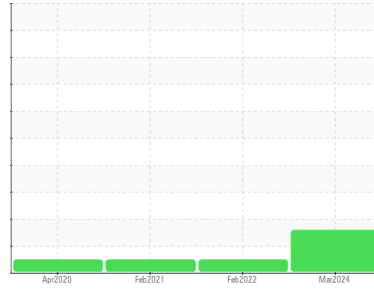




# OIL ANALYSIS REPORT

Sample Rating Trend



**WATER**



Area

[MC-001317-1]

Machine Id

**COSTCO #1248 RACK C (S/N 200-4-2-HR1-CU)**

Component

**Reciprocating Compressor**

Fluid

**BITZER BSE 85K (--- GAL)**

## DIAGNOSIS

### Recommendation

The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a trace of moisture present in the oil.

### 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>WC0907726</b>	WC0307153	WC0438175
Sample Date	Client Info		<b>13 Mar 2024</b>	09 Feb 2022	11 Feb 2021
Machine Age	mths	Client Info	<b>72</b>	6	5
Oil Age	mths	Client Info	<b>72</b>	0	0
Oil Changed	Client Info		<b>Not Chngd</b>	N/A	Not Chngd
Sample Status			<b>MARGINAL</b>	NORMAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
PQ	ASTM D8184*		<b>0</b>	0	0
Iron	ppm	ASTM D5185(m) >50	<b>&lt;1</b>	<1	1
Chromium	ppm	ASTM D5185(m) >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m) >25	<b>0</b>	0	<1
Lead	ppm	ASTM D5185(m) >25	<b>0</b>	0	<1
Copper	ppm	ASTM D5185(m) >50	<b>1</b>	1	<1
Tin	ppm	ASTM D5185(m) >15	<b>0</b>	0	<1
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) 0	<b>1</b>	<1	<1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>0</b>	0	<1
Calcium	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185(m) 1200	<b>1088</b>	1008	967
Zinc	ppm	ASTM D5185(m) 0	<b>&lt;1</b>	<1	<1
Sulfur	ppm	ASTM D5185(m) 0	<b>5</b>	3	11
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

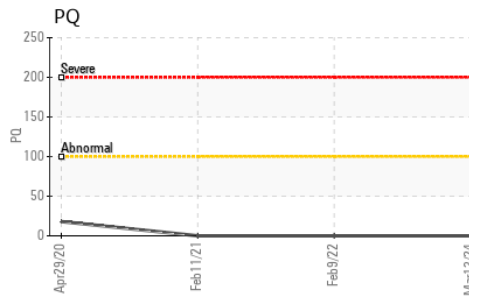
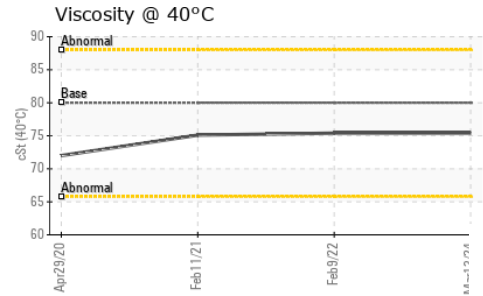
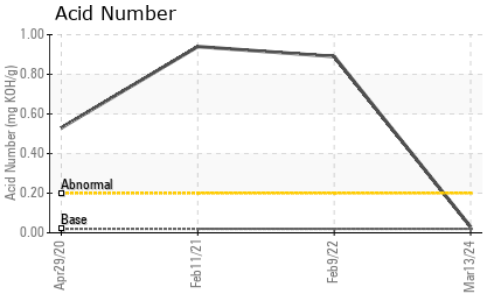
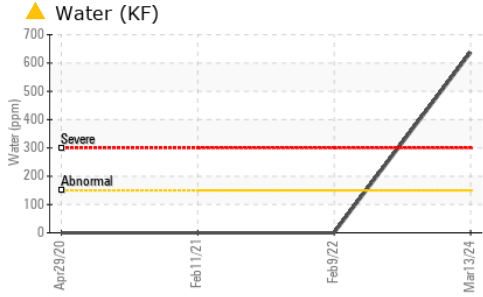
## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >25	<b>0</b>	2	2
Sodium	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	<1	<1
Water	%	ASTM D6304* >0.015	<b>▲ 0.063</b>	---	---
ppm Water	ppm	ASTM D6304* >150	<b>▲ 637</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.02	<b>0.03</b>	0.89	0.94

# OIL ANALYSIS REPORT

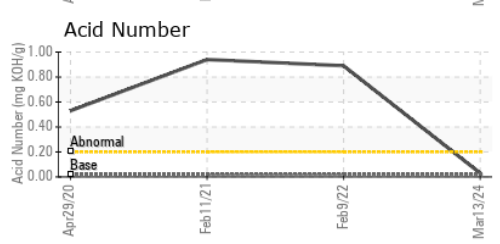
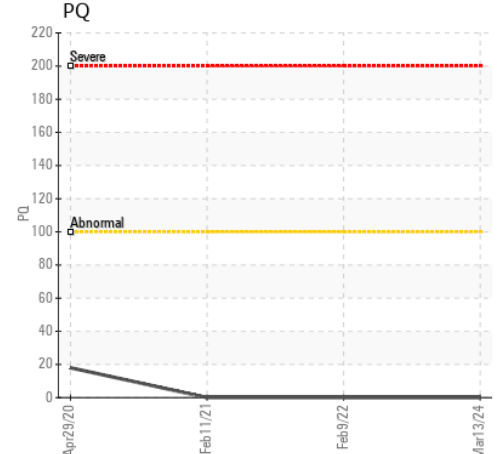
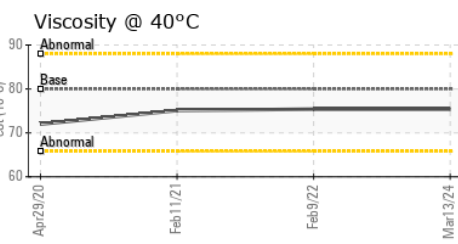
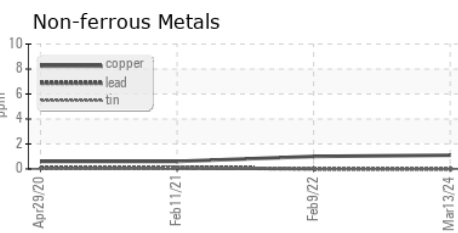
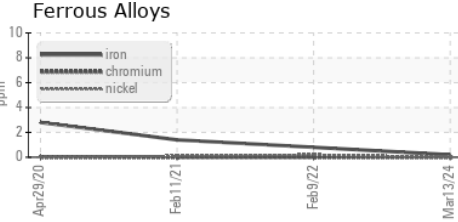


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	FREON	FREON
Emulsified Water	scalar	Visual*	>0.015	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	80	75.4	75.1

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0907726      **Received** : 19 Apr 2024  
**Lab Number** : 02630244      **Tested** : 23 Apr 2024  
**Unique Number** : 5763376      **Diagnosed** : 23 Apr 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: KF )

**Neelands Group Limited**  
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 Burlington, ON  
 CA L7M 0V9  
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 mike.squires@neelands.com  
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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.