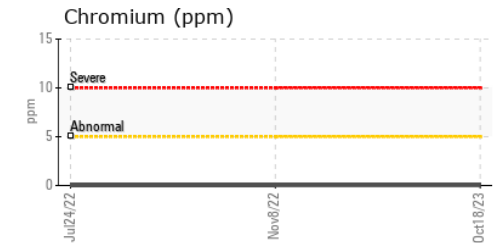
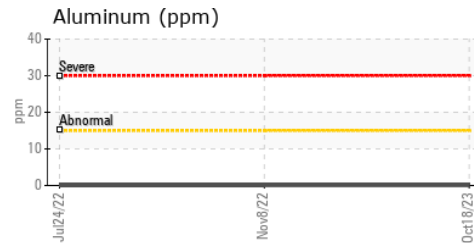
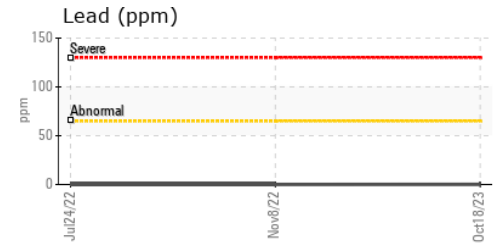
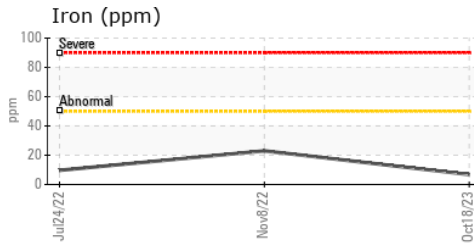
# OIL ANALYSIS REPORT



FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	64	▲ 44.8	64.0	▲ 54.2
Visc @ 100°C	cSt	ASTM D7279(m)	6.5	▲ 4.7	9.8	---
Viscosity Index (VI)	Scale	ASTM D2270*		---	136	---

SAMPLE IMAGES		method	limit/base	current	history1	history2
Color						
Bottom						

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Ocean Choice International - Katsheshuk II  
**Sample No.** : PC0018596 **Received** : 27 Oct 2023  
**Lab Number** : 02592418 **Diagnosed** : 27 Oct 2023  
**Unique Number** : 5669497 **Diagnostician** : Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: KV100, VI )

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.

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 St. John's, NL  
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 Contact: Chief Engineer  
 katengine@oceanchoice.com

T:  
F: