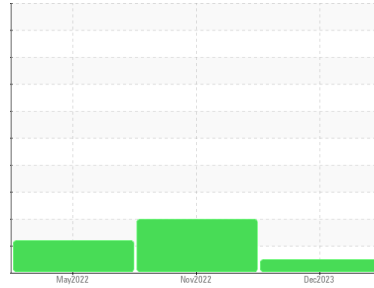




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**ASPIRE BRANTFORD [4501223531]**  
 Machine Id  
**FRICK C11 (S/N F0015VFMCTHAA0)**  
 Component  
**11 Screw Compressor**  
 Fluid  
**CIMCO TYPE A (120 GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

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

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0869722</b>	WC0759234	WC0693995
Sample Date	Client Info		<b>23 Dec 2023</b>	30 Nov 2022	06 May 2022
Machine Age	hrs	Client Info	<b>83172</b>	78169	73696
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>Not Changed</b>	Not Changd	Not Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>60	<b>0</b>	<1	0
Chromium	ppm	ASTM D5185(m)	>4	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>30	<b>&lt;1</b>	0	<1
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	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>0</b>	<1	<1
Barium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)		<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Calcium	ppm	ASTM D5185(m)		<b>3</b>	1	3
Phosphorus	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Zinc	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Sulfur	ppm	ASTM D5185(m)		<b>306</b>	312	317
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

## CONTAMINANTS

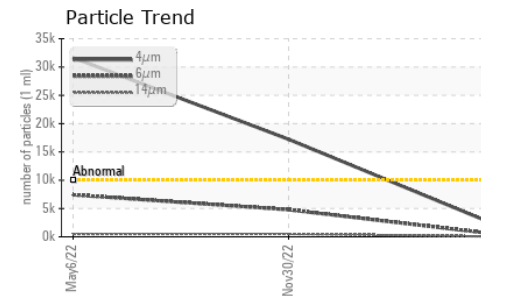
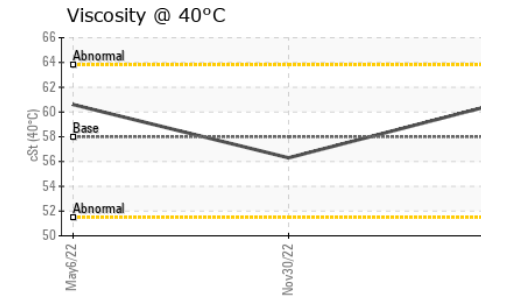
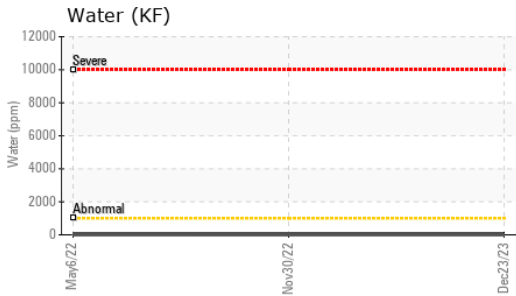
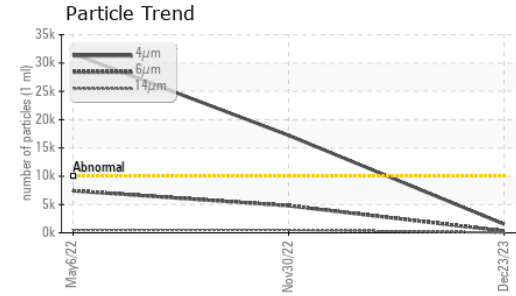
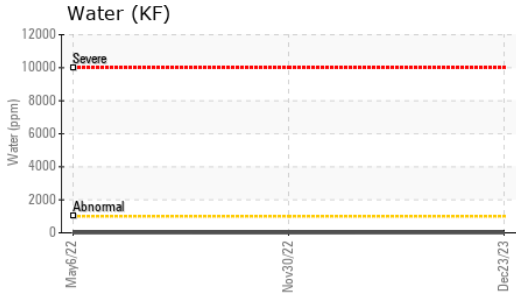
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	<1	<1
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304*	>0.1	<b>0.001</b>	0.001	0.001
ppm Water	ppm	ASTM D6304*	>1000	<b>10</b>	8.4	9.5

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>1516</b>	▲ 17228	▲ 31654
Particles >6µm	ASTM D7647	>2500	<b>312</b>	▲ 4790	▲ 7420
Particles >14µm	ASTM D7647	>320	<b>19</b>	▲ 507	▲ 476
Particles >21µm	ASTM D7647	>80	<b>4</b>	▲ 182	104
Particles >38µm	ASTM D7647	>20	<b>0</b>	15	6
Particles >71µm	ASTM D7647	>4	<b>0</b>	2	0
Oil Cleanliness	ISO 4406 (c)	>20/18/15	<b>18/15/11</b>	▲ 21/19/16	▲ 22/20/16



# OIL ANALYSIS REPORT

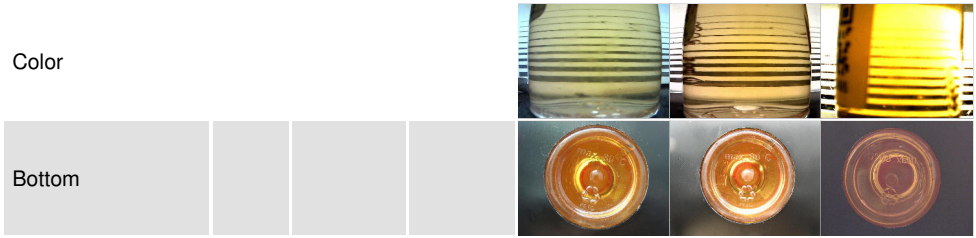


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.05	<b>0.00</b>	0.02	0.03

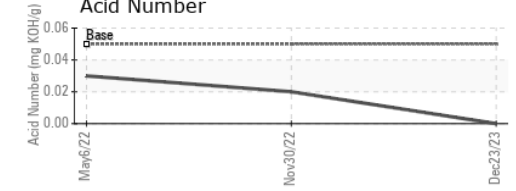
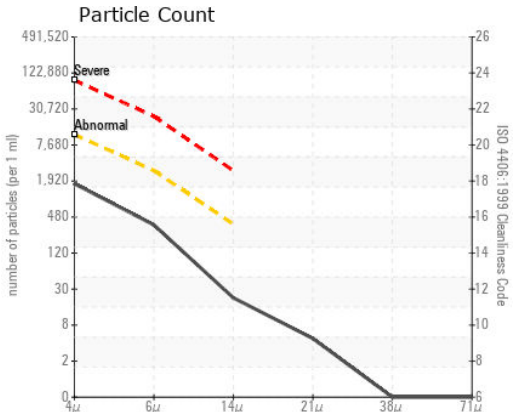
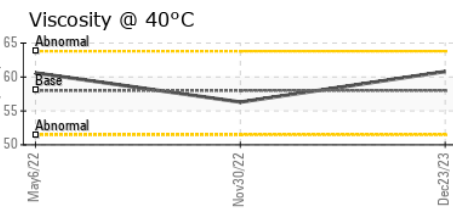
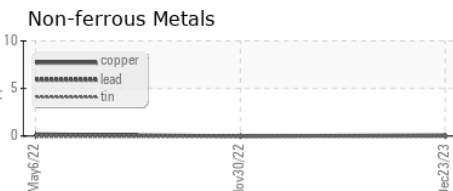
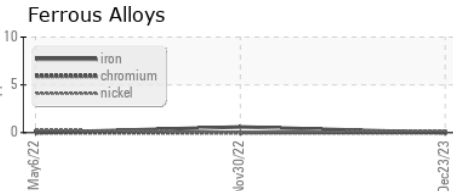
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	VLITE
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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	58	<b>60.8</b>	56.3	60.6

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



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0869722 **Received** : 08 Jan 2024  
**Lab Number** : **02607085** **Diagnosed** : 09 Jan 2024  
**Unique Number** : 5708171 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KF, TAN Man )

**CIMCO Refrigeration**  
 1551 Corporate Drive  
 Burlington, ON  
 CA L7L 6M3  
 Contact: DAVID PARISE  
 DPARISE@ToROMONT.COM  
 T: (416)465-7581  
 F: (416)465-8815

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.